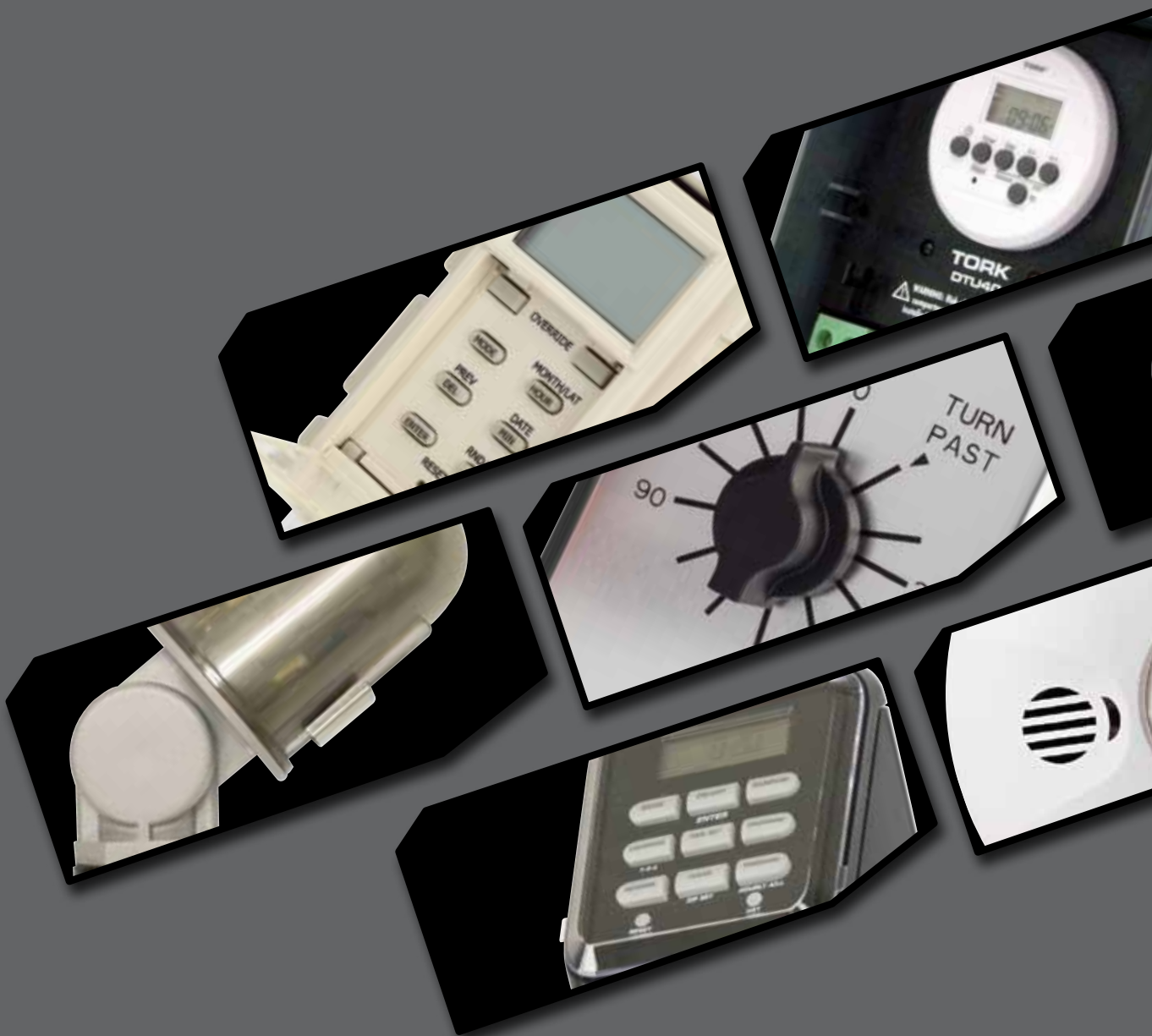


# TORK®

**nsi**  
INDUSTRIES







< **Responsible Energy** is the mark of TORK's commitment to developing and manufacturing energy saving, environmentally friendly products.

## EXTERIOR LIGHTING ZONES

When ambient light levels drop at dusk, lighting is needed to provide safety and security. BUT: Does all lighting need to be on all night long? The proper selection of lighting controls is essential to ensuring that energy is only used when needed. An efficient lighting control design creates zones of light levels that can be varied by time at night.

### ZONE 1 - DUSK TO DAWN - All night Security Lighting

Photocontrols and Photosensors

The first zone gives a minimum light level where security is the primary need. Determine what lighting is necessary, such as building-mounted wallpacks and a portion of the parking lot lighting. These should be on from dusk to dawn, and are best controlled by a photosensor device.

### ZONE 2 - DUSK TO TIME OFF - Safety and Architectural Lighting

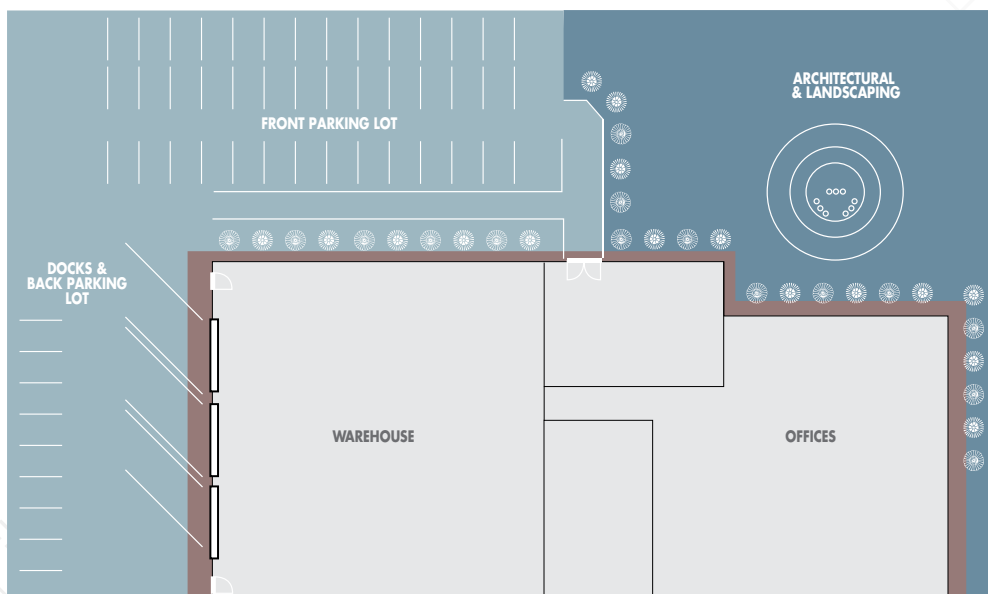
Photosensor/Time-based controls, Astronomic controls

The second zone provides a higher light level for safety, when people are normally present. Maximum levels for the parking lot and all walkway lighting are needed. These lights are best controlled by a combination photosensor and time-based device to allow shut-off during the night. The astronomic-calculated sunset/time control can also be useful.

### ZONE 3 - ARCHITECTURAL - Building Facade, Landscape and Signage


Astronomic controls

The third zone covers architectural lighting for building facade or landscape and signs. These are best controlled with an astronomic-calculated sunset/time control.





< Use the Quick Reference **Energy Code Guide** for approved products.



**Responsible Energy**  
Each of these marked products have features that decrease energy consumption and/or damage to the environment by one or more of the following:

- Timed control, Photocontrol and/or Astronomic control of on and off functions of lighting, fans, pumps and appliances
- Timed control of systems or multiple zones of lighting
- Photo or occupancy sensing control of lighting
- Supercapacitor backup, no batteries to replace or dispose.
- Helps meet CA Title 24, ASHRAE, IECC and other standards for responsible building products

## INTERIOR LIGHTING ZONES

The first way to save energy begins with eliminating lighting when it isn't needed. As with exterior lighting, an efficient design matches controls to the typical use of the area.

### ZONE A - SMALL SPACES - Meeting rooms, restrooms, storage spaces Occupancy sensors, interval timers

The first zone includes small spaces such as offices, restrooms and storage areas – places where people may not occupy the space continuously. Individual wall switch replacement provides low cost installation, with occupancy sensors and interval timers as the best solution. In the event that wall switches do not provide proper coverage for the occupancy sensor, ceiling mounted options are available.

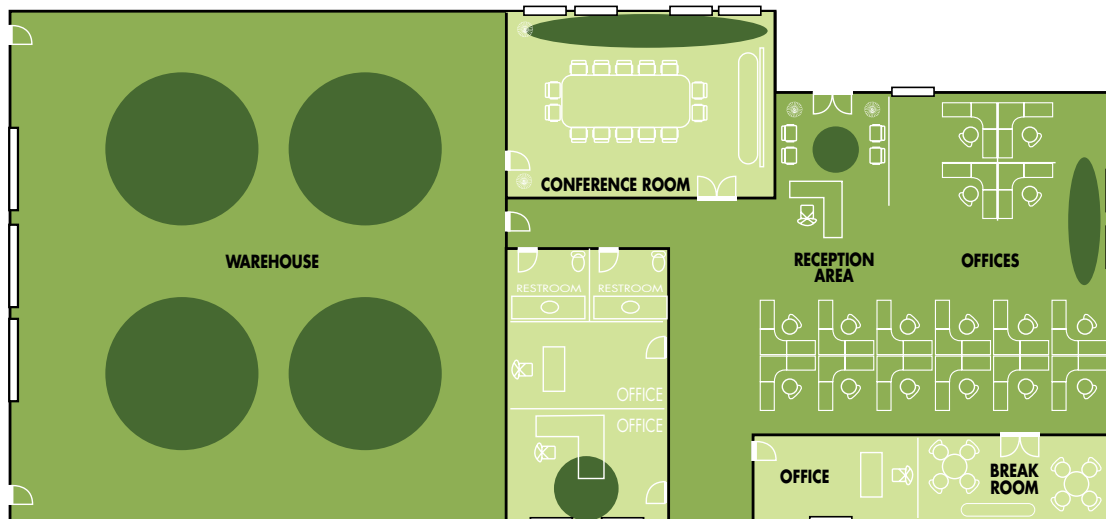
### ZONE B - LARGE SPACES - Open offices, public spaces, hallways, warehouses Time of Day with Override, Occupancy Sensors

The second zone is for common areas, such as hallways, reception spaces or large spaces for open offices. These places are commonly controlled with time-of-day devices and must include an after-hours override. A conveniently placed switch should provide a limited override with a maximum length of two or four hours\*, or occupancy sensors can be used to ensure that lights are shut off when people have left the building.

\* Energy codes vary on the stated maximum time, but shorter times can give more energy savings.

### ZONE C - DAYLIGHT HARVESTING - Large or small spaces with natural light Light Sensors, Light Sensors with Occupancy, Astronomic Timers

A third zone that uses daylighting control can be added to either of the first two zones. Light sensors can shut off a portion of the lighting when windows or skylights contribute sufficient natural light to the area. This “harvesting” of light is an excellent, green way to conserve energy.







# **TORK® PHOTOCONTROLS**

# QUICK REFERENCE GUIDE

	2100 SERIES	2110 SERIES	2000 SERIES	2001/2020 SERIES	3000 SERIES	5000M SERIES	2005A SERIES	2005B SERIES	5200 SERIES	5200-UL SERIES	5737 SERIES
<b>Page</b>	403	404	405	406/407	408	409	411	412	413	414	415
<b>Mounting</b>	Conduit	Conduit	Conduit	Conduit	Flush	Turn-Lock	Turn-Lock	Turn-Lock	Turn-Lock	Turn-Lock	Turn-Lock
<b>Adjustable Swivel</b>				Yes							
<b>Housing</b>	Die Cast Zinc	Die Cast Aluminum	Lexan®	Lexan®	Lexan®	UV Stabilized Plastic	UV Stabilized Plastic	UV Stabilized Plastic	UV Stabilized Plastic	UV Stabilized Plastic	UV Stabilized Plastic
<b>Turn ON Light Level</b>	1 - 5 fc	1 - 5 fc	1 - 5 fc	1 - 5 fc	1 - 5 fc	1 to 3 fc	1 to 3 fc	1.5 fc	1.5 fc	1.5 fc	5 fc
<b>Adjustable light level adjustment</b>	Yes	Yes	Yes	Yes (2001)							
<b>Turn OFF Ratio</b>	3:1	3:1	3:1	3:1	3:1	5:1	3:1	1.5:1	1.5:1	1.5:1	1.5:1
<b>Time Delay ON</b>	Yes	Yes	Yes	Yes	Yes	Yes	Instant	Instant	Instant	Instant	Instant
<b>Time Delay OFF</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Light Sensor</b>	CdS	CdS	CdS	CdS	CdS	CdS	CdS	Filtered Silicon Sensor	Silicon Sensor	Filtered Silicon Sensor	Silicon Sensor
<b>CFL Compatible</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>LED Driver Listed</b>										Yes	
<b>Surge Protection</b>						Yes	Yes	Yes	Yes	Yes	Yes
<b>Photo Timer</b>											Yes

## CHOICE OF PHOTOCELLS



Molded sealed IR filtered sensor resists effects of moisture and airborne contaminants. Available on turn-lock photocontrols. IR Filtering responds to the light spectrum near to that of a human eye.



Conformal coated CdS photocell resists effects of moisture and airborne contaminants. Available in 1/2" and 1" size on both wired and turn-lock photocontrols. Photocell responds to the light spectrum near to that of a human eye.

## TOUGH ENCLOSURES



All conduit and flush mounted models utilize die-cast zinc, die cast aluminum, or genuine Lexan® materials. All turn-lock models utilize high impact UV stabilized polypropylene, ABS, PBT or polycarbonate materials.

## TURN-LOCKS MEET ANSI C136.10



All models meet the current ANSI requirements for locking-type prongs and color coded voltage designations. Locking prongs are solid brass.

### Color-Coded Dome

Grey	105-130VAC
Maroon	208-277VAC
Blue	105-285VAC
Yellow	480VAC
Green	347VAC

## CHOICE OF MOUNTING ORIENTATION



Models are available in fixed position or 180° swivel.

## DEPENDABLE PERFORMANCE

Built-in time delay prevents false switching due to light from passing vehicles, lightning, etc.

## QUALITY ASSURANCE

**TORK®** Photocontrols are designed and manufactured with components which adhere to the highest industry standards. Trained personnel and in-process quality procedures ensure that every unit meets our strictest quality standards.



# 2100 SERIES

SPECIFICATION GRADE  
1/2" CONDUIT MOUNTING  
DIE CAST ZINC  
PHOTOCONTROL



## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc, Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a slide cover. No tools required.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1" diameter.

**CONTACTS:** Remain closed between dusk and dawn. (The unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

**POWER CONSUMPTION:** Averages under 1 watt.

**TEMPERATURE RANGE:** -40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

## APPLICATIONS



- Parking lot lighting
- Building perimeter lighting
- Outdoor signage

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

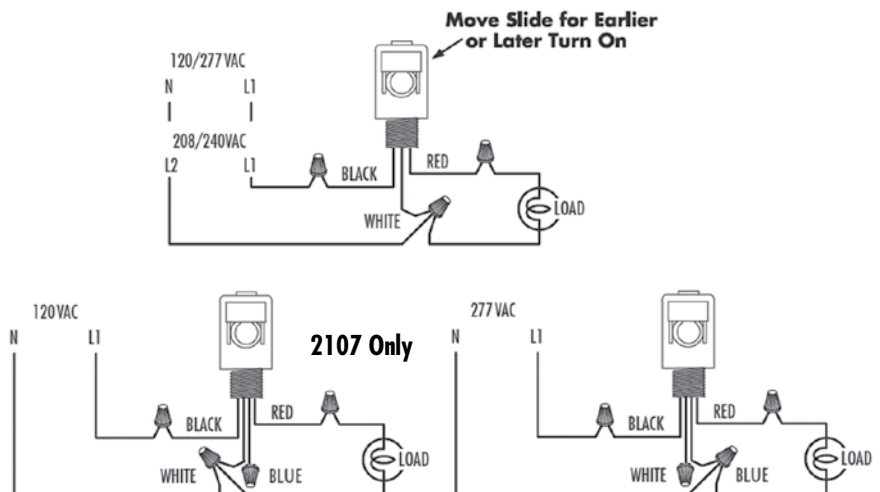
**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A.

**HOUSING:** Heavy Duty die cast zinc housing and base. Gasketed for maximum weather protection.

**ENERGY SAVINGS:** Works with screw base CFLs.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2101	60012	120	SPST	2000W	1800VA
2104	60013	208-277	SPST	2000W	1800VA
2107	60031	120/277	SPST	2000W	1800VA
73866	62020	Mounting Bracket			



# 2110 SERIES

SPECIFICATION GRADE  
1/2" CONDUIT MOUNTING  
DIE CAST ALUMINUM  
PHOTOCONTROL



## APPLICATIONS

- Parking lot lighting
- Building perimeter lighting
- Outdoor signage

2117

2115 & 2116

## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc, Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a slide cover. No tools required.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1/2" diameter. MODEL 2117 is 1" cell.

**CONTACTS:** Remain closed between dusk and dawn (the unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C. (2117 #10AWG red and black).

**POWER CONSUMPTION:**  
Averages under 1 watt.

**TEMPERATURE RANGE:**  
-40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**STANDARDS:** Meets ANSI/UL773A.

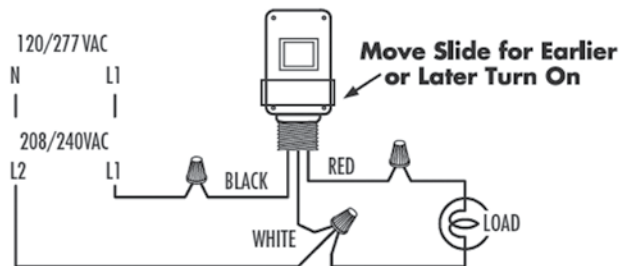
**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**HOUSING:** Die cast aluminum housing and base. Gasketed for weather protection.

**ENERGY SAVINGS:** Works with screw base CFLs.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2115	60032	120	SPST	2000W	1800VA
2116	60033	208-277	SPST	3470-4620W	2080-2770VA
2117*	60037	120	SPST	3000W	3000VA
73866	62020	Mounting Bracket			

\*Not UL or CSA rated.



# 2000 SERIES

1/2" CONDUIT MOUNTING  
FIXED POSITION, LEXAN® HOUSING  
WITH WEATHERPROOF SEALANT  
PHOTOCONTROL



## APPLICATIONS

- Flood lamp
- Patio lamp
- Decorative lighting

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A

**HOUSING:** All Lexan® enclosures are impact and vandal resistant. Translucent Lexan® Dome prolongs cell life by further screening out ultraviolet rays. Dome and base are ultrasonically welded for maximum strength.

**ENERGY SAVINGS:** Works with screw base CFLs.

## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc. Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a slide cover. No tools required.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1/2" diameter.

**CONTACTS:** Remain closed between dusk and dawn. (The unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

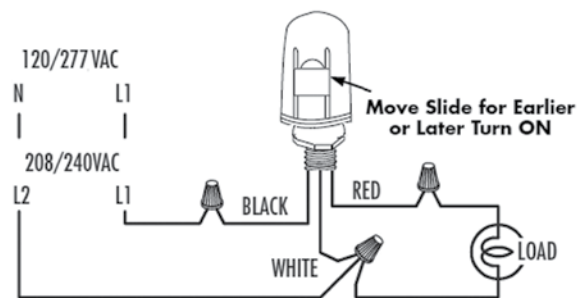
**POWER CONSUMPTION:** Averages under 1 watt.

**TEMPERATURE RANGE:** -40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2000	60017	120	SPST	2000W	1800VA
2000-2	60018	208-277	SPST	3470-4620W	2080-2770VA
73866	62020	Mounting Bracket			



# 2001 SERIES

## 1/2" CONDUIT MOUNTING

### 180° SWIVEL, LEXAN® HOUSING

### PHOTOCONTROL



## APPLICATIONS

- Flood lamp
- Patio lamp
- Decorative lighting

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A

**HOUSING:** All Lexan® enclosures are impact and vandal resistant. Translucent Lexan® Dome prolongs cell life by further screening out ultraviolet rays. Dome and base are ultrasonically welded for maximum strength.

**ENERGY SAVINGS:**  
Works with screw base CFLs.

## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc. Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a slide cover. No tools required.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1/2" diameter.

**CONTACTS:** Remain closed between dusk and dawn. (The unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

**POWER CONSUMPTION:**  
Averages under 1 watt.

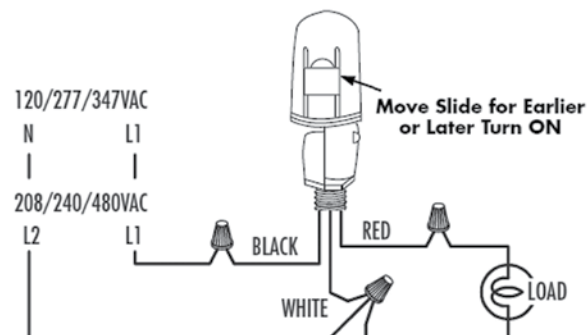
**TEMPERATURE RANGE:**  
-40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2001	60015	120	SPST	2000W	1800VA
2002	60016	208-277	SPST	3470-4620W	2080-2770VA
<b>NEW!</b> 2006*	60028	347	SPST	5760W	3470VA
<b>NEW!</b> 2018**	62021	480	SPST	7500W	4800VA
73866	62020	Mounting Bracket			

\*CSA certified only. \*\*Not UL or CSA rated.



# 2020 SERIES

## 1/2" CONDUIT MOUNTING

### 180° SWIVEL, LEXAN® HOUSING

### PHOTOCONTROL



## APPLICATIONS

- Flood and patio lamps
- Decorative lighting
- Ideal for applications where it is essential to aim the photocell in an exact direction to sense natural light but avoid artificial light.

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A

**HOUSING:** All Lexan® enclosures are impact and vandal resistant, cover and base are ultrasonically welded for maximum strength.

**ENERGY SAVINGS:** Works with screw base CFLs.

## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc. Turn OFF is 3 to 15fc.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1/2" diameter.

**CONTACTS:** Normally closed (the unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

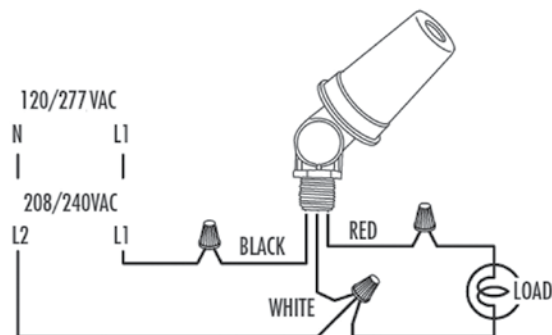
**POWER CONSUMPTION:** Averages under 1 watt.

**TEMPERATURE RANGE:** -40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2021	60024	120	SPST	2000W	1800VA
2022	60025	208-277	SPST	3470-4620W	2080-2770VA
73866	62020	Mounting Bracket			



# 3000 SERIES

## FLUSH MOUNTING LEXAN® HOUSING PHOTOCONTROL



### APPLICATIONS

- Pole lanterns
- Lawn lighting
- Walkways

Flush Mounting  
Model 3010

### SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc. Turn OFF is 3 to 15fc.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, conformal coated 1/2" diameter.

**CONTACTS:** Normally closed (the unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 9" wire leads, #16AWG, rated for 105°C.

**POWER CONSUMPTION:**  
Averages under 1 watt.

**TEMPERATURE RANGE:**  
-40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

### FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.


**STANDARDS:** Meets ANSI/UL773A

**HOUSING & MOUNTING:** Control housing is weather-resistant molded Lexan® with ultrasonically welded seams.

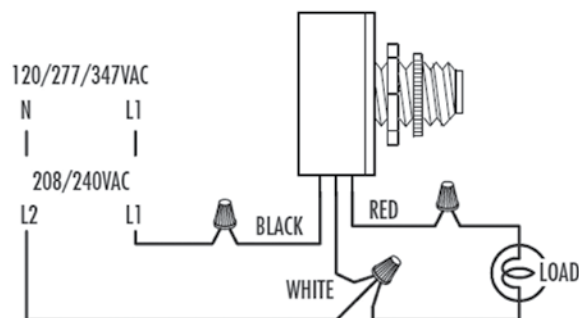
**MODEL 3000:** Flush mounting through .6875" hole in post lantern or lighting fixture, 3/8" NPT, stem 3/4" long. Gasket and nut supplied.

**MODEL 3010:** flush mounting into standard, raintight junction box. Includes aluminum plate and gasket to fit FS type outdoor junction box.

**ENERGY SAVINGS:** Works with screw base CFLs.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
3000	60020	120	SPST	2000W	1800VA
3002	60019	208-277	SPST	3470-4620W	2080-2770VA
 3006*	60026	347	SPST	5760W	3470VA
3010	60021	120	SPST	2000W	1800VA

\*CSA certified only. 



# 5000M SERIES

## DELAYED RESPONSE UTILITY GRADE MOV SURGE ARRESTOR PHOTOCONTROL



### APPLICATIONS

- For use on streets, highways and other luminaries equipped with locking type receptacles, where most stringent surge protection is needed.

### FEATURES

**SENSOR:** Conformal coated CdS photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delayed response prevents false switching due to light from vehicles or lighting, etc.

**STANDARDS:** Meets UL773 and ANSI C136.10 including color designations. Also meets EEL NEMA standards.

**HOUSING:** Polycarbonate housing and window, UV stabilized for permanent color. Provides high impact performance, flammability resistance, and electrically safe operations.

**CONTACTS:** Bi-metal provides positive snap action switching, reducing bounce and prolonging contact life.

### SPECIFICATIONS

**ON/OFF:** Turn-ON is 1 to 3 fc. Turn-OFF to Turn-ON ratio is 5 max.

**TIME DELAY:** ON and OFF.

**CELL:** CdS, epoxy conformal coated 1/2" and 1" diameter models.

**SURGE ARRESTOR:** 380 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.

**LOCKING PRONGS:** Solid brass for maximum corrosion resistance and electrical conductivity.

**TEMPERATURE RANGE:** -40° to +140°F (-40° to +60°C).

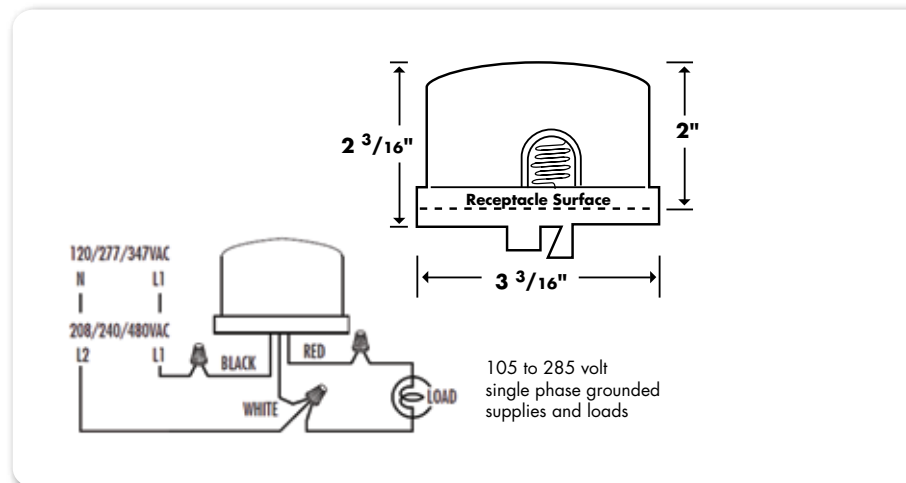
**FAIL MODE:** ON.

**WARRANTY:** 3 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	LIGHT SENSOR	RATING	
				TUNGSTEN	BALLAST
5001M	61012	105-130	1"	2000W	1800VA
5004M	61013	208-277	1"	3470-4620W	2080-2770VA
5007M	61014	105-130/208-285	1/2"	2000W 3470-4620W	1800VA 2080-2770VA
5008M*	61017	480	1"	7500W	4800VA
5021M	61015	105-130	1/2"	2000W	1800VA
5024M	61016	208-277	1/2"	3470-4620W	2080-2770VA
<b>NEW!</b> 5026M**	61045	347	1/2"	5760W	3470VA

\*Not UL listed or CSA certified.

\*\*CSA certified only. 



# 5400A SERIES

## CONTACTORS WITH TURN-LOCK PHOTOCONTROL



### SPECIFICATIONS

**RECEPTACLE:** 3-prong turn-lock meets the requirements of EEL NEMA.

**POWER CONSUMPTION:** Maximum 3 watts during daylight.

### APPLICATIONS



- For street lighting. Controls all lighting loads in excess of the capacity of the photoelectric control contacts.

UL LISTED  
FOR LED

CAT. NO.	UPC CODE	PHOTOCONTROL INCLUDED	VOLTAGE (VAC) 60Hz	SWITCH
5403A	81012	2005B	120	DPST
5404A	81013	2007B	208-240	DPST
5404-3A	81014	2007B	277	DPST

### FEATURES

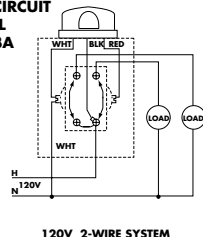
**OPERATION:** Delay up to two minutes to prevent false switching due to light from passing vehicles, lighting, etc. Photocontrol provides dusk to dawn control of lighting contactor for heavy duty switching.

**STANDARDS:** Meets UL773 and ANSI C136.10 for photocontrols.

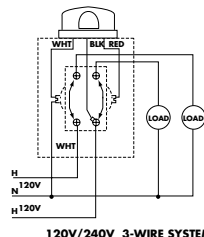
**HOUSING:** Outdoor NEMA Type 3R. Beige enamel finish. Two 1/2" - 3/4" combination KO in bottom.

TYPE	VOLTAGE (VAC)	CONTACT RATING PER POLE
Resistive	120-277	40A
Tungsten	120	30A
Ballast	120-277	40A
LED Driver	120-277	40A
Motor	120 240	3HP 7.5HP

120 VOLT CIRCUIT  
MODEL  
5403A

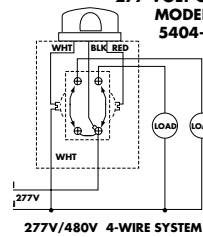


120V 2-WIRE SYSTEM



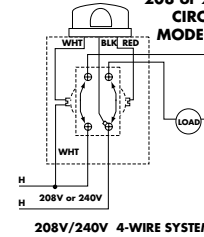
120V/240V 3-WIRE SYSTEM

277 VOLT CIRCUIT  
MODEL  
5404-3A

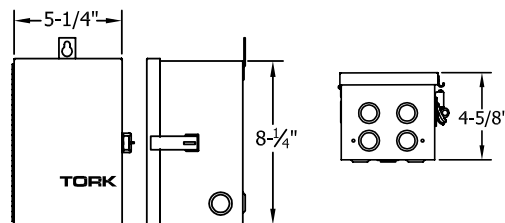


277V/480V 4-WIRE SYSTEM

208 or 240 VOLT  
CIRCUIT  
MODEL 5404A



208V/240V 4-WIRE SYSTEM





# 2005A SERIES

## INSTANT RESPONSE TURN-LOCK PHOTOCONTROL



### APPLICATIONS

- For state and county DOT & municipalities use on roadway and bridges. Also use for general commercial facilities.

### FEATURES

**SENSOR:** Conformal coated CdS photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**STANDARDS:** Meets UL773 and ANSI C136.10 including color designations. Also meets EEL NEMA standards.

**HOUSING:** Polypropylene, UV stabilized, permanent color with UV resistant clear acrylic window. Provides high impact, flammability resistance and electrically safe operations.

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life.

### SPECIFICATIONS

**ON/OFF:** Turn-ON is 1.5 foot candle +/-0.5  
OFF/ON ratio is 1.5:1 average.

**TIME DELAY:** Instant ON/3-5 seconds OFF.

**CELL:** CdS, epoxy conformal coated 1/2" diameter.

**RELAY:** Rated life 6,000 operations

**SURGE ARRESTOR:** 360 joules MOV exceeds NEMA and ANSI requirements.

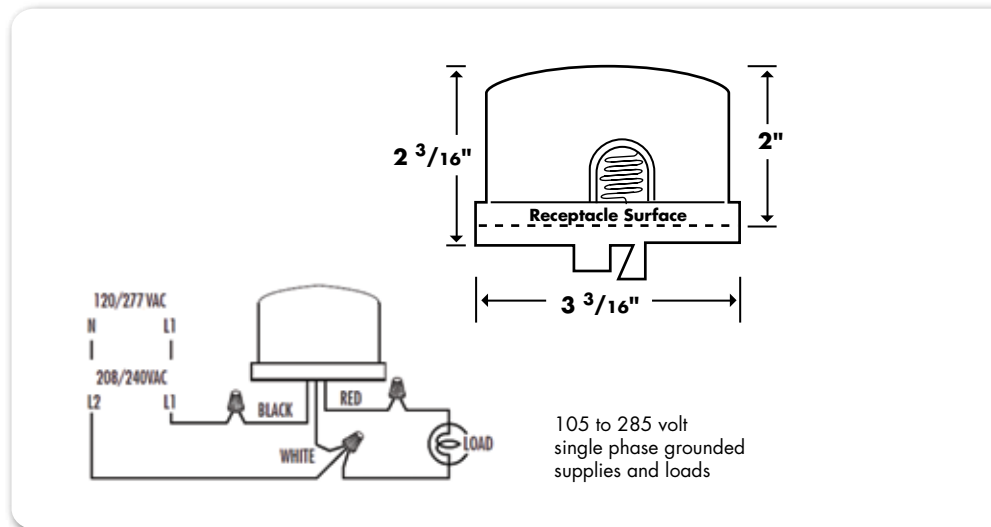
**LOCKING PRONGS:** Solid brass prongs for maximum corrosion resistance and electrical conductivity.

**TEMPERATURE RANGE:**  
-40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 3 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	RATING	
				TUNGSTEN	BALLAST
2005A	62012	105-130	Grey	1000W	1800VA
2007A	62013	105-285	Blue	1000W	1800VA



# 2005B SERIES

## INSTANT RESPONSE TURN-LOCK PHOTOCONTROL



### SPECIFICATIONS

**ON/OFF:** Turn-ON is 1.5 foot candle +/-0.2 OFF/ON ratio is 1.5:1 average.

**TIME DELAY:** Instant ON/3-5 seconds OFF.

**CELL:** Molded sealed IR filtered sensor

**RELAY:** Rated life 6,000 operations

**SURGE ARRESTOR:** 360 joules MOV exceeds ANSI and NEMA requirements.

**LOCKING PRONGS:** Solid brass prongs for maximum corrosion resistance and electrical conductivity.

**TEMPERATURE RANGE:** -40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 4 years.

### APPLICATIONS



- For state and county DOT & municipalities use on roadway and bridges. Also use for general commercial facilities.

### FEATURES

**SENSOR:** Molded sealed IR filtered sensor resists effects of moisture and airborne contaminants. IR filter responds to the light spectrum near to that of a human eye.

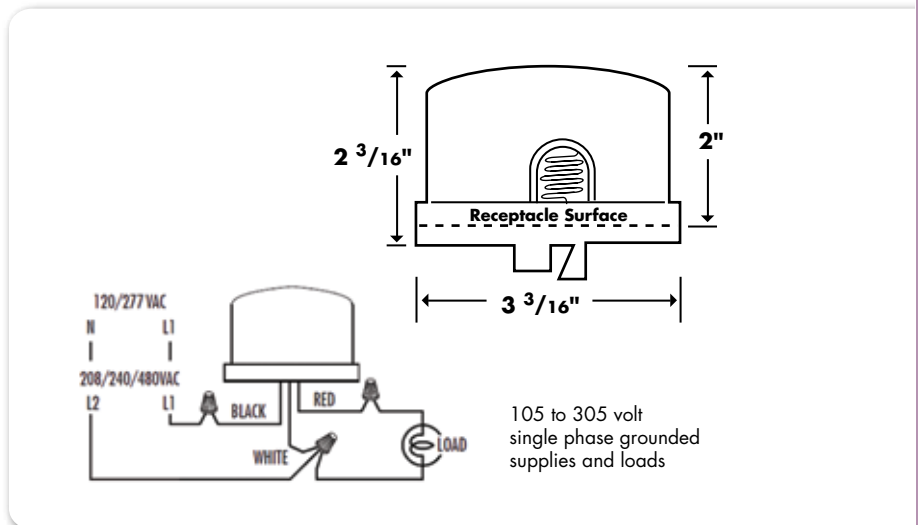
**STANDARDS:** Meets UL773 and ANSI C136.10 including color designations. Also meets EEL NEMA standards.

**HOUSING:** Polycarbonate housing and window, UV stabilized for permanent color. Polycarbonate provides high impact performance, flammability resistance, and electrically safe operations.

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety.

CAT.. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	RATING	
				TUNGSTEN	BALLAST
2005B	60015	105-130	Grey	1000W	1800VA
2007B	60016	105-305	Blue	1000W	1800VA
2008B*	62017	400-550	Yellow	1000W	1800VA

\*Not UL listed.



# 5200 SERIES

## UTILITY GRADE ELECTRONIC WITH FAIL ON MODE PHOTOCONTROL



### APPLICATIONS

- Designed meet local utility standards for street and highway lighting controls.

### FEATURES

**SENSOR:** Molded sealed silicon sensor resists effects of moisture and airborne contaminants.

**STANDARDS:** Meets ANSI C136 including color designations. Also meets EEI NEMA standards.

**HOUSING:** Polycarbonate housing and window, UV stabilized for permanent color. Polycarbonate provides high impact performance, flammability resistance, and electrically safe operations.

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety.

### SPECIFICATIONS

**ON/OFF:** Turn ON is 1.5 foot candle +/- 0.2 OFF/ON ratio is 1.5:1 average\*.

**TIME DELAY:** Instant ON/3-5 second OFF.

**CELL:** Molded sealed silicon sensor

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety.

**SURGE ARRESTOR:** 360 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.

**LOCKING PRONGS:** Solid brass for maximum corrosion resistance and electrical conductivity.

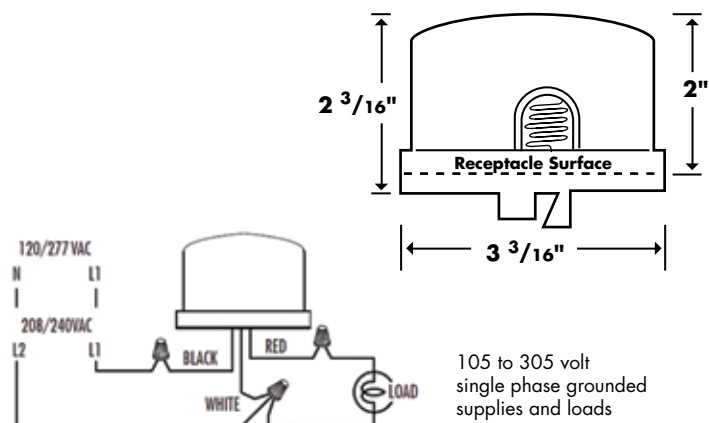
**CUSTOM:** Available for custom design to meet specific utility specification.

**TEMPERATURE RANGE:** -40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

CAT.NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	RATING	
				TUNGSTEN	BALLAST
5231	78885	105-130	Grey	1000W	1800VA
5237	78886	105-305	Blue	1000W	1800VA



# 5200-UL SERIES

## INSTANT RESPONSE TURN-LOCK PHOTOCONTROL



### APPLICATIONS



- Designed meet local utility standards for street and highway lighting controls.

### FEATURES

**SENSOR:** Molded sealed IR filtered sensor resists effects of moisture and airborne contaminants. IR filter responds to the light spectrum near to that of a human eye.

**STANDARDS:** Meets UL773 and ANSI C136.10 including color designations. Also meets EEI NEMA standards.

**HOUSING:** Polycarbonate housing and window, UV stabilized for permanent color. Polycarbonate provides high impact performance, flammability resistance, and electrically safe operations.

**ENERGY SAVINGS:** Listed for use with LED lamp drivers

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety.

### SPECIFICATIONS

**ON/OFF:** Turn ON is 1.5 foot candle +/- 0.2 OFF/ON ratio is 1.5:1 average.

**TIME DELAY:** Instant ON/3-5 second OFF.

**CELL:** Molded sealed IR filtered sensor

**RELAY:** Rated life 6,000 operations

**SURGE ARRESTOR:** 360 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.

**LOCKING PRONGS:** Solid brass for maximum corrosion resistance and electrical conductivity.

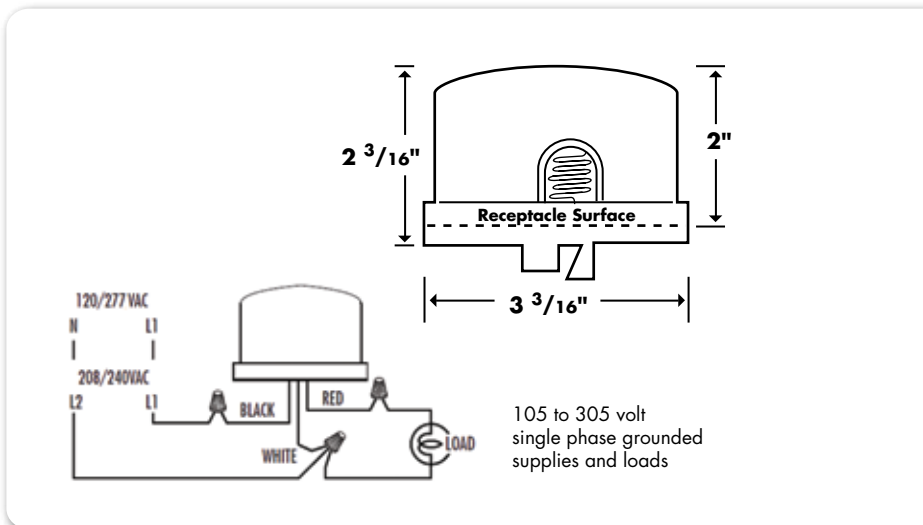
**CUSTOM:** Available for custom design to meet specific utility specification.

**TEMPERATURE RANGE:** -40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 6 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	RATING		LED DRIVER
				TUNGSTEN	BALLAST	
<b>NEW!</b> 5237-UL	78895	105-305	Blue	1000W	1800VA	1000W



# 5737 SERIES

ON AT DUSK, OFF AT MIDNIGHT  
ON EARLY MORNING,  
OFF AT DAWN  
PHOTO-TIMERS



## SPECIFICATIONS

**ON/OFF:** Turn ON at dusk is 5.0 foot candle +/- 0.5 OFF/ON ratio is 1.5:1 average.

**TIME DELAY:** Instant ON/3-5 seconds OFF.

**CELL:** Silicon photosensor

**SURGE ARRESTOR:** 360 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.

**5737TM HALF-NIGHT FUNCTION:** Allows user to adjust OFF time during the night. OFF time can be set for up to two hours before (for extra energy savings) or up to two hours after midnight. Use to stagger groups of lights to go OFF at different times during the night.

**5737TZ TWO FUNCTION:**

1) Standard: Set as a Dusk to Dawn photocontrol.

2) Half-night & Pre-Dawn: Turns on at Dusk. User adjusts OFF time for up to two hours before or after midnight. Then set countdown to Pre-dawn ON again 2 - 10 hours later. It always turns OFF at Dawn.

**LOCKING PRONGS:** Solid brass Prongs for maximum corrosion resistance and electrical conductivity.

**TEMPERATURE RANGE:**

-40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 3 years.

## APPLICATIONS

- Offices
- Restaurant signage
- Billboards
- Landscape and yard lighting
- Ideal for situations when visible traffic is reduced – lights ON at dusk and OFF at 10pm or later, then on again for early morning illumination.

## FEATURES

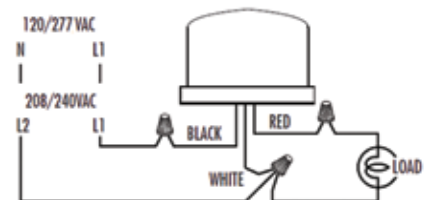
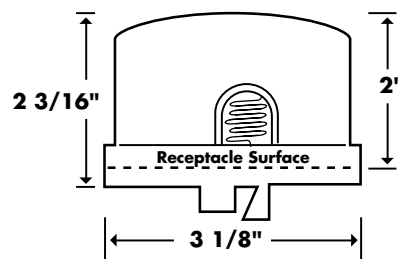
**OPERATION:** Microprocessor tracks the dusk and dawn times with the seasons and automatically determines midnight, NO PROGRAMMING REQUIRED. Automatically "re-learns" and resets after power outage, eliminating costly maintenance. DST correction built in.

**STANDARDS:** Meets ANSI C136.10 including color designations. Also meets EEI NEMA standards.

**HOUSING:** UV stabilized, ANSI color-coded polypropylene dome. UV stabilized, clear acrylic window. ABS base. Cross-linked, polypropylene gasket.

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	SWITCH	RATING	
					TUNGSTEN	BALLAST
5737TZ	62010	105-305	Blue	SPST	1000W	1800VA
5737TM	62009	105-305	Grey	SPST	1000W	1800VA



105-305 VAC  
single phase grounded supplies and loads

# PHOTOCONTROL ACCESSORIES FOR TURN-LOCK CONTROLS

## MOUNTING BRACKET

Utility mounting bracket for 1/2" threaded conduit photocontrols.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
--------	-------------	----------	-------------



73866 62020 Mounting Bracket

## REPLACEMENT CAPS



5500 replaces photocontrol to change light fixture to always ON.  
5500-OC replaces photocontrol to change light fixture to always OFF.  
Durable materials and gasket provide longevity and weatherproof protection.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
--------	-------------	----------	-------------



5500 Shorting cap  
480VAC max  
1800W Tungsten  
1800VA Ballast

5500-OC Open cap  
480VAC max  
(Black housing)

## RECEPTACLE



120-480V 50/60 Hz 15 amp maximum receptacle with color-coded 12" long, #14 leads, gasket and two mounting screws.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
--------	-------------	----------	-------------



2223 61025 Receptacle with gasket

## RECEPTACLE



120-480V 50/60 Hz 15 amp maximum receptacle with color-coded 12" long, #14 leads, mounting bracket and one mounting screw.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
--------	-------------	----------	-------------



2224 61026 Receptacle and mounting bracket

## RECEPTACLE



120-480V 50/60 Hz 15 amp maximum receptacle with color-coded 12" long, #14 leads, plastic housing, lock nut (with 1/2" NPT) and a mounting bracket.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
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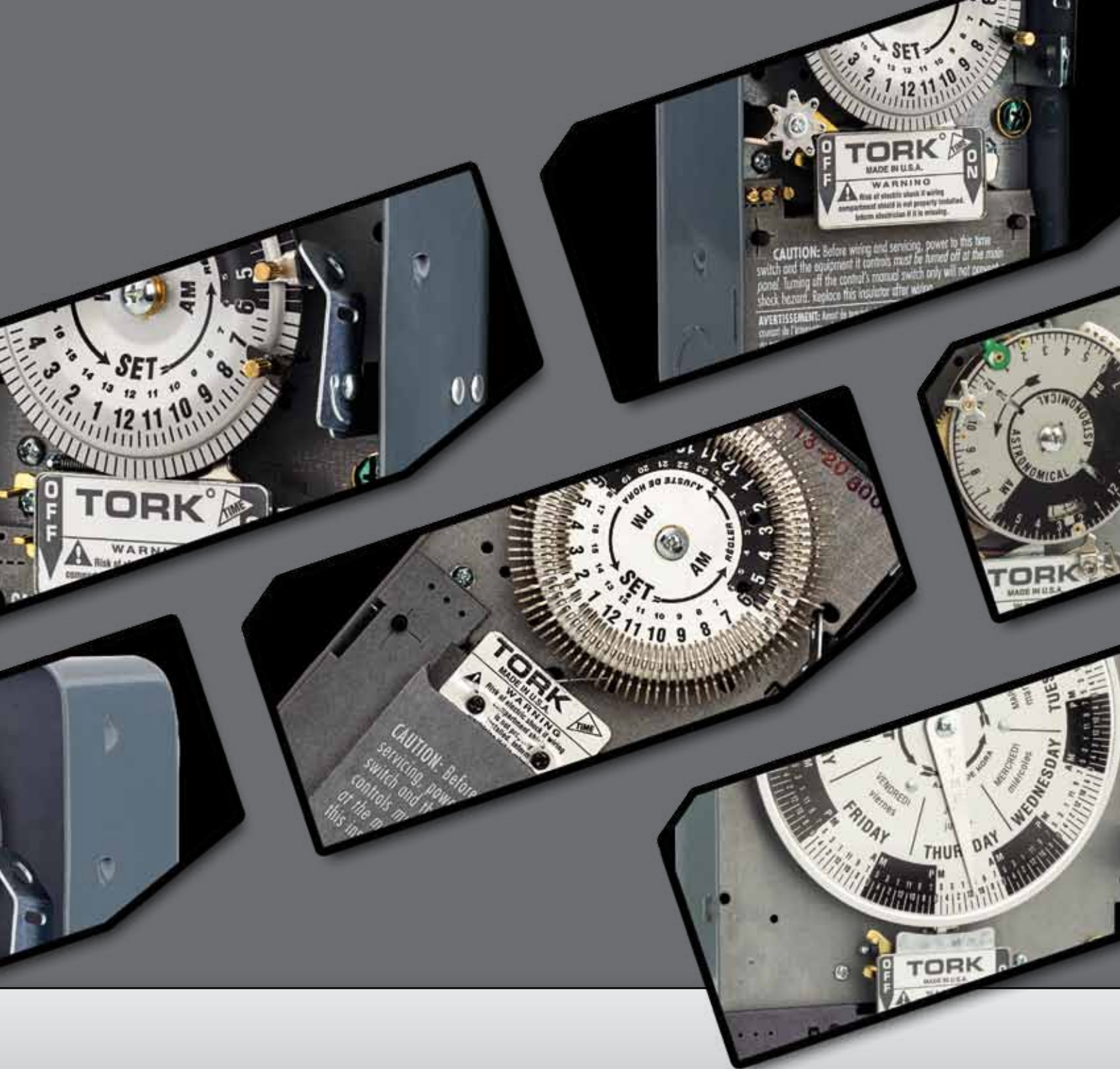


2421 61021 Receptacle with plastic housing and bracket

NSi offers many splicing options to complete the pole installation.  
See the splicing section pages 211- 232.










# TORK® ELECTROMECHANICAL TIME SWITCHES



# QUICK REFERENCE GUIDE

SERIES	PAGE NO.	CLOCK DIAL	MINIMUM SETTINGS (MINUTES)		SKIP A DAY	MANUAL OVERRIDE	SUNRISE/SUNSET	MAX ON & OFF EVENTS PER DAY	SWITCH TYPES					RATINGS (AMPS)	RESERVE POWER
			ON	OFF											
TU40	421	24 Hour	15	15		Permanent		48	SPST	DPST	SPDT	DPDT		40	
1100	423	24 Hour	20	75		Yes		12	SPST	DPST				40	
7000	425	24 Hour	20	75	Yes	Yes		12	SPST	DPST	SPDT	DPDT	3PST	40	Available
7000Z	427	24 Hour	20 or 40 Minute Offset		Yes	Yes		1	SPST	DPST	SPDT	DPDT	3PST	40	Available
TZ	441	24 Hour	20 or 40 Minute Offset		Yes	Permanent by circuit		1				DPDT	3PST	20	Standard
W	435	7 Day	60	120	Yes	Yes		2	SPST	DPST	SPDT	DPDT	3PST 4PST	40	Available
TW	439	7 Day	60	120	Yes	Permanent by circuit		2				DPDT	3PST	20	Standard
T900	437	7 Day	60	120	Yes	Permanent by circuit	Photo Control	2					2 SPDT 3 SPDT	20	Standard
1847A	433	24 Hour	20	75	Yes			12	SPDT, Momentary Contact					10	Available
1847AZ	433	24 Hour	20 or 40 Minute Offset		Yes	Yes		1	SPDT, Momentary Contact					10	Available
1847AW	433	7 Day	60	120	Yes	Yes		2	SPDT, Momentary Contact					10	Available
8000	429	24 Hour	15	15	Available			48	SPDT					20	Available
8000	431	6, 12, 30 & 60 Min.	Varies by dial 6 sec. to 1 min.					30/dial	SPDT					20	
WH2B	432	24 Hour	20	75		Yes		12	DPST					40	

## EASY TO SET DIAL ASSEMBLY



Tork's 24 hour dial assembly allows the user to set the time switch more accurately, easily moving it by hand in small increments. Dial can provide up to 12 ON/OcFFs per day with cycles as short as 20 minutes. AM and PM settings are easy to see by the light and dark areas of the dial.

## CAPTIVE TABS – DUTY CYCLE DIAL



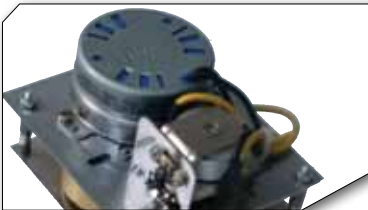
For applications requiring many ON/OFF cycles per day, captive tabs on this dial tilt in and out just using your fingertip!

## FIELD UPGRADEABLE TO SunSet DIALS



All Tork 24 hour time switches can be upgraded in the field to a SunSet timer dial.

## SPRING WOUND RESERVE



During power outages, precision spring mechanism takes over instantly and automatically. Keeps the mechanism on time up to 16 hours on 24 hour models and up to 24 hours on 7 day models. No resetting is needed after power resumes, and field installation is easy!

## REMOVABLE DOOR



Tork time switches feature removable doors to provide easy access for installation and wiring.

## ENCLOSED MOTOR



Time switch motors are enclosed to protect from dust and damage.

## QUALITY ASSURANCE

**TORK®** Electromechanical Controls are designed and manufactured with components which adhere to the highest industry standards. Trained personnel and in-process quality procedures ensure that every unit meets our strictest quality expectations.

# TU40 SERIES

UNIVERSAL MULTI-VOLTAGE  
SAME ON/OFF TIMES EACH DAY  
24 HOUR TIME SWITCH



ALL PURPOSE  
CONTACTS,  
HOUSING,  
& VOLTAGES!

## APPLICATIONS



- Lighting
- Pumps
- Signs
- Air conditioning
- Water heaters
- Fans

## FEATURES

**MULTI-VOLTAGE:** Automatic input voltage detection.

**EASY SET:** Real time clock face and day/night markings for setting trippers.

**SCHEDULING:** Minimum ON is setting 15 minutes. Dial has 96 captive trippers.

**4 in 1 CONTACTS:** DPDT can also wire as SPST, SPDT, & DPST.

**BYPASS SWITCH:** Sets timer to permanent ON, OFF or timer operation.

**VACATION MODE:** Set timer OFF with no change of tripper settings.

**INDICATING LIGHTS:** Power ON green and load ON red and LED indicators.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 60Hz	DRY CONTACTS (UNPOWERED)	ENCLOSURE TYPE
TU40	24000	120/208-240/277	DPDT	Plastic Indoor/Outdoor NEMA 3R
TU40-Y	24001	120/208-240/277	DPDT	Metal Indoor NEMA 1

## SPECIFICATIONS

**INPUT VOLTAGE:** 120/208-240/277VAC, 60Hz (auto detection).

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #18 AWG.

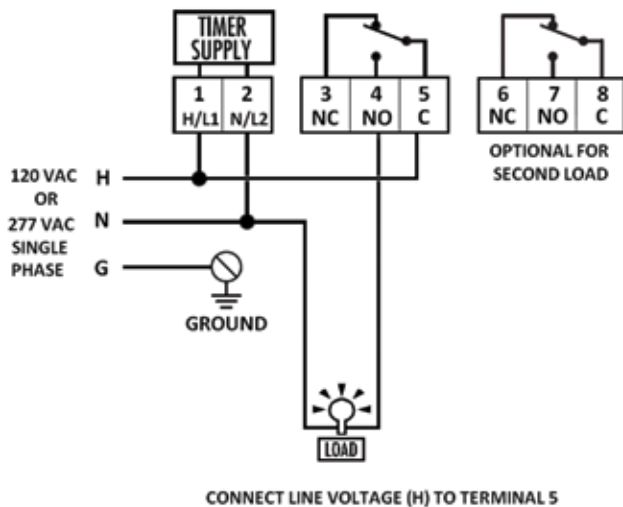
**OPERATING TEMPERATURE:** -31°F to 116°F (-35°C to +47°C).

**POWER CONSUMPTION:** 6 watts maximum.

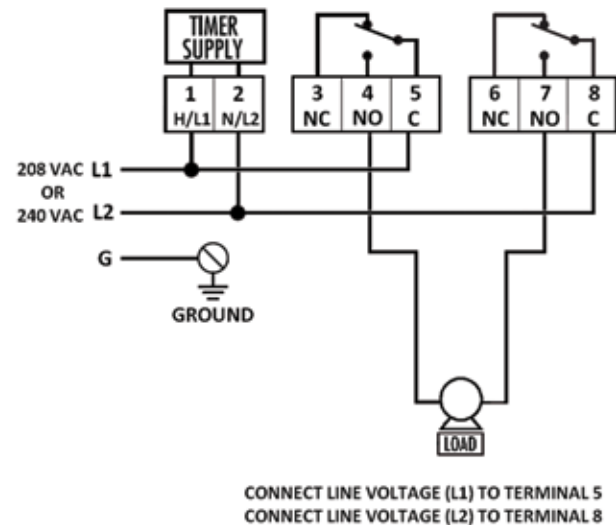
**ENCLOSURE:** Polycarbonate Indoor/  
Outdoor NEMA 3R or -Y suffix metal  
indoor NEMA 1 enclosure. Both with  
lockable hasp standard (see page 557 for  
enclosure dimensions).

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
General Purpose	120-277	40A	30A
Inductive	120-277	30A	15A
Ballast	120	30A	10A
	277	20A	10A
Tungsten	120	15A	
Motor Load	120	1HP, 30FLA, 90LRA	¼HP, 12FLA, 30LRA
	240	2HP, 20FLA, 60LRA	½HP, 12FLA, 33LRA
Pilot Duty	120	720VA	290VA
	240	720VA	360VA
Resistive	28VDC	20A	
Max above 104°F	120-277	30A	

TYPICAL SPST WIRING - LOAD SAME VOLTAGE AS TIMER SUPPLY



TYPICAL DPST WIRING - LOAD SAME VOLTAGE AS TIMER SUPPLY



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# 1100 SERIES

SAME DAY ON/OFF  
TIMES EACH DAY  
24 HOUR TIME SWITCH



## APPLICATIONS

- Lighting
  - Pumps
  - Signs
  - Air conditioning
  - Water heaters
  - Fans
- Automatic ON/OFF control when operation is required at the same time every day.

## FEATURES

**SCHEDULING:** Minimum ON is setting 20 minutes with a minimum OFF setting of 75 minutes. Dial accommodates up to 12 pairs of trippers. One pair included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF automatic operation then resumes.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
1101	10011	120	SPST	Metal Indoor NEMA 1
1101B-P*	10068	120	SPST	Polycarbonate Indoor/Outdoor NEMA 3R
1101-NC	10053	120	SPST	Noryl® Indoor/Outdoor w/ clear Lexan® cover
1101-O	10015	120	SPST	Metal Indoor/Outdoor NEMA 3
1101BM-IAP*	10073	120	SPST	Mechanism and retrofit plate
1101-7**	10033	347	SPST	Metal Indoor NEMA 1
1102B	10065	208-277	SPST	Metal Indoor NEMA 1
1103	10013	120	DPST	Metal Indoor NEMA 1
1103B-P*	10069	120	DPST	Polycarbonate Indoor/Outdoor NEMA 3R
1103-NC	10054	120	DPST	Noryl® Indoor/Outdoor w/ clear Lexan® cover
1103-O	10016	120	DPST	Metal Indoor/Outdoor NEMA 3
1103M	10023	120	DPST	Mechanism
1104	10014	208-277	DPST	Metal Indoor NEMA 1
1104B-P*	10070	208-277	DPST	Polycarbonate Indoor/Outdoor NEMA 3R
1104-NC	10055	208-277	DPST	Noryl® Indoor/Outdoor w/ clear Lexan® cover
1104B-O*	10075	208-277	DPST	Metal Indoor/Outdoor NEMA 3
1104BM-MB*	10076	208-277	DPST	Mechanism and surface mounting bracket
1104BM-IAP*	10074	208-277	DPST	Mechanism and retrofit plate
Replacement Trippers	Order #P47 for a pair of ON/OFF trippers			
Replacement Motor	#101 (120V) & #201 (208-277V)			



Astronomic dial. Consult factory for correct number for your latitude

\* B suffix units cULus cULus

\*\* 1101-7 CSA only SFA

## SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277 VAC  
60 Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14 AWG.

**OPERATING TEMPERATURE:**  
-40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:**  
3 watts maximum.

**ENCLOSURE:** Lockable hasp. Type varies  
by model (see page 557 for enclosure  
dimensions).

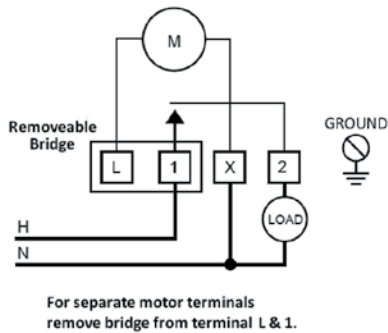
**OTHER MOUNTINGS:**

Intermatic® Adaptor Plate model #IAP allows  
any 1100 series to fit into an Intermatic case.

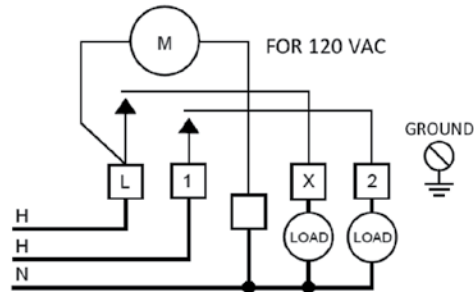
TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120 -277	40A
Resistive	120 -277	40A
Tungsten	120	40A
Ballast	120-277	20A
<b>NEW!</b> LED Driver*	120-277	20A
Pilot Duty	120 -277	1000VA**
Motor	120	2HP
	240	5HP
277VAC Single Phase		

\* LED rating UL only (UL) or cULus on B suffix units (UL)us  
\*\* B suffix units 120VAC 1000VA / 240VAC 2000VA  
1101-7 is 30 AMP inductive at 347 volts and CSA only (CSA)

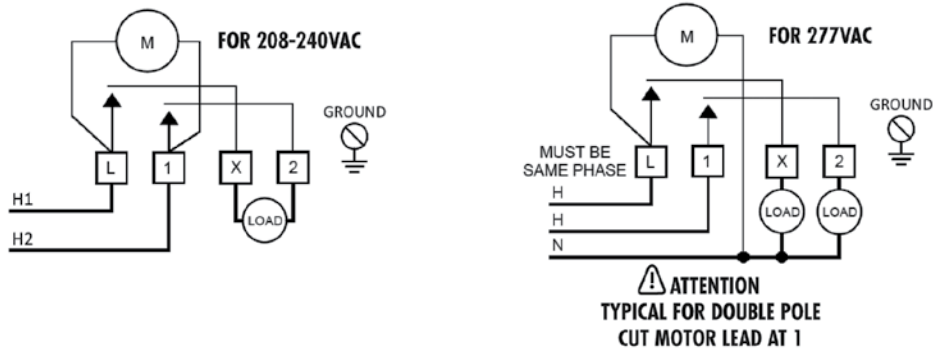
### 1101 & 1102



### 1103



### 1104



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# 7000 SERIES

WITH SKIP-A-DAY FEATURE  
RESERVE POWER OPTIONAL  
24 HOUR TIME SWITCH



**SKIP-A-DAY  
24 HOUR!**

## APPLICATIONS



CALIFORNIA Title 24

ASHRAE 90.1

- Lighting
- Heating
- Pumps
- Air conditioning
- Signs
- Automatic ON/OFF control when operation is required at the same time every day, with optional versatility of one to six days omission.

## FEATURES

**SCHEDULING:** Minimum ON setting is 20 minutes with minimum OFF setting at 75 minutes. Dial accommodates up to 12 pairs of trippers. One pair included.

**SKIP-A-DAY:** Omit operations on any day with a 7-spoke wheel marked with days of week. 3 omitting screws included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 16 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
7100	10001	120	SPST	Metal Indoor NEMA 1
7102	10002	208-277	SPST	Metal Indoor NEMA 1
7200	11001	120	DPST	Metal Indoor NEMA 1
7200-0	10512	120	DPST	Metal Indoor/Outdoor NEMA 3
7202	11002	208-277	DPST	Metal Indoor NEMA 1
7202-0	10509	208-277	DPST	Metal Indoor/Outdoor NEMA 3
7300	12001	120	3PST	Metal Indoor/Outdoor NEMA 3
7302	12002	208-277	3PST	Metal Indoor/Outdoor NEMA 3
7120	13001	120	SPDT	Metal Indoor NEMA 1
7122	13002	208-277	SPDT	Metal Indoor NEMA 1
7220	14001	120	DPDT	Metal Indoor NEMA 1
7222	14002	208-277	DPDT	Metal Indoor NEMA 1
<b>WITH RESERVE POWER</b>				
7200L	19003	120	DPST	Metal Indoor NEMA 1
7202L	19004	208-277	DPST	Metal Indoor NEMA 1
7300L	19005	120	3PST	Metal Indoor/Outdoor NEMA 3
7302L	19006	208-277	3PST	Metal Indoor/Outdoor NEMA 3
7120L	19007	120	SPDT	Metal Indoor NEMA 1
7220L	19009	120	DPDT	Metal Indoor NEMA 1
7222L	19011	208-277	DPDT	Metal Indoor NEMA 1

Replacement Trippers Order #P49 for a pair of ON/OFF per dial. Additional ON/OFF trippers per dial order #P47. 3 omitting screws #53005 supplied.

Replacement Motor #101 (120V) & #201 (208-277V). For "L" models #36 (120V) & #46 (208-277V). For Astronomic Conversion: Order #Z KIT for 7000 Series.



Astronomic dial. Consult factory for correct number for your latitude

# SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277 VAC 60 Hz varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14 AWG.

**OPERATING TEMPERATURE:** -40° to 165°F (-40° to +74°C).

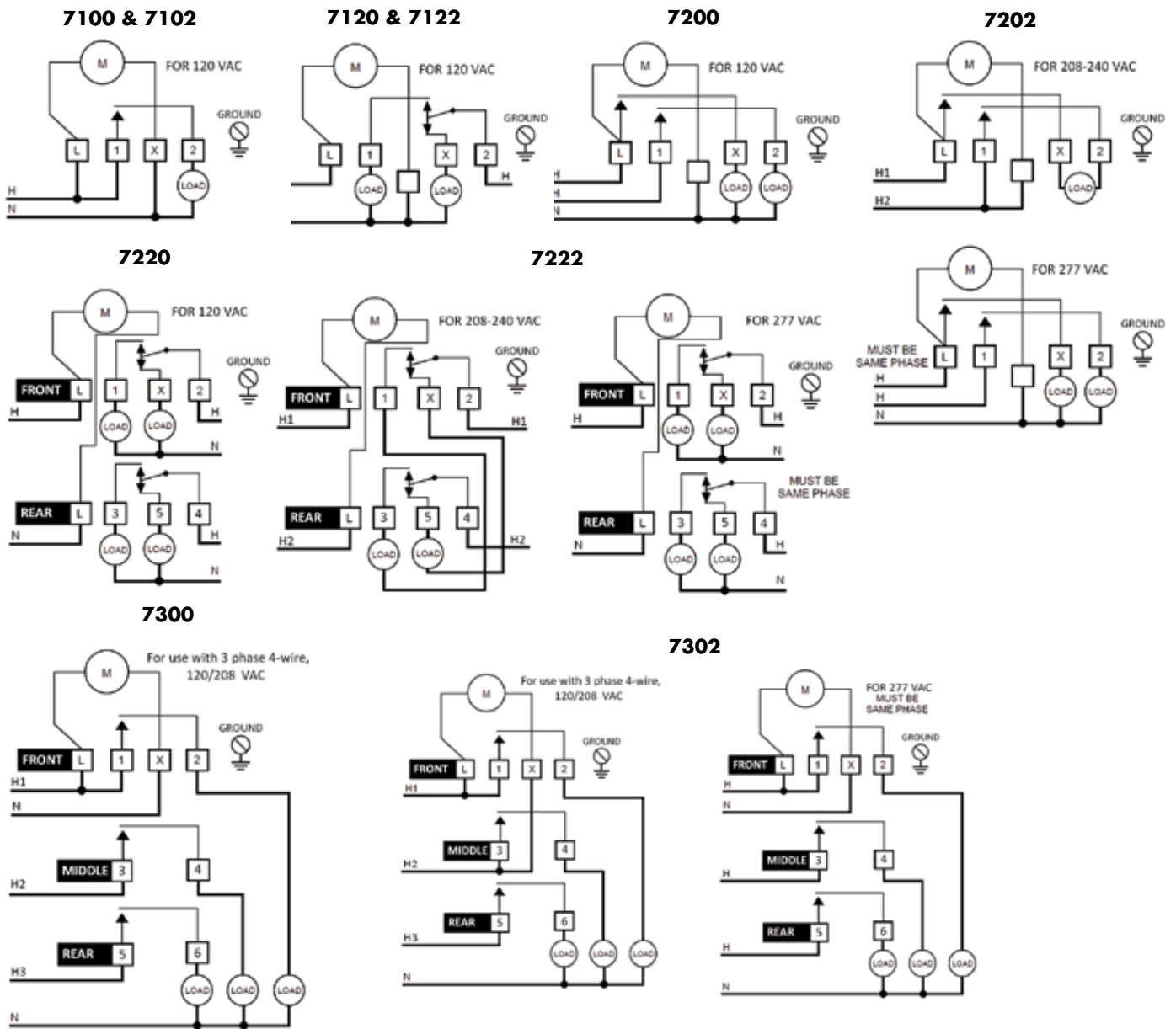
**POWER CONSUMPTION:** 3 watts, 5 watts for "L" models maximum.

**ENCLOSURE:** Lockable hasp. Type varies by model (see page 557 for enclosure dimensions).

**OTHER MOUNTINGS:** Intermatic® Adaptor Plate model #IAP allows any 7100 and 7200 series (except "L" models) to fit into an Intermatic case.

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120 -277	40A
Resistive	120 -277	40A
Tungsten	120	40A
Ballast	120-277	20A
Pilot Duty	120 -277	1000VA
Motor	120	2HP
	240	5HP

277 volt Single Phase



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# 7000Z SERIES

SunSet WITH SKIP-A-DAY FEATURE  
RESERVE POWER OPTIONAL  
ASTRONOMIC TIME SWITCH



ADJUSTS  
TO DAILY  
CHANGES IN  
SUNSET  
TIMES!

CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS



- Parking lots
- Walkways
- Outdoor signage
- Window displays
- Canopy lighting
- Landscape lighting
  
- Automatic ON at dusk, OFF at dawn. Control of outdoor lighting.

## FEATURES

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Turn ON at sunset and OFF at sunrise daily. OFF time can be set from 8:30PM to 2:30AM. Can be individually offset +/- 20 or 40 minutes from both sunset and OFF times. Available from 18° - 45° northern latitudes.

**SKIP-A-DAY:** Omit operations on any day with a 7 spoke wheel marked with days of the week. 3 omitting screws included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 16 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
7200Z-*	**	120	DPST	Noryl® Indoor/Outdoor NEMA 3R
7202Z-*	**	208-277	DPST	Noryl® Indoor/Outdoor NEMA 3R
7300Z-*	**	120	3PST	Metal Indoor/Outdoor NEMA 3
7302Z-*	**	208-277	3PST	Metal Indoor/Outdoor NEMA 3
7120Z-*	**	120	SPDT	Noryl® Indoor/Outdoor NEMA 3R
WITH RESERVE POWER				
7200ZL-*	**	120	DPST	Noryl® Indoor/Outdoor NEMA 3R
7202ZL-*	**	208-277	DPST	Noryl® Indoor/Outdoor NEMA 3R
7300ZL-*	**	120	3PST	Metal Indoor/Outdoor NEMA 3
7302ZL-*	**	208-277	3PST	Metal Indoor/Outdoor NEMA 3
7120ZL-*	**	120	SPDT	Noryl® Indoor/Outdoor NEMA 3R
7122ZL-*	**	208-277	SPDT	Noryl® Indoor/Outdoor NEMA 3R

Replacement Motor #101 (120V) & #201 (208-277V).  
For "L" models #36 (120V) & #46 (208-277V)

\*Add degrees latitude to complete number (18, 30, 34, 38, 40, 42, or 45).

\*\*Consult factory for UPC number.

**SPECIFICATIONS**

**INPUT VOLTAGE:** 120 or 208-277 VAC  
60 Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14 AWG.

**OPERATING TEMPERATURE:**  
-40° to 165°F (-40° to +74°C).

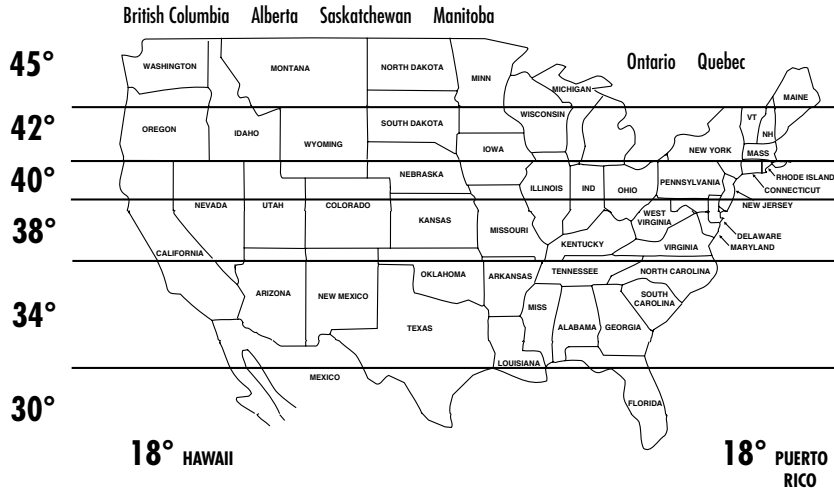
**POWER CONSUMPTION:** 3 watts,  
5 watts for "L" models maximum.

**ENCLOSURE:** Lockable hasp. Type varies  
by model (see page 557 for enclosure  
dimensions).

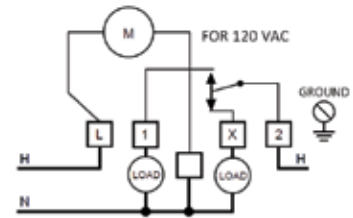
TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120 -277	40A
Resistive	120 -277	40A
Tungsten	120	40A
Ballast	120-277	20A
Pilot Duty	120 -277	1000VA
Motor	120 240	2HP 5HP

277VAC Single Phase

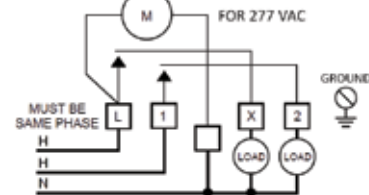
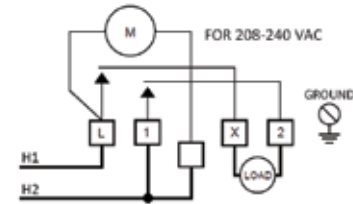
**ASTRONOMIC LATITUDE ZONES**



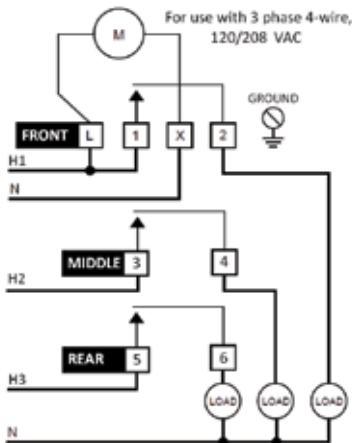
**7120Z**



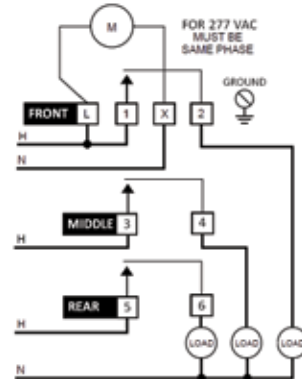
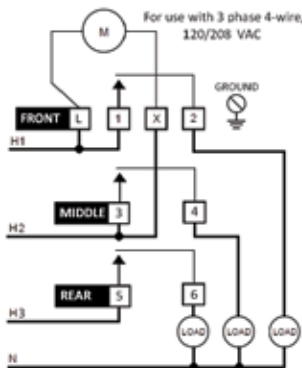
**7200Z**



**7300Z**



**7302Z**



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# 8000 SERIES

MANY DAILY ON/OFF  
OPERATIONS PER DAY  
**DUTY CYCLE**  
24 HOUR TIME SWITCH



**DUTY CYCLE  
FOR  
MULTIPLE  
ON/OFF  
OPERATIONS!**

## APPLICATIONS



- Duty cycling
- Ventilating fans
- Pumping
- Irrigation
- Process control
- Laboratory experiments
  
- For one or multiple daily ON/OFF operations.

## FEATURES

**SCHEDULING:** Minimum ON setting is 15 minutes with minimum OFF setting at 15 minutes. Dial has 96 captive tabs.

**DUTY CYCLE:** Adjustable from 1/2, 1, 2, 3, 4, 6, 12, and 24 hours.

**SKIP-A-DAY:** Some models include 7 day or 14 day wheel to omit selected days of the week.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 16 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
8001	70001	120	SPDT	Metal Indoor NEMA 1
8001-N	70025	120	SPDT	Noryl® Indoor/Outdoor NEMA 3R
8001-NC	70009	120	SPDT	Noryl® Indoor/Outdoor NEMA 3R w/ clear Lexan® cover
8001-LC/WB	70010	120	SPDT	Mechanism and bracket
8001-O	70029	120	SPDT	Metal Indoor/Outdoor NEMA 3
8004	70002	208-277	SPDT	Metal Indoor NEMA 1
8001U	70003	480/120 Trans.	SPDT	Metal Indoor NEMA 1
8001U-N	70014	480/120 Trans.	SPDT	Noryl® Indoor/Outdoor NEMA 3R
8001U-O	70011	480/120 Trans.	SPDT	Metal Indoor/Outdoor NEMA 3
<b>24 HOUR WITH 7 DAY OMIT</b>				
8007	70005	120	SPDT	Metal Indoor NEMA 1
8007-O	70012	120	SPDT	Metal Indoor/Outdoor NEMA 3
8008	70006	208-277	SPDT	Metal Indoor NEMA 1
8007U	70008	480/120 Trans.	SPDT	Metal Indoor NEMA 1
8007U-O	70028	480/120 Trans.	SPDT	Metal Indoor/Outdoor NEMA 3
<b>24 HOUR WITH 7 DAY OMIT &amp; RESERVE POWER</b>				
8007L	70015	120	SPDT	Metal Indoor NEMA 1
8008L	70016	208-277	SPDT	Metal Indoor NEMA 1
<b>24 HOUR WITH 14 DAY OMIT</b>				
8007V	70007	120	SPDT	Metal Indoor NEMA 1
<b>24 HOUR WITH 14 DAY OMIT &amp; RESERVE POWER</b>				
8007VL	70017	120	SPDT	Metal Indoor NEMA 1

Replacement Motor

#101(120V) & #201 (208-277V).  
For "L" models #36 (120V) & #46 (208-277V)

## SPECIFICATIONS

**INPUT VOLTAGE:** 120, 208-277VAC or 480VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

**OPERATING TEMPERATURE:**

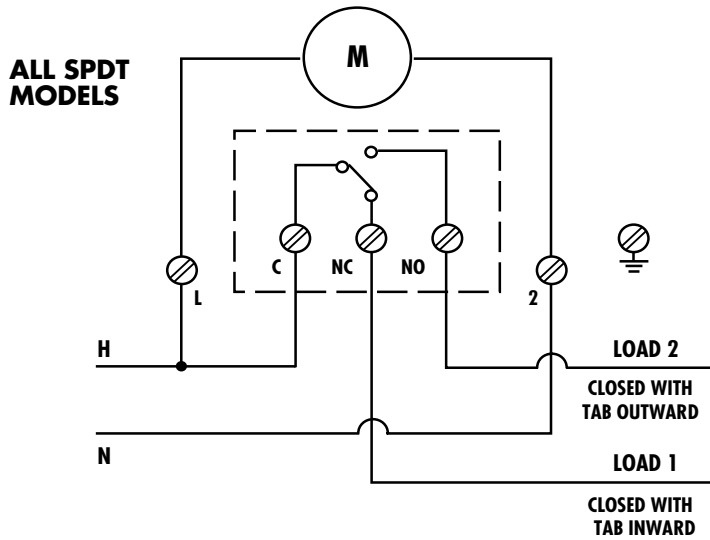
-40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:** 3 watts, 5 watts for "L" models maximum.

**ENCLOSURE:** Lockable hasp. Type varies by model (see page 557 for enclosure dimensions).

**OTHER MOUNTINGS:** Intermatic® Adaptor Plate model #IAP allows 8001 & 8004 to fit into an Intermatic case.

TYPE	VOLTAGE (VAC)	CONTACT RATING
Resistive	120 or 240 480	20A 20A
Motor	120	3/4 HP



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# 8000 SERIES

MULTIPLE ON/OFF CYCLES  
REPEATING VARIABLE CYCLE  
TIME SWITCH



## SPECIFICATIONS

- INPUT VOLTAGE:** 120VAC, 60Hz.  
**TIMING ACCURACY:** Line frequency.  
**TERMINAL RANGE:** #8 - #14AWG.  
**OPERATING TEMPERATURE:**  
 -40° to 165°F (-40° to +74°C).  
**POWER CONSUMPTION:**  
 3 watts maximum.  
**ENCLOSURE:** Indoor NEMA 1 Metal  
 with lockable hasp (see page 557 for  
 enclosure dimensions).

## APPLICATIONS



- Duty cycling
  - Ventilating fans
  - Pumping
  - Irrigation
  - Process control
  - Laboratory experiments
- For one or many daily ON/OFF operations.

## FEATURES

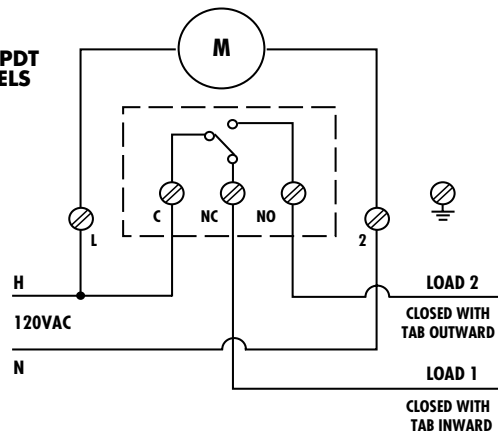
- SCHEDULING:** 60 captive tabs per dial with minimum ON/OFF settings:
- 60 minute dial with 1 minute tabs.
  - 30 minute dial with 30 second tabs.
  - 12 minute dial with 12 second tabs.
  - 6 minute dial with 6 second tabs.
- DUTY CYCLE:** Settings of  $\frac{1}{60}$  th of dial speed.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	TYPE
8601	70034	120	SPDT	60 Minute
8301	70033	120	SPDT	30 Minute
8121	70032	120	SPDT	12 Minute
8061	70031	120	SPDT	6 Minute

Replacement Motor For 8601 #102, for 8301 #108, for 8121 #107, and for 8061 #105.

TYPE	VOLTAGE (VAC)	CONTACT RATING
Resistive	120 or 240	20A
	480	20A
Motor	120	3/4 HP

### ALL SPDT MODELS



# WH2B 24 HOUR WATER HEATER TIME SWITCH



Avoid utility peak rates  
Turn off when not needed

## SPECIFICATIONS

**INPUT VOLTAGE:** 208 – 250V 60 Hz.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

**OPERATING TEMPERATURE:**  
-40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:**  
3 watts maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp (see page 557 for enclosure dimensions).

## APPLICATIONS

Automatic ON/OFF control of electric water heaters. Schedules the water heater to turn ON only when needed, avoiding energy waste when hot water is not needed.



## FEATURES

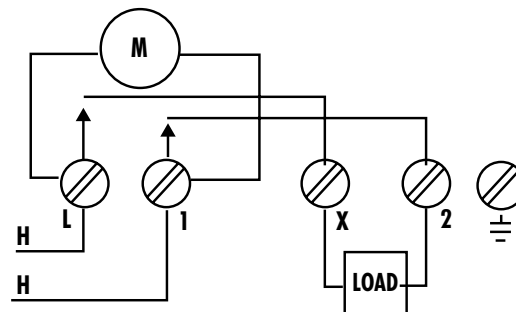
**SCHEDULING:** Minimum ON is setting 20 minutes with a minimum OFF setting of 75 minutes. Dial accommodates up to 12 pairs. 3 pairs of trippers supplied.

**EXTERNAL MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF automatic operation then resumes.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
WH2B	70044	208-250	DPST	Metal Indoor NEMA 1

TYPE	VOLTAGE (VAC)	CONTACT RATING
Resistive	208-250	40 A 10,000W
Replacement Motor	#201 (208-277)	
Replacement Trippers	Order #P47 for a pair of ON/OFF trippers	

### TYPICAL FOR 240 VOLT SUPPLY



# 1800 SERIES

FOR MECHANICALLY HELD CONTACTORS  
AND LOW VOLTAGE REMOTE CONTROL  
MOMENTARY CONTACT  
TIME SWITCH



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS



- Mechanically-held contactors
- 3-wire momentary
- lighting systems
- Remote station switching

## FEATURES

**SCHEDULING:** Choice of three types.

**24 HOUR SKIP-A-DAY:** Minimum ON setting is 20 minutes with minimum OFF setting at 75 minutes. Dial accommodates up to 12 pairs of trippers. Omit operations on any day with a 7 spoke wheel marked with days of week.

**ASTRONOMIC SCHEDULING:** Turn ON at sunset and OFF at sunrise daily. OFF time can be set from 8:30PM to 2:30AM. Can be individually offset +/- 20 or 40 minutes from both sunset and OFF times.

**7 DAY SCHEDULING:** Minimum ON setting is 1 hour with a minimum OFF setting of 2 hours. Minimum 8 hours between 2 OFF settings. 7 day calendar dial will accommodate up to 2 pairs on ON/OFF trippers per day - 7 pairs are supplied.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 16 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	TYPE
1847A	52001	120	SPDT Momentary	24 Hour
1848A	52014	208-277	SPDT Momentary	24 Hour
1847AZ*	**	120	SPDT Momentary	Astronomic
1847AW	52005	120	SPDT Momentary	7 Day
WITH RESERVE POWER				
1847AL	52006	120	SPDT Momentary	24 Hour
1847AZL*	**	120	SPDT Momentary	Astronomic
1847AWL	52010	120	SPDT Momentary	7 Day
Replacement Trippers	For 24 hour models order #P49 for a pair ON/OFF per dial. Additional ON/OFF trippers per dial order #P47. 3 omitting screws #53005 supplied. 7 day models order #P69 for 7 pairs of ON/OFF trippers.			
Replacement Motor	#101(120V) & #201 (208-277V). For "L" models #36 (120V)			

\*Add degrees latitude to complete number (18, 30, 34, or 42).

\*\*Consult factory for UPC number.

## SPECIFICATIONS

**INPUT VOLTAGE:** 120VAC or 208-277VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #12 - #22AWG.

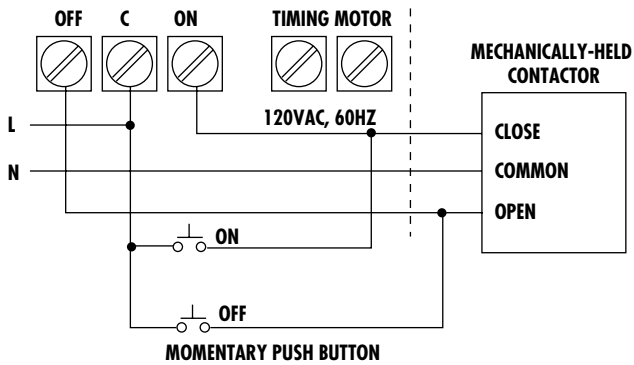
**OPERATING TEMPERATURE:**

-40° to 165°F (-40° to +74°C).

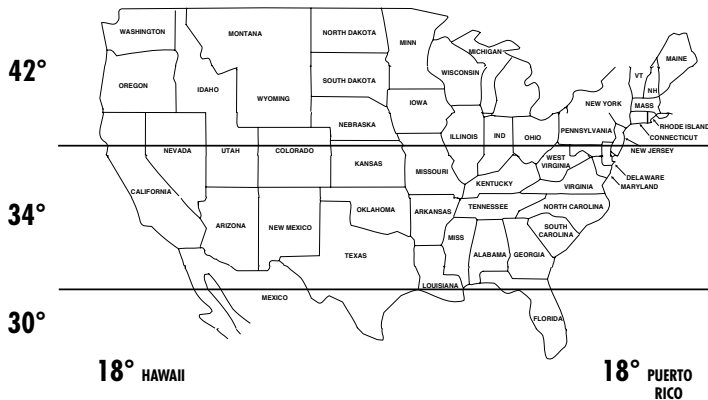
**POWER CONSUMPTION:** 3 watts, 5 watts for "L" models maximum.

**ENCLOSURE:** NEMA 1 Metal with lockable hasp (see page 557 for enclosure dimensions).

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	24-277	10A
Pilot Duty	24-277	360VA



## ASTRONOMIC LATITUDE ZONES



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# W SERIES

## DIFFERENT SCHEDULES EACH DAY

### 7 DAY TIME SWITCH



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS



- Heating
- Air conditioning
- Display lighting
- Ventilating systems
- Lighted signage
- Storefront lighting

## FEATURES

**SCHEDULING:** Minimum ON setting is 1 hour with a minimum OFF setting of 2 hours. Minimum 8 hours between 2 OFF settings. Models W400A and W402A offer minimum ON/OFF settings of 3½ hours. 7 day calendar dial accommodates up to 2 pairs of ON/OFF trippers per day – 7 pairs are supplied.

**SKIP-A-DAY:** Omit operations on any day.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF automatic operation then resumes.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 24 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
W100	30001	120	SPST	
W120	33001	120	SPDT	
W200	31001	120	DPST	
W202	31011	208-277	DPST	Metal Indoor NEMA 1
W220	34001	120	DPDT	
W222	34011	208-277	DPDT	
W300	32001	120	3PST	
W300-0	32003	120	3PST	Metal Indoor/Outdoor NEMA 3
W302	32002	208-277	3PST	
W400B*	35003	120	4PST	Metal Indoor NEMA 1
W402B*	35004	208-277	4PST	
<b>WITH RESERVE POWER</b>				
W220L	39009	120	DPDT	
W222L	39010	208-277	DPDT	
W300L	39005	120	3PST	Metal Indoor NEMA 1
W302L	39006	208-277	3PST	
W400BL*	39008	120	4PST	
Replacement Trippers	Order #P69 for 7 pairs of ON/OFF trippers			

Replacement Motor #101 (120V) & #201 (208-277V). For "L" models order #36 (120V) and #46 (208-277V).

\*UL Listed only.

# SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

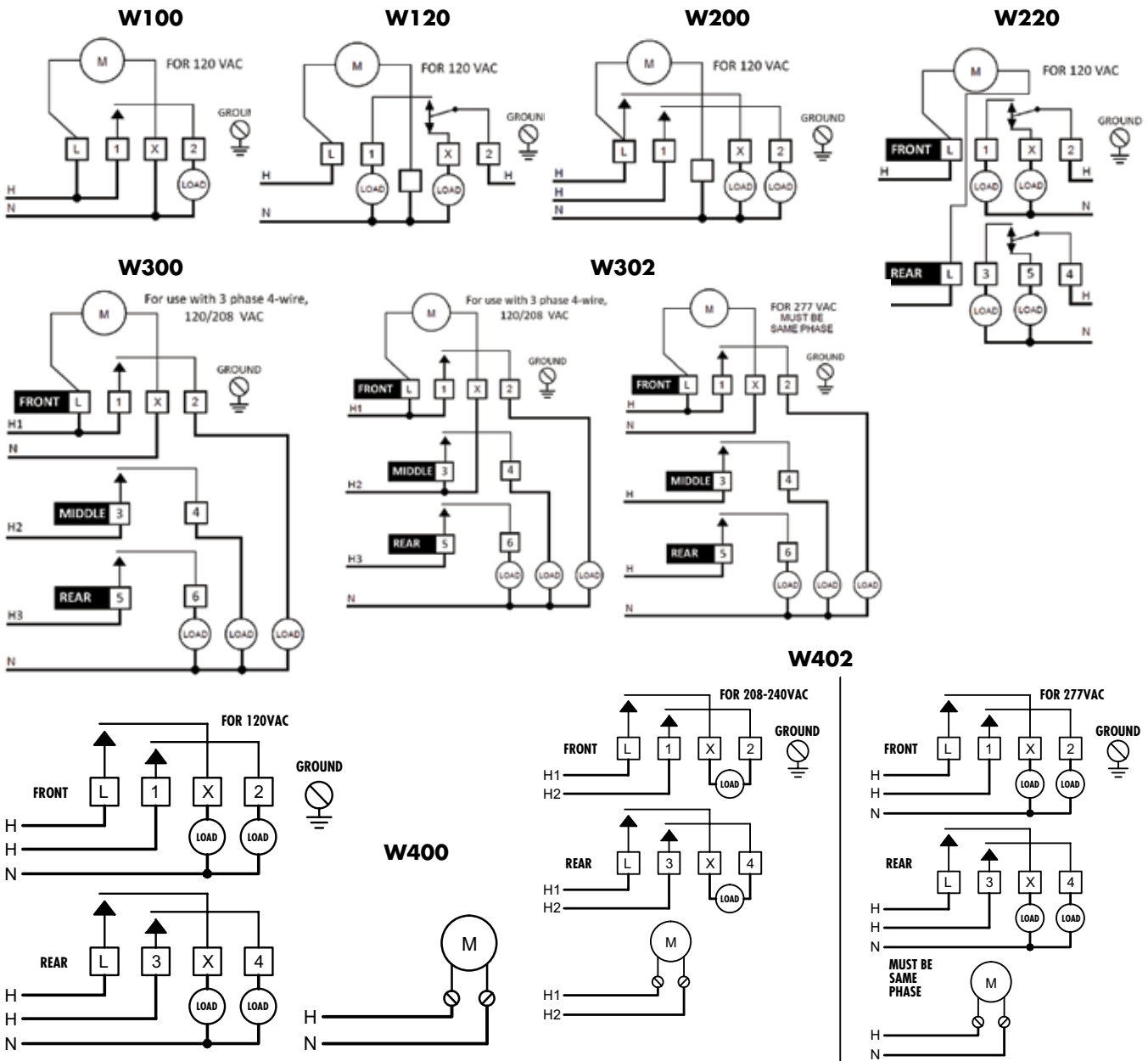
**OPERATING TEMPERATURE:** -40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:** 3 watts, 5 watts for "L" models maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp. Other enclosures include metal Indoor/Outdoor NEMA 3 with suffix "O" (see page 557 for enclosure dimensions).

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120 -277	40A
Resistive	120 -277	40A
Tungsten	120	40A
Ballast	120-277	20A
Pilot Duty	120 -277	1000VA
Motor	120 240	2HP 5HP

277VAC Single Phase



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# T900 SERIES

PHOTOELECTRIC & 7 DAY CONTROL COMBO  
DIFFERENT SCHEDULES EACH DAY  
RESERVE POWER STANDARD  
2 & 3 CIRCUIT CONTROL CENTERS

## APPLICATIONS

- Parking lot lighting
- HVAC
- Display lighting
- Security lighting
- Lighted signage
- Storefront lighting



Optional "E" cover



Model 2101  
supplied with unit.



CALIFORNIA Title 24

ASHRAE 90.1

## FEATURES

### SCHEDULING:

**CIRCUIT 1:** ON automatically at dusk, OFF at individual preset times each day, including skipping days when desired. Unit can be set to turn ON before dawn for early morning lighting.

**CIRCUIT 2:** ON at dusk, OFF at dawn automatically, daily.

**CIRCUIT 3:** Individual daily ON and OFF settings at desired times, including skipping any desired day or days. Minimum ON is setting 1 hour with a minimum OFF setting of 2 hours. Minimum 8 hours between 2 OFF settings. 7 day calendar dial will accommodate up to 2 pairs of ON-OFF trippers per day – 7 pairs are supplied.

**SKIP-A-DAY:** Omit operations on any day.

**MANUAL BY-PASS SWITCHES:** Single pole, 20 Amps – one per circuit. Factory pre-wired to terminal strip. ON/OFF/AUTO positions for each circuit is independent – will not disturb automatic settings.

**RESERVE POWER:** Standard feature on all models keep dial on time up to 24 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
T920L	41033	120	2 SPDT	Metal Indoor NEMA 1
T920L-E	41034	120	2 SPDT	Metal Indoor NEMA 1 with switch access
T920L-O	41035	120	2 SPDT	Metal Indoor/outdoor NEMA 3
T930L	41055	120	3 SPDT	Metal Indoor NEMA 1
T930L-E	41056	120	3 SPDT	Metal Indoor NEMA 1 with switch access
T930L-O	41057	120	3 SPDT	Metal Indoor/outdoor NEMA 3
Replacement Trippers		#P69 for 7 pairs of ON/OFF trippers.		
Replacement Motor		#36 (120V)		
Replacement Bypass Switch		#66061		

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120/277	20A
Motor	120 240	1HP 2HP

**NOTE:** All models are designed to control a contactor circuit and are not recommended for direct switching of most lighting loads.



# TW SERIES

DIFFERENT SCHEDULES EACH DAY  
 MANUAL BYPASS SWITCHES  
 RESERVE POWER STANDARD  
 7 DAY TIME SWITCH

## APPLICATIONS

- Heating
- Air conditioning
- Display lighting
- Ventilating systems
- Lighted signage
- Storefront lighting



## FEATURES

**SCHEDULING:** Minimum ON setting is 1 hour with a minimum OFF setting of 2 hours. Minimum 8 hours between 2 OFF settings. 7 day calendar dial accommodates up to 2 pairs of ON-OFF trippers per day – 7 pairs are supplied.

**SKIP-A-DAY:** Omit operations on any day.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**MANUAL BY-PASS SWITCHES:** Single pole, 20 Amps – one per circuit. Factory pre-wired to terminal strip. ON/OFF/AUTO positions for each circuit is independent – will not disturb automatic settings.

**RESERVE POWER:** Standard feature on all models keep dial on time up to 24 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
TW-220L	39013	120	DPDT	Metal Indoor NEMA 1
TW-220L-E	39021	120	DPDT	Metal Indoor NEMA 1 with switch access
TW-222L	39014	208-277	DPDT	Metal Indoor NEMA 1
TW-300L	39015	120	3PST	Metal Indoor NEMA 1
TW-302L	39016	208-277	3PST	Metal Indoor NEMA 1
Replacement Trippers	Order #P69 for 7 pairs of ON/OFF trippers.			
Replacement Motor	#36 (120V) & #46 (208-277V)			
Replacement Bypass Switch	#66061			

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120/277	20A
Motor	120 240	1HP 2HP

**NOTE:** All models are designed to control a contactor circuit and are not recommended for direct switching of most lighting loads.

## SPECIFICATIONS

**INPUT VOLTAGE:**

120 or 208 - 277VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

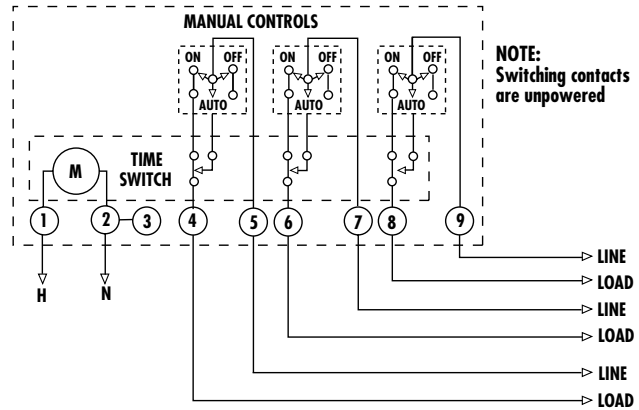
**TERMINAL RANGE:** #8 - #14AWG.

**OPERATING TEMPERATURE:**

-40° to 165°F (-40° to +74°C).

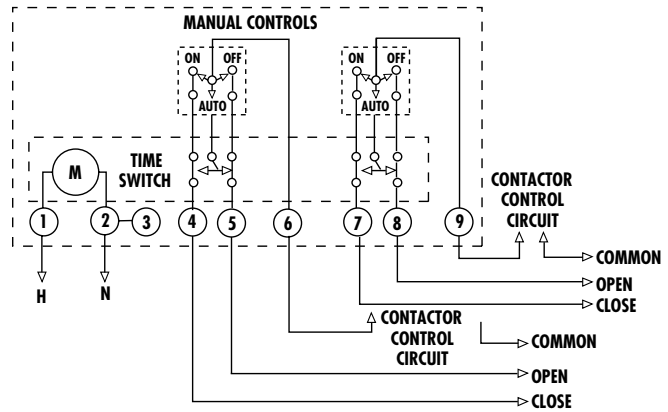
**POWER CONSUMPTION:** 5 watts maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp (see page 557 for enclosure dimensions).



### TW300L

When single line source is used, jumper terminals 1-5-7-9 and connect all commons to terminals 2 and 3.



### TW220L

Wiring shown is for mechanically-held contactors. Use CLOSE terminal only for magnetically-held contactors and to control direct loads not exceeding 2000 watts.

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# TZ SERIES

MANUAL BYPASS SWITCHES  
RESERVE POWER STANDARD  
ASTRONOMIC TIME SWITCH



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS

- Schools
- Industrial yards
- Shop windows
- Parking lots
- Highway signs
- Bridges

## FEATURES

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Turn ON at sunset and OFF at sunrise daily. OFF time can be set from 8:30PM to 2:30AM. Can be individually offset +/- 20 or 40 minutes from both sunset and OFF times. Available from 18° - 45° northern latitudes.

**SKIP-A-DAY:** Omit operations on any day with a 7 spoke wheel marked with days of the week. 3 omitting screws included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**MANUAL BYPASS SWITCHES:** Single pole, 20 Amps - one per circuit. Factory pre-wired to terminal strip. ON/OFF/AUTO positions for each circuit is independent, will not disturb automatic settings.

**RESERVE POWER:** Standard feature on all models keep dial on time up to 24 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
TZ220L*	**	120	DPDT	Metal Indoor NEMA 1
TZ220L-0*	**	120	DPDT	Metal Indoor/outdoor NEMA 3
TZ222L*	**	208 - 277	DPDT	Metal Indoor NEMA 1
TZ300L*	**	120	3PST	Metal Indoor NEMA 1
TZ300L-0*	**	120	3PST	Metal Indoor/outdoor NEMA 3
TZ302L*	**	208 - 277	3PST	Metal Indoor NEMA 1

Replacement Motor For "L" models #36 (120V) & #46 (208-277V)

Replacement Bypass Switch #66061

\*Add degrees latitude to complete number (18, 30, 34, 38, 40, 42, or 45).

\*\*Consult factory for UPC number.

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120/277	20A
Motor	120	1HP
	240	2HP

**NOTE:** All models are designed to control a contactor circuit and are not recommended for direct switching of most lighting loads.

## SPECIFICATIONS

### INPUT VOLTAGE:

120 or 208 - 277VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

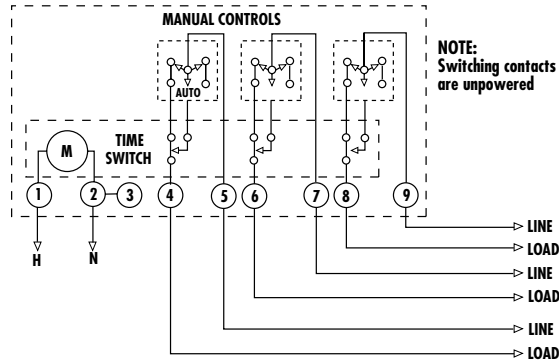
**TERMINAL RANGE:** #8 - #14AWG.

### OPERATING TEMPERATURE:

-40° to 165°F (-40° to +74°C).

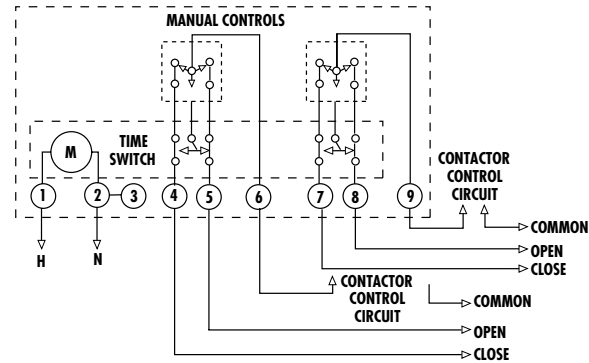
**POWER CONSUMPTION:** 5 watts maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp and for some models enclosures is Indoor/Outdoor NEMA 3 metal with suffix "O" (see page 557 for enclosure dimensions).



## TZ300L

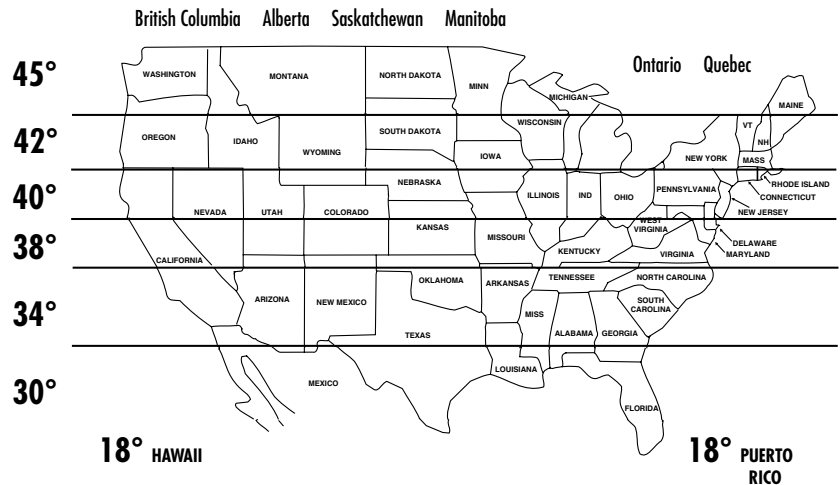
When single line source is used, jumper terminals 1, 5, 7, 9 and connect all commons to terminals 2 and 3.



## TZ220L

Wiring shown is for mechanically held contactors. Use CLOSE terminal only for magnetically held contactors and to control direct loads not exceeding 2000 watts.

## ASTRONOMIC LATITUDE ZONES



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# TORK® DIGITAL TIME SWITCHES

# QUICK REFERENCE GUIDE

	DTU40 DTWH40	EH20C	SA300	E-PB	E	EW	EWZ	DG	DGM	DW	DWZ	DTS
Page No.	447	449	451	453	453	455	457	459	459	461	461	463
Number of Channels	1	1	1	1	1 or 2	1 or 2	1 or 2	1 or 2	1	2	1	1, 2 or 4
ON/OFF Set Points	7 pair	14	1 pair	20	20	20	20	56	56	99	99	99
365 Day/7 Day Scheduling	7 day	7 day	7 day	24 hour	24 hour	7 day	7 day	7/365 day	7/365 day	7/365 day	7/365 day	7/365 day
Automatic Daylight Savings Adjustment	Manual	Yes	Manual	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leap Year		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Holiday Schedules										24	24	24
Block Holiday		Yes						9	9			
Season Scheduling												4
 SunSet (Astronomic)			ZipSet				Yes				Yes	
Photosensor Input												
Remote Override Input												
Signal/Pulse Duration												Yes
Momentary for Contactors					Option	Option	Option		Yes			
Duty Cycle												
31 Day Cycle												
Manual Override	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clock Format	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM	12/24	12/24	12/24	12/24	12/24
Power Outage Backup	Rechargeable Battery	4 day Super Capacitor	Battery	4 day Super Capacitor	4 day Super Capacitor	4 day Super Capacitor	4 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor
Schedule Retention without power	Battery	Permanent	Battery	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent
Staggered Start					Yes	Yes	Yes	Yes	Yes	Yes		Yes
Memory Module												
Computer Programming Software												
Output Contacts: Amps Resistive or General Purpose	40A	40A	40A	30A	40A	40A	40A	20A	20A	30A	30A	30A
Contact Type: Dry Unpowered	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Voltage Input AC	120/208-240/277	120-277	120 or 120/277	120	120-277	120-277	120-277	120-277	120-277	120/208-240/277	120/208-240/277	120/208-240/277
Other Voltage Inputs Available												

	LIGHTING CONTROLS							CYCLE - SIGNAL TIMER		DIN
	DZS	DZM	ELC74/78/712	DGU	DGUM	DGLC	DLC400	DG	DGS	
Page No.	465	467	473	471	471	471	475	479	479	485
Number of Channels	1, 2, or 4	2	4, 8, or 12	1	1	1 or 2	4	1 or 2	1	1 or 2
ON/OFF Set Points	99	99	128	56	56	56	99	56	56	8 pair 3 pair/ch
365 Day/7 Day Scheduling	7/365 day	7/365 day	7/365 day	7/365 day	7/365 day	7/365 day	7/365 day	24 Hour	7 Day	7 Day
Automatic Daylight Savings Adjustment	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Leap Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Individual Holiday Schedules	24	24	26				24			
Block Holiday			10	9	9	9				
Season Scheduling	4	4					4			
 SunSet (Astronomic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Photosensor Input			Yes	Yes	Yes	Yes	Yes			
Remote Override Input			Yes	Yes	Yes	Yes	Yes			
Signal/Pulse Duration	Yes		Yes					Yes	Yes	
Momentary for Contactors		Yes	Yes		Yes					
Duty Cycle			Yes					Yes	Yes	
31 Day Cycle								Yes		
Manual Override	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clock Format	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	AM/PM
Power Outage Backup	7 day Super Capacitor	7 day Super Capacitor	2 day Capacitor 1 year battery	7 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor	6 month battery	7 day Super Capacitor	7 day Super Capacitor	8 year battery
Schedule Retention without power	Permanent	Permanent	Battery	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Battery
Staggered Start	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Memory Module	Yes	Yes					Yes			
Computer Programming Software	Yes	Yes					Yes			
Output Contacts: Amps Resistive or General Purpose	30A/20A	30A	20A	20A	20A	20A	30A	20A	20A	16A
Contact Type: Dry Unpowered	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Voltage Input AC	120/208-240/277	120/208-240/277	24/120/208 240/277	120-277	120-277	120-277	120/208-240/277	120-277	120-277	120
Other Voltage Inputs Available	12VDC 24VAC		24VAC All Models					12VDC 24VAC	24VAC	

# DT SERIES

## AUTOMATIC VOLTAGE DETECTION 7 DAY TIME SWITCH AND WATER HEATER TIMER

**MORE  
WIRING  
SPACE!**

### APPLICATIONS



DTU40

DTWH40



Avoid utility peak rates  
Turn off when not needed

- **DTU40**
- Pumps, motors, fans
- Signs and lighting
- Water heaters
- Heating and air conditioning
  
- **DTWH40**
- Water Heaters
- This timer turns OFF when rates are high and turns OFF when no one is home.

### FEATURES

**SCHEDULING:** 7 ON & OFF pairs of set points for individual programs on each day of the week. Minimum setting is 1 minute.

**DAYLIGHT SAVING:** Manual button push for one hour adjustment.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**EXTERNAL MANUAL OVERRIDE:** DTWH40 only on clear door. Override without opening case.

**RANDOM MODE:** Varies ON and OFF times to create "lived-in" look when away.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Battery retains time and schedule.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DTU40	24004	120/208-240/277	1	DPDT
DTWH40	24005	120/240	1	DPDT

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	120-277	40A	30A
Inductive	120-277	30A	15A
Ballast	120	30A	10A
	277	20A	10A
Tungsten	120	15A	
Motor	120	1HP/30FLA/90LRA	1/4HP/12FLA/30LRA
	240	2HP/20FLA/60LRA	1/2HP/12FLA/33LRA
Pilot duty	120	720VA	290VA
	240	720VA	260VA
Resistive	28VDC	20A	
Max above 104°F	120-277	30A	

## SPECIFICATIONS

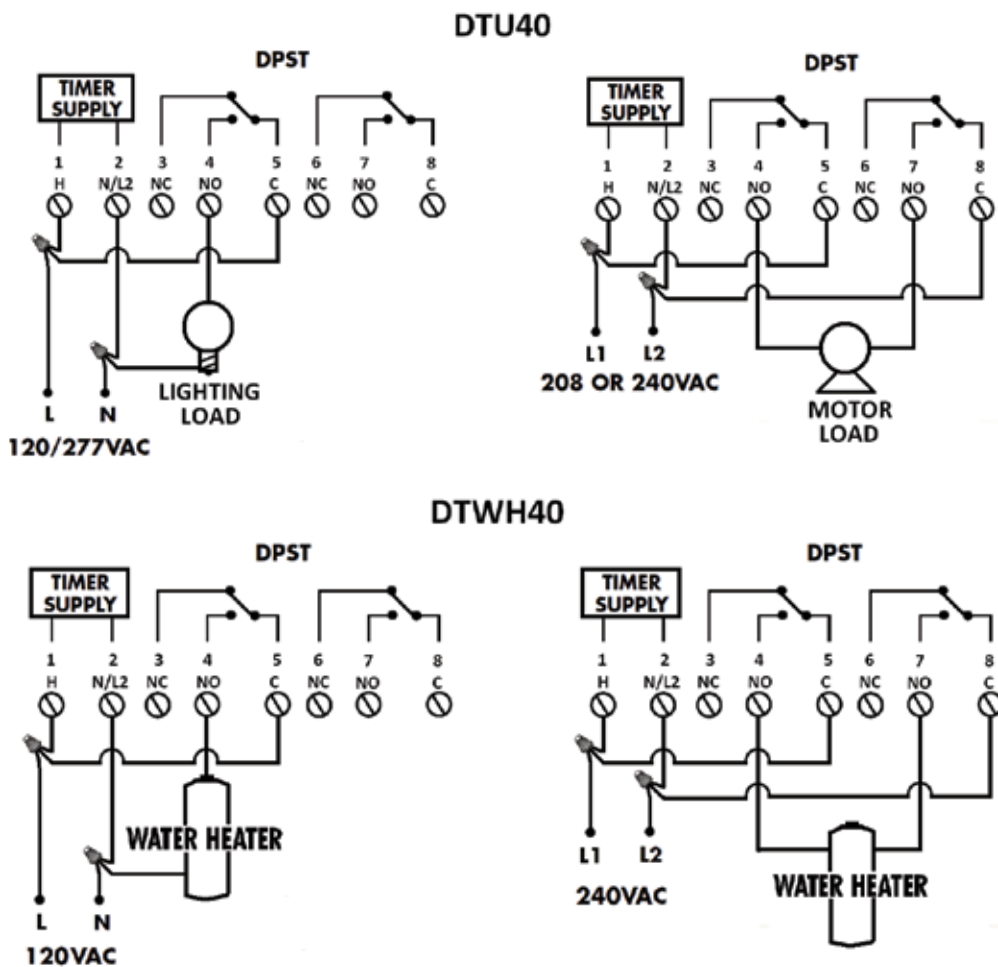
**INPUT VOLTAGE:** 120/208-240/277 VAC, 50/60 Hz (auto detection). DTWH40 is 120/240VAC 50/60Hz (auto detection).

**TERMINAL RANGE:** #8 - #18AWG.

**OPERATING TEMPERATURE:** -31°F to 116°F (-35°C to +47°C).

**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** DTU40 polycarbonate Indoor/Outdoor NEMA 3R. DTWH40 polycarbonate indoor NEMA 1 enclosure with clear cover. Both with lockable hasp (see page 557 for enclosure dimensions).



# EH20C

## AUTOMATIC VOLTAGE DETECTION WATER HEATER TIMER WITH SUMMER LOAD SHED



NEW!



Avoid utility peak rates  
Turn off when not needed

PRE  
PROGRAMMED  
FOR EASY  
SET-UP

### APPLICATIONS



- Electric water heaters for residential or commercial.

### FEATURES

**PRE-PROGRAMMED:** Unit preset for daily OFF time from 12:00am to 4:00am daily.

**SUMMER LOAD SHED:** Additional OFF time from 3:00pm to 7:00pm during Summer time (6/1 to 9/30) annually to avoid peak usage.

**SCHEDULING:** Additional 14 ON or OFF set points for individual programs for each day of the week. Minimum setting 1 minute.

**HOLIDAY SCHEDULE:** Extend to the load shed date throughout the year or preset extra load shed schedules while on vacation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF. Override during pre-programmed times limited to 60 minutes per day.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Lithium battery. Non-rechargeable with 8 year expected life.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50-60Hz	OUTPUT CONTACTS
EH20C	82314	120-277	DPST

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120-277	40A
Inductive	120-277	40A
Pilot duty	120-277	720VA
Motor	120	1 HP
	208	1 1/2 HP
	240-277	2 HP

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

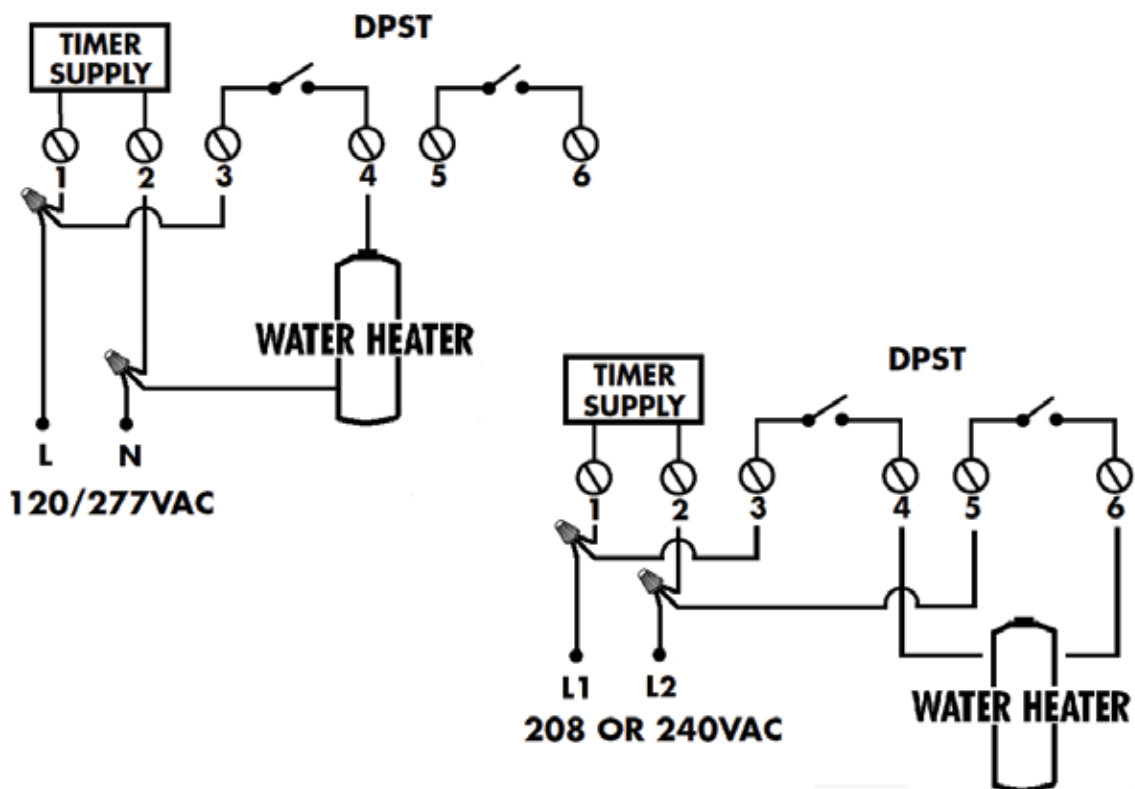
**INPUT VOLTAGE:** 120-277VAC, 50/60Hz  
(automatic detection).

**TERMINAL RANGE:** #8 - #16AWG.

**OPERATING TEMPERATURE:**  
-40° to +149°F (-40° to +65°C).

**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Indoor/Outdoor NEMA 3R  
Polycarbonate with locking hasp.  
(see page 557 for enclosure dimensions).





# SA300 SERIES

## Zip-Set™

### DIGITAL TIME SWITCH



NEW!



AREA CODE  
ENTRY  
FOR FAST  
SET-UP

## APPLICATIONS



- Outdoor lighting
- Electric motors
- Indoor lighting or signs

## FEATURES

**ZIP-SET:** Fast and easy. Just enter area code and timer adjusts to your time with preset program of Sunset ON and time off program.

**SCHEDULING:** One On/Off set point pair is active at a time. Only one schedule may be active at a time: Schedule 1, Schedule 2, a combination of 1 & 2, or ZipSet™. Day combinations for 7-5-2 speed programming.

**MANUAL DAYLIGHT SAVING:**  
Simple switch adjustment.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**RANDOM FEATURE:** Varies on time +/-90 minutes each day for lived in look.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:**  
Replaceable batteries

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS
SA300	16546	120	SPST
SA306	16549	120	DPST
SA400	16552	120/277	SPST

TYPE	VOLTAGE (VAC) 60Hz	RATING
Resistive	120*	40A
Inductive	120*	40A
Tungsten	120*	40A
Incandescent	120*	40A

Motor 120 1 1/2HP

\*SA400 120/277

## SPECIFICATIONS

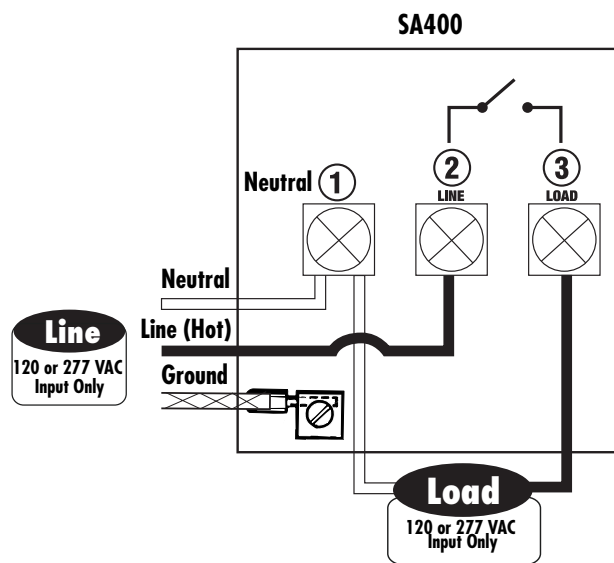
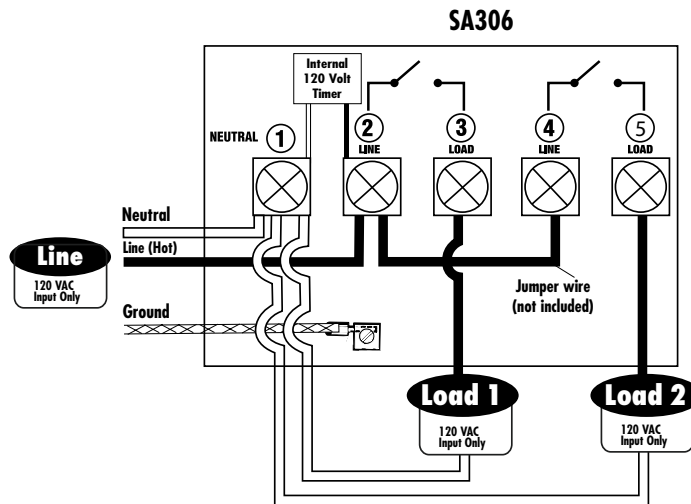
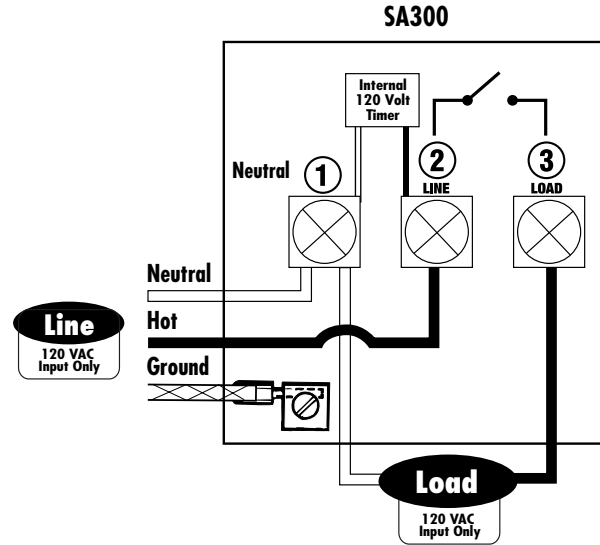
**INPUT VOLTAGE:** 120VAC, 60Hz  
SA400 120/277VAC, 60Hz

**TERMINAL RANGE:** #8 - #16AWG.

**OPERATING TEMPERATURE:**  
32° to +100°F (0° to +37°C).

**POWER CONSUMPTION:** 5VA Max.

**ENCLOSURE:** Indoor Metal with locking hasp.  
SA400 Outdoor Metal with locking hasp.  
(see page 557 for enclosure dimensions).



# E & E-PB SERIES

## MULTIPURPOSE CONTROLS

### 1 OR 2 CHANNEL

### 24 HOUR TIME SWITCH



**BACKUP  
WITHOUT  
BATTERY, ECO  
FRIENDLY!**

## APPLICATIONS



- Signs
- Air conditioning
- Lighting
- Sump pumps
- Ventilating fans

## FEATURES

**SCHEDULING:** 20 ON/OFF set points repeat each day. Minimum setting 1 minute.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 4 days of real time backup.

**MOMENTARY OPTION:** For mechanically held contractors: Model E201B only. Configure with simple jumper change for single-channel momentary operation.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT DRY CONTACTS
E101B	82401	120-277	1	SPST
E103B	82411	120-277	1	DPST
E120B	82406	120-277	1	SPDT
E201B	82466	120-277	2	SPST
E101PB	82461	120	1	SPST

TYPE	E101B, E103B, E201B		E120B		E101PB	
	VOLTAGE (VAC)	RATING NO	RATING NO	NC	VOLTAGE (VAC)	RATING NO
General Purpose	120-277	40A	30A	30A	120/240 277	30A 12A
Inductive	120-277	40A	30A	30A	120/240 277	30A 12A
Ballast	120	30A	30A	10A	120	20A
	208-277	20A	20A	10A	277	6A
Tungsten	120	15A	15A	2A	120	5A
Pilot Duty	120-277	720VA	720VA	720VA	120-240 277	470VA 690VA
	120	1HP	1HP	1HP	120	1HP
Motor	208	1 1/2HP	1 1/2HP	1 1/2HP	240	2HP
	240-277	2HP	2HP	2HP		
Resistive	28VDC	30A	30A	30A	28VDC	20A

# SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

**E SERIES**

120 - 277VAC, 50/60Hz (automatic detection).

**E-PB**

120VAC, 50/60Hz.

**TERMINAL RANGE:** #8 - #16AWG.

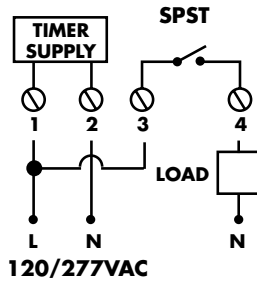
**OPERATING TEMPERATURE:**

-40° to +149°F (-40° to +65°C).

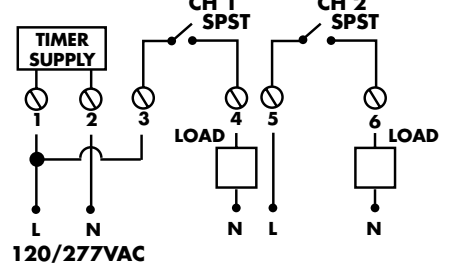
**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Polycarbonate Indoor/Outdoor  
NEMA 3R is standard with lockable hasp (see page 557 for enclosure dimensions).

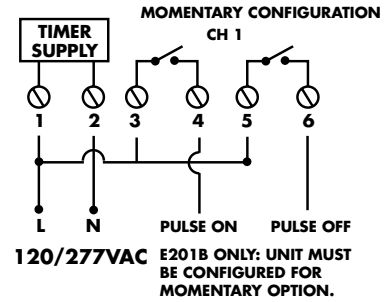
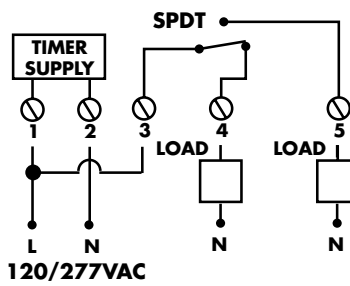
**E101B**



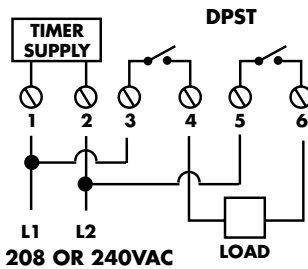
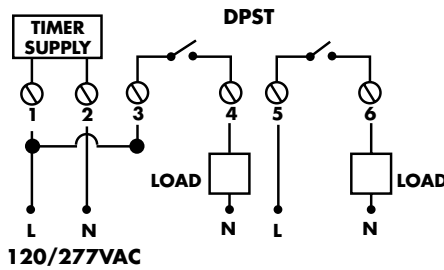
**E201B**



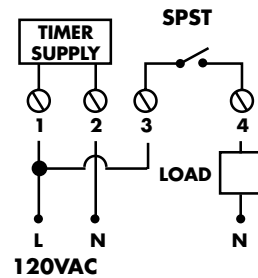
**E120B**



**E103B**



**E101PB**



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# EW SERIES

## MULTIPURPOSE CONTROL

### 1 OR 2 CHANNEL

### 7 DAY TIME SWITCH



CALIFORNIA Title 24

ASHRAE 90.1

**AUTOMATIC DST  
SAVES TIME  
CHANGES  
TWICE A YEAR!**

## APPLICATIONS

- Outdoor signs
- Lighting security
- Heating and air conditioning



## FEATURES

**SCHEDULING:** 20 ON & OFF set points for individual programs for each day of the week. Minimum setting is 1 minute.

**DAYLIGHT SAVING:**

Automatic (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 4 days of real time backup.

**MOMENTARY OPTION:** For mechanically held contractors: Model EW201B only. Configure with simple jumper change for single-channel momentary operation.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT DRY CONTACTS
EW101B	82431	120-277	1	SPST
EW103B	82441	120-277	1	DPST
EW120B	82436	120-277	1	SPDT
EW201B	82467	120-277	2	SPST
EW101B-Y	82249	120-277	1	SPST
EW103B-C	82253	120-277	1	DPST
EW103B-Y	82255	120-277	1	DPST
EW120B-C	82437	120-277	1	SPDT
EW120B-Y	82261	120-277	1	SPDT
EW201B-Y	82299	120-277	2	SPST

TYPE	EW101B, EW103B, EW201B		EW120B		
	VOLTAGE (VAC)	RATING NO	VOLTAGE (VAC)	RATING NO	RATING NC
General Purpose	120-277	40A	120-277	30A	30A
Inductive	120-277	40A	120-277	30A	30A
	120	30A	120	30A	10A
Ballast	208-277	20A	208-277	20A	10A
	120	15A	120	15A	2A
Pilot Duty	120-277	720VA	120-277	720VA	720VA
Motor	120	1HP	120	1HP	1HP
	208	1 1/2HP	208	1 1/2HP	1 1/2HP
	240-277	2HP	240-277	2HP	2HP
Resistive	28VDC	30A	28VDC	30A	30A

**SPECIFICATIONS**

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120 - 277VAC, 50/60Hz (automatic detection).

**TERMINAL RANGE:** #8 - #16AWG.

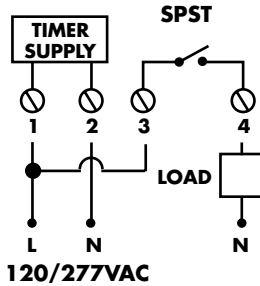
**OPERATING TEMPERATURE:**

-40° to +149°F (-40° to +65°C).

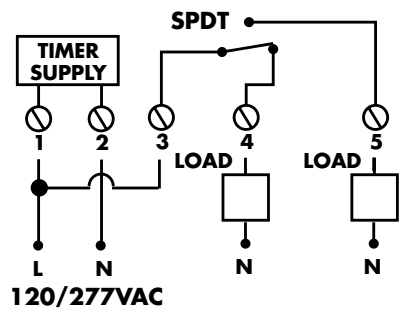
**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Polycarbonate Indoor/Outdoor NEMA 3R. Suffix -C plastic clear cover Indoor/Outdoor NEMA 3R. Suffix -Y metal Indoor enclosure NEMA 1. All with lockable hasp (see page 557 for enclosure dimensions).

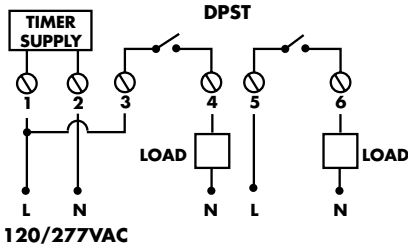
**EW101B**



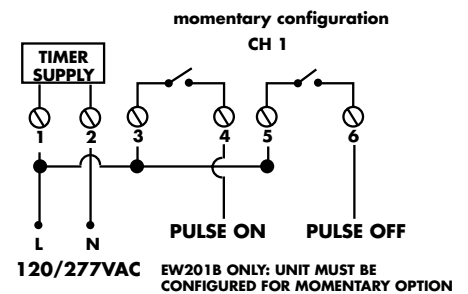
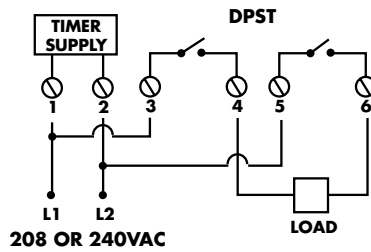
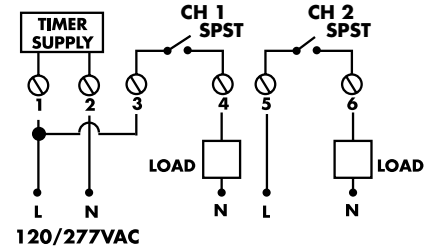
**EW120B**



**EW103B**



**EW201B**



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# EWZ SERIES

## SunSet 1 OR 2 CHANNEL 7 DAY TIME SWITCH



**PREFERRED FOR  
OUTDOOR  
LIGHTING!**

### APPLICATIONS



CALIFORNIA Title 24

ASHRAE 90.1

- Outdoor signs
- Lighting security
- Heating and air conditioning

### FEATURES

**SCHEDULING:** 20 ON & OFF set points for individual programs for each day of the week. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes. Can be individually offset +/- 1-240 minutes from both sunset and sunrise times.

**DAYLIGHT SAVING:** Automatic (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 4 days of real time backup.

**MOMENTARY OPTION:** For mechanically held contactors: Model EWZ201 only. Configure with simple jumper change for single-channel momentary operation.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT DRY CONTACTS
EWZ101	82470	120-277	1	SPST
EWZ103	82473	120-277	1	DPST
EWZ120	82471	120-277	1	SPDT
EWZ201	82472	120-277	2	SPST
EWZ101-MB	82263	120-277	1	SPST
EWZ103-MB	82269	120-277	1	DPST
EWZ120-MB	82275	120-277	1	SPDT
EWZ201-MB	82281	120-277	2	SPST

TYPE	EWZ101,EWZ103, EWZ201		EWZ120		
	VOLTAGE (VAC)	RATING NO	VOLTAGE (VAC)	RATING NO	RATING NC
General Purpose	120-277	40A	120-277	30A	30A
Inductive	120	30A	120	30A	10A
	208-277	20A	208-277	20A	10A
Tungsten	120	15A	120	15A	2A
Pilot Duty	120-277	720VA	120-277	720VA	720VA
Motor	120	1HP	120	1HP	1HP
	208	1 1/2HP	208	1 1/2HP	1 1/2HP
	240-277	2HP	240-277	2HP	2HP
Resistive	28VDC	30A	28VDC	30A	30A

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120 - 277VAC, 50/60Hz (automatic detection).

**TERMINAL RANGE:** #8 - #16AWG.

**OPERATING TEMPERATURE:**

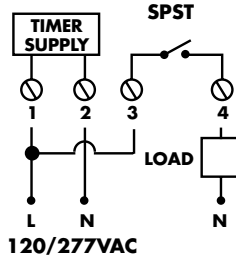
-40° to +149°F (-40° to +65°C).

**POWER CONSUMPTION:** 6VA Max.

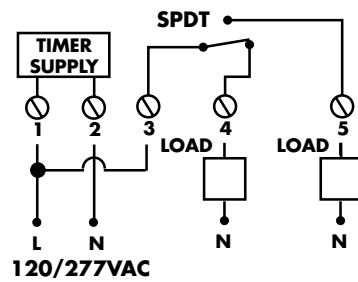
**ENCLOSURE:** Polycarbonate Indoor/Outdoor NEMA 3R is standard with lockable hasp (see page 557 for enclosure dimensions). Suffix -MB without enclosure and includes mounting bracket.

**OPTIONS:** Suffix -Q Quartz crystal timing. Maintains accurate timing where 50 or 60 Hz is not consistent such as on-site generator produced power. Consult factory for minimum order size.

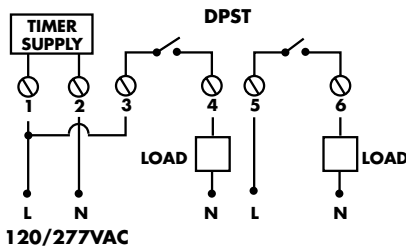
**EWZ101**



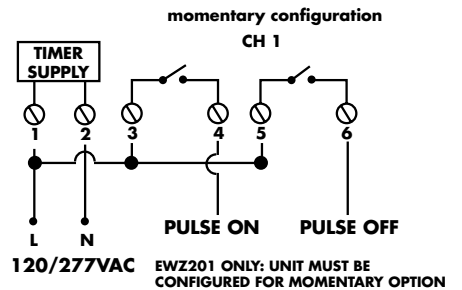
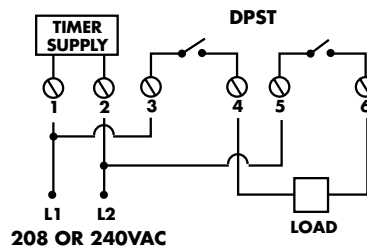
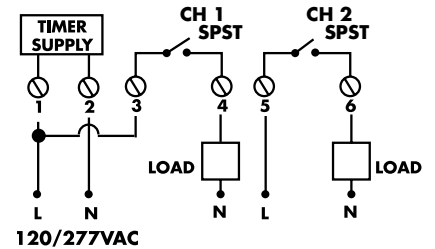
**EWZ120**



**EWZ103**



**EWZ201**



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# DG100 SERIES

## MULTIPURPOSE CONTROLS

### 1 OR 2 CHANNEL

### 365/7 DAY

### TIME SWITCH

**HOLIDAY  
PROGRAMMING  
FOR MORE  
SAVINGS!**



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS

- Indoor/Outdoor lighting
- HVAC equipment
- School warning and other
- Traffic lights
- Water heaters in offices, churches and factories

## FEATURES

**SCHEDULING:** 56 ON & OFF set points provide individual programs for each day of the week. Minimum setting is 1 minute.

**MOMENTARY CONTACT:** DGM100A has 2 second contact closures for ON & OFF control of mechanically held contactors or latching relays.

**BLOCK HOLIDAY:** 9 holiday blocks can be set for individual days or for duration of any number of days.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM or 24 Hour format.

**POWER OUTAGE BACKUP:** Permanent schedule retention is provided. Supercapacitor provides 7 days of real time back up.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT CONTACTS
DG100A	82201	120-277	1	DPDT
DG200A	82209	120-277	2	SPDT
DGM100A	82210	120-277	1	SPDT Momentary
DG100A-Y	82221	120-277	1	DPDT
DGM100A-Y	82222	120-277	1	SPDT Momentary

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	24-277	20A	10A
Ballast	120-277	20A	10A
Tungsten	120	15A	
Pilot Duty	120	720VA	290VA
	240		360VA
Motor	120	1HP	1/4HP
	240	2HP	1/2HP
Resistive	28VDC	20A	10A

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120 - 277VAC, 50/60Hz (automatic detection).

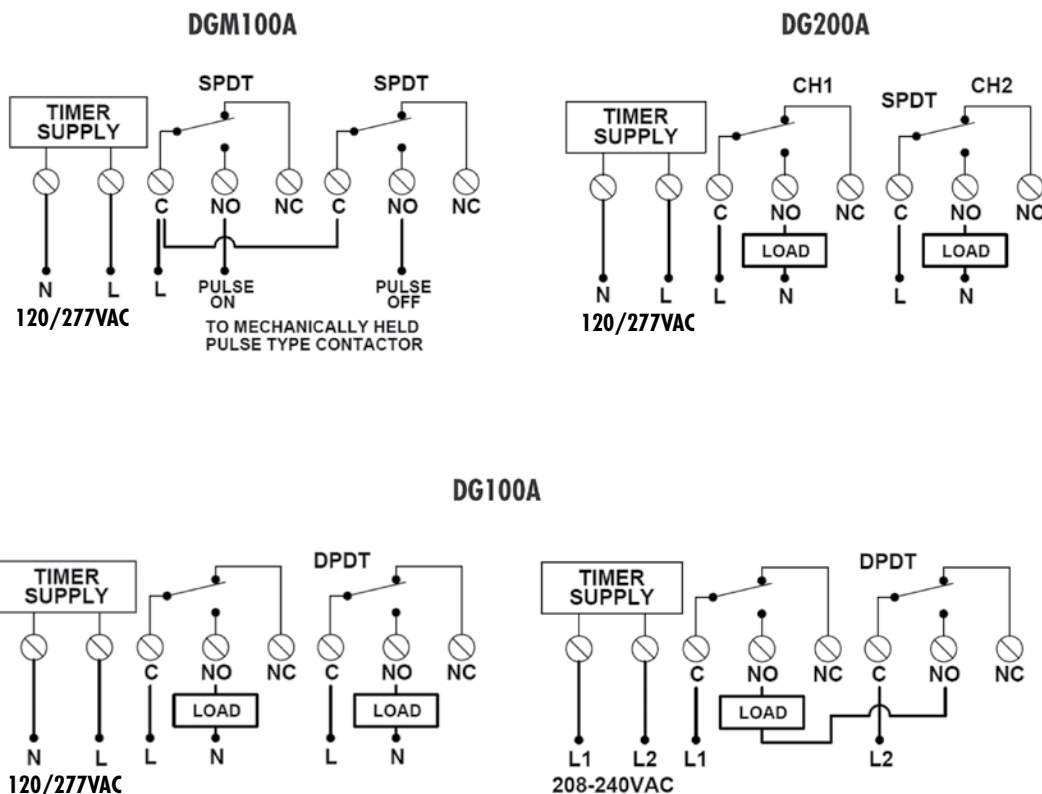
**TERMINAL RANGE:** #12 - #18AWG.

**OPERATING TEMPERATURE:**

-31° to +131°F (-35° to +55°C).

**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA 3R. Suffix -Y metal indoor enclosure NEMA 1. All with lockable hasp (see page 557 for enclosure dimensions).



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# DW SERIES

## MULTIPURPOSE CONTROLS

### 1 OR 2 CHANNEL

### 365 / 7 DAY ADVANCE

### TIME SWITCHES



**SPECIFICATION FAVORITE!**

## APPLICATIONS



- **1 CHANNEL**
  - Outdoor lighting
  - Security lighting
  - Parking lot lighting
  - Canopy lighting
- **2 CHANNEL**
  - HVAC equipment
  - Interior lighting
  - Electric motors
  - Refrigerator defrost control: condensers, heaters.

## FEATURES

- **SCHEDULING:** 99 ON & OFF set points allow individual programs for each day of the week at a minimum 1 minute apart.
- **SunSet ASTRONOMIC (DWZ100B only):** Adjusts daily to changes in sunset times. Adjustable 10°- 60° Northern or Southern latitudes. Can be individually offset +/- 1 to 240 minutes from both sunset and sunrise times.
- **HOLIDAYS:** 1 to 24 individual dates.
- **DAYLIGHT SAVING:** Automatic adjustment (can be omitted).
- **LEAP YEAR:** Automatic Compensation scheduled ON or OFF, automatic operation then resumes.
- **MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.
- **CLOCK FORMAT:** AM/PM or 24 Hour Format
- **POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 7 days of real time backup.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DWZ100B	82189	120/208-240/277	1	SPDT
DW200B	82190	120/208-240/277	2	SPDT
DW200B-0	82231	120/208-240/277	2	SPDT

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
General Purpose	24-277	30A	30A
Ballast	120	30A	10A
	277	20A	10A
Tungsten	120-277	15A	2A
Pilot Duty	120-277	720VA	720VA
Motor Load	120	1HP	1HP
	208-277	2HP	2HP
Resistive	28VDC	30A	30A

TORK DIGITAL TIME SWITCHES

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120/208-240-277VAC, 50/60Hz.

**TERMINAL RANGE:**

#14 - #16AWG for line input.

#12 - #16AWG load outputs.

**OPERATING TEMPERATURE:**

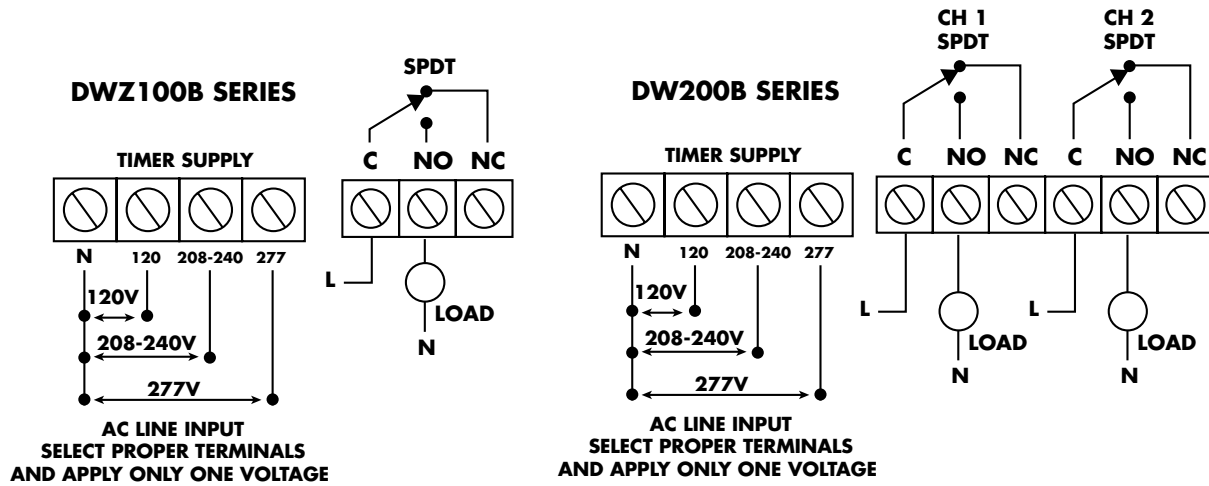
-40° to +158°F (-40° to 70°C).

**POWER CONSUMPTION:** 5VA Max.

**ENCLOSURE:** Noryl® Indoor/Outdoor

NEMA 3R. Suffix -0 metal Indoor/Outdoor NEMA

3. All with lockable hasp (see page 557 for enclosure dimensions).



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# DTS SERIES

## MULTIPURPOSE CONTROLS

### 1, 2 OR 4 CHANNEL

### 365 / 7 DAY ADVANCE

### TIME SWITCH

**MAINTAINED  
AND  
SIGNAL  
TIMING!**



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS

- Indoor and outdoor lighting
- Heating and air conditioning
- Security systems
- Horns and bells
- Low voltage lighting
- Misting and spraying
- Roof cooling
- Clock correction systems
- Process functions

## FEATURES

**SCHEDULING:** 99 ON/OFF set points allow individual programs for each day of the week at a minimum 1 minute apart.

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year.

**HOLIDAYS:** 1 to 24 individual dates.

**SIGNAL/PULSE DURATION:** 2 different settings per channel: each 1-99 seconds.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes. In signal mode, activates pulse.

**CLOCK FORMAT:** AM/PM or 24 Hour Format.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 7 days of real time back up.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DTS100B	82185	120/208-240/277	1	DPDT
DTS200B	82186	120/208-240/277	2	SPDT
DTS400B	82187	120/208-240/277	4	SPDT

TYPE	DTS100B, DTS200B		DTS400B	
	VOLTAGE (VAC)	RATING NO NC	VOLTAGE (VAC)	RATING NO NC
General Purpose	24-277	30A 30A	24-277	20A 20A
Ballast	120	30A 10A	120-277	13A
	277	20A 10A		
Tungsten	120-277	15A 2A	120	8A
Pilot Duty	120-277	720VA 720VA	120-277	720VA 360VA
Motor Load	120	1HP 1HP	120/240	1/2HP 1/2HP
	208-277	2HP 2HP		
Resistive	28VDC	30A 30A	-	-

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:** 120/208-277VAC,  
50/60Hz.

**TERMINAL RANGE:**

#14 - #16AWG for line input.

#12 - #16AWG load outputs.

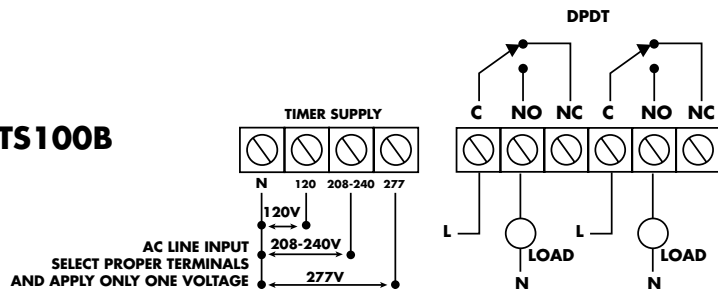
**OPERATING TEMPERATURE:**

-40° to +149°F (-40° to +65°C).

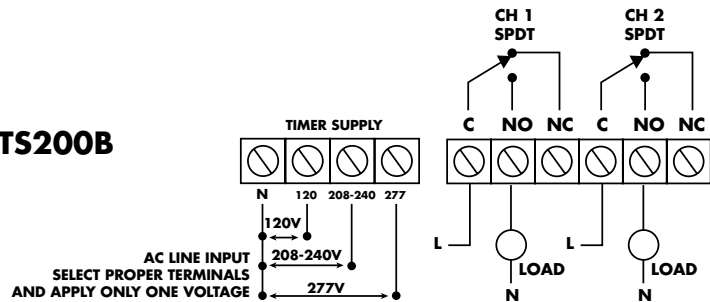
**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA  
3R with lockable hasp (see page 557 for enclosure  
dimensions).

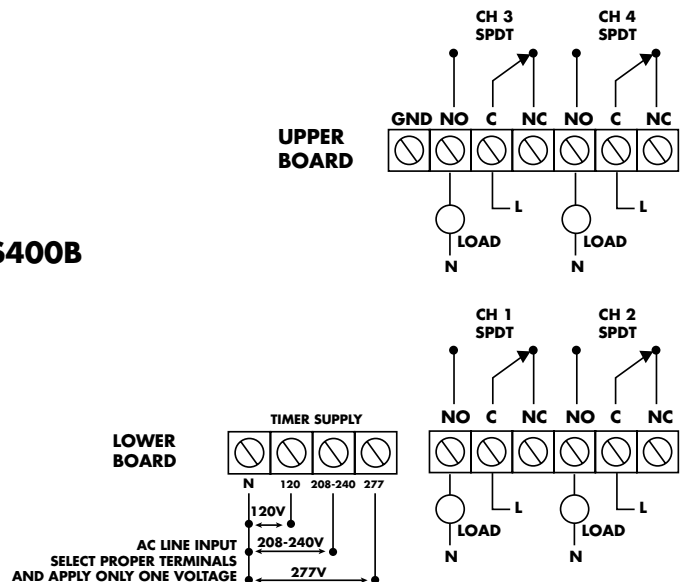
### DTS100B



### DTS200B



### DTS400B



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# DZS SERIES

## MULTIPURPOSE CONTROLS

### 1, 2 OR 4 CHANNEL

### 365 / 7 DAY ADVANCED

### TIME SWITCH



**REMOVABLE  
MEMORY  
MODULE FOR  
COMPUTER  
PROGRAMMING!**

## APPLICATIONS



- HVAC equipment
- Horns and bells
- Interior lighting
- Electric motors
- Outdoor lighting and signs

CALIFORNIA Title 24

ASHRAE 90.1



Memory Module  
Programmer optional

## FEATURES

**SCHEDULING:** 99 ON & OFF set points allow individual programs for each day of the week at a minimum 1 minute apart.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes can be individually offset +/- 1 to 240 minutes from both sunset and sunrise times.

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year.

**HOLIDAYS:** 1 to 24 individual dates.

**SIGNAL/PULSE DURATION:** 2 different settings per channel: 1-99 seconds.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes. In signal mode, activates pulse.

**CLOCK FORMAT:** AM/PM or 24 Hour Format.

**POWER OUTAGE BACKUP:** Permanent schedule retention with memory module. Supercapacitor provides 7 days of real time backup.

**MEMORY MODULE:** Removable MM can be programmed at any one location and inserted into another DZS series unit.

**COPY FEATURE:** Unit can be configured to copy program schedule to multiple memory modules.

**OPTION:** Memory Module Programmer with software for computer connection programming. Also allows stand alone battery operation for portable copy feature.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DZS100BP	82182	120/208-240/277	1	DPDT
DZS200BP	82183	120/208-240/277	2	SPDT
DZS400BP	82184	120/208-240/277	4	SPDT
DZS100BP-0	82215	120/208-240/277	1	DPDT
DZS200BP-0	82227	120/208-240/277	2	SPDT
DZS200BP-12	82228	12VDC	2	SPDT
DZS200BP-24	82229	24VAC	2	SPDT
DZS400BP-0	82230	120/208-240/277	4	SPDT
USB-MMP	82196		Memory Module Programmer	Includes software

TYPE	DZS100BP, DZS200BP			DZS400BP		
	VOLTAGE (VAC)	RATING NO	RATING NC	VOLTAGE (VAC)	RATING NO	RATING NC
General Purpose	24-277	30A	30A	24-277	20A	20A
Ballast	120	30A	10A	120-277	13A	-
	277	20A	10A			-
Tungsten	120-277	15A	2A	120	8A	-
Motor Load	120	1HP	1HP	120/240	1/2HP	1/2 HP
	208-277	2HP	2HP			
Pilot Duty	120-277	720VA	720VA	120-277	720VA	360VA
Resistive	28VDC	30A	30A	-	-	-

TORK DIGITAL TIME SWITCHES

# SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:** 120/208-240/277VAC, 50/60Hz.

**TERMINAL RANGE:**

#14-#16AWG for line input.  
#12-#16AWG load outputs.

**OPERATING TEMPERATURE:**

-40° to +158°F (-40° to 70°C).

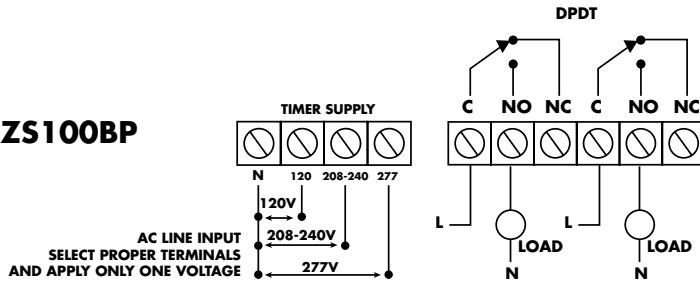
**POWER CONSUMPTION:**

5VA Max: DZS100/200BP.

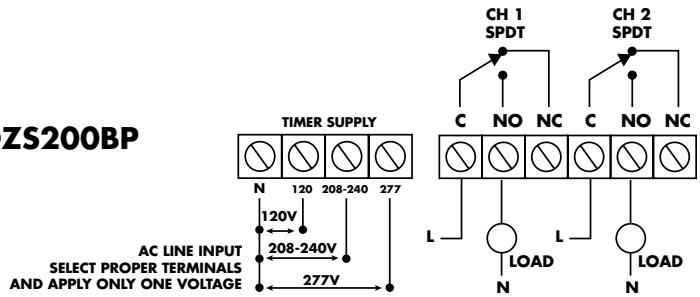
6VA Max: DZS400BP.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA 3R. Suffix -0 metal Indoor/Outdoor NEMA 3. All with lockable hasp (see page 557 for enclosure dimensions).

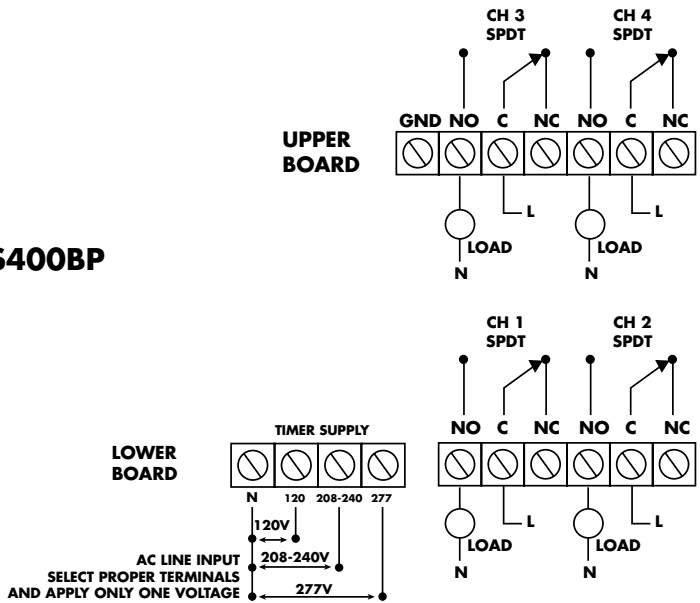
## DZS100BP



## DZS200BP



## DZS400BP



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# DZM SERIES

## MOMENTARY OUTPUT 365 / 7 DAY ADVANCED LIGHTING CONTROL TIME SWITCH



**GREAT FOR  
LATCHING  
CONTACTORS!**

### APPLICATIONS



- Low voltage latching relays
- Direct wire to mechanically held contactors

CALIFORNIA Title 24

ASHRAE 90.1



Memory Module  
Programmer optional

### FEATURES

**SCHEDULING:** 99 ON & OFF set points allow individual programs for each day of the week at a minimum 1 minute apart.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes can be individually offset +/- 1 to 240 minutes from both sunset and sunrise times.

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year.

**HOLIDAYS:** 1 to 24 individual dates.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM or 24 Hour Format.

**POWER OUTAGE BACKUP:** Permanent scheduled retention with memory module. Supercapacitor provides 7 days of real time backup.

**MEMORY MODULE:** Removable MM can be programmed at any one location and inserted into another DZM series unit.

**COPY FEATURE:** Unit can be configured to copy program schedule to multiple memory modules.

**OPTION:** Memory Module Programmer with software for computer connection programming. Also allows stand alone battery operation for portable copy feature.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DZM200BP	82188	120/208-240/277	2	SPDT Momentary
DZM200BP-0	82232	120/208-240/277	2	SPDT Momentary
USB-MMP	82196		Memory Module Programmer	Includes software

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120-277	20A
Pilot Duty	120-277	720VA

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:** 120/208-240/277VAC,  
50/60Hz.

**TERMINAL RANGE:**

#14 - #16AWG for line input.

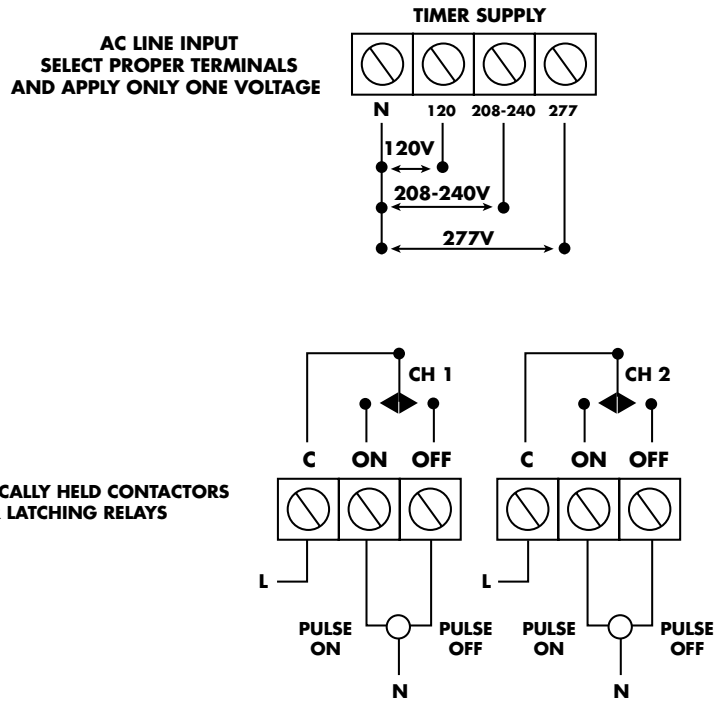
#12 - #16AWG load outputs.

**OPERATING TEMPERATURE:**

-40° to 158°F (-40° to +70°C).

**POWER CONSUMPTION:** 4VA Max.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA  
3R. Suffix -0 metal Indoor/Outdoor NEMA 3. All  
with lockable hasp (see page 557 for dimensions).



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# LC200 SERIES

LIGHT LEVEL / TIME OF DAY OPTION  
2 ZONES LIGHTING CONTROL

STAGE  
LIGHTING  
TURN ON  
LEVEL

## APPLICATIONS



- 24 hour convenience stores
- Open wall parking structures
- Large canopies
- Building perimeters
- Atriums
- Use to control two different outdoor lighting circuits utilizing one photocell. Sign lighting can turn ON at one ambient light level while parking lot lighting turns ON at a different light level.



EPC1 sensor  
supplied with unit.

ASHRAE 90.1

## FEATURES

**PHOTOSENSOR INPUT:** EPC1 included.

**DUAL OUTPUTS:** with independent turn-ON adjustment for Stage1 and Stage 2.

**LIGHT LEVEL ACTIVATION:** Turn ON is user settable from 2 to 100 footcandle; Independent light level adjustment for each zone. Turn OFF is a maximum of 2 times turn ON level. Built-in delay OFF of 30 seconds to avoid reaction to lightning or headlights.

**SWITCHED INPUT:** Turns off loads. Can be used for photocell ON and time switch OFF operation.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF ZONES	OUTPUT CONTACTS
LC200	82111	120/240/277	2	SPDT
LC200M	82113	120/240/277	2	SPDT

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	120/240	20A	10A
	277	12A	
Ballast	120	20A	10A
	240/277	6A	3A
Tungsten	120/240/277	5A	3A
Pilot Duty	120/240	470VA	275VA
	277	690VA	

# SPECIFICATIONS

**INPUT VOLTAGE:**

120/240/277VAC, 50/60Hz.

**TERMINAL RANGE:** Relay #12AWG; input

power terminals #14 - #22AWG; TOD/sensor terminals accept #18 - #22AWG.

**OPERATING TEMPERATURE:**

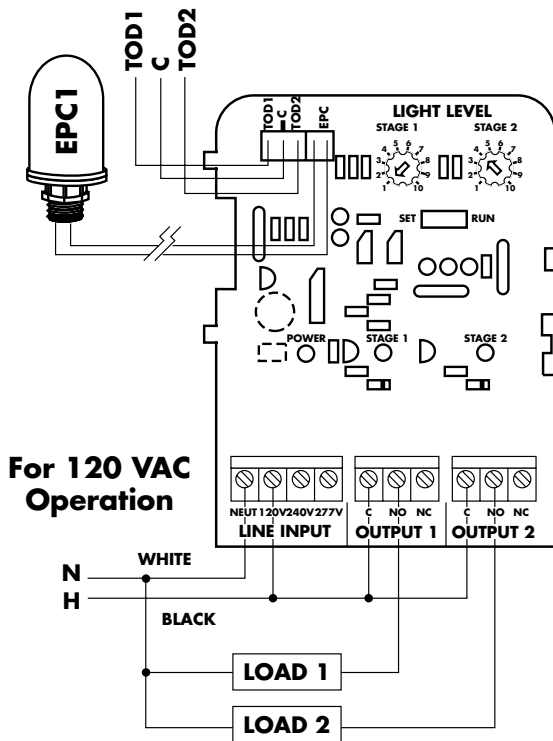
-40°F to +140°F (-40°C to + 60°C).

**POWER CONSUMPTION:** 5VA Maximum.

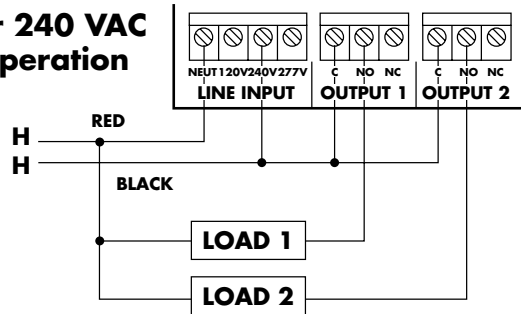
**ENCLOSURE:** LC200 includes metal Indoor NEMA 1 with lockable hasp (see page 557 for dimensions).

**OTHER MOUNTINGS:**

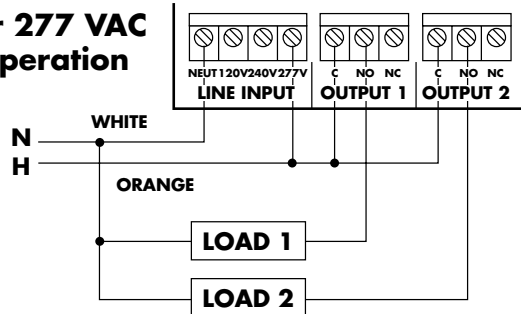
LC200M mechanism only.



**For 240 VAC Operation**



**For 277 VAC Operation**



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# DGU & DGLC SERIES

LIGHTING CONTROL WITH PHOTO  
OR OVERRIDE INPUT  
7 DAY LIGHTING  
CONTROL TIME SWITCH

NEW!

SunSet

responsible  
energy

SMALL  
BUSINESS  
ENERGY CODE  
PANEL

## APPLICATIONS

### INTERIOR LIGHTING

- Open office zoning
- Hallways
- Meeting and sales areas
- Stock rooms and warehouses

### EXTERIOR LIGHTING

- Signage and store windows
- Security
- Parking lots



CALIFORNIA Title 24

ASHRAE 90.1

Model EPC-A supplied  
with DGLC-A unit.

With optional  
Timed Override

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	NO. OF CHANNELS	OUTPUT CONTACTS
DGU100A-Y	82211	120-277	1	DPDT
DGUM100A	82212	120-277	1	SPDT Momentary
DGUM100A-Y	82224	120-277	1	SPDT Momentary
DGLC100A-NC	82223	120-277	1	DPDT
DGLC200A-NC	82213	120-277	2	SPDT
EPC-A	82112	Accessory Photo Sensor	-	-
SS410	14033	24VAC/24VDC	-	SPDT
TRP-24B	98225	120/277	Transformer Power Pack	SPST

## FEATURES

**SCHEDULING:** 56 ON & OFF set points provide individual programs for each day of the week. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes. Can be individually offset +/- 1-240 minutes from both sunset and sunrise times.

**PHOTOSENSOR INPUT:** Unique push button set-up assures accurate operation with automatic calibration that adjusts for wire size and distance. EPC-A photo sensor is included with the DGLC-A and may be ordered as an option for use with model DGU100A & DGUM100A.

**LIGHT LEVEL ACTIVATION:** Turn ON is user settable from 1 to 100 footcandle; Turn OFF is a maximum of 2 times turn ON level. Each channel has an independent setting. Includes a user settable delay before ON and OFF between 1 - 90 seconds.

**REMOTE OVERRIDE ON:** Each channel has independent input for a maintained dry-contact closure. May use TORK model SS410 and TRP-24B for timed override. May use with occupancy sensor with dry contacts as override.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**MOMENTARY CONTACT - DGUM100A:** 2 second contact closure ON & OFF to control mechanically held contactors or latching relays.

**BLOCK HOLIDAY:** 9 holiday blocks can be set for individual days or for duration of any number of days.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**CLOCK FORMAT:** AM/PM or 24 Hour format.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 7 days of real time backup.

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:** 120-277VAC, 50/60Hz (auto detection).

**TERMINAL RANGE:**

#12 - #18AWG for line/load.

#18 - #26AWG sensor/switch input.

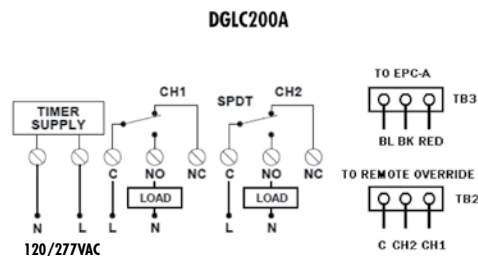
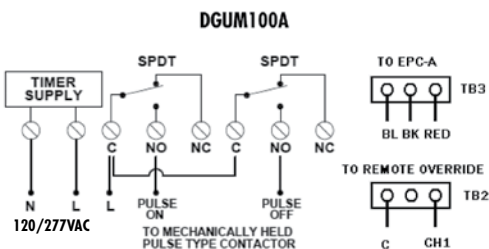
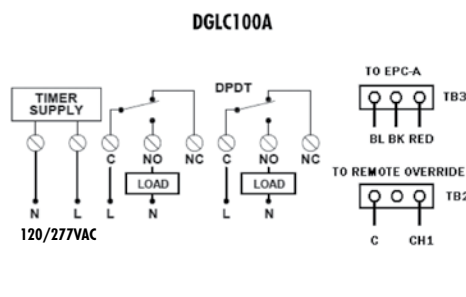
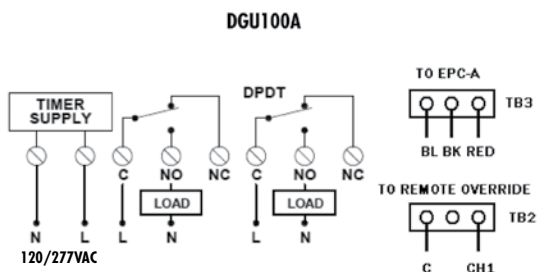
**OPERATING TEMPERATURE:**

-31°F to +131°F (-35°C to +55°C).

**POWER CONSUMPTION:** 6VA Maximum.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA 3R . Suffix -NC Noryl® Indoor/Outdoor NEMA 3R with clear Lexan® cover. Suffix -Y metal Indoor enclosure NEMA 1. All with lockable hasp (see page 557 for dimensions).

TYPE	VOLTAGE	RATING	
		NO	NC
Resistive	24-277VAC	20A	10A
Ballast	120-277VAC	20A	10A
Tungsten	120VAC	15A	
Pilot Duty	120VAC 240VAC	720VA	290VA 360VA
Motor	120VAC 240VAC	1HP 2HP	1/4HP 1/2HP
Resistive	28VDC	20A	10A



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# ELC SERIES

## ENERGY AND LIGHTING CONTROL

### 4, 8 & 12 ZONE

## LIGHTING CONTROL

THE  
DO-IT-ALL  
ENERGY  
& LIGHTING  
CONTROLLER

### APPLICATIONS

- HVAC equipment
- Indoor/Outdoor lighting
- Meets indoor/outdoor lighting energy code requirements



CALIFORNIA Title 24

ASHRAE 90.1

EPC-LC

LCS115M

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT CONTACTS
ELC74	82523	24/120/208-240/277	4	SPDT
ELC78	82524	24/120/208-240/277	8	SPDT
ELC712	82525	24/120/208-240/277	12	SPDT
EPC-LC	82233	Accessory Photo Sensor	-	-
LCS115M	82082	Accessory Momentary Switch	-	SPST

### FEATURES

**SCHEDULING:** 128 time based events allow individual programs for each day of the week at a minimum 1 minute apart. Event types include ON, OFF, Duration, or Duty Cycle.

**SENSOR EVENT:** 32 sensor driven events allow individual programs for each day of the week.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 70° Northern or Southern latitudes. Settings can be offset from both sunset and sunrise times.

**UNIVERSAL INPUT:** 8 inputs may be assigned to any channel. ELC74 includes 4.

**SWITCHED INPUT:** Accepts input from optional momentary or maintained switch for a timed override.

**PHOTOSENSOR INPUT:** Accepts input from optional sensor. EPC-LC (indoor/outdoor) has a range from 0 - 250 foot-candels.

**MOMENTARY CONTACT:** May be configured for momentary ON/OFF operation to control latching contactors. The ELC74 operates as a two channel unit. The ELC78 operates as a four channel unit. The ELC712 operates as a six channel unit.

**HOLIDAYS:** 26 holidays may be set using 10 individual dates, 10 month type (last Monday in May), or 6 specific holidays with one of 3 independent holiday schedules.

**BLOCK HOLIDAY:** 10 holiday blocks can be set for individual days or for duration of any number of days and may use one of 3 holiday schedules.

**PULSE/TIME DURATION:** 4 different ON settings from 1 second to 23 hours, 59 minutes, 59 seconds.

**DUTY CYCLE:** 4 different ON and OFF patterns from 1 second to 23 hours, 59 minutes, 59 seconds.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**REMOTE OVERRIDE:** Universal input may be programmed for timed override from a momentary or maintained dry contact switch.

**MANUAL OVERRIDE:** Keyboard button control until the next regularly scheduled ON or OFF, automatic operation then resumes.

**STAGGERED START:** Optional stagger up time between channels, after a power outage; selectable from 5 seconds, 15 seconds, 30 seconds, 1 minute, 5 minutes, 10 minutes, and 15 minutes.

**CLOCK FORMAT:** AM/PM or 24 hour format.

**POWER OUTAGE BACKUP:** The program and time of day are maintained for a minimum of 2 days by means of a capacitor. After two days, a lithium battery takes over and provides a minimum accumulated time of 1 year. The lithium battery should provide over 10 years of protection.

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:**

24/120/208-240/277VAC, 50/60Hz.

**TERMINAL RANGE:**

#10 - #16AWG for line input.

#10 - #16AWG for load output.

#14 - #22AWG universal input.

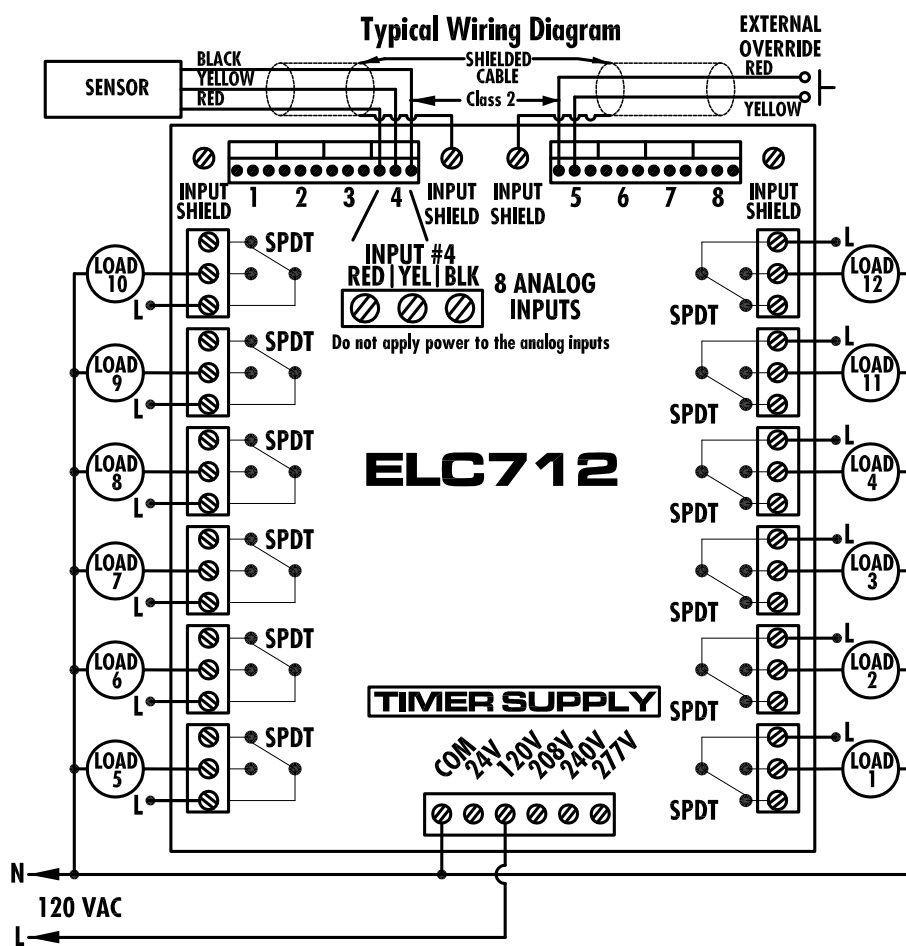
**OPERATING TEMPERATURE:**

-20°F to +140°F (-29°C to + 60°C).

**POWER CONSUMPTION:** 10VA Maximum.

**ENCLOSURE:** Metal Indoor NEMA 1 with lockable hasp (see page 558 for dimensions).

TYPE	VOLTAGE	RATING	
		NO	NC
General Purpose	24/120 - 277VAC	20A	15A
Ballast	120-277VAC	20A	20A
Tungsten	120-277VAC	5A	-
Pilot Duty	120-240VAC	470VA	275VA
Motor	120VAC	1HP	1/4HP
	208-277VAC	2HP	1/2HP



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# DLC400BP

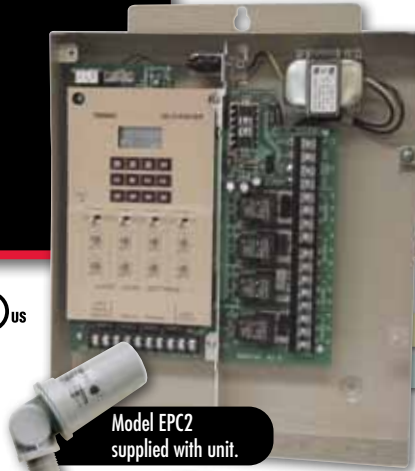
## 4 ZONE LIGHTING CONTROL TIME SWITCH

**FLEXIBLE  
INDOOR &  
OUTDOOR  
LIGHTING  
CONTROLLER**



CALIFORNIA Title 24

ASHRAE 90.1



Model EPC2  
supplied with unit.

Memory Module  
Programmer optional

With optional  
Timed Override

### APPLICATIONS

#### INTERIOR LIGHTING

- Open office zoning
- Hallways
- Meeting and sales areas
- Stock rooms and warehouses

#### EXTERIOR LIGHTING

- Signage and store windows
- Security
- Parking lots

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	NO. OF CHANNELS	OUTPUT CONTACTS
DLC400BP	82191	120/208-240/277	4	SPDT
USB-MMP	82196	Memory Module Programmer	Includes Software	
SS410	14033	24VAC/24VDC	-	SPDT

### FEATURES

**CONFIGURABLE ZONES:** Simple three position slide switch sets logic for each zone: Time ON/Time OFF, Photo ON/Photo OFF, or Photo ON/ Time OFF.

**SCHEDULING:** 99 ON & OFF set points allow individual programs for each day of the week. Minimum 1 minute apart.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. **1.** Adjustable 10° - 60° Northern or Southern latitudes. **2.** Can be individually offset +/-1-240 minutes from both sunset and sunrise times.

**PHOTOSENSOR INPUT:** EPC2 photo sensor included.

**LIGHT LEVEL ACTIVATION:** Turn ON and OFF level is user settable from 1 to 100 footcandle. Each channel has an independent setting.

**REMOTE OVERRIDE:** Maintained dry contact closure or use TORK Model SS410 for timed override with flash warning before OFF. May use with occupancy sensor as override.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year.

**HOLIDAYS:** 1 to 24 individual dates.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**POWER OUTAGE BACKUP:** Permanent schedule retention with memory module. Battery provides real time backup for 6 months cumulative.

**MEMORY MODULE:** Removable MM can be programmed at any one location and inserted into another DZS series unit.

**OPTION:** Memory Module Programmer with software for computer connection programming. Also allows stand alone battery operation for portable copy feature.

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:**

120/208 - 240/277VAC, 50/60Hz.

**TERMINAL RANGE:** #10 - #14AWG.

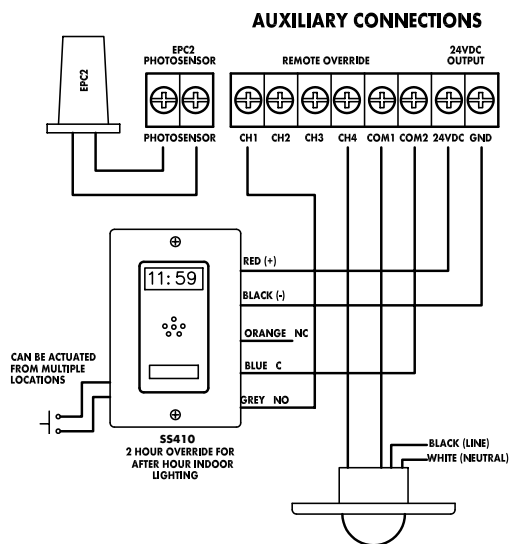
**OPERATING TEMPERATURE:**

-40°F to +158°F (-40°C to + 55°C).

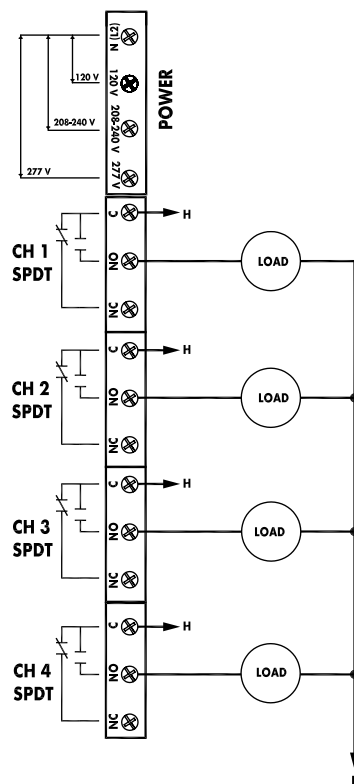
**POWER CONSUMPTION:** 30VA Maximum.

**ENCLOSURE:** Metal Indoor/Outdoor NEMA 3 with lockable hasp (see page 557 for dimensions).

TYPE	VOLTAGE	RATING	
		NO	NC
General Purpose	24-277VAC, 30VDC	30A	30A
Ballast	120-277VAC	20A	10A
Tungsten	120VAC	10A	
Pilot Duty	120-277VAC	720VA	720VA



TORK DIGITAL CONTROL TERMINAL BLOCK



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# LD SERIES

## EXTENDED LIGHTING CONTROL LIGHTING DELAY TIME SWITCH



ASHRAE 90.1

ADD A  
WARNING  
BLINK TO ANY  
CONTROL

### APPLICATIONS



- Open offices
- Gymnasiums
- Warehouses
- Outdoor recreation courts
- User-activated lights with time limits
- Match with photocontrol and timer to limit hours of use

### FEATURES

**MAINTAINED INPUT WITH LOAD WARNING BLINK:** LDS Series controls output load contacts based on power applied to the time switch input contact. At removal of power from the time switch input, LDS Series provides 1 second blink then keeps load contacts closed for an extra 1 or 5 minutes (user selectable) before turn off.

**MAINTAINED INPUT WITH AUXILIARY WARNING:** LDSH Series controls output load contacts based on power applied to the time switch input contact. At removal of power from the time switch input, LDSH Series closes a second set of contacts for a user supplied audible or visual warning device. The warning circuit closes for a selected time of 4 seconds (best for audible device or continuous, then keeps load contacts closed for an extra 1 or 5 minutes (user selectable) before turn OFF.

**MOMENTARY INPUT:** Provides timed override when time switch input contact is unpowered (timer OFF). When activated during the warning period, load contacts are kept closed and timing starts. Both series can accept momentary input contact closure for ON to start the timing and OFF to end the timing.

**TIMED OVERRIDE SETTINGS:** User may select override times of 1/2, 1, 1 1/2, 2, 6, 9, or 12 hours. Warning before OFF is always active after override time.

### SPECIFICATIONS

**INPUT VOLTAGE:**  
120/208/240/277VAC, 50/60Hz.

**TERMINAL RANGE:** #10 - #16AWG for line/load. #18 - #26AWG switch input.

**OPERATING TEMPERATURE:**  
-22° to 150°F (-30° to +65°C).

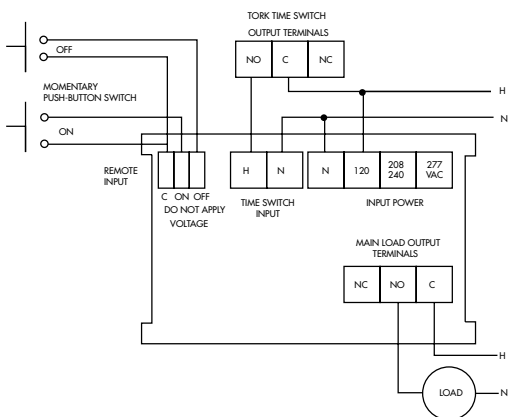
**POWER CONSUMPTION:**  
5VA Maximum.

**ENCLOSURE:** Metal Indoor NEMA 1 with lockable hasp (see page 557 for dimensions).

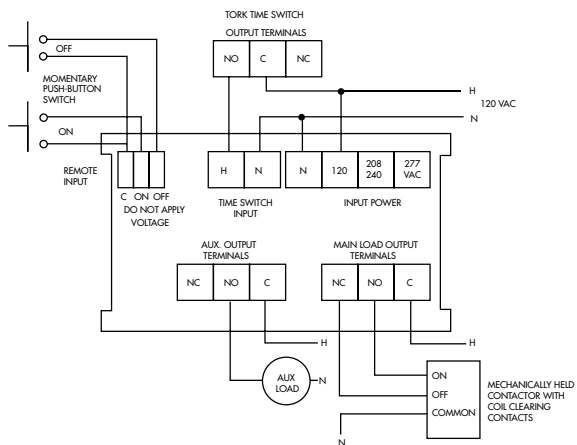
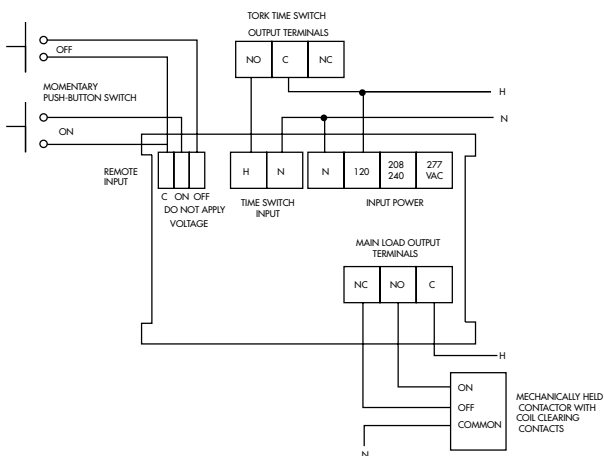
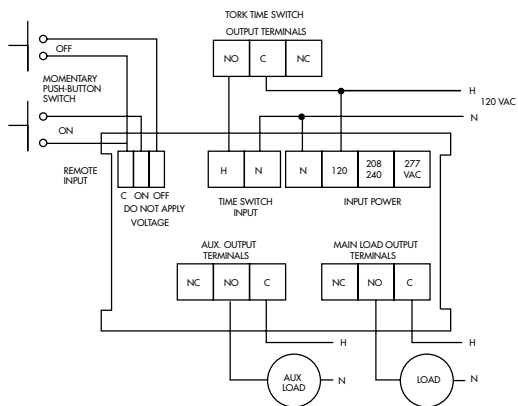
CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
LDS-A	81026	120/208-240/277	SPDT	Metal Indoor NEMA 1
LDS	81025	120/208-240/277	SPDT	Mechanism
LDSH-A	81031	120/208-240/277	SPDT	Metal Indoor NEMA 1
LDSH	81028	120/208-240/277	SPDT	Mechanism

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
General Purpose	24/240 277	20A	10A
		20A	3A
Ballast	120 208-277	20A	10A
		10A	3A
Tungsten	120-277	5A	3A
Pilot Duty	120-240 277	470VA	275VA
		690VA	
Resistive	28VDC	20A	10A

**LDS WIRING**

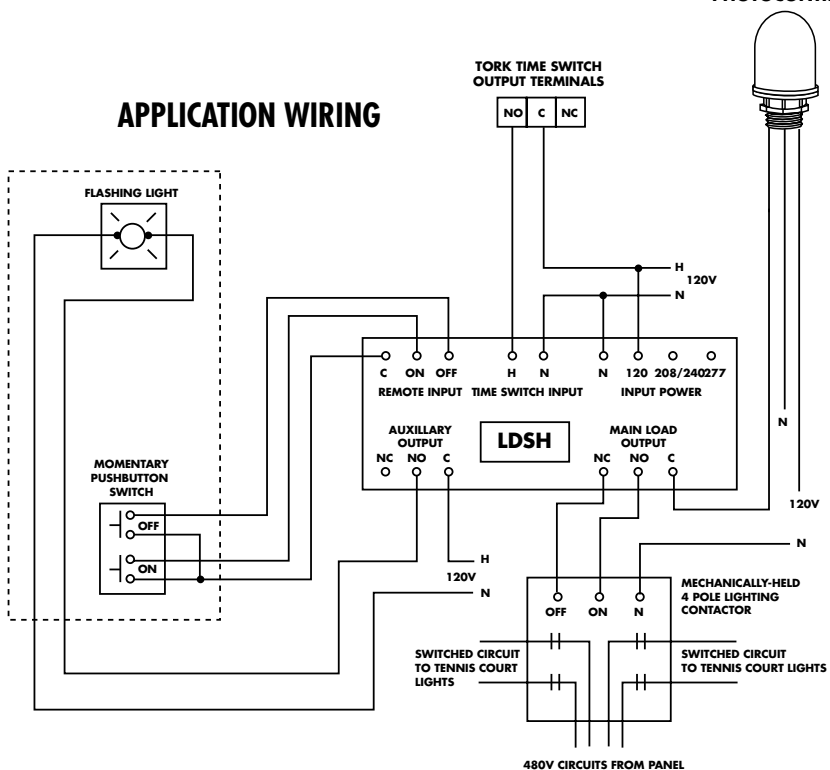


**LDSH WIRING**



**PHOTOCONTROL**

**APPLICATION WIRING**



# DGS SERIES

## SIGNALING AND DUTY CYCLE

### 24 HOUR OR 7 DAY

### TIME SWITCH



**31 DAY  
CYCLE TIME:  
AN INDUSTRY  
FIRST!**

## APPLICATIONS



- Signaling
- Duty cycle

## FEATURES

**DG180A & DG280A:** 56 ON & OFF set points provide daily repeated programs. Minimum setting is 1 minute.

**DGS100A:** 56 ON & OFF set points provide individual programs for each day of the week. Minimum setting is 1 minute.

**DUTY CYCLE & SIGNALING:** Two different ON/OFF patterns or signal durations may be programmed. The durations can be up to 23 hours, 59 minutes and 59 seconds in length.

**SKIP FUNCTION (24 HOUR UNITS ONLY):** Each channel can be set for ACTIVE/SKIP operations that alternate from 1 - 31 days. This becomes an effective way to cycle loads on varying days within the month. Using the two-circuit DG280A, two loads can be set to operate on alternate days in a simple manner.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM or 24 hour.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 7 days of real time backup.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	NO. OF CHANNELS	OUTPUT CONTACTS
<b>24 HOUR MODELS</b>				
DG180A	82206	120-277	1	DPDT
DG280A	82207	120-277	2	SPDT
DG280A-24	82220	24VAC	2	SPDT
<b>7 DAY MODELS</b>				
DGS100A	82205	120-277	1	DPDT
DGS100A-12	82218	12VDC	1	DPDT
DGS100A-24	82219	24VAC	1	DPDT

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:**

120 - 277 VAC, 50/60 Hz (auto detection).

**TERMINAL RANGE:** #12 - #18AWG.

**OPERATING TEMPERATURE:**

-31°F to +131°F (-35°C to + 55°C).

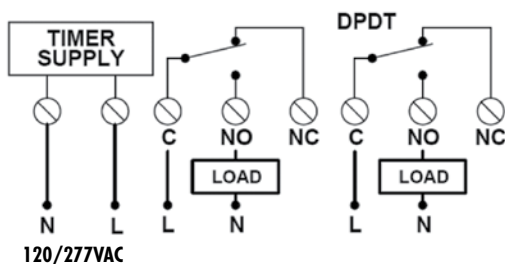
**POWER CONSUMPTION:** 6VA Maximum.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA

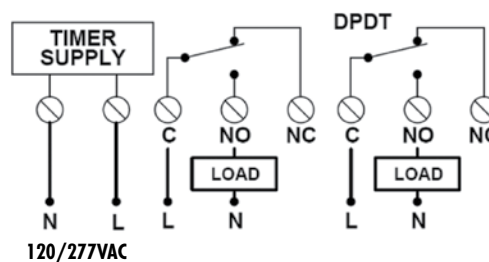
3R with lockable hasp (see page 557 for enclosure dimensions).

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	24-277	20A	10A
Ballast	120-277	20A	10A
Tungsten	120	15 A	
Pilot Duty	120	720VA	290VA
	240		360VA
Motor	120	1HP	1/4HP
	240	2HP	1/2HP
Resistive	28VDC	20A	10A

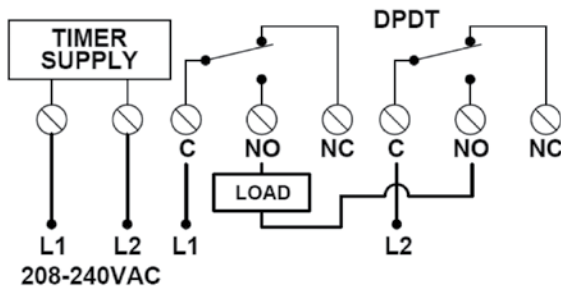
**DGS100A**  
FOR 120V/277VAC



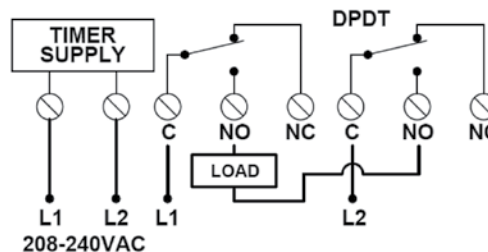
**DG180A**  
FOR 120V/277VAC



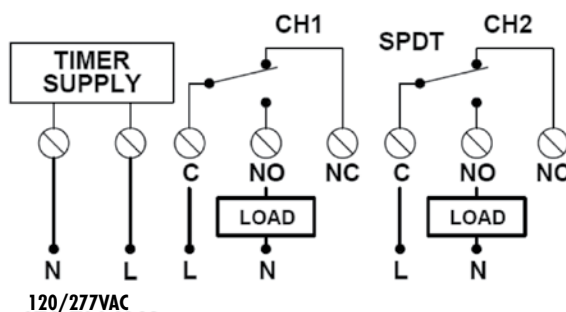
**DGS100A**  
FOR 208-240VAC



**DG180A**  
FOR 208-240VAC



**DG280A**



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# EJWT & E500T SERIES

DELAY, INTERVAL &  
PERCENTAGE TIME CYCLE  
TIME SWITCHES

PERFECT FOR  
PROCESS  
CONTROL

## APPLICATIONS



- Poultry and livestock
- Agriculture or greenhouse
- Oil well pumping
- Ventilation
- Process control



## FEATURES

### EJWT – PERCENTAGE TIMER

960 time combinations with two dials.  
Cycle Time Dial sets 32 repeating cycles from 15 seconds to 24 hours.  
Percentage ON Dial has 32 steps from 0% to 100%.  
Repeats cycle as long as power is applied.

### E500T – ON DELAY TIMER

Dial sets 30 time delay durations from 5 seconds to 3 hours.  
External switch activated starts delay to ON.  
Runs until external switch turns OFF.

### E501T – AUTO OFF INTERVAL TIMER

Dial sets 30 time durations from 10 seconds to 12 hours.  
Start/Stop button or External switch starts interval ON.  
Automatically turns OFF at end of preset time.  
START/STOP or External switch turns OFF.

### E502T – OFF DELAY TIMER

Dial sets 30 time durations from 5 seconds to 3 hours.  
External switch starts interval ON.  
Automatically turns OFF at end of preset time.  
External switch turns OFF.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	OUTPUT CONTACT
EJWT	82513	120-240	SPDT
E500T	82514	120-240	SPDT
E501T	82515	120-240	SPDT
E502T	82516	120-240	SPDT

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
General Purpose	120-240	20A	10A
Resistive	120-240	20A	10A
Motor	120	1HP	1/4HP
	208-240	2HP	1/2HP
Pilot Duty	120/240	470VA	275VA

## SPECIFICATIONS

**TIMING ACCURACY:** 1% of timing range.

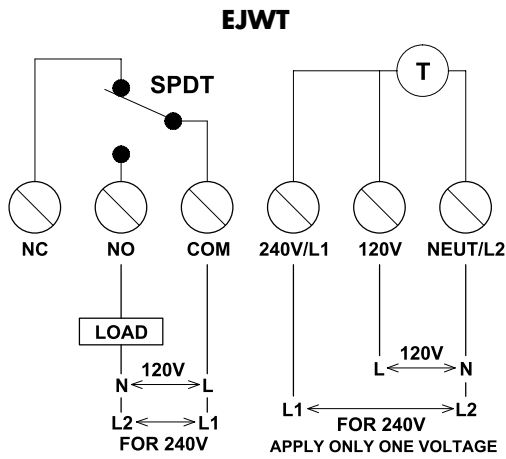
**INPUT VOLTAGE:** 120/240VAC, 60Hz.

**TERMINAL RANGE:** #12 - #18AWG.

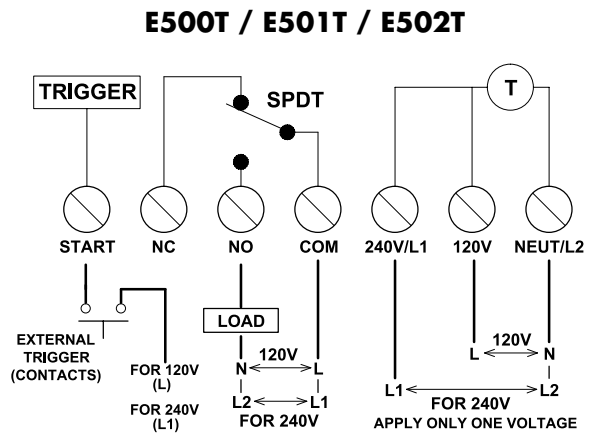
**OPERATING TEMPERATURE:**  
32°F to +122°F (0°C to + 50°C).

**POWER CONSUMPTION:** 16VA Maximum.

**ENCLOSURE:** Indoor NEMA 4X is standard (see page 558 for enclosure dimensions).



Use copper conductors. For supply connections use AWG #12 wire rated for at least 90°C (194°F) or equivalent.



Use copper conductors. For supply connections use AWG #12 wire rated for at least 90°C (194°F) or equivalent.



# PCT SERIES PANEL MOUNT CYCLE TIME SWITCHES

**NEW!**



## SPECIFICATIONS

### TIMING ACCURACY:

1% of timing range.

**INPUT VOLTAGE:** 120-240VAC,  
50/60Hz (automatic detection).

**TERMINAL RANGE:** #14 - #16AWG  
for line input, #12 - #16AWG for load  
output.

### OPERATING TEMPERATURE:

-40° to +149°F (-40° to +65°C).

**POWER CONSUMPTION:** 5VA Max.

## APPLICATIONS



- Oil field pumping stations
- Poultry and livestock feeding and watering
- Ventilation
- Process control

## FEATURES

**FIXED TIMER CYCLE:** 15 minutes repeating cycle when unit is powered.

**PERCENTAGE ON:** 1% to 99% increments.

**DISPLAY:** Digital percentage reading.

**ON SETTING:** Hold ON.

**OFF SETTING:** Hold OFF.

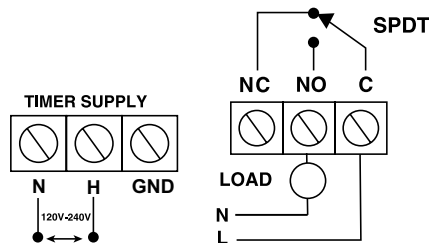
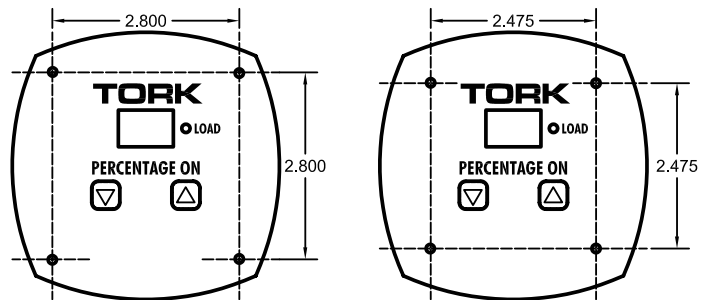
**POWER OUTAGE BACKUP:** Remembers place in cycle when power resumes.

**TEST MODE:** For temporary ON/OFF cycle verification.

**PANEL MOUNTING:** 3" diameter back housing retrofits to existing mechanical timer dimensions. Two sets of mounting dimensions to choose from. (see page 558 for enclosure dimensions).

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	OUTPUT CONTACT
PCT15M	82528	120-240	SPDT

TYPE	RATINGS	
	NO	NC
120-240VAC General Purpose & Resistive	20A	20A
120VAC Motor	1HP	1/4HP
240VAC Motor	2HP	1/2HP



# ACT30MA SERIES

## ADJUSTABLE CYCLE TIMER

### TIME SWITCHES



## SPECIFICATIONS

**INPUT VOLTAGE:** 120-240VAC

**TERMINAL RANGE:** #18 - #12AWG

**CONTACTS:** SPDT

**ENCLOSURE:**

Indoor NEMA 4X is standard (see page 558 for enclosure dimensions).

## APPLICATIONS

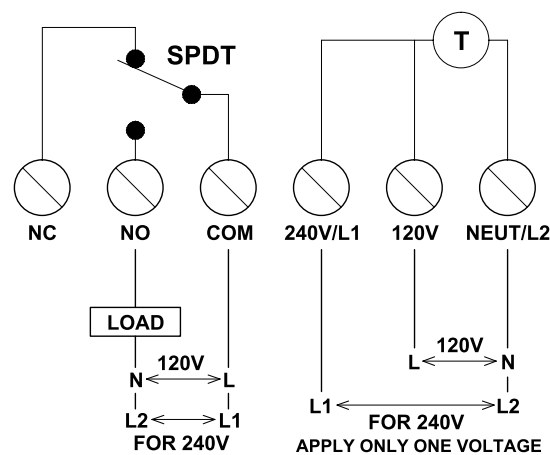
- Poultry and livestock feeding and watering
- Agriculture irrigation for field or greenhouse
- Oil well pumping daily cycle
- Ventilation
- Process control

## FEATURES

**960** time combinations with two dials  
**ON** time dial sets 30 time steps from 30 seconds to 15.5 minutes  
**OFF** dial has 30 steps time steps from 30 seconds to 15.5 minutes  
 Repeats cycle as long as power is applied  
 Hold On or Hold Off positions included

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	OUTPUT CONTACT
ACT30MA	82527	120-240	SPDT

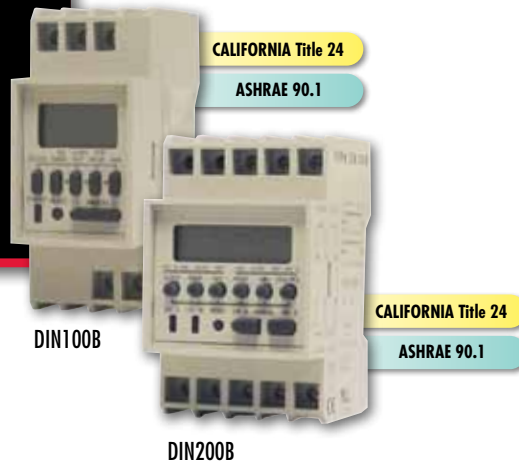
TYPE	RATINGS	
	NO	NC
120-240VAC General Purpose & Resistive	20A	10A
120VAC Motor	1HP	1/4HP
208-240VAC Motor	2HP	1/2HP
120-240VAC Pilot Duty	470VA	275VA



Use copper conductors. For supply connections use AWG #12 wire rated for at least 90°C (194°F) or equivalent.

# DIN SERIES

## 1 OR 2 CHANNEL 7 DAY TIME SWITCH



**PANEL BUILDERS' CHOICE**

### APPLICATIONS



- Panel builders
- Indoor/Outdoor lighting
- Security systems
- HVAC equipment

### FEATURES

**SCHEDULING:** 8 ON and OFF pairs of set points for DIN100B. 4 ON and OFF (CH A) and 3 ON and OFF (CH B) pairs of set points for DIN200B. Individual programs on each day of the week. Minimum setting is 1 minute.

**MANUAL OVERRIDE:** Until the next regular scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Battery retains time and schedule.

CATALOG NO.	UPC CODE	DRY CONTACTS	CLOCK INPUT (VAC)50/60 Hz	NO. OF CHANNELS	NUMBER OF ON/OFF
DIN100B	82193	SPDT	120	1	8
DIN200B	82192	SPDT	120	2	4 Channel A 3 Channel B

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	120	16A	16A
General Purpose	120	8A	8A
Motor (DIN100 only)	120	1/2HP	

# SPECIFICATIONS

**INPUT VOLTAGE:** 120VAC, 50/60Hz.

**TERMINAL RANGE:** #12 - #18AWG.

**OPERATING TEMPERATURE:**

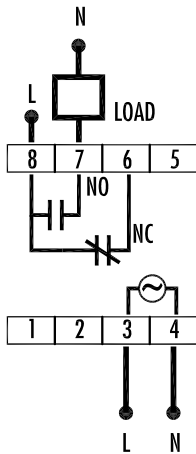
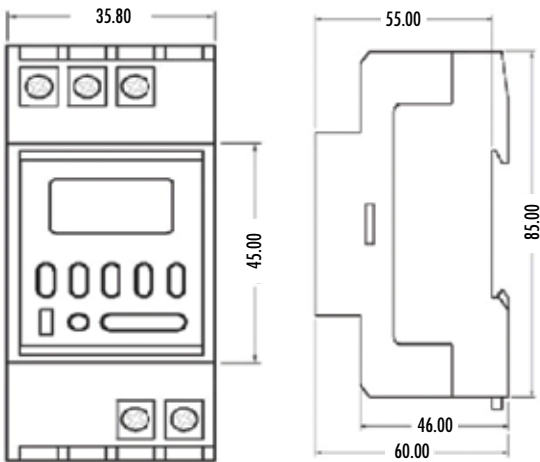
DIN100B: 14° - 131°F (-10° - +55°C).

DIN200B: 14° - 113°F (-10° - +45°C).

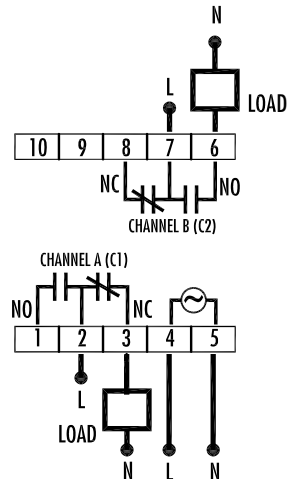
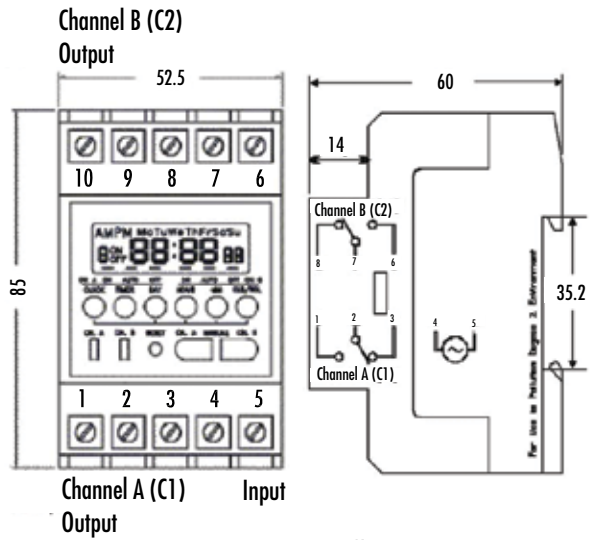
**POWER CONSUMPTION:** 4VA Maximum.

**MOUNTING:** DIN rail #50022 (35mm) or flat surface using supplied adapter.

DIN100B



DIN200B



# SMC SERIES MOMENTARY CONTACT ADAPTER



## SPECIFICATIONS

**INPUT VOLTAGE:** 120VAC, 50/60Hz.

**TERMINAL RANGE:** #12 - #18AWG.

**OPERATING TEMPERATURE:**  
-31°F to +131°F (-35°C to + 55°C).

**POWER CONSUMPTION:** 6VA max.

**ENCLOSURE:** Noryl® Indoor/Outdoor  
NEMA 3R with lockable hasp (see page  
557 for dimensions).

## APPLICATIONS

- Converts maintained contacts for pulse switching
- Timer to latching contactor control
- Photocell to latching contactor control Signaling

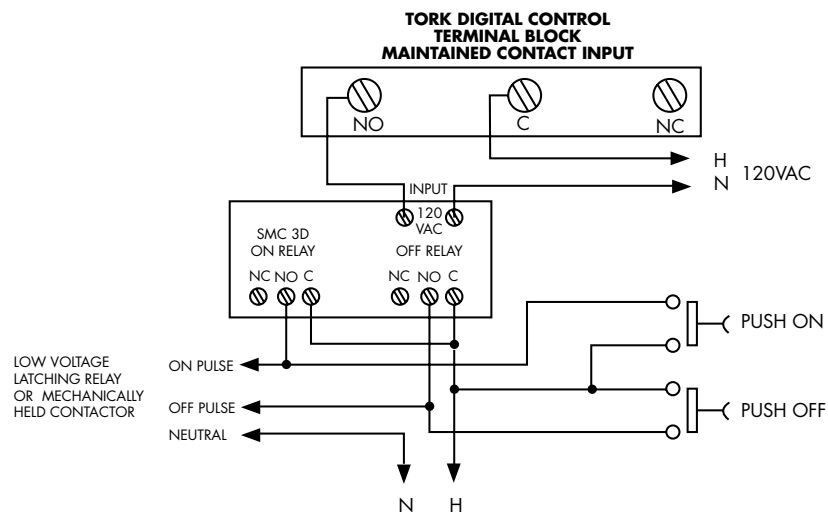
## FEATURES

**MAINTAINED INPUT:** SMC3D accepts maintained input power from any 120 volt control. When power is applied or removed a short contact closure (pulse) is created on the dry output contacts.

**MOMENTARY OUTPUT:** SMC3D provides two dry output contacts. The ON contact provides a 2 second contact closure (pulse) when power is applied to the input contacts. The OFF contact provides a 2 second pulse when power is removed from the input contacts.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	OUTPUT CONTACTS
SMC3D	52011	120	SPDT Momentary

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	120	10A	10A
General Purpose	120	10A	10A
Motor	120	1/4HP	



# 5401 SERIES

## INCREASED AMPERAGE & VOLTAGE SWITCHING

### 40 AMP CONTACTORS

#### APPLICATIONS



- Lighting loads
- Exhaust fans
- Electric and hot water heaters
- Refrigeration and defrosting



5401A

5441A

#### FEATURES

**CONTACT RATINGS:** Can switch up to 40 AMPS per pole from 120VAC to 277V lighting loads, one to three circuits simultaneously.

**EASY WIRING:** Includes 120 volt control wiring compartment. 5441 has terminal strip pre-mounted for quick connection.

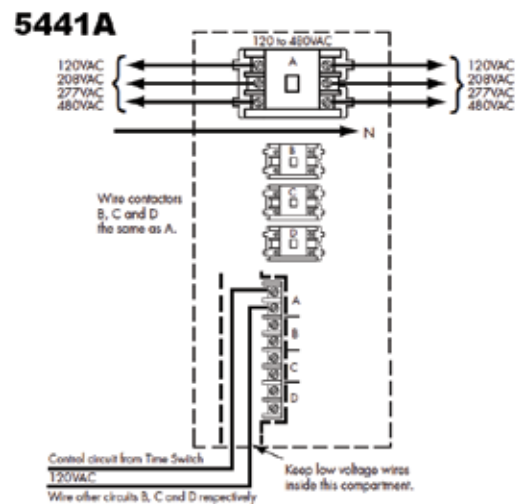
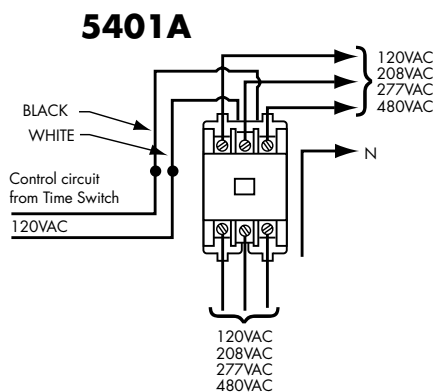
**ENCLOSURE:** Metal NEMA 1 Indoor enclosure (see page 557 for enclosure dimensions).

CATALOG NO.	UPC CODE	COIL VOLTS	NO. OF CONTACTORS	OUTPUT CONTACTS
5401A	81019	120	1	3PST
5441A	81020	120	4	3PST

TYPE	VOLTAGE (VAC)	FLA	RATING
Tungsten*	120	-	30A
Ballast*	120/277	-	40A
LED Driver*	120/277	-	40A
Motor (Single Phase)	120 240	40 40	3HP 7.5HP
Motor (3 Phase)	240 480	40 40	10HP 20HP

Coil Data: 120VAC @ 60Hz  
6VA Holding/seal; 60VA inrush

\* Ratings for single phase load



# HPS STARTER

## FOR HIGH PRESSURE SODIUM LAMPS STARTING AID



## SPECIFICATIONS

**LINE VOLTAGE:** 105 - 347VAC.

**LAMP VOLTAGE:** 55 or 100VAC.

**LAMP WATTAGE:** 35 to 400 watts.

**OPERATING TEMPERATURE:**  
-40°F to +221°F (-40°C to +105°C).

**LEAD LENGTH:** 9 inches.

**ENCLOSURE:** Durable, high temperature Lexan® housing.

## APPLICATIONS

- Designed to operate as a starting aid, for all
- H.P.S. ballasts from 35 to 400 watts, with lamp voltage of 55 or 100 volts.

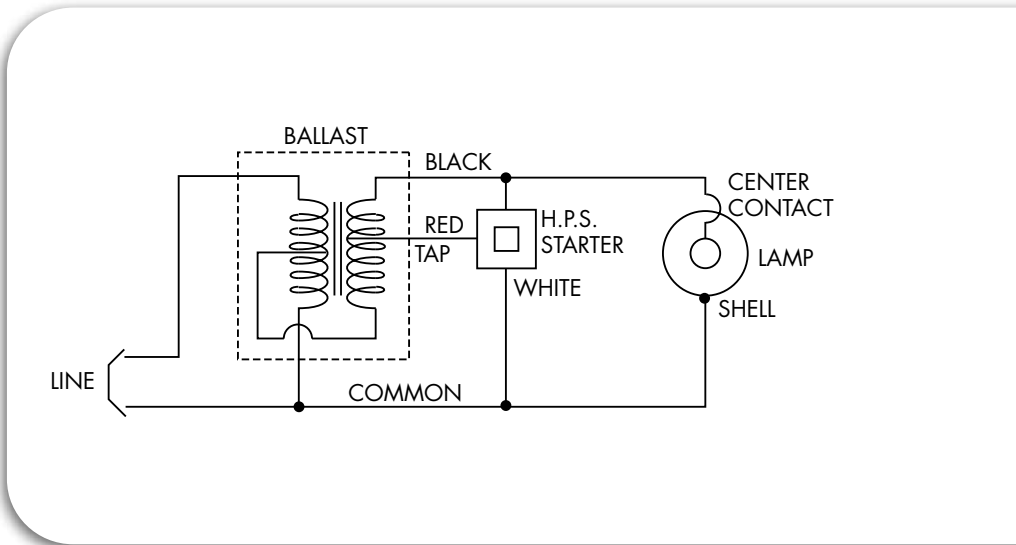
## FEATURES

**SMART VOLTAGE:** Delivers appropriate trigger spikes for lamp ignition, then reduces voltage to good lamps. Continues to feed voltage spikes to old or poorly working lamps.

**HIGH GRADE MATERIAL:** All components are sealed with high grade die-electric material to protect against contaminants and other adverse environmental conditions.

**EASY INSTALLATION:** Universal 3 wire design, color coded for ease of installation.

CATALOG NO.	UPC CODE	DESCRIPTION
HPS30	81030	High Pressure Sodium Starter

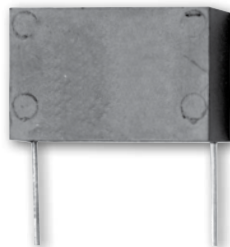


# SURGE SUPPRESSOR

## FOR HIGH ELECTRICAL NOISE

## APPLICATIONS

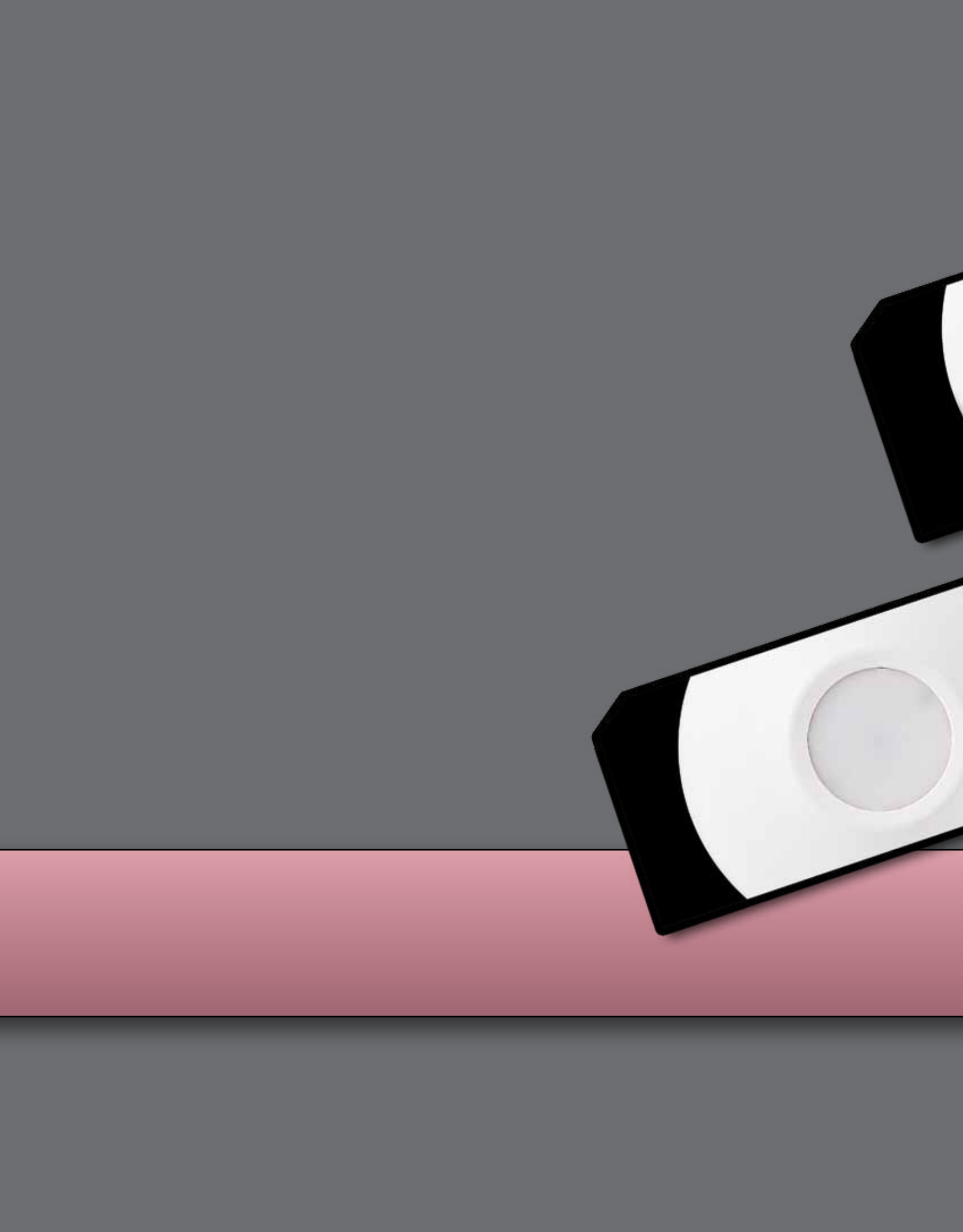
- For high electrical noise interference, recommended for all digital controls.

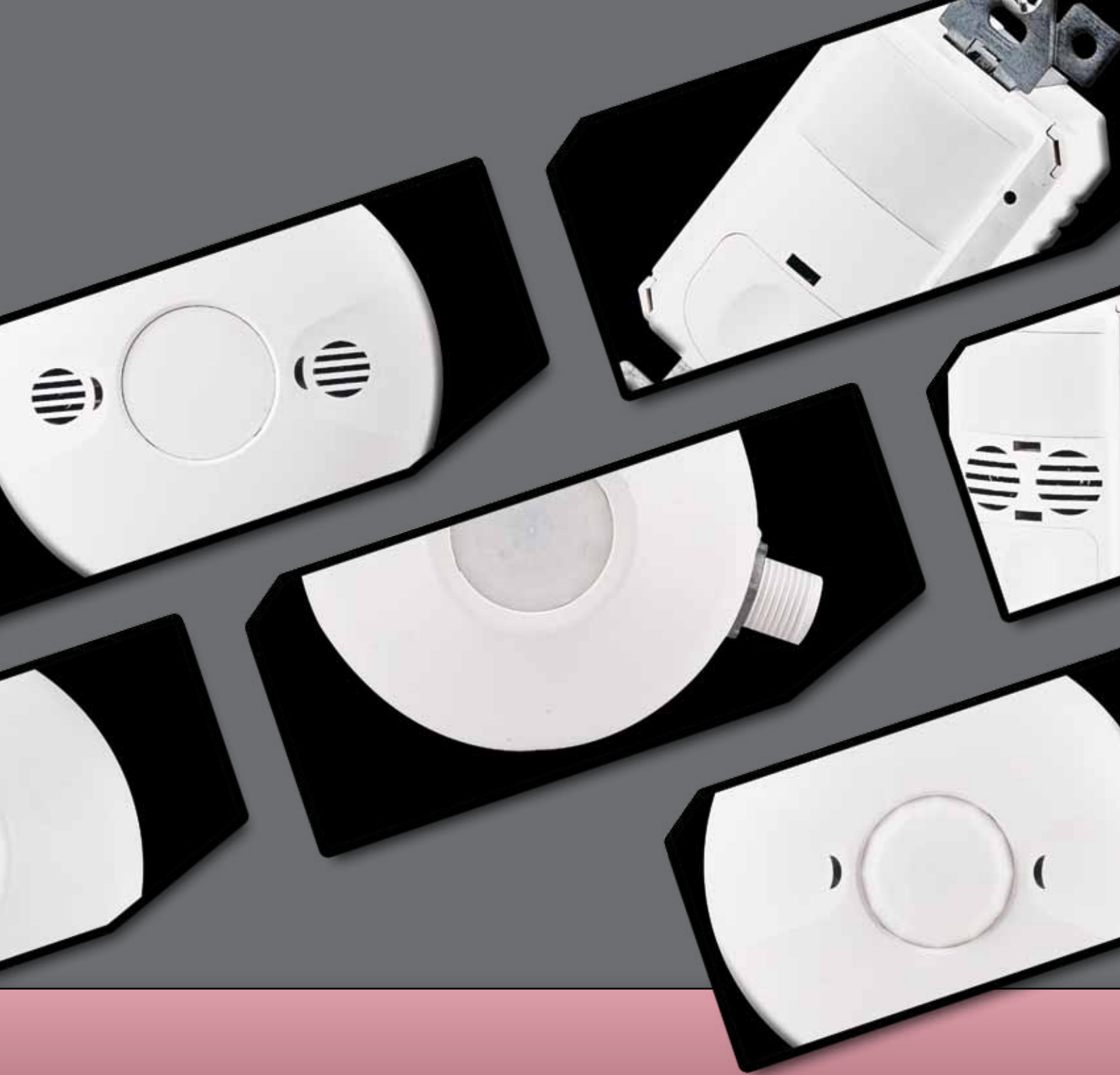


CATALOG NO.	UPC CODE	DESCRIPTION
90058-1	81024	Surge Suppressor









# **TORK® OCCUPANCY SENSORS**

## TECHNOLOGY PIR AND ULTRASONIC

A **Passive Infrared Sensor** (PIR sensor), is a device that measures infrared radiation (IR), or heat, from objects in its field of view. Because it only receives information, it is considered passive. The IR sensor views a human body as an IR generating object. The lens of the occupancy sensor breaks up the field of view into IR sensitive bands. The occupancy sensor is designed to only react when heat is sensed moving from band to band. For PIR occupancy sensors to work object must have direct "line of sight" to the PIR sensor.

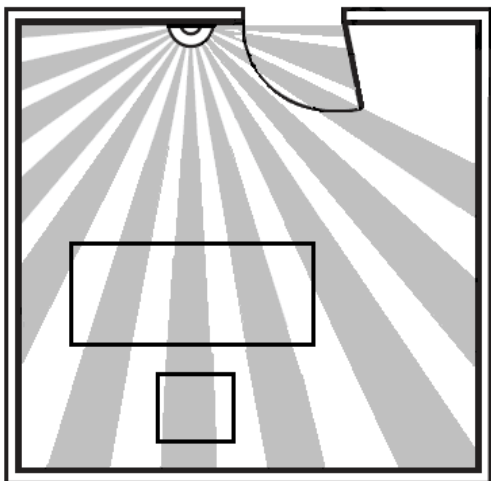
An **Ultrasonic Sensors** (US sensor) is a technology that works on a principle similar to radar or sonar. It is an active technology that sends and receives. It emits an inaudible high-frequency sound wave and evaluates the echo which is received back after bouncing around in the room. This allows the sensor to evaluate the whole room and can "look" over walls and obstructions to identify movement.

Both technologies show higher sensitivity closer to the sensor to allow small movements to be noticed. Sensitivity reduces further away from the sensor and may require a walking step to activate the sensor.

## PLACEMENT GUIDELINES WALL SENSOR

A **Wall Switch Sensor** provides a 180° coverage pattern, extending outward from the sensor. This will allow for instant turn ON when an occupant enters the space. Total area covered will be over 400 square feet.

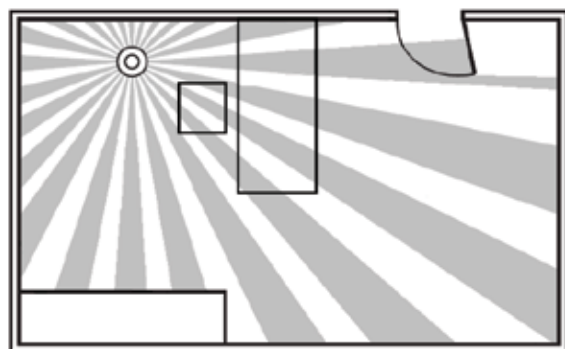
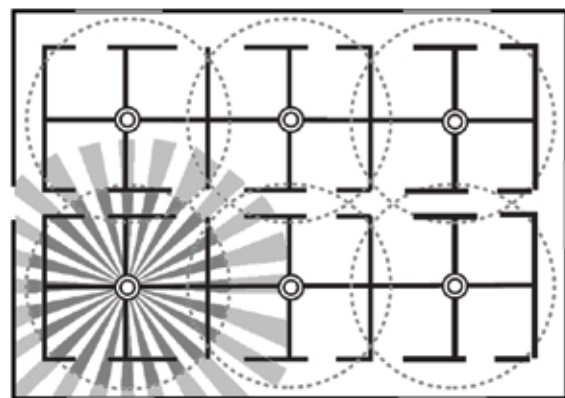
- Proper placement gives the sensor a clear line of sight to the entry door without viewing the hallway.
- The occupant must be able to see the sensor from their normal work position otherwise the sensor will not be able to detect their presence.
- For offices where there are other obstructions between the sensor and the occupant or the entry door, a ceiling sensor is required.



## PLACEMENT GUIDELINES CEILING SENSOR

A **Ceiling Sensor** provides a 360° coverage pattern of up to 1200 square feet when using passive infrared only. When using dual technology the coverage pattern extends to over 2000 square feet. Barriers within the space that block line-of-sight to sensor detection will decrease coverage area when using passive infrared by itself, ultrasonic dual technology will allow the sensor to get around the obstructions.

- Designed for ceiling mounting at a height of 8-10 feet (mounting sensor at greater heights decreases the sensitivity to motion, while lower mounting height will decrease range).
- The sensor needs a visually unobstructed view of the normally occupied workspace and entry door(s).
- Avoid sensor placement with a direct view out a doorway. Placing the sensor offset from the center and away from the door is recommended.
- If the occupant cannot see a PIR sensor from their normal work position, the sensor will not be able to detect their presence.
- File cabinets, partitions, or walls are typical types of obstructions. If there are other obstructions between the sensor and the occupant, an ultra-sonic or dual technology ceiling sensor is recommended.
- When the light level feature is used, mount within 15 feet of the windows or skylight and avoid mounting the sensor close to lighting fixtures.
- Place the sensor no closer than 5 feet to an HVAC air duct when using dual technology sensors.
- Open office designs encourage placement of the sensors to allow overlapping coverage of small motion range and a clear view into each cubicle. Walking step motion may cover the entry to the space. Dual technology units provide added sensitivity to small motion.



# WOS SERIES

## PIR WALL SWITCH OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Offices areas
- Meeting rooms
- Equipment room & storage spaces

### SPECIFICATIONS

**VOLTAGE:**  
120VAC 50/60 Hz

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 3 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
120V ¼ HP Motor

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Two selectable modes: Automatic On/Off or energy saving Walk Through. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**FLASH WARNING:** Optional load flicker 2 minutes before Off.

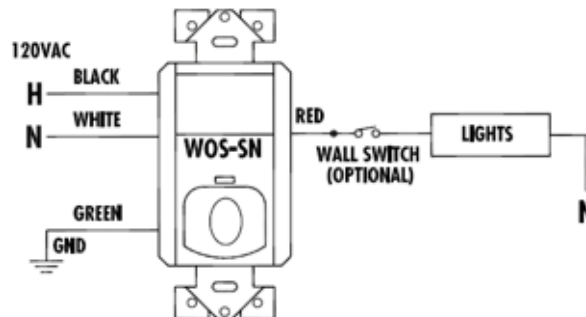
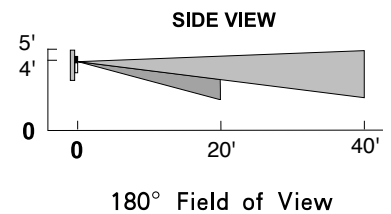
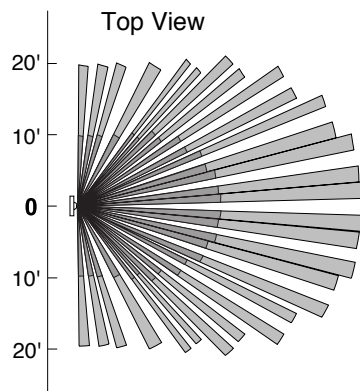
**TAMPER RESISTANT:** Captive button, rugged lens, and optional disable button function for public areas. Use in bathrooms to avoid manual off condition for occupant as another person leaves.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**COLOR:** White (single gang decorator wall plate included).

CATALOG NO.	UPC CODE	INPUT SUPPLY VAC 50/60Hz	WIRING
WOS-SN	98213	120	Requires Neutral



# WOS-M SERIES

## PIR WALL SWITCH OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Offices areas
- Meeting rooms
- Equipment room & storage spaces
- New construction & retrofit

### SPECIFICATIONS

**VOLTAGE:**

120/230/277VAC 50/60 Hz

**OPERATING TEMPERATURE:**

32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**

120V 800W Tungsten

120V 1000W Electronic Ballast

230V 1500W Electronic Ballast

277V 1800W Electronic Ballast

120V ¼ HP Motor

CATALOG NO.	UPC CODE	INPUT SUPPLY VAC 50/60Hz	WIRING
WOS-M	98217	120/230/277	No Neutral Required
WOS-MN	98215	120/230/277	Requires Neutral

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Four selectable modes: Automatic On/Off, Manual on (vacancy), energy saving Walk Through, or Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**DAYLIGHT PHOTOSENSOR:** Optional light-level turn off from 5 to 200fc. Save energy if windows provide enough light.

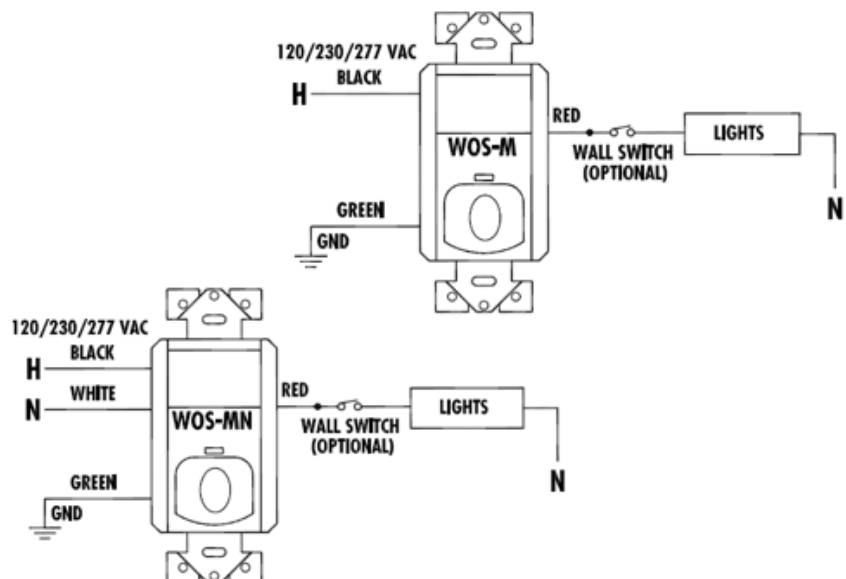
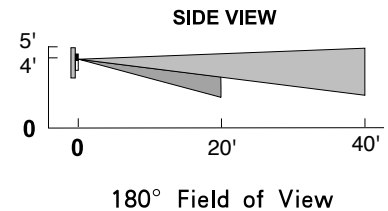
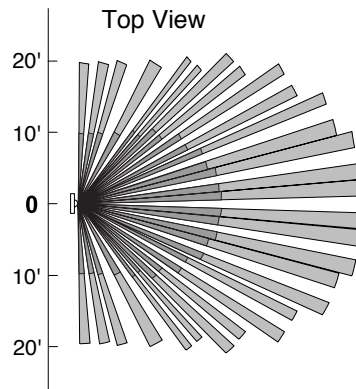
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**TAMPER RESISTANT:** Captive button, rugged lens, and optional disable button function for public areas. Use in bathrooms to avoid manual off condition for occupant as another person leaves.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**COLOR:** White (single gang decorator wall plate included).



# WOS-M2R SERIES

## PIR WALL SWITCH TWO RELAY OCCUPANCY SENSOR



ASHRAE 90.1

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60 Hz

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
230V 1500W Electronic Ballast  
277V 1800W Electronic Ballast  
120V ¼ HP Motor

### APPLICATIONS



- Offices areas
- Meeting rooms
- Equipment room & storage spaces
- New construction & retrofit

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming. Each relay can have different settings.

- BATHROOM MODE: set fan relay time delay longer than lighting relay.
- TWO STEP LIGHT LEVEL: set each relay to turn off at different daylighting levels
- PUBLIC AREAS: Disable one relay button manual OFF function. Use in bathrooms to avoid full off condition for occupant as another person leaves.

**MODES:** Four selectable modes: Automatic On/Off, Manual on (vacancy), energy saving Walk Through, or Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**DAYLIGHT PHOTOSENSOR:** Optional light-level turn off from 5 to 200fc. Save energy if windows provide enough light.

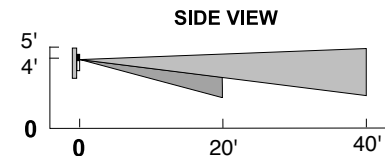
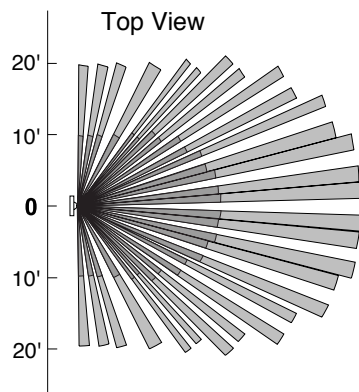
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**TAMPER RESISTANT:** Captive button, rugged lens, and optional disable button function for public areas.

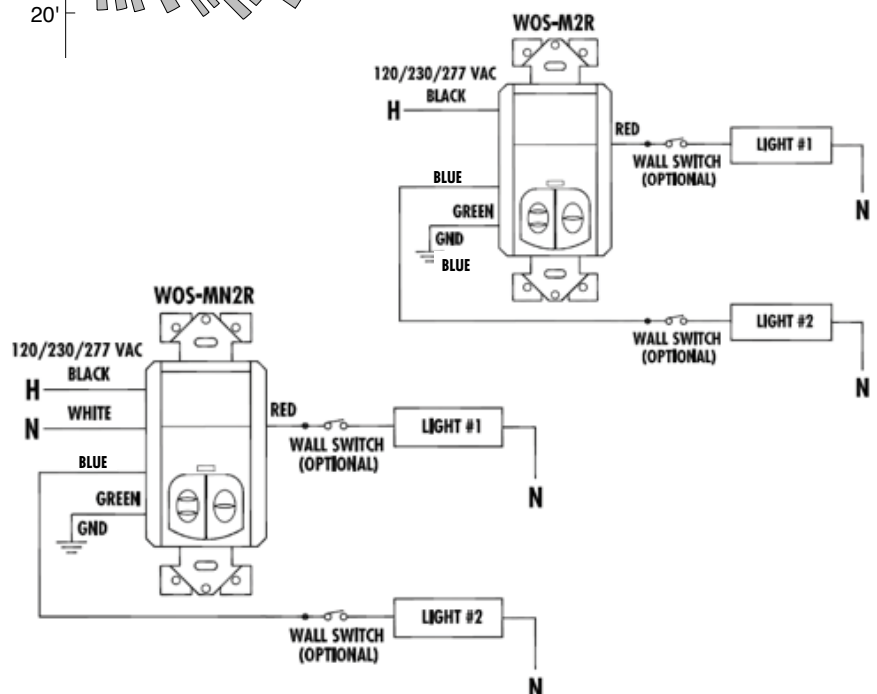
**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**COLOR:** White (single gang decorator wall plate included).



180° Field of View



# WOS-M2T SERIES

## ULTRASONIC AND PIR WALL SWITCH OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Offices areas
- Meeting rooms
- Equipment room & storage spaces
- New construction & retrofit

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming. Each relay can have different settings.

- INITIAL ON: customize and set one technology only to trigger turn on.
- MAINTAIN ON: customize and set one technology to keep lights on.
- PUBLIC AREAS: Disable button manual OFF function. Use in bathrooms to avoid full off condition for occupant as another person leaves.

**MODES:** Four selectable modes: Automatic On/Off, Manual on (vacancy), energy saving Walk Through, or Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**DAYLIGHT PHOTOSENSOR:** Optional light-level turn off from 5 to 200fc. Save energy if windows provide enough light.

**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**TAMPER RESISTANT:** Captive button, rugged lens, and optional disable button function for public areas.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**SENSOR CHOICES:** Factory default setting allows either technology to trigger the unit. Optional is a disable function of one technology for initial and/or maintain on operations.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**COLOR:** White (single gang decorator wall plate included).

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60 Hz

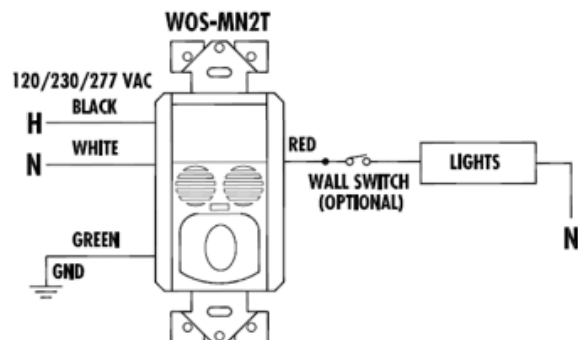
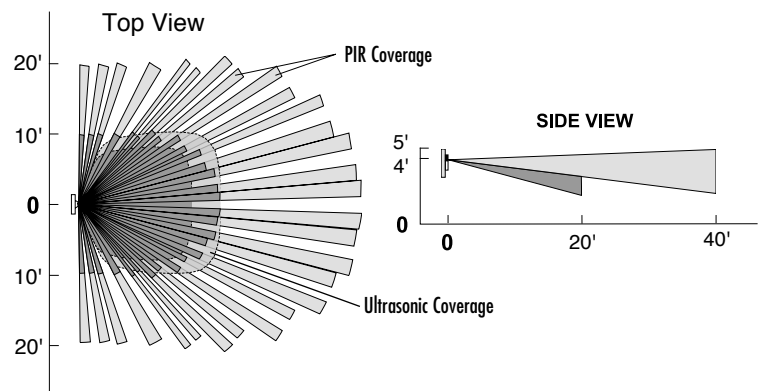
**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:**  
PIR 1200 sq. ft.  
Ultra-Sonic 400 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
230V 1500W Electronic Ballast  
277V 1800W Electronic Ballast  
120V ¼ HP Motor

CATALOG NO.	UPC CODE	INPUT SUPPLY VAC 50/60Hz	WIRING
WOS-MN2T	98223	120/230/277	Requires Neutral



# COS-L2T SERIES

ULTRASONIC AND PIR  
CEILING MOUNTING  
OCCUPANCY SENSOR



ASHRAE 90.1

## SPECIFICATIONS

**VOLTAGE:**  
24VDC

**CURRENT CONSUMPTION:**  
9mA

**POWER SUPPLY:**  
TPR-24I or TRP-24B Power Packs provided separately

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:**  
PIR 1200 sq. ft.  
Ultra-Sonic 900 sq. ft.

**WARRANTY:** 5 YRS.

## APPLICATIONS



- Large offices areas
- Larger meeting rooms
- Classrooms
- Bathroom & storage spaces

## FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

- INITIAL ON: customize and set one technology only to trigger turn on.
- MAINTAIN ON: customize and set one technology to keep lights on.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**FLASH WARNING:** Optional load flicker 2 minutes before Off.

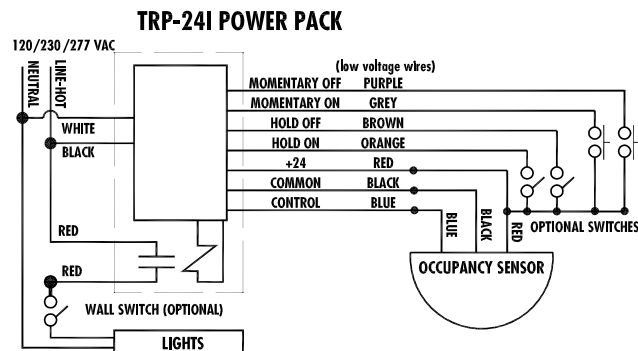
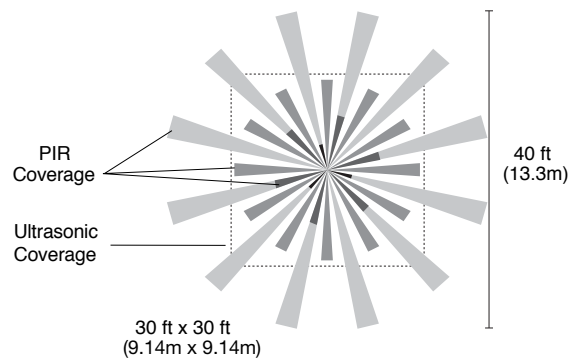
**COVERAGE AREA:** Adjustable for three steps of sensitivity for ultrasonic and two steps for PIR.

**SENSOR CHOICES:** Factory default setting allows either technology to trigger the unit. Optional disable function of one technology for initial and/or maintain on operations.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**MOUNTING:** Mounts direct to box or ceiling. Available is optional adapter for pendant or side mounting with 1/2" threaded nipple.

CATALOG NO.	UPC CODE	INPUT SUPPLY	DESCRIPTION
COS-L2T	98207	24VDC	White
TRP-24I	98227	120/277VAC	Power Pack
COS-ADP	98229	1/2" pendant/side mounting adapter	





# COS-L SERIES

## PIR CEILING MOUNTING OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Large offices areas
- Larger meeting rooms
- Classrooms
- Equipment room & storage spaces

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**MOUNTING:** Mounts direct to box or ceiling. Available is optional adapter for pendant or side mounting with 1/2" threaded nipple.

### SPECIFICATIONS

**VOLTAGE:**  
24VDC

**CURRENT CONSUMPTION:**  
9mA

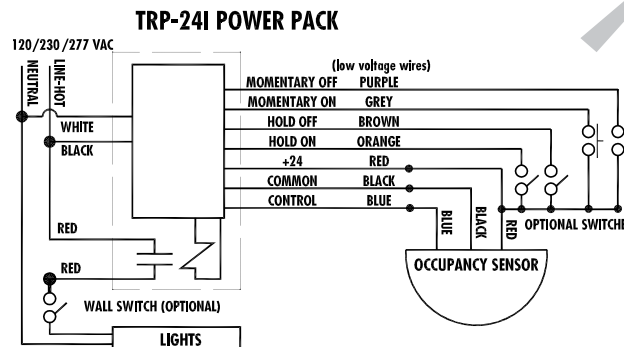
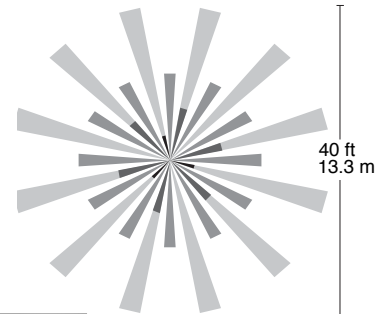
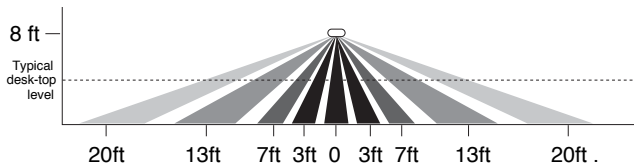
**POWER SUPPLY:**  
TPR-24I or TRP-24B Power Packs provided separately

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 5 YRS.

CATALOG NO.	UPC CODE	INPUT SUPPLY	DESCRIPTION
COS-L	98203	24VDC	White
TRP-24I	98227	120/277VAC	Power Pack
COS-ADP	98229	1/2" pendant/side mounting adapter	



# COS-LU SERIES

## ULTRASONIC CEILING MOUNTING OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Large offices areas
- Larger meeting rooms
- Classrooms
- Bathroom & storage spaces

### SPECIFICATIONS

**VOLTAGE:**  
24VDC

**CURRENT CONSUMPTION:**  
9mA

**POWER SUPPLY:**  
TPR-24I or TRP-24B Power Packs provided separately.

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 900 sq. ft.

**WARRANTY:** 5 YRS.

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

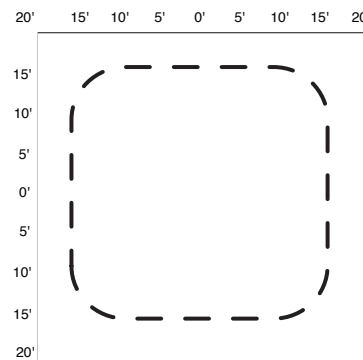
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**COVERAGE AREA:** Adjustable for three steps of sensitivity.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

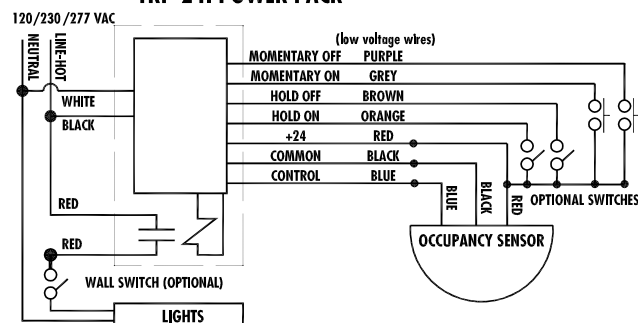
**MOUNTING:** Mounts direct to box or ceiling. Available is optional adapter for pendant or side mounting with 1/2" threaded nipple.

CATALOG NO.	UPC CODE	INPUT SUPPLY	DESCRIPTION
COS-LU	98205	24VDC	White
TRP-24I	98227	120/277VAC	Power Pack
COS-ADP	98229	1/2" pendant/side mounting adapter	



30 ft x 30 ft  
(9.14m x 9.14m)

### TRP-24I POWER PACK



# COS-M SERIES

## PIR CEILING MOUNTING LINE VOLTAGE OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Large offices areas
- Larger meeting rooms
- Classrooms
- Equipment room & storage spaces

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60Hz

**POWER SUPPLY:**  
Built-in

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
230V 1500W Electronic Ballast  
277V 1800W Electronic Ballast  
120V ¼ HP Motor

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

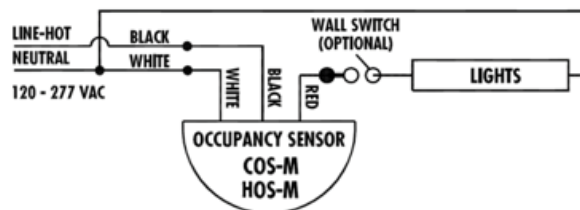
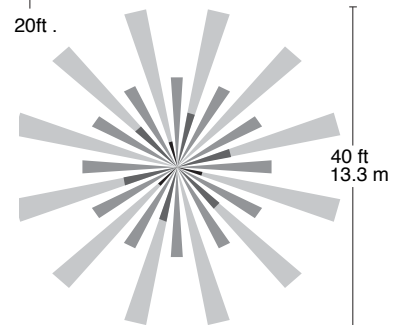
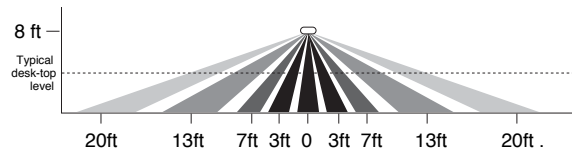
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**MOUNTING:** Mounts direct to a box. Available is optional adapter for pendant or side mounting with ½" threaded nipple.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC)	DESCRIPTION
COS-M	98201	120/230/277	White
COS-ADP	98229	1/2" pendant/side mounting adapter	



# HOS-M SERIES

## HIGH BAY PIR MOUNTING LINE VOLTAGE OCCUPANCY SENSOR



ASHRAE 90.1

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60Hz

**POWER SUPPLY:**  
Built-in

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1000 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
230V 1500W Electronic Ballast  
277V 1800W Electronic Ballast  
120V ¼ HP Motor

### APPLICATIONS



- Warehouse
- Tall aisle
- High ceiling equipment room & storage spaces

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

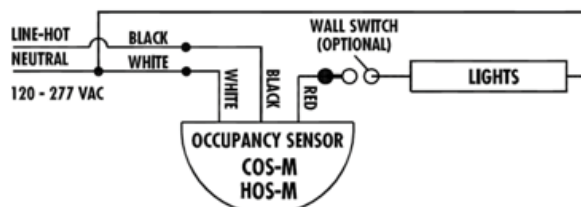
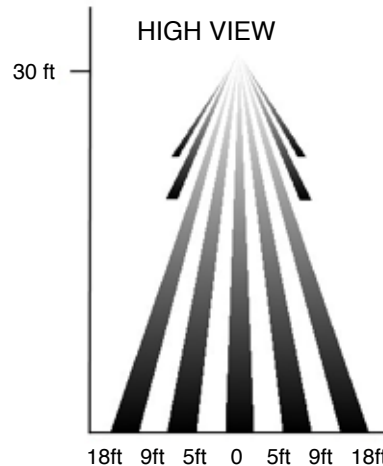
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**MOUNTING:** Includes as standard an adapter for pendant or side mounting with ½" threaded nipple. Also mounts direct to box or ceiling.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC)	DESCRIPTION
HOS-M	98209	120/230/277	White



# CPS-L SERIES

## CEILING MOUNTING PHOTO SENSOR



ASHRAE 90.1



### APPLICATIONS

- Side window areas of offices
- Spaces with skylights
- Classrooms

### SPECIFICATIONS

**VOLTAGE:**  
24VDC

**CURRENT CONSUMPTION:**  
9mA

**POWER SUPPLY:**  
TPR-24B Power Packs provided separately

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**WARRANTY:** 5 YRS.

### FEATURES

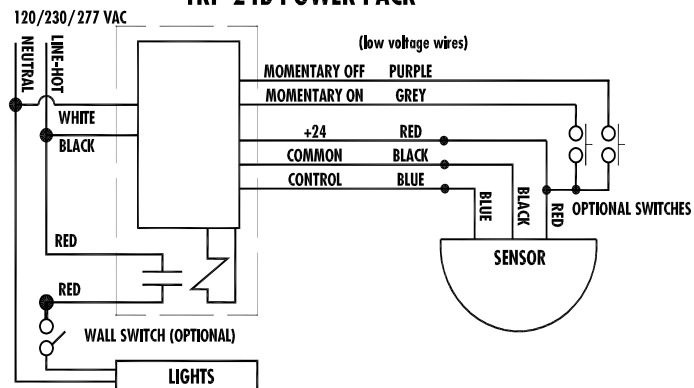
**SOFTWARE SET:** Completely customizable functions through button push programming.

**LIGHT LEVEL SETTING:** Light level between 5 to 200 fc.

**MOUNTING:** Mounts direct to box or ceiling. Available is optional adapter for pendant or side mounting with 1/2" threaded nipple.

CATALOG NO.	UPC CODE	INPUT SUPPLY	DESCRIPTION
CPS-L	98211	24VDC	White
TRP-24B	98225	120/277VAC	Power Pack
COS-ADP	98229	1/2" pendant/side mounting adapter	

### TRP-24B POWER PACK



# TRP-24 SERIES

## POWER PACK FOR OCCUPANCY SENSORS



ASHRAE 90.1



### APPLICATIONS

- Power and switching for occupancy or light sensors
- Power and switching for SS410 auto-off switch
- BAS compatible
- Demand shedding applications
- Low cost momentary switching of loads

### SPECIFICATIONS

#### VOLTAGE:

120/230/277VAC 50/60Hz

#### OPERATING TEMPERATURE:

32° to 131°F (0° to 55°C)

#### WARRANTY: 5 YRS.

#### CONTACT RATINGS:

120V 15A Incandescent

120V 20A Ballast

230V 20A Ballast

277V 20A Ballast

120V 1 HP Motor

CATALOG NO.	UPC CODE	INPUT SUPPLY VAC 50/60Hz	OUTPUT CONTACTS
TRP-24B	98225	120/230/277	SPST
TRP-24I	98227	120/230/277	SPST
LCS115M	82082	Momentary Switch SPST	

### FEATURES

**OPERATION:** Switches line voltage loads ON/OFF based on a contact closure from an occupancy sensor, AUTO OFF switch, or relay.

**SENSOR CONTROL:** Three wires for typical device control. Red and black wires for 24VDC output to power a device. Blue control wire to receive ON/OFF signal back from device.

**TRP-24B INPUT:** Two additional input wires to control TRP.

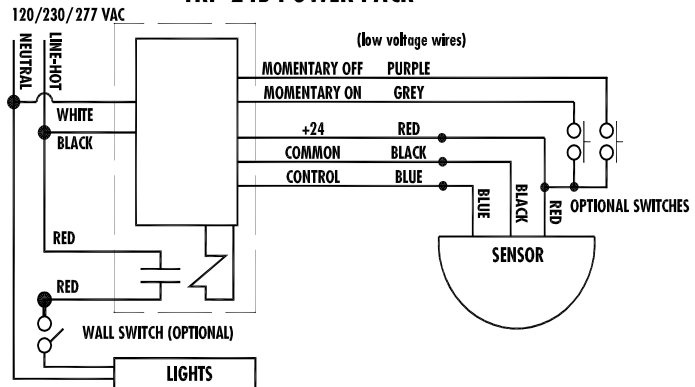
1. ON from momentary switch.
2. OFF from momentary switch.

**TRP-24I INPUT:** Four additional input wires to control TRP.

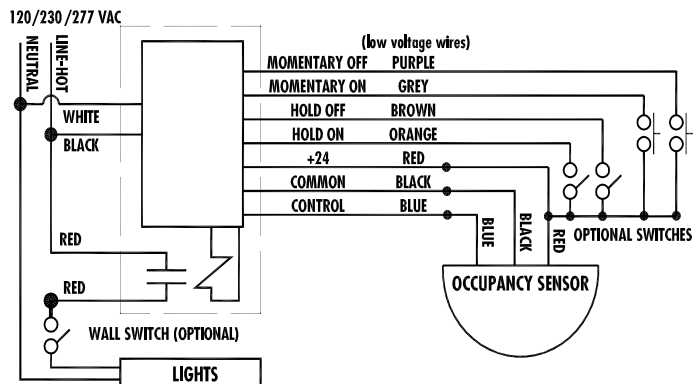
1. Hold OFF for demand shed control.
2. Hold ON override.
3. ON from momentary switch.
4. OFF from momentary switch.

**MOUNTING:** Box mount to 1/2" KO

#### TRP-24B POWER PACK



#### TRP-24I POWER PACK








# **TORK® IN-WALL TIME SWITCHES**



# QUICK REFERENCE GUIDE

	SS700Z	SS721Z	SS720A	SS720Z	SA170	701A 711A	SS403	SS423	SS410	SS	D1060 D212	A	C	
Page No.	509	509	511	512	513	514	515	515	515	517	518	519	520	
Timer Type	SunSet 7 Day Digital	SunSet 7 Day Digital	7 Day Digital	SunSet 7 Day Digital	ZipSet Digital	24 Hour Mechanical	Auto OFF Digital	Auto OFF Digital	Auto OFF Digital	Auto OFF Electronic	Auto OFF Electronic	Auto OFF Mechanical	Auto OFF Mechanical	
Voltage	120/277	120/277	120	120	120	120	120/277	120/277	24	24/120/ 208-240/277	120	125/250/ 277	125/250/ 277	
Minimum Settings	ON	1 min.	1 min.	1 min.	1 min.	1 min.	30 min.	5 min-24 hr	5 min-24 hr	5 min-24 hr	1 min-18 hr	10-60 min. 2-12 hr	Various 2 min-12 hr	Various 2 min-12 hr
	OFF	1 min.	1 min.	1 min.	1 min.	1 min.	30 min.	5 min.	5 min.	5 min.	1 min.	10 min.		
Manual Override	Yes	Yes	Yes	Yes	Yes	Yes								
 SunSet (Astronomic)	Yes	Yes		Yes	ZipSet									
ON/OFF Set Points	10 Pair	10 Pair	7 Pair	7 Pair	1 Pair	24								
Flash Warning							Yes	Yes	Yes	Yes				
Audible Warning							Yes	Yes	Yes	Yes				
Power Outage Backup	Capacitor	Capacitor	Battery	Battery	Battery									
Switch Type	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPDT	SPST or SPDT	SPST	SPDT	SPDT or DPST	
Resistive Ratings	16A	16A	15A	15A	15A	15 & 20A	15A	15A	1A	4A or 7.5A	15A	20/10/ 10A	20/10/ 10A	
 LED Ratings	10A	10A					1200W	1200W						
Neutral Required for Wiring	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	No	
3-Way Wiring	Yes	Yes	No	No	No	No	Yes	Yes	Yes	SS13 Yes	No	No	No	



# TORK® SS700Z & SS721Z

## SunSet IN-WALL TIMER SUNSET / SUNRISE / 7 DAY



CALIFORNIA Title 24

ASHRAE 90.1



With wall plate  
(not included)



**BACK-UP  
WITHOUT  
BATTERIES!**

### APPLICATIONS

- Commercial outdoor security lighting
- Interior lobby lighting
- Contactors for fans and motors
- Sign lighting

### SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:** 120/277VAC, 50/60Hz.

**WIRE SIZE:** #12AWG input/output - #16AWG 3-way (remote).

**OPERATING TEMPERATURE:** 32°F to +104°F (0°C to +40°C).

### FEATURES

**SCHEDULING:** 10 ON and OFF pairs of set points for individual programs on each day of the week. 11 day groups speed programming. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Sunset and sunrise times are adjustable from 10°-60° Northern or Southern latitudes. Can be individually offset +/- 1-240 minutes for earlier or later operation.

**RANDOM MODE:** Varies ON and OFF times to create lived in look when away.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**MANUAL MODE:** Does not run programs until set to AUTO (automatic) mode.

**VACATION MODE:** No operation when away.

**EASY WIRING:**

**SS700Z** does not require a neutral, can be used as a 3-way switch.

**SS721Z** Requires a neutral, can be used as a 3-way switch.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 2 days of real time backup.

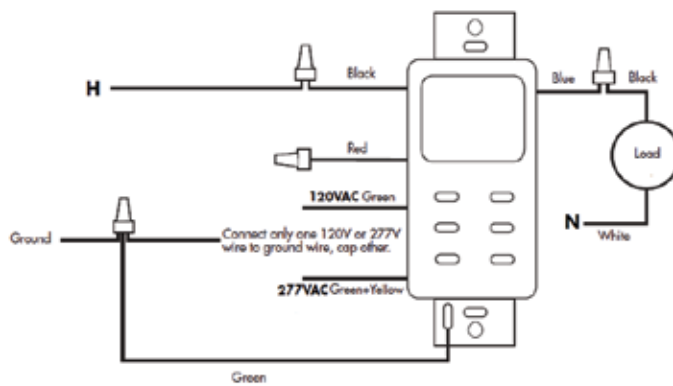
**COMMERCIAL GRADE SPECS:** Control lighting contactors and 277VAC loads. Compatible with CFL lamps.

**FULL SWITCHING:** No minimum load requirement.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	SWITCH TYPE	COLOR
SS700Z	14019	120/277	SPST	White
SS700ZA	14020	120/277	SPST	Light Almond
SS721Z	14027	120/277	SPST	White
SS721ZA	14028	120/277	SPST	Light Almond

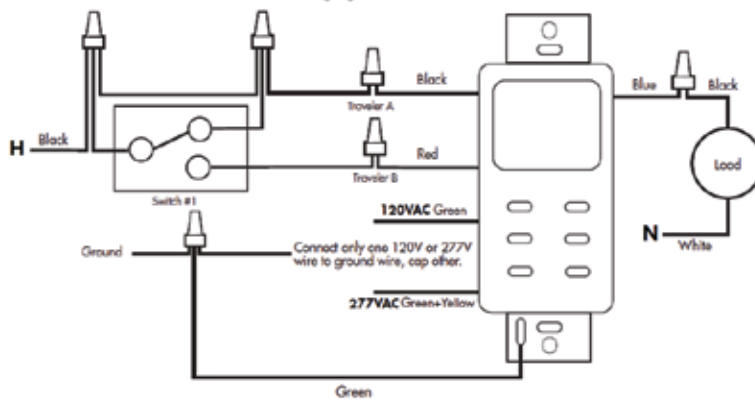
TYPE	SS700Z SERIES		SS721Z SERIES RATINGS
	RATING	VOLTAGE (VAC)	
Resistive	16A	120-277	16A
Ballast	10A	120-277	13A
LED Driver	10A	120-277	10A
Tungsten	8A	120	8A
Pilot Duty	360VA	120	720VA
Motor	1/2HP	120	1/2HP

**WIRING DIAGRAM: INSTALLATION SS700Z**

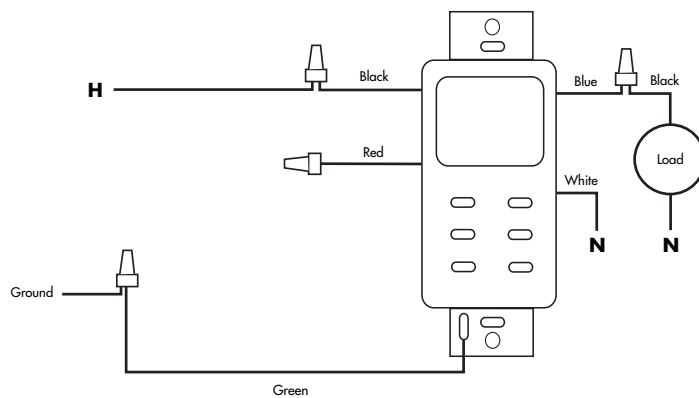


**WIRING DIAGRAM: THREE-WAY INSTALLATION SS700Z**

Connect a wire inside the gang-box between Traveler A and Hot.

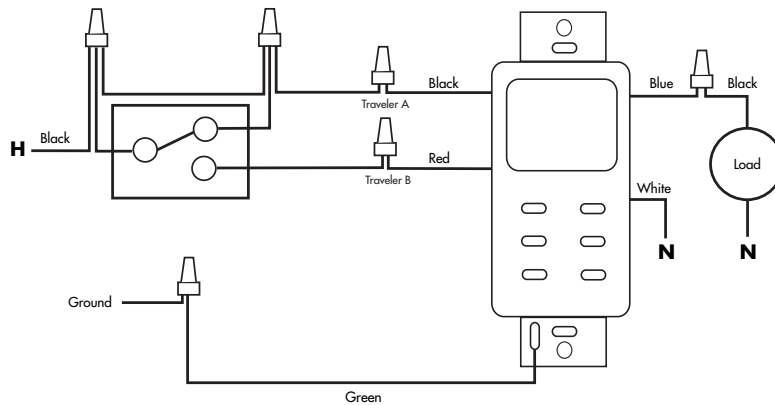


**WIRING DIAGRAM: INSTALLATION SS721Z**



**WIRING DIAGRAM: THREE-WAY INSTALLATION SS721Z**

Connect a wire inside the gang-box between Traveler A and Hot.



# SS720A SERIES

## 7 DAY IN-WALL RESIDENTIAL TIMER



### APPLICATIONS

- Residential interior lights
- Random for lived-in look
- Small fans and motors
- Appliances

### FEATURES

**SCHEDULING:** 7 ON and OFF pairs of set points for individual programs on each day of the week. Minimum setting is 1 minute.

**RANDOM MODE:** Varies ON and OFF times to create "lived in" look when away.

**DAYLIGHT SAVING:** Manual button push for one hour adjustment.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**WIRING:** Requires a neutral.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Rechargeable Ni-Cad battery retains time and schedule.

**WALL PLATE:** Supplied with standard single gang decorator wall plate.

### SPECIFICATIONS

**TIMING ACCURACY:** +/- 1 minute/month

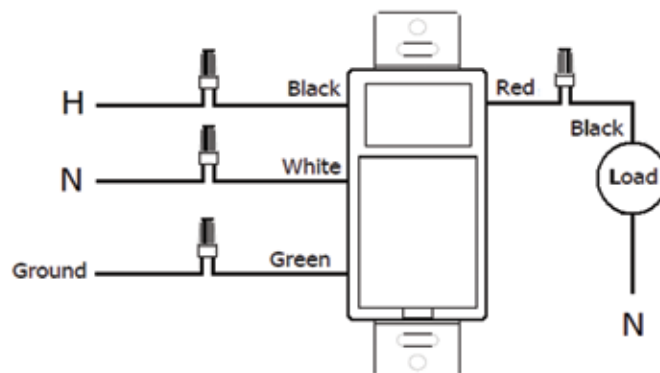
**INPUT VOLTAGE:** 125VAC, 60Hz.

**WIRE SIZE:** #14AWG.

**OPERATING TEMPERATURE:** 32°F to +104°F (0°C to +40°C).

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	COLOR
SS720A	14017	120	White
SS720AA	14018	120	Light Almond

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120	15A
Resistive	120	15A
Tungsten	120	15A
Motor	120	1HP
Electronic Ballast	120	500VA



TORK® SS720Z

SunSet IN-WALL  
RESIDENTIAL TIMER  
SUNSET / SUNRISE / 7 DAY



SPECIFICATIONS

**TIMING ACCURACY:** +/- 1 minute/  
month

**INPUT VOLTAGE:** 120VAC, 60Hz.

**WIRE SIZE:** #14AWG

**OPERATING TEMPERATURE:**  
32°F to +104°F (0°C to + 40°C).

APPLICATIONS



- Residential Interior lights
- Small fans and motors
- Appliances

FEATURES

**SCHEDULING:** 7 ON and OFF pairs of set points for individual programs on each day of the week. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Sunset and sunrise times with five zones: North USA/Southern Canada, Central USA, South USA, Northern Canada/Alaska, and Hawaii/Puerto Rico.

**RANDOM MODE:** Varies ON and OFF times to create "lived in" look when away.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**WIRING:** Requires a neutral.

**CLOCK FORMAT:** AM/PM.

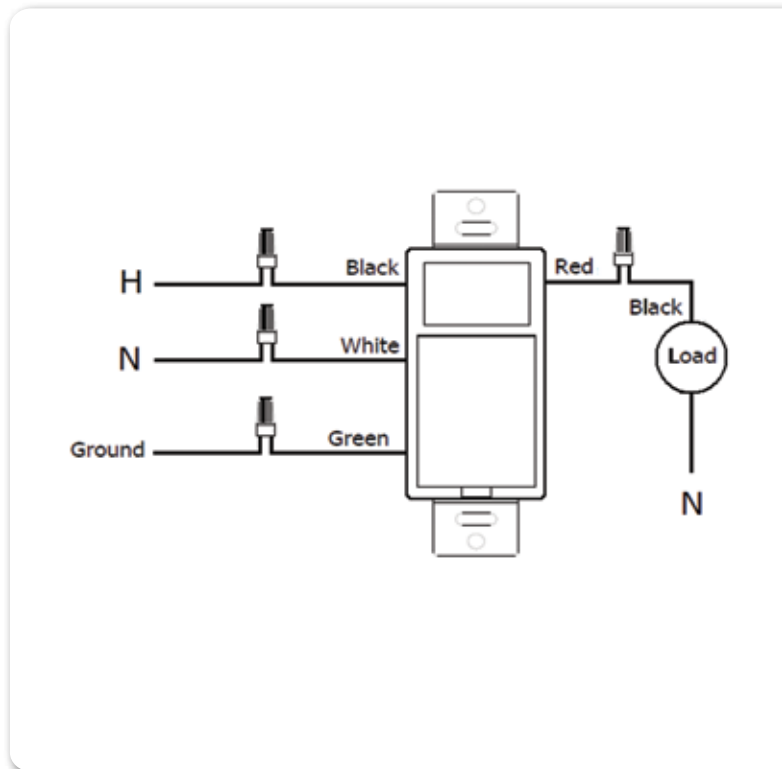
**POWER OUTAGE BACKUP:** Rechargeable Ni-Cad battery retains time and schedule.

**WALL PLATE:** Supplied with standard single gang decorator wall plate.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	COLOR
SS720Z	14023	120	White

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120	15A
Resistive	120	15A
Tungsten	120	960W
Motor	120	½HP

Electronic Ballast	120	500VA
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# SA170 SERIES

**Zip-Set™** IN-WALL

**RESIDENTIAL TIMER  
SUNSET / TIME OFF**



\*Wall plate not included

## SPECIFICATIONS

**TIMING ACCURACY:** +/- 1 minute/month

**INPUT VOLTAGE:** 120VAC, 60Hz.

**WIRE SIZE:** #14AWG.

**OPERATING TEMPERATURE:** 32°F to +104°F (0°C to +40°C).

## APPLICATIONS



- Residential Exterior lights
- Small fans and motors
- Appliances

## FEATURES

**Zip-Set™** factory preset time. Just enter area code and it finds correct time and sunset time.

**SCHEDULING:** One On/Off set point pair is active at a time. Schedule 1, Schedule 2, a combination of 1 & 2, or ZipSet™. Day combinations for 7-5-2 speed programming.

**RANDOM MODE:** Varies ON and OFF times to create "lived in" look when away.

**COUNTDOWN:** Button press turns lights ON and starts a 5 minute countdown to OFF.

**DAYLIGHT SAVING:** Manual button push for one hour adjustment.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**WIRING:** Requires a neutral.

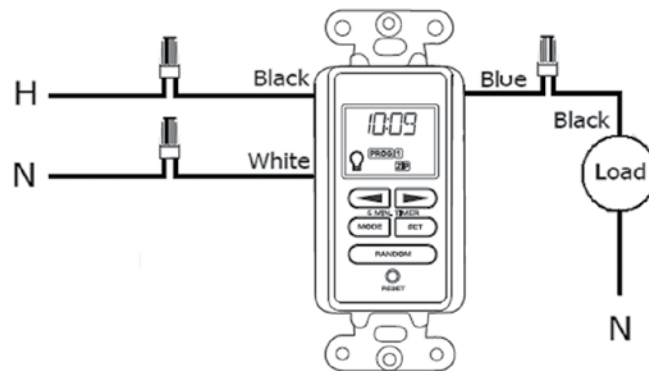
**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Lithium batteries retain time and schedule.



CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	COLOR
SA170	16528	120	White

TYPE	VOLTAGE (VAC)	RATING
Resistive	120	15A
Inductive	120	15A
Tungsten	120	5A
Motor	120	1/2HP



# 701A & 711A SERIES 24 HOUR IN-WALL TIMER



## SPECIFICATIONS

**INPUT VOLTAGE:** 125VAC, 60Hz.

**WIRE SIZE:** #14AWG.

**OPERATING TEMPERATURE:**  
32°F to +104°F (0°C to +40°C).

## APPLICATIONS



- Porch or patio
- Doorway
- Pool
- Outdoor security lighting

## FEATURES

**SCHEDULING:** Minimum ON setting is 30 minutes. Dial has 48 captive trippers.

**BYPASS SWITCH:** Slide switch for ON, OFF, or TIMER (automatic) operation.

**VACATION MODE:** Set timer OFF with no change of tripper settings.

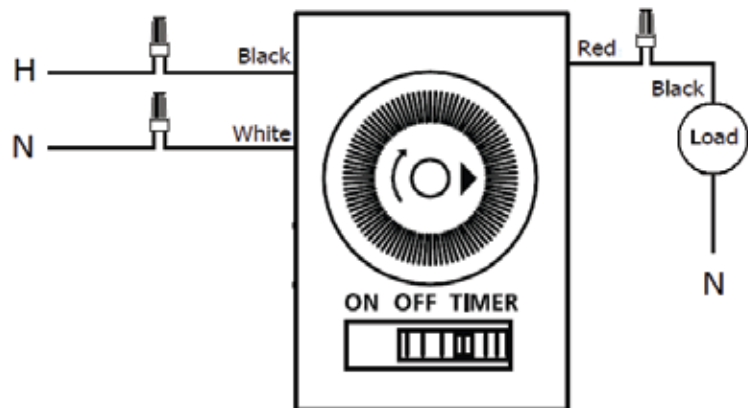
**WIRING:** Requires a neutral.

**CLOCK FORMAT:** AM/PM marked on dial.

**WALL PLATE:** Supplied with single gang wallplate.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	COLOR
701A	10113	125	White
701AA	10118	125	Light Almond
711A	10114	125	White

TYPE	VOLTAGE (VAC)	RATING	
		701A SERIES	711A SERIES
General Purpose	125	20A	15A
Resistive	125	20A	15A
Tungsten	125	1500W	1250W
Motor	125	1 HP	1/2 HP





# TORK® SS400 SERIES DIGITAL AUTO OFF IN-WALL TIMER



CALIFORNIA Title 24

ASHRAE 90.1



SS400 Series  
\*Wall plate included

**PROGRAMMABLE!**

## APPLICATIONS



- Offices, meeting rooms
- Energy code timed override
- Exhaust fans
- Equipment room and storage spaces

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency

**INPUT VOLTAGE:** SS403/SS423 – 120/230/277VAC 50/60 Hz  
SS410 – 24VDC OR 24VAC 50/60 Hz

**WIRE SIZE:** SS403/SS423 – #14AWG input/output - #16AWG 3-way (remote)  
SS410 – #18AWG

**OPERATING TEMPERATURE:** 32°F to +104°F (0°C to + 40°C)

**WARRANTY:** 5 Yrs.

## FEATURES

### WIRING CHOICES:

- SS403 – no neutral for retrofit
- SS423 – with neutral for new construction
- SS410 – multiple circuits with power packs – low voltage for class 2 wiring

**ENERGY CODE PRESET:** 2 hour timing for Title 24 and IECC (default). 4 hour timing for ASHRAE 90.1 (with quick dip switch adjustment)

**PROGRAMMABLE:** 5 minutes to 24 hour: 5 minute steps from 5 minutes to 1 hour. 10 minute steps from 1 to 4 hours. 30 minute steps from 4 to 12 hours. 1 hour steps from 12 to 24 hours.

**SCROLL LOCK:** Limits user adjustment to a maximum equal to the preset time.

**FLASH WARNING:** Optional one second flicker turns load off/on 2 minutes before end of time cycle.

**BEEPER WARNING:** Optional beep will sound every 15 seconds during the last 2 minutes of the time cycle.

**TAMPER RESISTANT:** Wall plate locks access to dip switch adjustments.

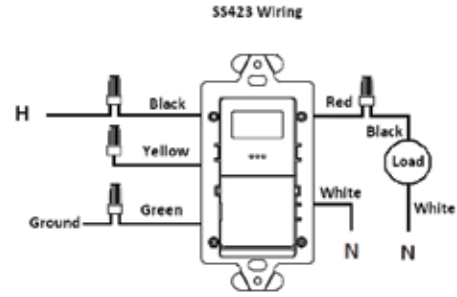
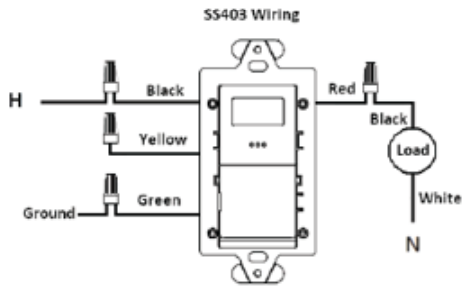
**THREE-WAY & MULTI-WAY:** Three-way compatible with existing switch. Multi-way requires momentary switches at the additional locations. Maximum distance 100 feet.

**DISPLAY:** Backlit LCD Display.

**COLOR:** White (single gang decorator wall plate included).

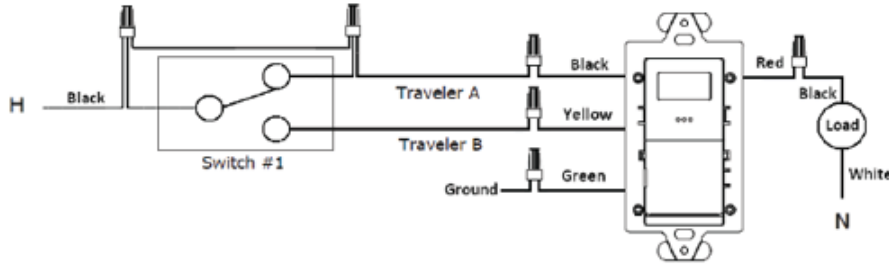
CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	SWITCH TYPE	COLOR
SS403	14029	120/230/277	SPST	White
SS423	14030	120/230/277	SPST	White
SS410	14033	24VDC or 24VAC	SPDT	White

TYPE	VOLTAGE	SS403 RATING	VOLTAGE (VAC)	SS423 RATING
Resistive	120-277VAC	15A	120-277	15A
Ballast	120-277VAC	10A	120-277	13A
LED Lamp Driver	120-277VAC	1200W	120-277	1200W
Tungsten	120VAC	8A	120	8A
Pilot Duty	120VAC	360VA	120-277	720VA
Motor	120VAC	1/4HP	120-277	1HP
SS410				
VOLTAGE	RATING	VOLTAGE (VAC)		RATING
28VDC	.5A Max	24		1A Max
Minimum Load 1ma @ 5V				



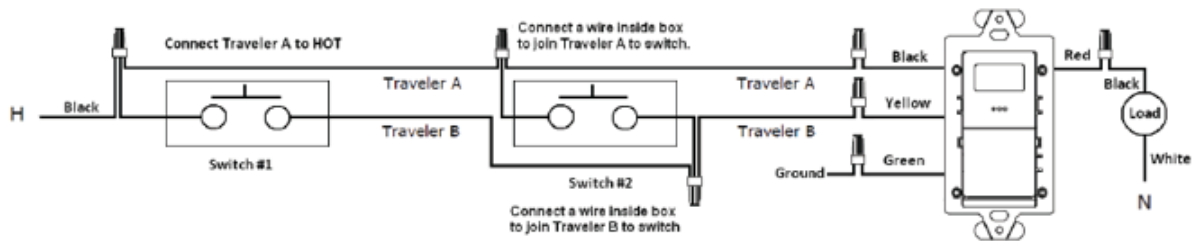
**SS403 Wiring for 3-Way**

Connect a wire inside the gang-box between Traveler A and HOT

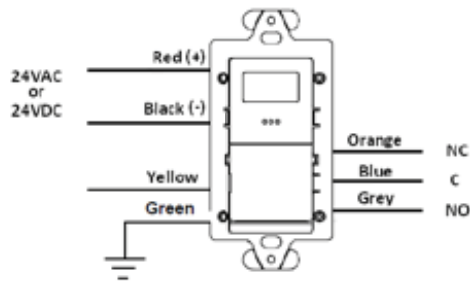


**SS403 Wiring for 4-Way**

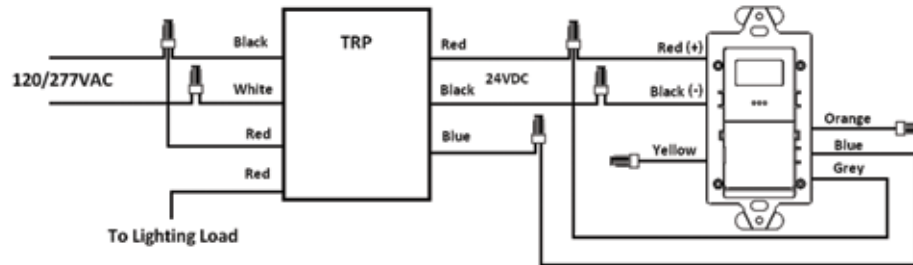
Use momentary switches at all additional locations.  
Tork #LCS115M



**SS410 Series Wiring**



**SS410 Series Wiring to a TRP**



# SS SERIES

## AUTO OFF IN-WALL TIMER



### SPECIFICATIONS

#### TIMING ACCURACY:

±5% @ 60° to 80°F.

#### INPUT VOLTAGE:

24/120/208-240/277VAC, 50/60Hz.

#### WIRE SIZE: #18AWG.

#### OPERATING TEMPERATURE:

0°F to +100°F (-17°C to +37°C).

### APPLICATIONS



- Bathroom fans and lights
- Indoor/Outdoor lighting
- Storage areas
- Hospitality areas

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	WARNING BEFORE TIME OUT	SWITCH TYPE
SS20	14005	24/120/208-240/277	None	Single pole
SS20F	14008	24/120/208-240/277	*Flicker	Single pole
SS13F	14007	24/120/208-240/277	*Flicker	3-way
SS13B	14006	24/120/208-240/277	**Beep	3-way

\*Flicker feature turns load OFF for 1/2 second, 2 minutes before end of timed cycle and again 1 minute before end of timed cycle.

\*\*Beep feature will begin a 1/2 second audible warning every 12 seconds during the last 2 minutes of timed cycle.

### FEATURES

**VARIABLE TIMING:** Choose from 1 minute to 18 hours.

**FLASH WARNING:** "F" suffix models with flicker feature turns load off for 1/2 second, 2 minutes before end of timed cycle and again 1 minute before end of timed cycle.

**AUDIBLE WARNING:** "B" suffix model will buzz that every 12 seconds during the last 2 minutes of timed cycle.

**TAMPER RESISTANT:** Time ON interval preset is hidden behind wall plate.

**EASY SET:** Small screw driver adjustment provides quick set-up of timing.

**EASY WIRING:** No neutral needed, great for retrofit.

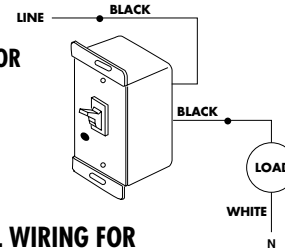
**3-WAY:** SS13 SERIES replaces standard 3-way switch with no re-wiring.

**COLOR:** White.

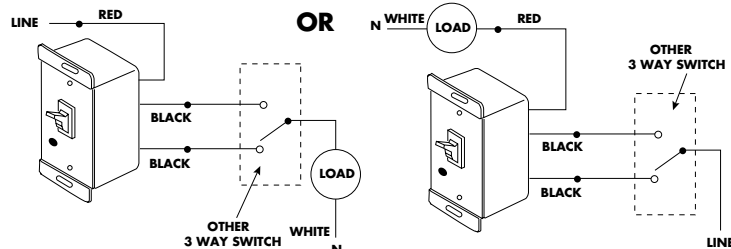
TYPE	CONTACT RATINGS	MINIMUM LOAD	
		VOLTS	WATTS
SS13F & SS13B	.25-4.0A Resistive	24	6
	.25-4.0A Ballast*	120	30
	.25-4.0A Tungsten	208	50
	1/8 HP @ 120VAC	240	60
	1/3 HP @ 240VAC	277	70
SS20 & SS20F	.50-7.25A Resistive	24	12
	.50-7.25A Ballast*	120	60
	.50-4.0A Tungsten	208	105
	1/6 HP @ 120VAC	240	120
	1/2 HP @ 240VAC	277	150

\*Not compatible with compact fluorescent lamps (CFL) and electronic fluorescent ballasts.

#### TYPICAL WIRING FOR 120 VAC SINGLE POLE



#### TYPICAL WIRING FOR 120 VAC – 3 WAY (Red is common)



# D SERIES ELECTRONIC AUTO OFF IN-WALL TIMER



## SPECIFICATIONS

**TIMING ACCURACY:** Line voltage.

**INPUT VOLTAGE:** 120VAC, 60Hz.

**WIRE SIZE:** #14AWG.

**OPERATING TEMPERATURE:**  
32°F to 122°F (0°C to 50°C).

## APPLICATIONS



- Whole house fans
- Indoor/Outdoor lighting
- Bathroom fans and lights
- Self storage

## FEATURES

### VARIABLE TIMING:

Button push changes time ON setting.

**D1060M:** 10, 20, 30, 60 minute.

**D212H:** 2, 4, 8, 12 hour.

**LED DISPLAY:** Indicator moves to new range as timer counts down.

**TAMPER RESISTANT:** Time ON interval preset.

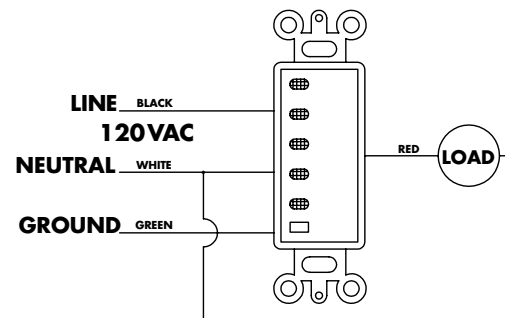
**EASY SET:** No adjustments, just wire and go!

**WIRING:** Requires a neutral.

**THREE COLORS:** Ivory, Light Almond, White.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	TIME SETTINGS	OUTPUT CONTACTS
D212H	14021	120	Ivory	2, 4, 8, 12 HOURS
D212HA	14022	120	Light Almond	2, 4, 8, 12 HOURS
D212HW	14023	120	White	2, 4, 8, 12 HOURS
D1060M	14025	120	Ivory	10, 20, 30, 60 MINUTES
D1060LA	14024	120	Light Almond	10, 20, 30, 60 MINUTES
D1060MW	14025	120	White	10, 20, 30, 60 MINUTES

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120	15A
Resistive	120	1000W
Tungsten	120	1000W
Motor	120	1/4 HP
Ballast	120	1000VA



# A SERIES SPRINGWOUND AUTO OFF IN-WALL TIMER



**NEW!**  
SPDT, 2 IN 1  
CONTACTS

## SPECIFICATIONS

**INPUT VOLTAGE:**  
125/250/277VAC, 50/60Hz.

**TERMINAL SIZE:** #12AWG.

**OPERATING TEMPERATURE:**  
32°F to 122°F (0°C to 50°C).

## APPLICATIONS



- Whole house fans
- Indoor/Outdoor lighting
- Bathroom fans and lights
- Self storage

\*Wallplate not included

## FEATURES

**VARIABLE TIMING:** Twist knob for time ON setting. Time ON lengths from 15 minutes to 12 hour vary by model.

**HOLD FEATURE:** Some models have position for constant ON.

**EASY SET:** No adjustments. Just wire and go!

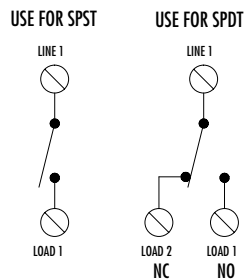
**EASY WIRING:** No neutral required. Great for retrofit! Use as single or in multi-gang box with no de-rating.

**SWITCH TYPE:** SPDT "2 in 1" contacts wire has SPST also.

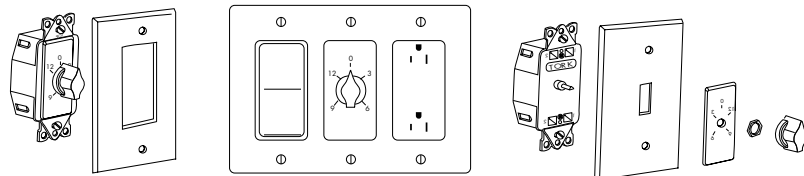
**COLOR:** Ivory, Light Almond, White.

**WALL PLATE:** Fits standard or decorator style wall plates, see below (not included).

TYPE	VOLTAGE (VAC)	RATING
Resistive	125	20A
	250	10A
	277	10A
Inductive	125	20A
	250	10A
	277	10A
Tungsten	125	7A
Motor	125	1HP
	250	2HP



CATALOG NO.	UPC CODE	HOLD FEATURE	COLOR
<b>15 MINUTE MAX.</b>			
A515MH	15020	With Hold	Ivory
A515MHW	15120		White
A515M	15013	No Hold	Ivory
A515MW	15113		White
A515MA	15127		Light Almond
<b>30 MINUTE MAX.</b>			
A530MH	15021	With Hold	Ivory
A530MHW	15121		White
A530M	15014	No Hold	Ivory
A530MW	15114		White
A530MA	15128		Light Almond
<b>60 MINUTE MAX.</b>			
A560MH	15022	With Hold	Ivory
A560MHW	15122		White
A560M	15015	No Hold	Ivory
A560MW	15115		White
<b>2 HOUR MAX.</b>			
A502HHW	15123	With Hold	White
A502H	15016	No Hold	Ivory
A502HW	15116		White
<b>6 HOUR MAX.</b>			
A506HHW	15125	With Hold	White
A506H	15018	No Hold	Ivory
A506HW	15118		White
<b>12 HOUR MAX.</b>			
A512HH	15026	With Hold	Ivory
A512HHW	15126		White
A512H	15019	No Hold	Ivory
A512HW	15119		White



**CAUTION:** This timer is not to be used in precision timing applications where inaccurate timing could have dangerous consequences (i.e. sun lamp, sauna, etc.).

# C SERIES

## COMMERCIAL STYLE SPRINGWOUND AUTO OFF IN-WALL TIMER



\*Wallplate included

**NEW!**  
**SPDT, 2 IN 1  
CONTACTS**

### SPECIFICATIONS

**INPUT VOLTAGE:**  
125/250/277VAC, 50/60Hz.

**TERMINAL SIZE:** #12AWG.

**OPERATING TEMPERATURE:**  
32°F to 122°F (0°C to 50°C).

### APPLICATIONS



- Ventilating fans
- HVAC
- Whirlpools
- Self storage
- Motors and pumps

### FEATURES

**VARIABLE TIMING:** Twist knob for time ON setting. Time ON lengths from 15 minutes to 12 hour vary by model.

**HOLD FEATURE:** Some models have position for constant ON.

**EASY SET:** No adjustments. Just wire and go!

**EASY WIRING:** No neutral required. Great for retrofit!

**SWITCH TYPE:** SPDT "2 in 1" contacts wire as SPST also, except C460M and C412H are DPST.

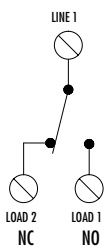
**COLOR:** Metal-brushed aluminum.

**WALL PLATE:** Includes real metal wall plate with screw mounting, to add extra security for commercial applications.

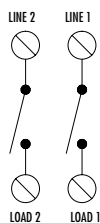
USE FOR SPST



USE FOR SPDT



USE FOR DPST



TYPE	VOLTAGE (VAC)	RATING
Resistive	125	20A
	250	10A
	277	10A
Inductive	125	20A
	250	10A
	277	10A
Tungsten	125	7A
Motor	125	1HP
	250	2HP

CATALOG NO.	UPC CODE	HOLD FEATURE
15 MINUTE MAX.		
C515M	15501	No Hold
30 MINUTE MAX.		
C530M	15503	No Hold
60 MINUTE MAX.		
C560M	15505	No Hold
C560MH	15506	With Hold
C460M*	15011	No Hold
2 HOUR MAX.		
C502H	15507	No Hold
6 HOUR MAX.		
C506H	15511	No Hold
12 HOUR MAX.		
C512H	15513	No Hold
C512HH	15514	With Hold
C412H*	15010	No Hold

\*DPST switch type.

**CAUTION:** This timer is not to be used in precision timing applications where inaccurate timing could have dangerous consequences (i.e. sun lamp, sauna, etc.).





# TORK® PLUG-IN TIMERS



# 400 SERIES INDOOR PLUG-IN MECHANICAL TIMERS

## APPLICATIONS



- Automatically turn ON/OFF items in the home.
- Control lamps, radios, televisions, appliances.
- Give the home a "lived in" look while away.
- Save energy and provide security.

## FEATURES

**REPEAT SCHEDULE:** Daily.

**VARIABLE TIMING:** Multiple ON/OFF times.

**ON/OFF:** Manual ON/TIMER switch.



401A



402A



403A



405A

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
401A	16001		1	Polarized	Multiple ON/OFF Lighting Timer	15 minute
402A	16002	125 VAC, 15A, 1875W Resistive 125VAC, 10A, 1250W Tungsten	1	Grounded	Heavy Duty 24 hour Timer	15 minute
403A	16013	125VAC, 1/3HP	1	Polarized	Powerful & Compact Automatic Timer	30 minute
405A	16014		2	Grounded	Heavy Duty 15 AMP Automatic Timer	15 minute

**NOTE:** "▲" = Indicates outlet location.

# SA 100 SERIES INDOOR PLUG-IN MECHANICAL TIMERS

**NEW!**

## APPLICATIONS



- Automatically turn ON/OFF items in the home.
- Control lamps, radios, televisions, appliances.
- Give the home a "lived in" look while away.
- Save energy and provide security.



SA011



SA105



SA100



SA110

## FEATURES

**REPEAT SCHEDULE:** Daily.

**VARIABLE TIMING:** Multiple ON/OFF times.

**ON/OFF:** Manual ON/TIMER switch.

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA011	16501	120VAC 15A Resistive, 120VAC 15A Inductive, 120VAC 1800W Tungsten, 120VAC 1/2HP Motor	1	Polarized	Lamp Timer with LED night light	Two Pair of On/Off trippers
SA100	16507		1	Polarized	Basic Timer with cover to hide dial	15 Minutes
SA105	16510	120VAC 15A Resistive 120VAC 15A Inductive 120VAC 1800W Tungsten	1 Timed 1 Untimed	Polarized Polarized	Table Top Timer for easy access with 6" cord	15 Minutes
SA110	16513		1 Timed 1 Untimed	Grounded Polarized	Heavy Duty Appliance Timer with cover to hide dial	15 Minutes

**NOTE:** "▲" = Indicates outlet location.

# SA100 & 400 SERIES INDOOR DIGITAL PLUG-IN TIMERS

**NEW!**



SA134



SA130



455D



457Z



## APPLICATIONS



- Automatically turn ON/OFF items in the home.
- Vary schedules daily.
- Give the home a "lived in" look while away.
- Save energy and provide security.

## FEATURES

### SA134:

- 24 hour programming
- Battery Back-up for power outages

### SA130 & 455A:

- 7 day programming
- Random feature for lived in look
- Manual Daylight Savings
- Battery Back-up for power outages

### SunSet™ TIMER 457Z:

- Sunset On with 7 day programmable Off or sunrise Off
- Random feature for lived in look
- Automatic Daylight Savings
- Battery Back-up for power outages
- Never come home to a dark house

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA134	16522	120VAC 8.3 amp Resistive 120VAC 600W Tungsten	1	Polarized	Easy Set 24 hour daily repeat timer	2 On/Off Settings
SA130*	16519	120VAC 15A Resistive, 120VAC 15A Inductive, 120VAC 500W Tungsten 120VAC 1/2 HP Motor	1 Timed 1 Untimed	Polarized	Easy Set Lamp Timer with cover to hide buttons	2 On/Off settings. 1 setting may be active at a time
455D	16015	125VAC 15A General Purpose 125VAC 15A Resistive 125VAC 1000W Tungsten	2	Grounded	Seven Day Programmable	24 ON/OFFs Different schedule for each day of the week. Multiple ON/OFFs
457Z	16016	125VAC 15A General Purpose 125VAC 15A Resistive 125VAC 1000W Tungsten	2	Grounded	SunSet™ Timer Dusk to Dawn with automatic daylight savings	20 ON/OFFs Different schedule for each day of the week. Multiple ON/OFFs

NOTE: "▶" = Indicates outlet location.



\*ETL Listed for US and Canada

# SA200 & SA500 SERIES WIRELESS PLUG-IN CONTROLS



## APPLICATIONS



- Remotely turn ON/OFF items.
- Control lamps, radios, appliances, outdoor lighting.
- Safety: enter and leave rooms in full light.
- Provide a convenient control from your chair.



SA230



SA500

## FEATURES

### INDOOR REMOTE OUTLET - SA500 :

Control indoor outlet up to 80' away  
 Transmitter has 3 pair ON/OFF buttons to allow independent control of 3 receivers  
 Match receiver and outlet with simple dial. No fussy programming.  
 Get one for each room. No cross talk.  
 Wireless control without moving across room

### OUTDOOR REMOTE OUTLET - SA230:

Control indoor outlet up to 80' away  
 Matched receiver and outlet. No programming  
 Transmitter has 1 pair ON/OFF button  
 Wireless control from the comfort of inside

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (>)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA500	16555	125VAC 8A Resistive 125VAC 625W Tungsten	1	Grounded	Indoor Remote Controlled Outlet	Manual On/Off with push button transmitter
SA230	16564	125VAC 8A Resistive 125VAC 600W Tungsten	2	Grounded	Outdoor Remote Controlled Outlet	Manual On/Off with push button transmitter

**NOTE:** "▲" = Indicates outlet location.

# 600 & SA200 SERIES OUTDOOR PLUG-IN MECHANICAL TIMERS

**NEW!**

## APPLICATIONS



- Automatically turn ON/OFF outdoor lighting.
- Save energy. Don't run lights all night.
- Match dusk On with light activated timer.



601A



652B



602A



SA205

## FEATURES

### MECHANICAL TIMERS:

TIMER REPEAT SCHEDULE: Daily.  
VARIABLE TIMING: Multiple ON/OFF times.  
MANUAL SWITCH: ON or TIMER mode

### LIGHT ACTIVATED TIMERS:

TIMER REPEAT SCHEDULE: Daily turns on at dusk  
VARIABLE TIMING: Dial turn to choose a countdown time to turn Off hours after dusk

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
601A	16020	125 VAC, 15A, 1875W General Purpose 125VAC, 15A, 1875W Resistive	1	Grounded	Outdoor Lighting Timer	15 Minutes
602A	16021	125VAC, 10A, 1250W Tungsten 125VAC, 1/2HP	2	Grounded	Outdoor Lighting Timer	15 Minutes
SA205*	16534	120VAC 15A Resistive 120VAC 15A Inductive 120VAC 1800W Tungsten 120VAC 1800W Incandescent 120VAC 1/2 HP Motor	1 Timed 1 Untimed	Grounded	Landscape Timer	15 Minutes
652B	16018	125VAC 15A General Purpose 125VAC 15A Resistive 125VAC 1000W Tungsten 125 VAC 500VA Electronic Ballast 125VAC 1/3HP, TV-5	2	Grounded	Light Activated Outdoor Lighting Timer	Turns on at Dusk and countdown Off 2, 4, 6 or 8 hours later

\* ETL listed for U.S. and Canada.



**NOTE:** "▲" = Indicates outlet location.

# 600 & SA200 SERIES OUTDOOR PLUG-IN DIGITAL TIMERS

**NEW!**

## APPLICATIONS



- Automatically turn ON/OFF outdoor lighting
- Save energy. Don't run lights all night
- Match dusk On with light activated timer



**621D & 631D**  
(621D without photocell)



**611D**



**654A**



**SA204**

## FEATURES

### DIGITAL TIMER:

7 day programming  
Manual Daylight Savings  
Random feature for lived in look  
Battery Back-up for power outages

### PHOTO-TIMERS:

Dusk to Dawn operation  
Set a fixed time off before Dawn  
Battery Back-up for power outages

### LIGHT ACTIVATED TIMERS:

**TIMER REPEAT SCHEDULE:** Daily turns on at dusk.  
**VARIABLE TIMING:** Choose a countdown time to turn Off from 1 to 9 hours after dusk.  
**654A USER SELECT MODE:** Start countdown at any time and repeats daily.

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
621D	16056	125 VAC, 15A, 1875W General Purpose	2	Grounded	Digital Outdoor Timer	7 On/Off pairs. Schedule for each day of week
611D	16018	125VAC, 15A, 1875W Resistive	1	Grounded	Digital Outdoor Photo-Timer	Photocell Turns on at Dusk and off at Dawn or off at a pre-set time
631D	16027	125VAC, 1000W Tungsten 125VAC, 8A Ballast 125VAC, 1/2HP	2	Grounded	Digital Outdoor Photo-Timer	
SA204*	16561	120VAC 8A Resistive 120VAC 600W Tungsten	2	Grounded	Light Activated Landscape Timer	Turns on at Dusk and countdown off 1 through 9 hours later
654A	16025	125VAC 15A General Purpose, 125VAC 15A Resistive, 125VAC 625W Tungsten 125VAC 1/3HP, TV-5	2	Grounded	Light Activated Outdoor Lighting Timer or User Selected Daily Repeat	Turns on at Dusk and countdown off 1 through 9 hours later. Includes user select mode.

\* ETL listed for U.S. and Canada.



**NOTE:** "▲" = Indicates outlet location.

# SA200 SERIES OUTDOOR PLUG-IN STAKE TIMERS

**NEW!**

## APPLICATIONS



- Automatically turn ON/OFF outdoor lighting
- Save energy. Don't run lights all night
- Multiple outlets for holiday lighting

## FEATURES

**REPEAT SCHEDULE:** Daily.

**VARIABLE TIMING:** Multiple ON/OFF times.

**MANUAL SWITCH:** ON or TIMER mode.



CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA215	16540	125V 15A Resistive 125V 1250W Tungsten 125V 1/2HP Motor	6	Grounded	Holiday Décor Stake Timer	30 minutes

**NOTE:** "▲" = Indicates outlet location.

# SA200 SERIES

## OUTDOOR *Zip-Set*

### DIGITAL PLUG-IN TIMERS

**NEW!**

#### APPLICATIONS



- Automatically turn ON/OFF outdoor lighting
- Save energy. Don't run lights all night
- Match dusk On everyday



#### FEATURES

- Fast programming with ZIP-SET™ One-Step™ set-up.  
Just enter your area code
- ZIP-SET™ turns lights ON at sunset & OFF at countdown or preset time.
- 7-5-2 settings for full week, weekdays, and weekends
- Option to set with one of three on/off programs
- Manual Daylight Savings
- Random feature for lived in look
- Battery Back-up for power outages

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA210	16537	120VAC 15A Resistive 120VAC 15A Inductive 120VAC 1000W Tungsten 120VAC 1/4 HP Motor	2 Timed 1 Untimed	Grounded	Zip-Set™ Outdoor Living Wall Mount Timer	Sunset On and countdown hours to Off or same fixed time off each day
SA220	16534	120VAC 15A Resistive 120VAC 15A Inductive 120VAC 600W Tungsten 120VAC 1/4 HP Motor	6 Timed 1 Untimed	Grounded	Zip-Set™ Outdoor Lighting Stake Timer	Sunset On and countdown hours to Off or same fixed time off each day







# **TORKALERT™ SIGNALING DEVICES**

# MECHANICAL STROBE HORNS



TA880-N5

TA5508H-G1



## APPLICATIONS

- High performance for industrial signaling applications. Offers high sound output, low current draw and dependable operation. Strobes use xenon flashtube, ideal for maximum efficiency and reliability.

## FEATURES

**ALARM:** Penetrating mechanical sound.

**WIRING:** Low current draw. Horn may be wired separately

**MOUNTING:** 4" square surface mounting.

CATALOG NO.	UPC CODE	INPUT VOLTAGE	INPUT CURRENT (AMPS)	dB @10 FEET	CANDELA
TA880-N5	96015	120VAC	0.115	96	15
TA5508H-G1	96071	24VDC	.059	strobe only	15/75

**NOTE:** TA880-N5 For outdoor use, unit must be mounted in a TA-WBBF outdoor backbox. See page 550 for ordering. TA5508H-G1 for indoor mounting only.

# MECHANICAL HORNS



## APPLICATIONS

- Loud tone with typical decibel output of 87 dB at 10 feet. Low frequency resonance for strong penetration of noisy areas like boiler rooms, water pumping stations, elevators and air compressor rooms.

## FEATURES

**INPUT VOLTAGE:** Wide input voltage ratings for compatibility with unregulated power supplies.

**WIRING:** Screw terminals for convenient IN/OUT wiring. Low current draw for minimizing power supply and wiring cost.

**HOUSING:** Steel, painted Dawn Mist. Resonant grill design for high sound output.

**MOUNTING:** To indoor box TA-BBSF or outdoor box TA-WBBF, see accessories page 550.

CATALOG NO.	UPC CODE	INPUT VOLTAGE	INPUT CURRENT (AMPS)
SURFACE TYPE			
TA874-N5	96023	120VAC, 60Hz	0.070
TA874-N5R (Red)	97613	120VAC, 60Hz	0.070
TA875-G1	97687	24VDC	0.035
WITH WEATHERPROOF BACKBOX TA-WBBF UL LISTED FOR OUTDOOR USE			
TA876-N5	96026	120VAC, 60Hz	0.070

**NOTE:** Use TORK signal timers for 24 hour or 7 day scheduling, see page 485.

# MULTI-TONE ELECTRONIC HORNS

24VDC & 115VAC



TA875-1G1  
cUL<sub>us</sub>

TA-MTS  
UL

## APPLICATIONS

- For indoor and outdoor use. Superior sound penetration for various room conditions. Screw terminals accept #12AWG.

## FEATURES

### OPERATING TEMPERATURE:

TA-MTS: -31°F to +150°F (-35°C to +66°C).

### DIMENSIONS AND MOUNTING:

TA-MTS: 4 1/8"H x 4 1/8"W x 3 17/32"D

Can be mounted on ceiling or wall.

TA875-1G1: 4 3/4"H x 4 3/4"W x 1 3/8"D

1 gang, 2 gang or 4" square backbox.

TA875-1G1 24VDC HORN		
ALARM TONE	CURRENT (AMPS)	TYPICAL dB @ 10 FEET
BELL	0.020	91
HI-LO	0.025	96
CHIME	0.028	93
SINGLE STROKE BELL	0.026	93
HORN	0.023	97
3 BEEPS, PAUSE	0.023	97
SIREN	0.040	95
SLOW WHOOP	0.040	96

TA-MTS 115VAC HORN				
ALARM TONE	AMPS @ 120VAC		TYPICAL dB @ 10 FEET	
	HIGH	STANDARD	HIGH OUTPUT	STANDARD OUTPUT
HORN	0.050	0.042	85	82
BELL	0.041	0.039	82	75
HORN 2	0.050	0.040	85	79
CODE 3 HORN	0.050	0.042	82	75
CODE 3 TONE	0.042	0.040	79	75
SLOW WHOOP	0.050	0.042	85	82
SIREN	0.045	0.041	85	82
HI-LO	0.042	0.039	82	79

CATALOG NO.	UPC CODE	INPUT VOLTAGE	DESCRIPTION
TA875-1G1	97641	20-31VDC	Multi-tone Electric Horn
TA-MTS	97674	115 VAC	Multi-tone Electric Horn

# HEAVY DUTY BELLS

4", 6", 10" DIAMETERS  
AC VIBRATING BELLS



## APPLICATIONS



- For indoor or outdoor applications. High sound output, durable and dependable performance. Ideal for schools and hospitals.

## FEATURES

**TERMINAL SIZE:** #12 - 22 AWG.

**WIRING:** Screw terminals permit fast IN/OUT field wiring.

**HOUSING:** Steel gong and cast aluminum. See page 551 for dimensional drawings.

**MOUNTING:** To indoor box TA-BBSF or outdoor box TA-WBBF, see accessories page 550.

CATALOG NO.	UPC CODE	SHELL SIZE	VOLTAGE	INPUT CURRENT (AMPS)	dB @ 10 FEET	COLOR
TA340-4G5	96001	4"	24VAC	0.320	81-90	Dawn Mist
TA340-4N5	96002	4"	120VAC	0.065	81-90	Dawn Mist
TA340-6G5	96003	6"	24VAC	0.320	81-95	Dawn Mist
TA340-6N5	96004	6"	120VAC	0.065	81-95	Dawn Mist
TA340-10G5	96005	10"	24VAC	0.320	84-98	Dawn Mist
TA434-4N5	98005	4"	120VAC	0.065	81-95	Red
TA434-6N5	97521	6"	120VAC	0.065	81-95	Red
TA434-10N5	96522	10"	120VAC	0.065	84-98	Red

# LIGHT DUTY AND GENERAL PURPOSE BELLS & BUZZER



## APPLICATIONS

- Designed to operate on either bell ringing transformers or batteries. Non-adjustable sound.

## FEATURES

**ALARM:** Bell ringing, non-adjustable sound.

**DIMENSIONS FOR TA725:**  
3" H x 2½" W x 1" D.

**MOUNTING:** Fully enclosed sturdy steel bases and covers. Base and cover snap together, no screws required.

CATALOG NO.	UPC CODE	DESCRIPTION	VAC	VDC	AMPS	dB
TA740	96228	2½" Gong	8-16	3-6	1	76 @ 10'
TA744	96230	4" Gong	8-16	3-6	1	78 @ 10'
TA725	96226	Buzzer	8-16	3-6	1	88 @ 3'

# CHIMES & CHIME KITS



## APPLICATIONS

- Powerful and loud, pleasant sounding push-button chimes. Ideal for homes, apartments and offices.

CATALOG NO.	UPC CODE	DESCRIPTION	DIMENSIONS
TAC212WS	96064	16VAC Chime + Push Button clip for Stucco + 10VA Transformer	7 3/16"L x 4"W x 2"D
TAC212WL	96054	16VAC Chime +1 Illuminated & 1 Non-illuminated Push-button +10VA Transformer	7 1/4"L x 4 3/4"W x 2 1/2"D

## FEATURES

**INPUT:** 16V, 10VA, 120VAC.

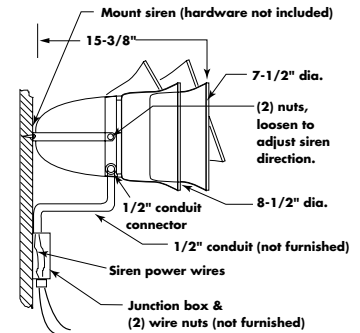
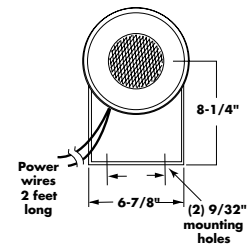
**ALARM:** Chime.

**MOUNTING:** Fully enclosed sturdy steel bases.

# WEATHERPROOF MOTOR DRIVEN SIREN



## DIMENSIONS



## APPLICATIONS



- For industrial and outdoor use. Ideal for evacuation and warning systems.

## FEATURES

**INPUT VOLTAGE:** 120AC & DC, 60Hz.

**ALARM:** Loud, distinctive tone. Designed to be effective over standard horns or bells.

**HOUSING:** Red enamel paint over heavy gauge aluminum housing. Fully enclosed motor. 180° swivel and adjustable direction.

CATALOG NO.	UPC CODE	INPUT VOLTAGE	dB @10 FEET	AMPS	VA
TA315-1N5	96599	120VAC/DC	117	2.5	300

# MANUAL FIRE ALARM PULL-DOWN STATION



## APPLICATIONS



- Designed for indoor use. Ideal for schools, hospitals, industrial plants, warehouses and retail stores. Key required to close and reset device. Meets requirements, BSA, MEA, CA and UL.

## FEATURES

**ALARM:** Loud, distinctive tone. Designed to be compatible with any control panel to initiate local alarm signals, trip municipal fire alarm box and start fire pumps.

**MOUNTING:** Sturdy metal construction, mounts to a standard single gang electrical box.

CATALOG NO.	UPC CODE	SWITCH	VOLTS	AMPS
TA270A	96521	SPST, NO	30V AC/DC	1

# TELEPHONE RELAY



## APPLICATIONS



- This device activates appliances when a telephone ring voltage is detected. For indoor and outdoor use with horns, bells or strobes. Recommended use where ambient noise levels are high. FCC approved.

## FEATURES

**INPUT:** Accepts RJ-11C phone plug.

**WIRING:** Hard wire connections, for analog phone lines.

**MOUNTING:** Weatherproof, indoor and outdoor, includes mounting bracket.

CATALOG NO.	UPC CODE	INPUT TELEPHONE RING VOLTAGE	AC INPUT VOLTAGE	RINGER EQUIVALENCE	PEAK CANDLEPOWER
TA-B-8332	97100	39-150V/20-30Hz	115VAC-5A, 230VAC-2A	Up to 115VDC-500MA	0.6

# WALL CLOCKS

## QUARTZ & ELECTRIC



### APPLICATIONS

- Each model meets United States Government Specifications. All Clocks provide second hand for accurate timing.

### FEATURES

#### QUARTZ

Accurate to one minute per year. Low power consumption for long battery life. Uses AA battery (not supplied).

#### ELECTRIC

110VAC, 60 Hz synchronous motor. 66 inch line cord and plug. Does not require grounding.

**MOUNTING:** Concealed mounting brackets allow for simple, neat placement on walls.

#### QUARTZ CLOCK

CATALOG NO.	UPC CODE	TYPE	SIZE	FRAME COLOR
TA1886 G	96156	QUARTZ	8"	Grey
TA1886 B	96155	QUARTZ	8"	Brown
TA1887 G	96159	QUARTZ	12"	Grey
TA1887 B	96157	QUARTZ	12"	Brown
TA1887 BK	96158	QUARTZ	12"	Black

#### ELECTRIC CLOCK

CATALOG NO.	UPC CODE	TYPE	SIZE	FRAME COLOR
TA1880 G	96152	ELECTRIC	8"	Grey
TA1880 B	96151	ELECTRIC	8"	Brown
TA1882 G	96154	ELECTRIC	12"	Grey
TA1882 B	96153	ELECTRIC	12"	Brown



# ELECTRIC DOOR OPENERS


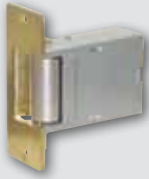
## REMOTE CONTROL & CONTACT DEVICES

### APPLICATIONS

- For unlocking or locking metal or wooden doors using low voltage wiring. For AC, use TA591 or TA592 transformer.


### MORTISE TYPE REMOTE OPENER

Reversible for right or left hand door. Use with mortise entrance locks having a latch bolt with up to 1/2" width and throw. 6" wire leads. Dimensional drawings available.

DEVICE	CATALOG NO.	UPC CODE	VOLTS	AMPS
	TA09	96960	8-16VAC 3-6VDC	.95-1.75 1.25-1.80
	TA154	96962	16VAC 3-6VDC	.95-1.75 1.25-1.80


### RIM TYPE REMOTE OPENER

Reversible for right or left hand door. Standard surface type used with lock latches with up to 5/8" width and throw. 6" wire leads. Dimensional drawings available

DEVICE	CATALOG NO.	UPC CODE	VOLTS
	TA152	96961	8-16VAC, 3-6VDC


### MAGNETIC SWITCH CONTACTS

For activating a variety of signals, ideal for limiting space applications. Self-insulating and can be mounted in any direction. All units include companion magnet. Dimensions: 2 3/16" L x 1/2" W x 1/2" D

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS MAX.
	TA60	96975	Circuit closed with magnet engaged		
	TA61	96976	Make & break NO and NC	24VAC 12VDC	.5
	TA62	96977	Circuit open with magnet engaged		
	TA67W	96979	Terminal Cover		


### DOOR/WINDOW CONTACTS, ROLLING BALL TYPE

Signals automatically with the opening and closing of doors, windows and transoms. Operates from pressure in any direction. Non-tilt, non-jamming design. Fits 3/4" hole; no need to mortise.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS MAX.
	TA44	96995	Normally closed Push to open		
	TA45	96996	Normally open Push to close	12-24V AC/DC	2
	TA46	96997	Momentary contact Push to make & break		


### ELECTRIC DOOR SWITCH

For turning lights/signals on or off when doors are opened or closed. Ideal for closets, dark rooms, storage areas of walk-in refrigeration. Rust resistant steel case with 4 knockouts, antique brass plate. Box dimensions: 1 1/4"W x 3 7/8"H x 2"D. Plate dimensions: 1 1/4"W x 4"

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS MAX.
	TA502	96964	Light ON when door is open	125VAC 250VAC	6 3

### DOOR TRIP SWITCH

Signals automatically as door is openend. Commonly used on store doors to announce entrance of customers. Mounts on top of door frame. Solid cast brass. Size: 3 x 1 5/8"

DEVICE	CATALOG NO.	UPC CODE	VOLTS	AMPS MAX.
	TA236	96963	12-24VAC	2

# PUSH-BUTTONS

ILLUMINATED,  
NON-ILLUMINATED &  
WEATHERPROOF


## APPLICATIONS

- For outdoor use to activate low voltage bells, buzzers, horns or any other audible signal. Ideal for factory doors, receiving departments, small office buildings, limited access retail stores and private homes.

## ILLUMINATED PUSH-BUTTONS, UP TO 16VAC

BUTTON	CATALOG NO.	UPC CODE	COLOR	SIZE
	TA603L	96035	Gold	1 3/4" (diameter)
	TA631L	96089	White	2 3/4" x 7/8"
	TA656B	96039	Gold	15/16 x 2 3/4"
	TA215LB	96031	Brass	1 1/4 x 2"
	TA620L*	96037	Chrome	5/8" (diameter)
	TA620LB*	96038	Brass	5/8" (diameter)

## WEATHERPROOF PUSH-BUTTONS / SOLID CAST BRASS

BUTTON	CATALOG NO.	UPC CODE	DESCRIPTION	INPUT VOLTAGE
	TA1786B	96090	Without conduit backplate	Momentary Contacts 4 amps AC/DC @ 12V 4 amps AC, 2 amps DC @ 24V
	TA1786CB	96091	With conduit backplate	2 amps AC 1 amp DC @48V

## NON-ILLUMINATED PUSH-BUTTONS, UP TO 24VAC

BUTTON	CATALOG NO.	UPC CODE	COLOR	SIZE
	TA600	96041	Polished Brass	2 1/4" (diameter)
	TA603	96044	Polished Brass	1 3/4" (diameter)
	TA631	96088	White	2 3/4" x 7/8"
	TA635	96047	Ivory, black bar	2 3/4" x 7/8"
	TA666BK	96048	Black, ivory bar	2 3/4" X 2 3/4"
	TA602	96043	Polished Brass	13/8" x 5 1/4"
	TA601	96042	Sprayed Brass	2 x 2 9/16"
	TA620*	96045	Chrome	5/8" (diameter)
	TA620B*	96046	Brass	5/8" (diameter)

\*Stainless steel plate to fit TA620 models: Order TA 147-1

# WARNING LIGHTS INDUSTRIAL UNITS


LETTER	INDICATES COLOR
R	Red
A	Amber
C	Clear
B	Blue

## APPLICATIONS

- 1/2" conduit mounting. Full selection of dome colors, see "Ordering Info". For outdoor use. All units must be mounted vertically with base at bottom.


### TA47N5 / TA47R5 – ALL PURPOSE 360° BEACON

Large parabolic reflector rotates around a 100 watt bulb. Long range beam. Use to indicate equipment malfunctions, security intrusion, etc.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA47RN5	96061	90 FPM Corrosion resistant/Outdoor use Glass filled polypropylene housing	117VAC	
	TA47AN5	96161	Acrylic dome	117VAC	.9
	TA47AR5	96162	Tamper resistant dome clamps Nominal current draw 9 1/2"H x 8 1/2" diameter	240VAC, 60Hz	


### TA52N5 – COMPACT ROTATING BEACON

Light intensifying reflector rotates around a low current 25 watt bulb. Bayonet socket for easy lamp replacement. Ideal for restricted or dangerous areas.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA52RN5	96063	80-90 FPM 360° rotation		
	TA52AN5	96163	Dependable belt & turntable design Acrylic dome	117VAC	.21
	TA52BN5	96263	Nominal current draw 6 1/2"H x 5 5/8" diameter		


### TA93-2N5 – MIDI-STROBE

Solid state circuitry in a low profile design. No moving parts means less Maintenance!

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA93-2RN5	99622	70-80 FPM Solid state electronic circuitry		
	TA93-2AN5	97623	High output 3-4 watt, 3.6 joules Vertically mounted flash tube	117VAC	.04
	TA93-2CN5	96968	Snap out socket base for 360° Fresnel dome optics		
	TA93-2BN5	97624	Nominal current draw 6 1/2"H x 5 1/8" diameter		

### TA94N5 – ELECTRONIC STROBE

High intensity strobe tube with inner fluted lens for maximum brilliance. No moving parts makes it immune to shock and vibration. Ideal for security alert.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA94RN5	97626	70-80 FPM Solid state electronic circuitry High output 3-4 watt, 3.6 joules		
	TA94AN5	97627	Acrylic dome	117VAC	.04
	TA94BN5	97628	Glass filled polypropylene housing Suitable for outdoor use 9 1/2"H x 8 1/2" diameter		

# WARNING LIGHTS VEHICULAR UNITS


LETTER	INDICATES COLOR
R	Red
A	Amber

## APPLICATIONS

- 1/2" conduit mounting.
- Full selection of dome colors, see "Ordering Info".
- For outdoor use. All units must be mounted vertically with base at bottom.


### TA53E1 – ROTATING BEACON

Single point shock-mounting. Ideal for use on security or service vehicles.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS
	TA53AF1	96185	90-100 FPM	36VDC
	TA53AG1	96184	Dependable belt & turntable design 25 watt lamp Acrylic Dome Nominal current draw 7 1/2"H x 6" diameter	24VDC

### TA54E1 – PORTABLE, MAGNETIC, ROTATING BEACON


Single point shock-mounting. Ideal for use on security or service vehicles.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS
	TA54AE1	96187	75 FPM, 12 watt lamp Quiet belt-drive motor.	12VDC
	TA54RE1	96087	Teardrop design fits under windshields. Includes glare shield, velcro tape 4 1/2" H x 7 1/2" diameter	

### TA131DN5 / TA131DU1 – DOUBLE FLASH SUPER STROBE


Ideal for industrial applications requiring extremely high visibility. One model covers all popular mounting methods: 1/2" pipe, surface, flange, electrical box.



DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA131DRN5	96510	60 FPM, 7.5 JPF High intensity 85,000 peak CP Flashtube Rated at 7000-8000 hrs. Durable Lexan® housing 5"H x 7 1/4" diameter	120VAC	.2
	TA131DAN5	96610		10.5-	
	TA131DRU1	96511		31.0VDC	
	TA131DAU1	97611			

### TA879 – VEHICULAR BACKUP ALARM

Solid state electronic unit. Helps to comply with OSHA and State regulations. Makes distinctive noise, ideal for extreme variations in background noise

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS
	TA879	96102	2 sound levels 97 or 87 dB +/- dB at 4ft Multi-voltage Water-resistant housing	12 to 48VDC

**NOTE:** "FPM" = Flashes per minute  
"JPF" = Joules per flash

For replacement parts and accessories, see page 550.

# POWER SUPPLY UNITS 24 VDC UNITS



## APPLICATIONS

- Units provide power to multiple signaling devices, depending on requirements.

## FEATURES

### TA606

Regulated and filtered 24VDC up to 600mA. Easy-to-use screw terminals, accepts #16-24AWG. No conduit is required for installation.

### TA640

Dual output unit, each providing 2 Amps fo current. If connected in parallel, will provide up to 4 Amps. Circuit breaker provides input protection.

CATALOG NO.	UPC CODE	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	REGULATION	RIPPLE VOLTAGE
TA606	96109	117VAC	24VDC	600mA		
TA640	96110	115VAC	24VDC	4A	+/-5%	10mVRMS

# TRANSFORMERS



## APPLICATIONS

- Engineered to ensure long use for bells, buzzers and chimes.



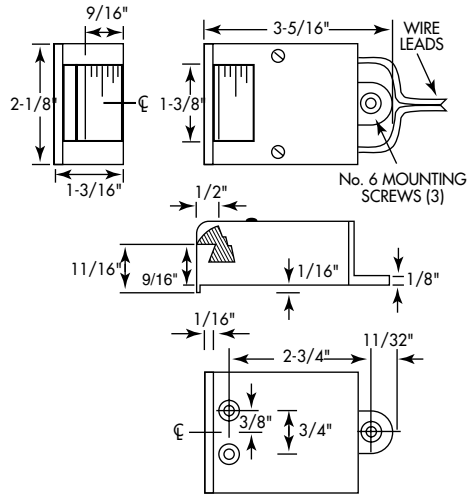
CATALOG NO.	UPC CODE	TYPE	VOLTS-AMPS (VA)	PRIMARY VOLTAGE AC	SECONDARY VOLTAGE AC	Hz
TA590	96104	Bell	5	120	10	60
TA591	96105	Chime	10	120	16	60
TA592	96106	Tri-Volt	10-10-20	120	8-16-24	50/60
TA598	96602	Tri-Volt	20-30-30	120	8-16-24	60
TA599	96108	Heavy Duty	40	120	24	60
TA1245Y-50	96166	Heavy Duty	50VA	120/208/240	24	60
TA1245Y-75	96167	Heavy Duty	75VA	120/208/240	24	60

# ACCESSORIES, REPLACEMENT PARTS

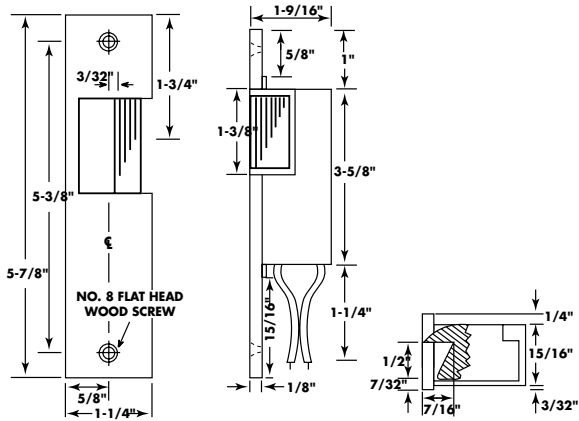
UNIT	CATALOG NO.	UPC CODE	DESCRIPTION
TA93-2	TA-L6-2	96982	110VAC Xenon Flash Tube
TA52	TA-L8	96134	110VAC Bulb
TA94	TA-L10	96136	110VAC Xenon Flash Tube
TA-94	TA-L10-1	96981	110VAC Xenon Flash Tube
TA502	TA502SW	96966	Replacement switch
TA874 Series	TA-BBSF	97694	Backbox – 4" painted Dawn Mist 3/4" and 1" KO's
TA874 Series	TA-WBBF	97692	Weatherproof Backbox – 1/2" KOs 4" painted Dawn Mist
TA-BBSF, TA-WBBF	TA-SFPF	97707	Semi-Flush plate – Dawn Mist
TA-BBSF, TA-WBBF	TA-SFPFR	97697	Semi-Flush plate – Red
TA47, TA94	TA-ADR	96111	Acrylic Dome – Red
TA47, TA94	TA-ADA	96311	Acrylic Dome – Amber
TA52, TA53	TA-D5B	96419	Acrylic Dome – Blue
TA54	TA-D6A	96320	Dome – Amber
TA93, TA94	TA-D7R	96121	Fresnal Dome – Red
TA93, TA94	TA-D7A	96321	Fresnal Dome – Amber
TA93, TA94	TA-D7C	96621	Fresnal Dome – Clear
TA131D	TA-D8R	96970	Acrylic Dome – Red

### REMOTE CONTROL DOOR OPENERS

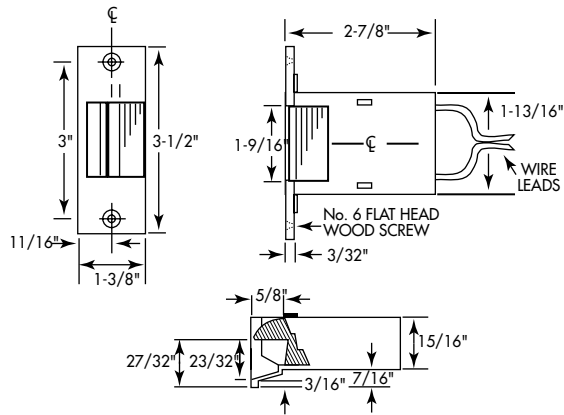
TA152



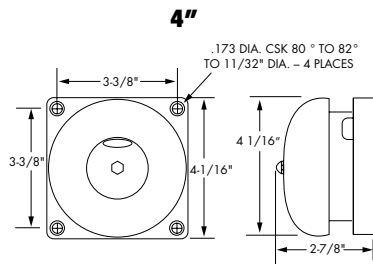
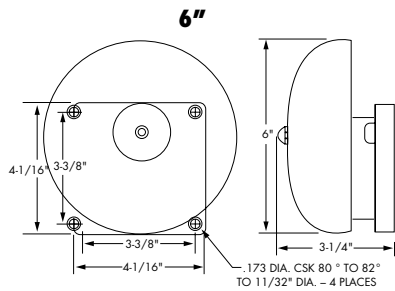
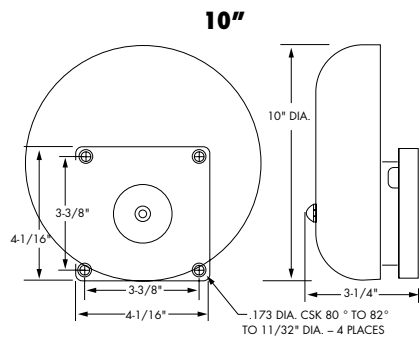
TA09



TA154

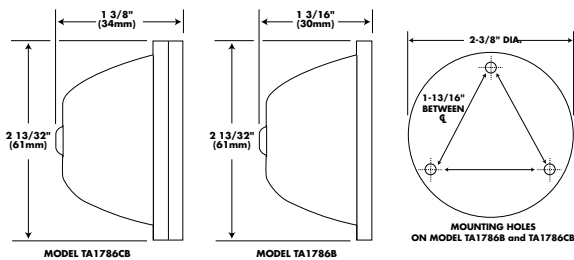


### HEAVY DUTY BELLS



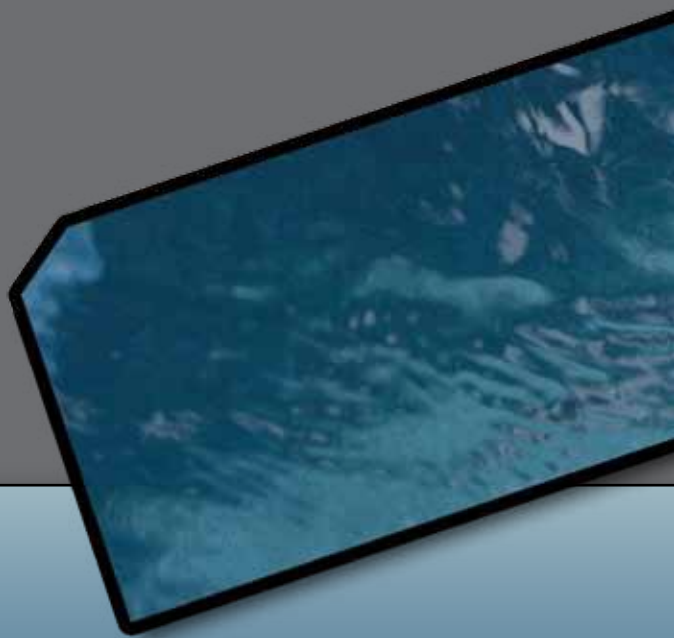
### WEATHERPROOF BUTTON

TA1786B ONLY











# TORK® POOL & SPA CONTROLS

# PP PANEL SERIES

## POOL AND SPA PANELS

### APPLICATIONS

- Pumps
- Swimming pools
- Fountains
- Ponds



### FEATURES

**COMBINATION PANEL:** The PP Panel Series provides a flexible platform to create a custom pool and spa control at an off the shelf price. Start with a blank panel and add timers, freeze controls, circuit breakers, switches and outlets for a custom installation.

**PP-100R:** 100 amp load center 120-240V, 5/10 circuit breaker base.

**PP-125R:** 125 amp load center 120-240V, 8/16 circuit breaker base.

**CONTROLS:** Freeze protection or mechanical and digital timers are all available with unique features not found elsewhere in the industry. Find specification details on pages 557 and 558.

**BREAKERS:** Listed for Cutler Hammer (BR), GE (THQL), Murray/Siemens (MP) and Square D (HOM) (not included).

**REVERSIBLE DOOR:** Easy-Hinge patented removable and reversible door. Change from left to right opening. Solves installation issues in the field.

**WHILE-IN-USE COMPARTMENT:** Inside mounting for two devices with cord exit.

**DEVICE MOUNTING:** Provision for mounting one or two devices in any combination accepts toggle, GFCI, X-10 and UPB type devices in, PP-100R and PP-125R enclosures.

**TRANSFORMER:** Select panels include 120V input: 100 watt with output 12V/13V or 300 watt with output 12V/13V/14V.

**ENCLOSURE:** Metal NEMA 3R with lockable hasp. See page 558 for dimensions.



PP-125R-P4

PP-125R-P4-100X

CATALOG NO.	UPC CODE	CONTROL	CONTROL INPUT	ADDITIONAL INFORMATION
PP-100R	94016	-	-	Panel only. Add controls from page 557 and 558.
PP-125R	94017	-	-	Panel only. Add controls page 557 and 558.
PP-125R-P4	53007	P1104-M	240VAC	Add another control from page 557 and 558.
PP-125R-P4-100X	94018	P1104-M	240VAC	Includes 100 watt Low Voltage Transformer
PP-125R-P4-300X	94019	P1104-M	240VAC	Includes 300 watt Low Voltage Transformer

# P1100 SERIES

## SWIMMING POOL TIMERS, 24 HOUR ELECTROMECHANICAL CONTROL



**QUICK INSTALL/RELEASE LEVER:**  
For easy installation and removal when installing into pool panels.

**LOAD INDICATOR LAMP**

**CONVENIENT EXTERNAL ROCKER SWITCH:**  
3 position switch: OFF/ON/AUTO. Use switch to turn OFF pump at the end of pool season.

**REAL TIME SWITCH FACE:** Easy to set and check time.

**CAPTIVE TRIPPERS:** 15 minute intervals, no lost trippers.

**HEATER CONTACTS:** FM suffix includes "Fireman Switch" to turn off pool heater 20-30 minutes before timer turns OFF. Contact rates SPST, 15A @120V.

**THERMOSTAT:** PFP models include built in Freeze Protection. No extra wiring. Thermostat turns on load at user settable level between 33°F and 42°F. Moving water prevents costly freeze damage.

**ACCESSORY CONTACT:** PF models include extra contact to accept PFPT Freeze Protection Accessory. Thermostat turns ON load at user settable level between 33°F and 42°F. Moving water prevents costly freeze damage.

**TIMER INTERLOCK:** Makes one second timer dependant on operation of another timer.



CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	CONTACTS	RESISTIVE/INDUCTIVE RATINGS	HP RATING	NOTES
✦ PFP2-M	94026	240	DPST	40A	7.5HP @ 240V	Thermostat only
✦ PFP3-M	94027	120/240 w/neutral	DPST	40A	3 HP @ 120V 7.5HP @ 240V	Thermostat only
P1101-M	10056	120	DPST	40A	3 HP @ 120V	
P1101FM-M	10060	120	DPST	40A	3 HP @ 120V	Fireman Switch
PF1101-M	94020	120	DPST	40A	3 HP @ 120V	Accepts PFPT thermostat input
PF1101FM-M	94024	120	DPST	40A	3 HP @ 120V	Fireman Switch & Accepts PFPT thermostat input
✦ PFP1102-M	94022	240	DPST	40A	7.5HP @ 240V	Freeze Protection included
✦ PFP1103-M	94023	120/240 w/neutral	DPST	40A	3 HP @ 120V 7.5HP @ 240V	Freeze Protection included
P1104-M	10057	240	DPST	40A	7.5HP @ 240V	
P1104FM-M	10061	240	DPST	40A	7.5HP @ 240V	Fireman Switch
✦ PF1104-M	94021	240	DPST	40A	7.5HP @ 240V	Accepts PFPT thermostat input
PF1104FM-M	94025	240	DPST	40A	7.5HP @ 240V	Fireman Switch & Accepts PFPT thermostat input
✦ PFPT	94028	120/240	-	-	-	Thermostat accessory

\*PFPT



**NOTE:** "✦" = Indicates Freeze Protection.

# PEW100 SERIES

## SWIMMING POOL TIMERS, 7 DAY DIGITAL CONTROL



**QUICK INSTALL/RELEASE LEVER:** For easy installation and removal when installing into pool panels.

**LOAD INDICATOR LAMP**

**LARGE LCD DISPLAY**

**LARGE "MANUAL" BUTTON:** 3 operating modes available: OFF/ON/AUTO. Using the OFF mode, the pool can be closed down without disrupting the time settings.

**POWER OUTAGE BACKUP:** Battery retains time and schedule.

**7 DAY PROGRAMMING ONE MINUTE INTERVAL:** Allows for the control of various electrical equipment on a 7 day schedule. 15 schedule weekly programs.

**THERMOSTAT:** PFPEW models include built in Freeze Protection. No extra wiring. Thermostat turns on load at user settable level between 33°F and 42°F. Moving water prevents costly freeze damage.

**ACCESSORY CONTACT:** PFEW models include extra contact to accept PFPT Freeze Protection Accessory. Thermostat turns ON load at user settable level between 33°F and 42°F. Moving water prevents costly freeze damage.

**TIMER INTERLOCK:** Makes one timer dependant on operation of another timer.



CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	CONTACTS	RESISTIVE/INDUCTIVE RATINGS	HP RATING	NOTES
PEW101-M	82432	120	DPST	40A	3 HP @ 120	
PFWEW101-M	94029	120	DPST	40A	3 HP @ 120	Accepts PFPT thermostat input
PFPEW1102-M	94031	240	DPST	40A	7.5HP @ 240V	Freeze protection included
PFPEW1103-M	94032	120/240 w/neutral	DPST	40A	3 HP @ 120V 7.5HP @ 240V	Freeze protection included
PEW104-M	82442	240	DPST	40A	7.5HP @ 240V	
PFWEW104-M	94030	240	DPST	40A	7.5HP @ 240V	Accepts PFPT thermostat input

**NOTE:** "❄️" = Indicates Freeze Protection.

# 1100 SERIES

## SAME ON/OFF TIMES EACH DAY

### SWIMMING POOL

### TIME SWITCHES



## APPLICATIONS



- Pool pumps
- Heaters
- Lighting

## SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277VAC, 60Hz (varies by model).

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

**OPERATING TEMPERATURE:** -40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:** 3 watt max.

**ENCLOSURE:** Lockable hasp. Type varies by model. See page 557 for dimensions and additional enclosure information.

## FEATURES

**SCHEDULING:** Minimum ON setting is 20 minutes with a minimum OFF setting of 75 minutes. Dial accommodates up to 12 pairs of trippers. One pair included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF automatic operation then resumes.

TYPE	VOLTAGE	CONTACT RATING
General Purpose	120-277VAC	40A
Resistive	120-277VAC	40A
Tungsten	120VAC	40A
Ballast	120-277VAC	20A
LED Driver*	120-277VAC	20A
Motor	120VAC 240VAC	2HP 5HP

277VAC Single Phase

\*UL only or cULus on B suffix units

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
1101	10011	120	SPST	Metal Indoor NEMA 1
1101BM-IAP*	10073	120	SPST	Mechanism and mounting plate
1104	10014	208-277	DPST	Metal Indoor NEMA 1
1104B-P*	10070	208-277	DPST	Polycarbonate Indoor/Outdoor NEMA 3R
1104B-O*	10075	208-277	DPST	Metal Indoor/Outdoor NEMA 3
1104BM-IAP*	10074	240	DPST	Mechanism and mounting plate
1101FM-N	10043	120	SPST	Noryl® Indoor/Outdoor NEMA 3R with fireman switch
1104FM-N	10044	208-277	DPST	Noryl® Indoor/Outdoor NEMA 3R with fireman switch
1101FM-M	10043	120	SPST	Mechanism with fireman switch
1104FM-M	10044	208-277	DPST	Mechanism with fireman switch
1101D	10028	120	Two 1101 SPST each	Metal Indoor/Outdoor NEMA 3R
1104D	10029	208-277	Two 1104 DPST each	Metal Indoor/Outdoor NEMA 3R
1104DF	10032	208-277	One 1104 One 1104FM	Metal Indoor/Outdoor NEMA 3R
Replacement Trippers				Order #P47 for a pair of ON/OFF trippers Order #PF48 for a pair of ON/OFF trippers for 1100FM series
Replacement Motor				#101 (120V) & #201 (208-277V)

\* B suffix units cULus cULus

# POOL & SPA JUNCTION BOXES

JPB75175



## APPLICATIONS



- For installation of underwater pool lights or low voltage connections.

## FEATURES

- Durable PVC molded case
- INTERIOR & EXTERIOR bonding
- Flexibility for conduit sizing
- Built-in strain relief cord clamps
- Line or low voltage wiring
- Complete compliance with UL Standard 1241

CATALOG NO.	UPC CODE	DESCRIPTIONS	CONDUIT HUBS
JBP75175	95457	Two Light Junction Box	3/4" / 1/2" / 1"
JBP57510	95485	Four Light Junction Box	1/2" / 3/4" / 3/4" / 1" / 1"



# DPC201 SERIES

## DIGITAL TWO-SPEED PUMP TIMER



### APPLICATIONS



- Swimming pools with two-speed pump motors

### FEATURES

**PUMP PROTECTION:** Unit always starts on HIGH with 5 minute countdown before switching to low.

**SCHEDULING:** Up to 3 HIGH/LOW/OFF cycles repeat each day. Minimum setting 5 minute.

**MANUAL OVERRIDE:** Hold OFF until midnight then follows the next regularly scheduled HIGH/LOW/OFF operation.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted)

**LEAP YEAR:** Automatic Compensation

**CLOCK FORMAT:** AM/PM

**POWER OUTAGE BACKUP:** Permanent schedule retention. Super capacitor provides 4 days of real time backup.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50-60Hz	OUTPUT CONTACTS
DPC201	82457	120-277	SPST

LOAD TYPE	RATINGS	
	120VAC	208-277VAC
Motor	1HP	1 1/2 HP@208VAC 2 HP@240-277VAC
Resistive	40A	40A
Inductive	40A	40A
Ballast	30A	20A
Tungsten	15A	
Pilot Duty	720VA	720VA

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120-277VAC, 50/60Hz (automatic detection)

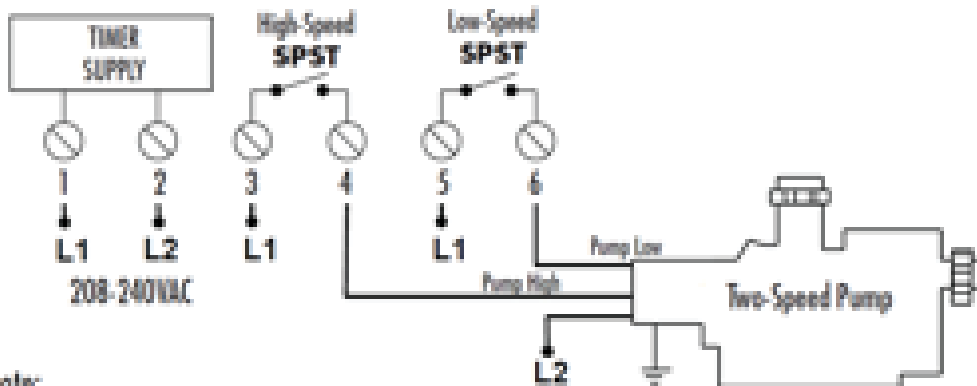
**TERMINAL RANGE:** #8 - #16AWG.

**OPERATING TEMPERATURE:**

-40° to +149°F (-40° to +65°C)

**POWER CONSUMPTION:** 6VA max.

**ENCLOSURE:** Indoor/Outdoor NEMA 3 Metal with locking hasp. See page 557 for dimensions and additional enclosure information.



**Note:**

A) Power must be supplied to each terminal marked L1

B) For 120VAC motors use Neutral in place of L2

# ENCLOSURES

**STANDARD FOR MODELS**

1101	7120	EW101B-Y
1102	7122	EW103B-Y
1103	8001	
1104	8004	
1101FM	8061	
1104FM	8121	
7100	8301	
7102	8601	
7200	8602	
7202	TU40-Y	
1101-7	EW201-Y	
WH2B	EW120B-Y	

**METAL INDOOR NEMA 1 ENCLOSURE #68229**

**STANDARD FOR MODELS**

TZ220L-0	TZ300L-0
TZ300L-0	T920L-0
T930L-0	W300-0

**METAL INDOOR/OUTDOOR MODEL #9006**

**STANDARD FOR MODELS**

TZ220L	TW220L
TZ300L	TW300L
W300	T920L
W302	T930L
W300L	TW222L
W302L	TW302L

**METAL INDOOR NEMA 1 ENCLOSURE #63016-1**

#62158 "E" DOOR

T920L-E T930L-E  
TW220L-E

**STANDARD FOR MODELS**

7220	1847AZL	DGM100A-Y
7222	8007	DGU100A-Y
7200L	8007L	DGUM100A-Y
7202L	8007V	LC200
7120L	8007U	
1847A	8007VL	
1848A	8008	
1847AZ	8008L	
1847AL	LDS-A	
DG100A-Y	LDSH-A	

**METAL INDOOR NEMA 1 ENCLOSURE #63100-6**

**STANDARD FOR MODELS**

DLC400BP
----------

**DLC400BP**

**STANDARD FOR MODELS**

1101NC	DGLC100A-NC
1103NC	DGLC200A-NC
1104NC	
8001-NC	

**NORYL® & LEXAN® INDOOR/OUTDOOR NEMA 3R MODEL #9000NC**

**STANDARD FOR MODELS**

7200Z, ZL	
7202Z, ZL	
7120Z, ZL	
7122Z, ZL	
DG Series	DZS Series
8001-N	DTS Series
8001U-N	DW Series
SMC-3D	DWZ Series
DZM Series	

**NORYL® INDOOR/OUTDOOR NEMA 3R MODEL #9000N**

**STANDARD FOR MODELS**

W100	W220L
W200	W222L
W202	1847AW
W120	1847AWL
W220	W400B
W222	W402B
	W400BL

**METAL INDOOR NEMA 1 ENCLOSURE #70100**

**MODELS**

TU40	DTU40
1101B-P	E101PB
1103B-P	E Series
1104B-P	EW Series
EH20C	EWZ Series

**PLASTIC INDOOR/OUTDOOR NEMA 3R #9000P**

**STANDARD FOR MODELS**

1101D	1101DF
1114D	1114DF
1104D	1104DF

**METAL DUPLEX INDOOR/OUTDOOR MODEL #9004L**

**MODELS**

EW103B-C	EW120B-C
----------	----------

**PLASTIC INDOOR/OUTDOOR NEMA 3R WITH CLEAR COVER**

NEMA 1 ENCLOSURE STANDARD FOR MODELS  
DTWH40

**STANDARD FOR MODELS**

7300, L, Z, ZL	8001-0
7302, L, Z, ZL	8001U-0
8007U-0	8007-0
DZS100BP-0	DZS200BP-0
DZS200BP	DW200B-0
DZM200BP-0	5401A

**METAL INDOOR/OUTDOOR NEMA 3 MODEL 9000A - SUFFIX "O"**

**STANDARD FOR MODELS**

1101-0	1104B-0
DPC201	7200-0
1103-0	7202-0

**METAL INDOOR/OUTDOOR MODEL 9000B - SUFFIX "O"**

**MODELS**

LC200M
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**LC200M MOUNTING WITH BRACKET**

## MODELS

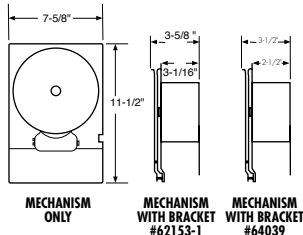
## MECHANISM & MOUNTING BRACKET #62153-1

Use Bracket #64039

W100 W120  
W200 W220  
W202 W222

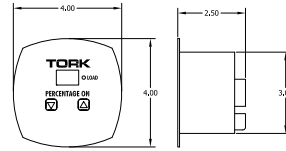
Use Bracket #62153-1

W300 W302



## PCT15M

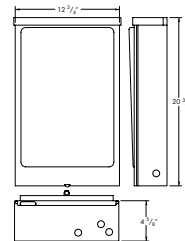
PCT15M



## MODELS

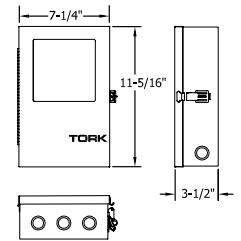
## 5441A ENCLOSURE

5441A



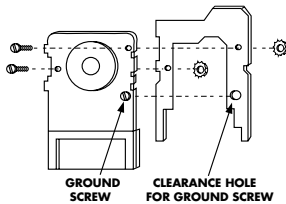
## ELC74 ENCLOSURE

ELC74



## IAP BRACKET INTERMATIC ADAPTER PLATE

1101BM-IAP 7200  
1104BM-IAP 7202  
1102 7120  
1103 7122  
7100 E Series  
7102 EW Series  
EWZ Series

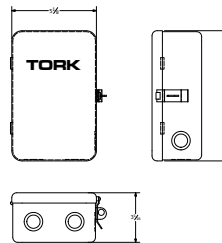


## MODELS

## METAL INDOOR

SA300

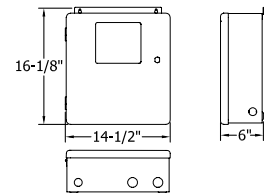
SA306



## ELC78 & ELC712 ENCLOSURE

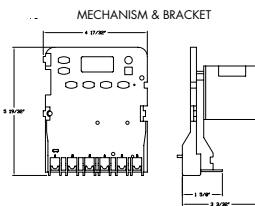
ELC78

ELC712



## E/EW/EWZ SERIES

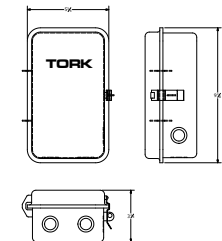
EWZ101-MB  
EWZ103-MB  
EWZ120-MB  
EWZ201-MB



## MODELS

## METAL INDOOR

SA400



## EWJT & E500T SERIES ENCLOSURE

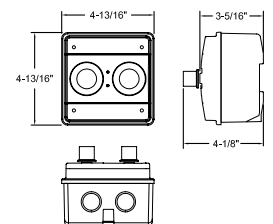
EJWT

E500T

E501T

E502T

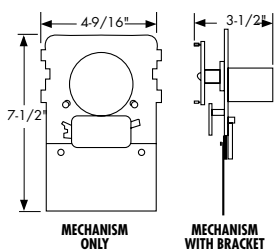
ACT30MA



## MODELS

## MECHANISM & MOUNTING BRACKET #65447

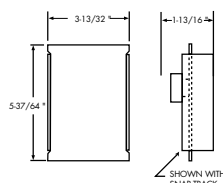
1101-M 1102-M  
1103-M 1104-M  
7000 Series 1847A, Z  
1848A 8001-LC/WB  
8601 8121  
8602 8061  
8301



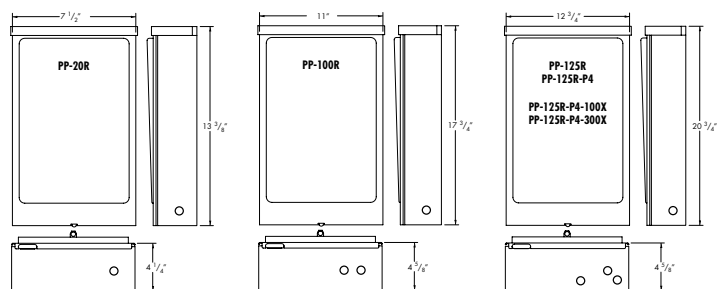
## MODELS

## LDS SERIES MOUNTING WITH BRACKET

LDS LDSH



## POOL PANEL SERIES



# ALPHANUMERIC INDEX

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
0T – 1000T	13	2002	406	5231	413
0TC – 6TC-1	39	2005A	411	5237	413
1012 – 1042	133	2005B	412	5237-UL	414
1101	423, 553	2006	406	5401A	488
1101-7	423	2007A	411	5403A	410
1101BM-IAP	423, 553	2007B	412	5404A	410
1101B-P	423	2008B	412	5404-3A	410
1101D	553	2018	406	5441A	488
1101FM-M	553	2021	407	5500	416
1101FM-N	553	2022	407	5500-OC	416
1101-NC	423	2024 – 2042	135	5737TM	415
1101-O	423	2101	403	5737TZ	415
1102B	423	2104	403	601A	527
1103	423	2107	403	602A	527
1103B-P	423	2115	404	611D	528
1103M	423	2116	404	621D	528
1103-NC	423	2117	404	631D	528
1103-O	423	2223	416	640-PM	323
1104	423, 553	2224	416	652A	527
1104BM-IAP	423, 553	2421	416	652B	527
1104BM-MB	423	300T-2 – 800T-4	19	654A	528
1104B-O	423, 553	350LL2 – 8-1000LL12	29	701A	514
1104B-P	423, 553	36175 – 481750	325	701AA	520
1104D	553	3000	408	705-16 – 1150-20	314
1104DF	553	3002	408	711A	514
1104FM-M	553	3006	408	750P – 1450P	323
1104FM-N	553	3010	408	7100	425–426
1104-NC	423	4-250L4 – 4-1000L4	17	7102	425–426
1847A	433–434	401A	523	7120	425–426
1847AL	433–434	402A	523	7120L	425–426
1847AW	433–434	403A	523	7120Z	425–427
1847AWL	433–434	405A	523	7120ZL	425–427
1847AZ	433–434	418 – 60175	319–320	7122	425–426
1847AZL	433–434	418-4 – 1450-5	327–328	7122ZL	425–427
1848A	433–434	418-ID – 818H-ID	324	7200L	425–426
2/0–14	129	418-SB – 14120-SB	335	7200-O	425–426
2/0TP – 2-600TP	23	418X – 14500X	319–320	7200	425–426
2-14 – 4-14	129	455D	525	7200Z	427–428
2-210T≠2-1000T	13	457Z	525	7200ZL	427–428
2-350L4 – 8-350L8	31	4180 – 601750	321	7202	425–426
2-350T2 – 8-350T4	31	530MH – 141200MH	333	7202L	425–426
2C-14, 4C-14	129	5001M	409	7202-O	425–426
2SR – 750SR	21	5004M	409	7202Z	427–428
200-3-2	285	5007M	409	7202ZL	427–428
250L2 – 600L2	15	5008M	409	7220	425–426
2000	405	5021M	409	7220L	425–426
2000-2	405	5024M	409	7222	425–426
2001	406	5026M	409	7222L	425–426

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
7300	425-426	A506H	519	CAL	63
7300L	425-426	A506HHW	519	CB-11 - CB-120	132
7300Z	427-428	A506HW	519	CB	159
7300ZL	427-428	A512H	519	CBH	159
7302	425-426	A512HH	519	CCM	158
7302L	425-426	A512HHW	519	CCR	158
7302Z	427-428	A512HW	519	CD	156
7302ZL	427-428	A515M	519	CDP	104
73866	416	A515MA	519	CG	393
75(000)CW, CQ	300	A515MH	519	CN	131
76(000)PS	301-303	A515MHW	519	COS-ADP	498-501, 503
76(000)PW	301-302	A515MW	519	COS-L	499
77(000)RQ	297-298	A530M	519	COS-L2T	498
77(000)RW	299	A530MA	519	COS-LU	500
78(000)TQ	304-306	A530MH	519	COS-M	501
78(000)TS	304-307	A530MHW	519	CPS-L	503
78(000)TW	304	A530MW	519	CSP	104
79(000)LW	308-310	A560M	519	CT	102
79(000)LQ	309	A560MH	519	CTH	103
79(000)MS	299-300, 307	A560MHW	519	CTP	331
79(000)MSR	307	A560MW	519	D1060LA	518
850-R	326	ACT30MA	484	D1060M	518
8001	429	ADJCC	342	D1060MW	518
8001-LC/WB	429	AL	49	D1082	154
8001-N	429	AL (C.Blok), AM, AS	115-120	D212H	518
8001-NC	429	AL-N	51	D212HA	518
8001-O	429	APS	108	D212HW	518
8001U	429	ASC	53	DBL	157
8001U-N	429	B	271	DE	41
8001U-O	429	BKM	383, 385	DFR	293
8004	429	BKS	382, 384	DG100A	459-460
8007	429	BS400T, T2	25	DG100A-Y	459-460
8007L	429	BT	356	DG180A	479-480
8007-O	429	BTP	23	DG200A	459-460
8007U	429	BY	157	DG280A	479-480
8007U-O	429	C	267	DG280A-24	479-480
8007V	429	C-8 - C-750	87	DGLC100A-NC	471-472
8007VL	429	C2 - C9	59	DGLC200A-NC	471-472
8008	429	C412H	520	DGM100A	459-460
8008L	429	C460M	520	DGM100A-Y	459-460
8061	431	C502H	520	DGS100A	479-480
8121	431	C506H	520	DGS100A-12	479-480
8301	431	C512H	520	DGS100A-24	479-480
8601	431	C512HH	520	DGU100A-Y	471-472
90058-1	489	C515M	520	DGUM100A	471-472
A502H	519	C530M	520	DGUM100A-Y	471-472
A502HHW	519	C560M	520	DIN100B	485-486
A502HW	519	C560MH	520	DIN200B	485-486

# ALPHANUMERIC INDEX

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
DLC400BP	475-476	ESB2	310	FLLP	378
DMT	285	ESGHS	218	FLM	379
DPC201	555-556	ESGS	215	FLPTM	378
DRD, DRE, DRF, DRJ, DRT	126	ESGTS	216	FQC	122
DS	168	ESSLK	217	FS	255
DSS	355	ESUF	214	FS-136	359
DTS100B	463-464	ET-CP	263-264	FS-814	359
DTS200B	463-464	EW101B	455-456	FSIC	359
DTS400B	463-464	EW101B-Y	455-456	FSP	359
DTU40	447-448	EW103B	455-456	FSPP	359
DTWH40	447-448	EW103B-C	455-456	FTBFP	125
DW200B	461-462	EW103B-Y	455-456	FTH	338
DW200B-0	461-462	EW120B	455-456	FTS	159
DWZ100B	461-462	EW120B-C	455-456	FW	166
DZM200BP	467-468	EW120B-Y	455-456	G-(1)-S-BS	237
DZM200BP-0	467-468	EW201B	455-456	G-(1)-S-DB	237
DZS100BP	465-466	EW201B-Y	455-456	G-(1)-S-DBR	239
DZS100BP-0	465-466	EWDT	315	G-1 - G-66	240-242
DZS200BP	465-466	EWEF	316	G-140DB	238
DZS200BP-12	465-466	EWFT	316	G-1-S - G-6-S	240
DZS200BP-24	465-466	EWG	314	G-20DB	238
DZS200BP-0	465-466	EWGC	317	G-3-BS	239
DZS400BP	465-466	EWHR	317	G-79 - G-90	244
DZS400BP-0	465-466	EWMT	317	GBA	249
E101B	453-454	EWP	313	GBC	249
E101PB	453-454	EWPP	314	GBIAL, GBIBZ	248
E103B	453-454	EWRT	315	GC	27
E120B	453-454	EWSR	316	GCA	241
E201B	453-454	EWWH	315	GGC	256
E500T	481-482	EWZ101	457-458	GH	245
E501T	481-482	EWZ101-MB	457-458	GHM	245
E502T	481-482	EWZ103	457-458	GL	79-82
EC	47	EWZ103-MB	457-458	GLA	25
EEL	387	EWZ120	457-458	GL-B	89
EG	243	EWZ120-MB	457-458	GLC	235-236
EH20C	449	EWZ201	457-458	GLN	99
EJWT	481-482	EWZ201-MB	457-458	GL-N	83
EL	390	EXL	387	GL-NB	95
ELC712	473-474	F	295	GLN-X	101
ELC74	473-474	FBP	389	GP	27
ELC78	473-474	FCT	289	GRC	246-247
EMFW	386, 392	FD	349	GSC, GSH	256
EMHD	389	FL	379	GSS	219
EMFW	386	FLBR	379	GST	394
EMTW	386, 388	FLHBR	380	GZ	246
EMWL	388	FLC	377	GZB	246
EPC-A	471	FLF	377	HB	166
EPC-LC	473	FLH	380	HHK	228

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
HLC	47	LCS115M	473, 504	PPF3	551
HMSS	222	LDS	477-478	PFPEW1102-M	552
HN	166	LDS-A	477-478	PFPEW1103-M	552
HOS-M	502	LDSH	477-478	PFPT	551
HPS30	489	LDSH-A	477-478	PFS	288
HSC	224	LK	139	PG	256
HTF	287	LN, LN-P	71-76	PHMN	380
HTGE	254	L-NB	93	PIWC	265
HTM	288	LT	35	PL	203-206
HTP	288	M	289	PLH	201
HTR	287	M-250, M-500	157	PM	285
HTS, HTSF	287	MP	350	PNC	340-341
HWHS	225	MPM	342	Polaris Custom	207
IF	291-292	N	105-106	Polaris Installation	209
IFL	293	N121D, N1240	153	PP-100R	549-550
IFS	291-292	NC	343	PP-125R	549-550
IM	289	NCH	343	PP-125R-P4	549-550
IPCS	113-114	NH-1, NH-2	160	PP-125R-P4-100X	549-550
IPL	181-184	NMS, NMT	137	PP-125R-P4-300X	549-550
IPLD	185-188	NSi-12	155	PT	55
IPLDH	191	N-SP	107	PT-12V - PT-22V	285
IPLDS	189	OD	157	PTC	285
IPLG	171	OJB	157	PTO	57
IPLM	193	OX	168	PTS	57
IPLMD	195-198	P	291	QF	381
IPLW	175	P-750	153	R	279-284
ISE	65	P1101-2M	551	RDC 1/0	157
ISPB	199	P1101FM-M	551	RLD	351
ISPC	199	P1101-M	551	ROS	220
ISR	179	P1104FM-M	551	RS200	393
ISW	173	P1104-M	551	RSK	221
IT	177	P47	553	S	273-278
ITB	127	PAA	45	S300	23
IT-BW	351	PAE	45	SA 382 - SA 582	255
ITG	171	PC-LC, PC-LSW	345-349	SA011	524
ITH	177	PCT15M	483	SA100	524
ITO	177	PEW101-M	552	SA10-400, SA500-1000	78
ITOG	171	PEW104-M	552	SA105	524
ITW	175	PF	285	SA110	524
J	122	PF1101FM-M	551	SA130	525
JBP57510	554	PF1101-M	551	SA134	525
JBP75175	554	PF1104FM-M	551	SA170	513
KA	154	PF1104-M	551	SA204	528
KC	154	PFEW101-M	551	SA205	527
L, L-P	67-70	PFEW104-M	552	SA210	530
L-B	91	PFP1102-M	551	SA215	529
LC200	469-470	PFP1103-M	551	SA220	530
LC200M	469-470	PFP2	551	SA230	526



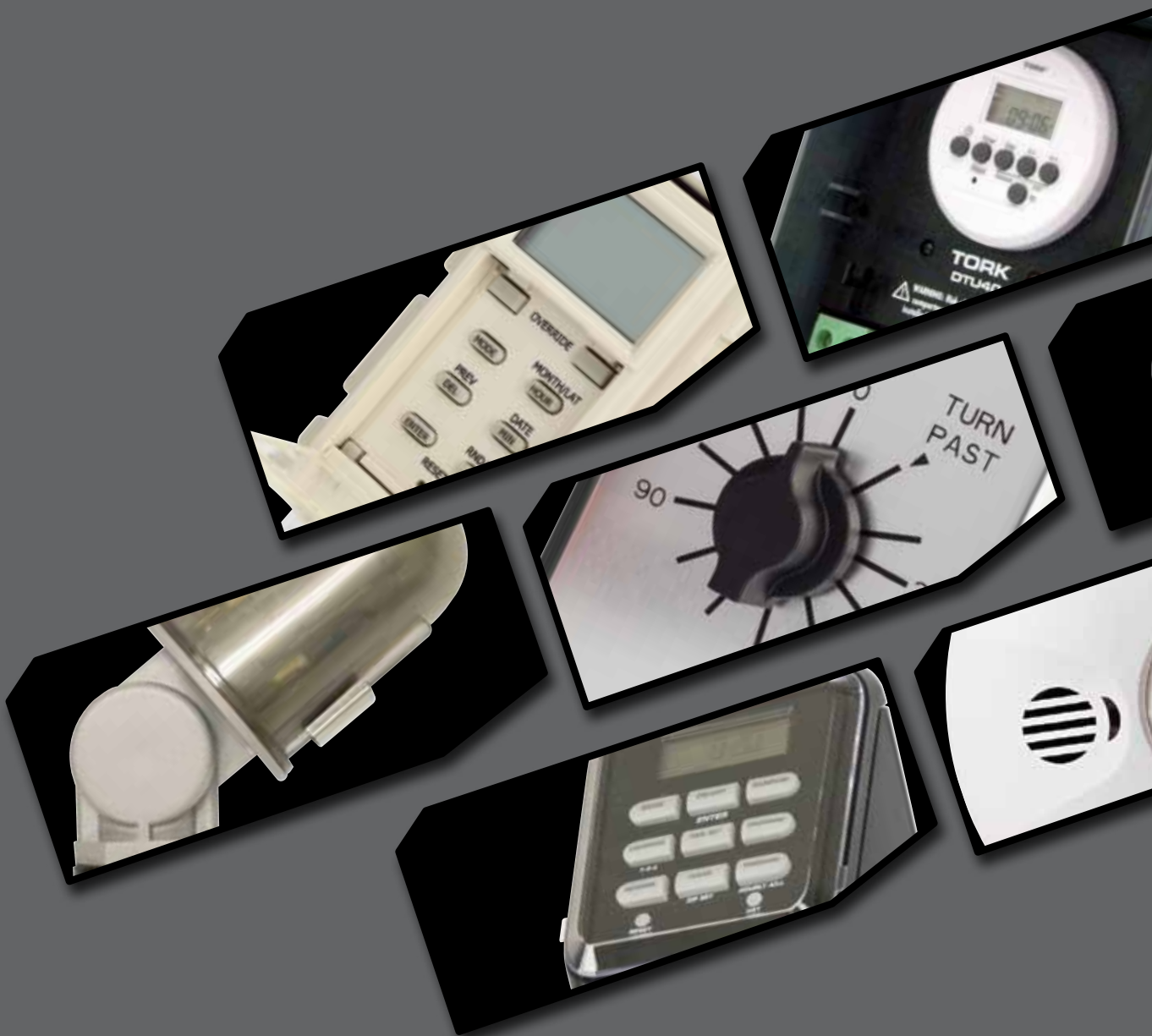
# ALPHANUMERIC INDEX

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
SA300	451–452	T920L-E	437–438	TA53AF1	542
SA306	451–452	T920L-O	437–438	TA53AG1	542
SA400	451–452	T930L	437–438	TA54AE1	542
SA500	526	T930L-E	437–438	TA54RE1	542
SB	267–268, 271	T930L-O	437–438	TA5508H-G1	533
SC	393	TA09	539	TA590	543
SC	85	TA1245Y-50	543	TA591	543
SC-B	97	TA1245Y-75	543	TA592	543
SF	293	TA131DAN5	542	TA598	543
SFTZ	35	TA131DAU1	542	TA599	543
SITG	171	TA131DRN5	542	TA60	539
SKAB, SKCB, SKDB	223	TA131DRU1	542	TA600	540
SKSS	222	TA152	539	TA601	540
SKUF	223	TA154	539	TA602	540
SL-N	77	TA1786B	540	TA603	540
SLUL	393	TA1786CB	540	TA603L	540
SLW	166	TA1880 B	538	TA606	543
SM	339	TA1880 G	538	TA61	539
SMC3D	487	TA1882 B	538	TA62	539
SOTZ	35	TA1882 G	538	TA620	540
SPM	109–110	TA1886 B	538	TA620B	540
SR	360	TA1886 G	538	TA620L	540
SRNY	355	TA1887 B	538	TA620LB	540
SRPE	355	TA1887 BK	538	TA631	540
SS13B	517	TA1887 G	538	TA631L	540
SS13F	517	TA215LB	540	TA635	540
SS20	517	TA236	539	TA640	543
SS20F	517	TA270A	536	TA656B	540
SS34 – SS66	167	TA315-1N5	536	TA666BK	540
SS403	515–516	TA340-10G5	534	TA67W	539
SS410	515–516	TA340-4G5	534	TA725	535
SS423	515–516	TA340-4N5	534	TA740	535
SS700Z	509–510	TA340-6G5	534	TA744	535
SS700ZA	509–510	TA340-6N5	535	TA874-N5	533
SS720A	511	TA434-10N5	534	TA874-N5R	533
SS720AA	511	TA434-4N5	534	TA875-1G1	534
SS720Z	512	TA434-6N5	534	TA875-G1	533
SS721Z	509–510	TA44	539	TA876-N5	533
SS721ZA	509–510	TA45	539	TA879	542
SS8100 – SS26250	326	TA46	539	TA880-N5	533
SSBW	167	TA47AN5	541	TA93-2AN5	541
SSCT	337	TA47AR5	541	TA93-2BN5	541
SSFW	167	TA47RN5	541	TA93-2CN5	541
SSHN	167	TA502	539	TA93-2RN5	541
SSSLW	167	TA502SW	544	TA94AN5	541
STL	33	TA52AN5	541	TA94BN5	541
SWL	318	TA52BN5	541	TA94RN5	541
T920L	437–438	TA52RN5	541	TA-ADA	544

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
TA-ADR	544	TW-220L-E	439-440	WH2B	432
TA-B-8332	537	TW-222L	439-440	WLD	350
TA-BBSF	544	TW-300L	439-440	WMB	352
TAC212WL	535	TW-302L	439-440	WMC	353
TAC212WS	535	TWBS	165	WOS-M	495
TA-D5B	544	TWHB	165	WOS-M2R	496
TA-D6A	544	TWHS	229-232	WOS-MN	495
TA-D7A	544	TWSB	165	WOS-MN2R	496
TA-D7C	544	TZ-220L	441-442	WOS-MN2T	497
TA-D7R	544	TZ-220L-0	441-442	WOS-SN	494
TA-D8R	544	TZ-222L	441-442	WP	371
TA-DOK	392	TZ-300L	441-442	WPC	372
TA-L10	544	TZ-300L-0	441-442	WPGC	371
TA-L10-1	544	TZ-302L	441-442	WPL	374
TA-L6-2	544	U-BG	157	WPLD	374
TA-L8	544	UC	250-251	WPCRKY	375
TA-MTS	534	UCF	394	WPLRKY	375
TA-SFPF	544	ULT, ULTD	356	WPMRKY	376
TA-SFPFR	544	USB-MMP	467	WPM	373
TA-WBBF	544	V	465, 467, 475	WRD	59-62
TB	121	V850-V7200	334	WWC, WWC-GR, WWC-N1, WWC-N2	261-262
TBO - TB4	124	VL	355		
TBS	123	VM	354		
TC	111	VRM	390		
TCP	112	VRS	391		
TES	162-164	VTB	393		
TFZ	324	VTW	393		
TGE	253	W	47		
THK	227	W100	435-436		
TL	43	W120	435-436		
TL-5-1, TL-6-1	160	W200	435-436		
TL-ADJ5	160	W202	435-436		
TL-CCIH	161	W220	435-436		
TL-CRP	161	W220L	435-436		
TL-DC	161	W222	435-436		
TL-ISS	161	W222L	435-436		
TL-LP, TL-LNP	161	W300	435-436		
TL-RCR	160	W300L	435-436		
TL-WS6	160	W300-0	435-436		
Tool and Die Charts	141-149	W302	435-436		
TOP	267	W302L	435-436		
TRP-24I	498-500, 504	W400B	435-436		
TRP-24B	503-504	W400BL	435-436		
TRT	337	W402B	435-436		
TS	37	WAGS	213		
TU40	421	WAHS	225, 231		
TU40-Y	421	WC	259-260		
TW-220L	439-440	WC-HB1, HB3	259-260		

# TORK®

**nsi**  
INDUSTRIES







< **Responsible Energy** is the mark of TORK's commitment to developing and manufacturing energy saving, environmentally friendly products.

## EXTERIOR LIGHTING ZONES

When ambient light levels drop at dusk, lighting is needed to provide safety and security. BUT: Does all lighting need to be on all night long? The proper selection of lighting controls is essential to ensuring that energy is only used when needed. An efficient lighting control design creates zones of light levels that can be varied by time at night.

### ZONE 1 - DUSK TO DAWN - All night Security Lighting

Photocontrols and Photosensors

The first zone gives a minimum light level where security is the primary need. Determine what lighting is necessary, such as building-mounted wallpacks and a portion of the parking lot lighting. These should be on from dusk to dawn, and are best controlled by a photosensor device.

### ZONE 2 - DUSK TO TIME OFF - Safety and Architectural Lighting

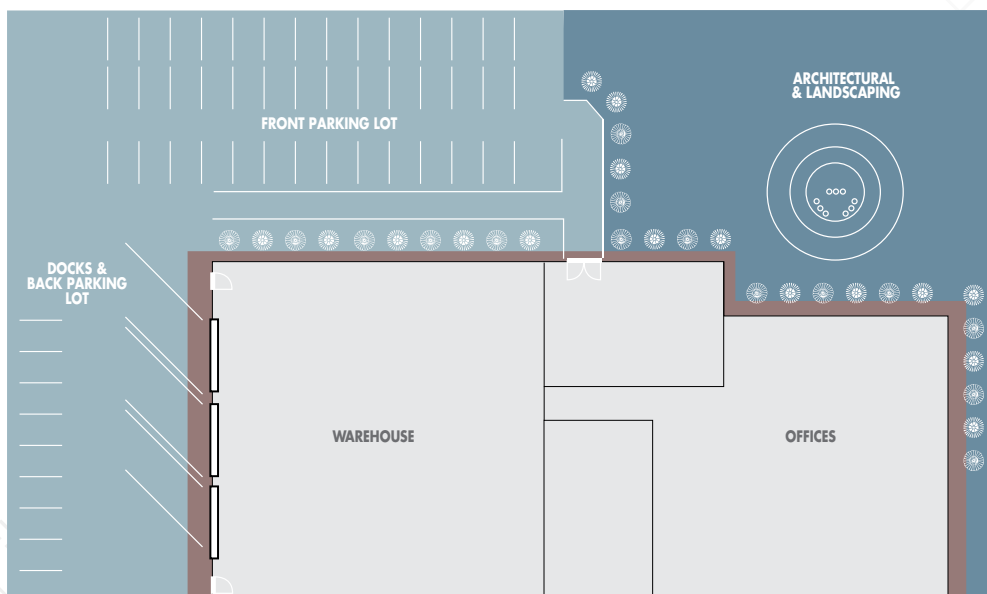
Photosensor/Time-based controls, Astronomic controls

The second zone provides a higher light level for safety, when people are normally present. Maximum levels for the parking lot and all walkway lighting are needed. These lights are best controlled by a combination photosensor and time-based device to allow shut-off during the night. The astronomic-calculated sunset/time control can also be useful.

### ZONE 3 - ARCHITECTURAL - Building Facade, Landscape and Signage


Astronomic controls

The third zone covers architectural lighting for building facade or landscape and signs. These are best controlled with an astronomic-calculated sunset/time control.





< Use the Quick Reference **Energy Code Guide** for approved products.



**Responsible Energy**  
Each of these marked products have features that decrease energy consumption and/or damage to the environment by one or more of the following:

- Timed control, Photocontrol and/or Astronomic control of on and off functions of lighting, fans, pumps and appliances
- Timed control of systems or multiple zones of lighting
- Photo or occupancy sensing control of lighting
- Supercapacitor backup, no batteries to replace or dispose.
- Helps meet CA Title 24, ASHRAE, IECC and other standards for responsible building products

## INTERIOR LIGHTING ZONES

The first way to save energy begins with eliminating lighting when it isn't needed. As with exterior lighting, an efficient design matches controls to the typical use of the area.

### ZONE A - SMALL SPACES - Meeting rooms, restrooms, storage spaces Occupancy sensors, interval timers

The first zone includes small spaces such as offices, restrooms and storage areas – places where people may not occupy the space continuously. Individual wall switch replacement provides low cost installation, with occupancy sensors and interval timers as the best solution. In the event that wall switches do not provide proper coverage for the occupancy sensor, ceiling mounted options are available.

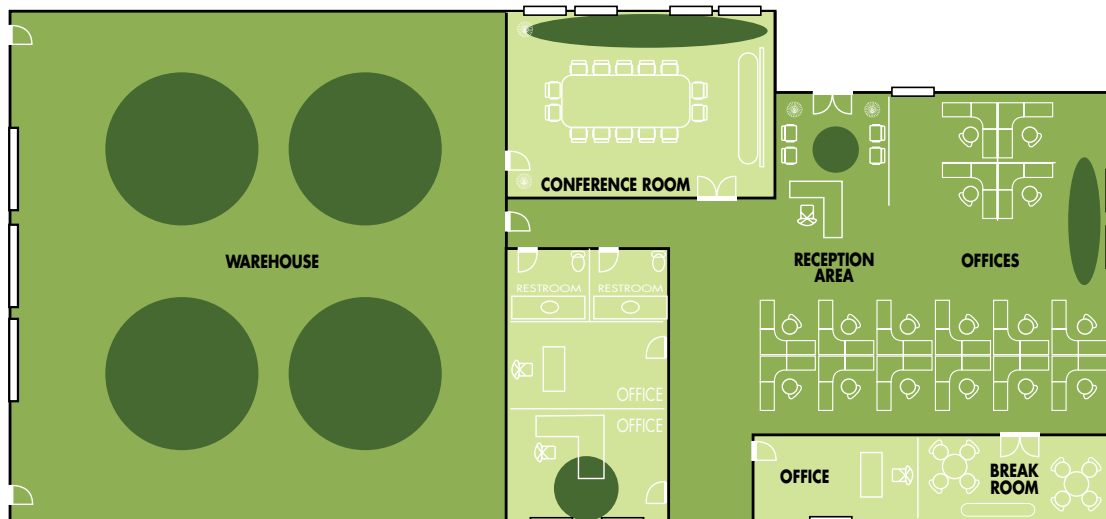
### ZONE B - LARGE SPACES - Open offices, public spaces, hallways, warehouses Time of Day with Override, Occupancy Sensors

The second zone is for common areas, such as hallways, reception spaces or large spaces for open offices. These places are commonly controlled with time-of-day devices and must include an after-hours override. A conveniently placed switch should provide a limited override with a maximum length of two or four hours\*, or occupancy sensors can be used to ensure that lights are shut off when people have left the building.

\* Energy codes vary on the stated maximum time, but shorter times can give more energy savings.

### ZONE C - DAYLIGHT HARVESTING - Large or small spaces with natural light Light Sensors, Light Sensors with Occupancy, Astronomic Timers

A third zone that uses daylighting control can be added to either of the first two zones. Light sensors can shut off a portion of the lighting when windows or skylights contribute sufficient natural light to the area. This “harvesting” of light is an excellent, green way to conserve energy.







# **TORK® PHOTOCONTROLS**



# QUICK REFERENCE GUIDE

	2100 SERIES	2110 SERIES	2000 SERIES	2001/2020 SERIES	3000 SERIES	5000M SERIES	2005A SERIES	2005B SERIES	5200 SERIES	5200-UL SERIES	5737 SERIES
<b>Page</b>	403	404	405	406/407	408	409	411	412	413	414	415
<b>Mounting</b>	Conduit	Conduit	Conduit	Conduit	Flush	Turn-Lock	Turn-Lock	Turn-Lock	Turn-Lock	Turn-Lock	Turn-Lock
<b>Adjustable Swivel</b>				Yes							
<b>Housing</b>	Die Cast Zinc	Die Cast Aluminum	Lexan®	Lexan®	Lexan®	UV Stabilized Plastic	UV Stabilized Plastic	UV Stabilized Plastic	UV Stabilized Plastic	UV Stabilized Plastic	UV Stabilized Plastic
<b>Turn ON Light Level</b>	1 - 5 fc	1 - 5 fc	1 - 5 fc	1 - 5 fc	1 - 5 fc	1 to 3 fc	1 to 3 fc	1.5 fc	1.5 fc	1.5 fc	5 fc
<b>Adjustable light level adjustment</b>	Yes	Yes	Yes	Yes (2001)							
<b>Turn OFF Ratio</b>	3:1	3:1	3:1	3:1	3:1	5:1	3:1	1.5:1	1.5:1	1.5:1	1.5:1
<b>Time Delay ON</b>	Yes	Yes	Yes	Yes	Yes	Yes	Instant	Instant	Instant	Instant	Instant
<b>Time Delay OFF</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Light Sensor</b>	CdS	CdS	CdS	CdS	CdS	CdS	CdS	Filtered Silicon Sensor	Silicon Sensor	Filtered Silicon Sensor	Silicon Sensor
<b>CFL Compatible</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>LED Driver Listed</b>										Yes	
<b>Surge Protection</b>						Yes	Yes	Yes	Yes	Yes	Yes
<b>Photo Timer</b>											Yes

## CHOICE OF PHOTOCELLS



Molded sealed IR filtered sensor resists effects of moisture and airborne contaminants. Available on turn-lock photocontrols. IR Filtering responds to the light spectrum near to that of a human eye.



Conformal coated CdS photocell resists effects of moisture and airborne contaminants. Available in 1/2" and 1" size on both wired and turn-lock photocontrols. Photocell responds to the light spectrum near to that of a human eye.

## TOUGH ENCLOSURES



All conduit and flush mounted models utilize die-cast zinc, die cast aluminum, or genuine Lexan® materials. All turn-lock models utilize high impact UV stabilized polypropylene, ABS, PBT or polycarbonate materials.

## TURN-LOCKS MEET ANSI C136.10



All models meet the current ANSI requirements for locking-type prongs and color coded voltage designations. Locking prongs are solid brass.

### Color-Coded Dome

Grey	105-130VAC
Maroon	208-277VAC
Blue	105-285VAC
Yellow	480VAC
Green	347VAC

## CHOICE OF MOUNTING ORIENTATION



Models are available in fixed position or 180° swivel.

## DEPENDABLE PERFORMANCE

Built-in time delay prevents false switching due to light from passing vehicles, lightning, etc.

## QUALITY ASSURANCE

**TORK®** Photocontrols are designed and manufactured with components which adhere to the highest industry standards. Trained personnel and in-process quality procedures ensure that every unit meets our strictest quality standards.

# 2100 SERIES

SPECIFICATION GRADE  
1/2" CONDUIT MOUNTING  
DIE CAST ZINC  
PHOTOCONTROL



## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc, Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a slide cover. No tools required.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1" diameter.

**CONTACTS:** Remain closed between dusk and dawn. (The unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

**POWER CONSUMPTION:** Averages under 1 watt.

**TEMPERATURE RANGE:** -40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

## APPLICATIONS



- Parking lot lighting
- Building perimeter lighting
- Outdoor signage

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

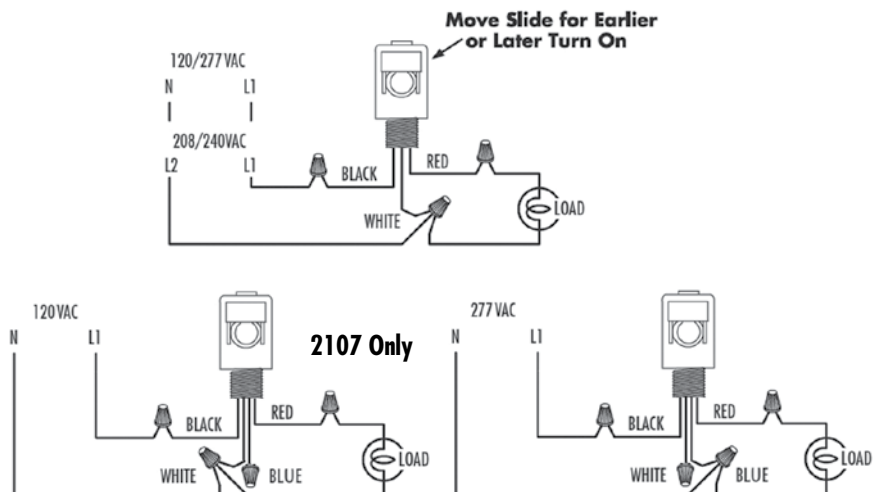
**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A.

**HOUSING:** Heavy Duty die cast zinc housing and base. Gasketed for maximum weather protection.

**ENERGY SAVINGS:** Works with screw base CFLs.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2101	60012	120	SPST	2000W	1800VA
2104	60013	208-277	SPST	2000W	1800VA
2107	60031	120/277	SPST	2000W	1800VA
73866	62020	Mounting Bracket			



# 2110 SERIES

SPECIFICATION GRADE  
1/2" CONDUIT MOUNTING  
DIE CAST ALUMINUM  
PHOTOCONTROL



## APPLICATIONS

- Parking lot lighting
- Building perimeter lighting
- Outdoor signage

2117

2115 & 2116

## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc, Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a slide cover. No tools required.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1/2" diameter. MODEL 2117 is 1" cell.

**CONTACTS:** Remain closed between dusk and dawn (the unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C. (2117 #10AWG red and black).

**POWER CONSUMPTION:**  
Averages under 1 watt.

**TEMPERATURE RANGE:**  
-40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**STANDARDS:** Meets ANSI/UL773A.

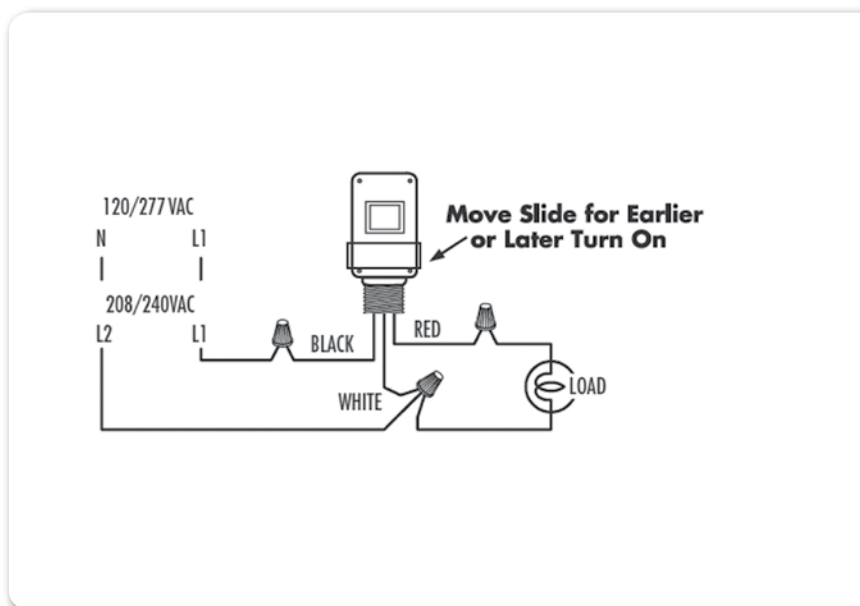
**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**HOUSING:** Die cast aluminum housing and base. Gasketed for weather protection.

**ENERGY SAVINGS:** Works with screw base CFLs.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2115	60032	120	SPST	2000W	1800VA
2116	60033	208-277	SPST	3470-4620W	2080-2770VA
2117*	60037	120	SPST	3000W	3000VA
73866	62020	Mounting Bracket			

\*Not UL or CSA rated.



# 2000 SERIES

1/2" CONDUIT MOUNTING  
FIXED POSITION, LEXAN® HOUSING  
WITH WEATHERPROOF SEALANT  
PHOTOCONTROL



## APPLICATIONS

- Flood lamp
- Patio lamp
- Decorative lighting

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A

**HOUSING:** All Lexan® enclosures are impact and vandal resistant. Translucent Lexan® Dome prolongs cell life by further screening out ultraviolet rays. Dome and base are ultrasonically welded for maximum strength.

**ENERGY SAVINGS:** Works with screw base CFLs.

## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc. Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a slide cover. No tools required.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1/2" diameter.

**CONTACTS:** Remain closed between dusk and dawn. (The unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

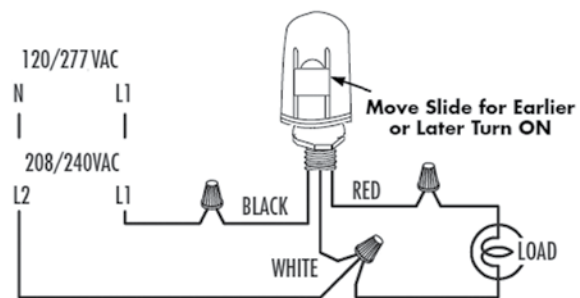
**POWER CONSUMPTION:**  
Averages under 1 watt.

**TEMPERATURE RANGE:**  
-40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2000	60017	120	SPST	2000W	1800VA
2000-2	60018	208-277	SPST	3470-4620W	2080-2770VA
73866	62020	Mounting Bracket			



# 2001 SERIES

## 1/2" CONDUIT MOUNTING

### 180° SWIVEL, LEXAN® HOUSING

### PHOTOCONTROL



## APPLICATIONS

- Flood lamp
- Patio lamp
- Decorative lighting

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A

**HOUSING:** All Lexan® enclosures are impact and vandal resistant. Translucent Lexan® Dome prolongs cell life by further screening out ultraviolet rays. Dome and base are ultrasonically welded for maximum strength.

**ENERGY SAVINGS:**  
Works with screw base CFLs.

## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc. Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a slide cover. No tools required.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1/2" diameter.

**CONTACTS:** Remain closed between dusk and dawn. (The unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

**POWER CONSUMPTION:**  
Averages under 1 watt.

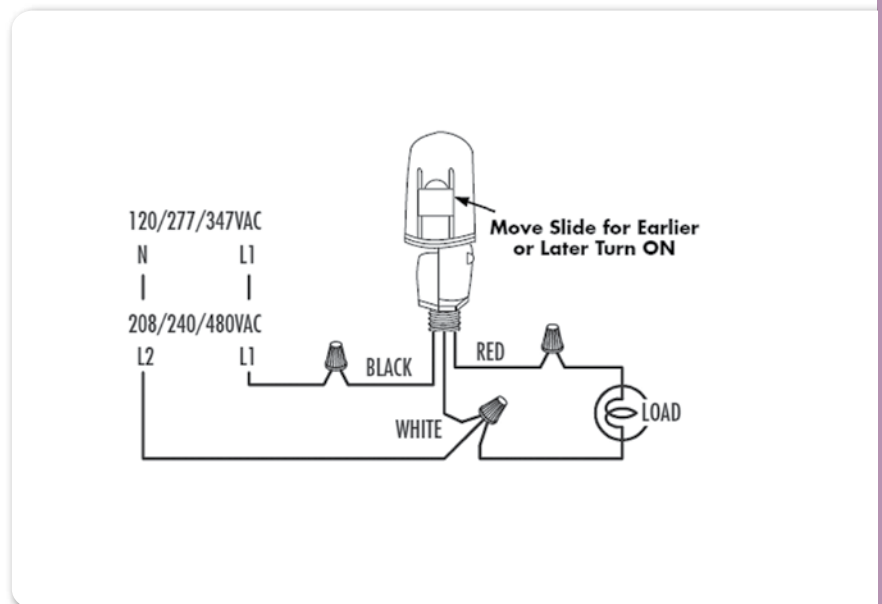
**TEMPERATURE RANGE:**  
-40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2001	60015	120	SPST	2000W	1800VA
2002	60016	208-277	SPST	3470-4620W	2080-2770VA
<b>NEW!</b> 2006*	60028	347	SPST	5760W	3470VA
<b>NEW!</b> 2018**	62021	480	SPST	7500W	4800VA
73866	62020	Mounting Bracket			

\*CSA certified only. \*\*Not UL or CSA rated.



# 2020 SERIES

## 1/2" CONDUIT MOUNTING

### 180° SWIVEL, LEXAN® HOUSING

### PHOTOCONTROL



## APPLICATIONS

- Flood and patio lamps
- Decorative lighting
- Ideal for applications where it is essential to aim the photocell in an exact direction to sense natural light but avoid artificial light.

## FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A

**HOUSING:** All Lexan® enclosures are impact and vandal resistant, cover and base are ultrasonically welded for maximum strength.

**ENERGY SAVINGS:** Works with screw base CFLs.

## SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc. Turn OFF is 3 to 15fc.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, epoxy conformal coated 1/2" diameter.

**CONTACTS:** Normally closed (the unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

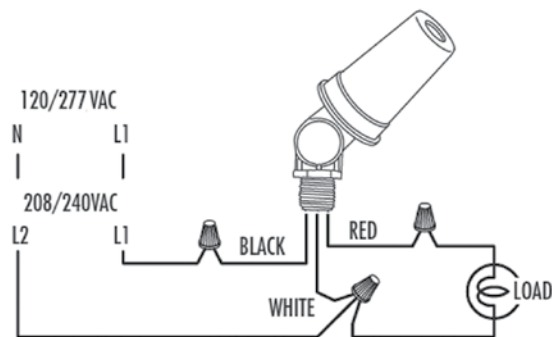
**POWER CONSUMPTION:** Averages under 1 watt.

**TEMPERATURE RANGE:** -40° to +140°F (-40° to +60°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
2021	60024	120	SPST	2000W	1800VA
2022	60025	208-277	SPST	3470-4620W	2080-2770VA
73866	62020	Mounting Bracket			



# 3000 SERIES

## FLUSH MOUNTING LEXAN® HOUSING PHOTOCONTROL



### APPLICATIONS

- Pole lanterns
- Lawn lighting
- Walkways

Flush Mounting  
Model 3010

### SPECIFICATIONS

**ON/OFF:** Turn ON is 1 to 5fc. Turn OFF is 3 to 15fc.

**TIME DELAY:** ON and OFF.

**CELL:** Cadmium sulphide, conformal coated 1/2" diameter.

**CONTACTS:** Normally closed (the unit fails in the ON position).

**LEAD WIRES:** Three color coded, minimum 9" wire leads, #16AWG, rated for 105°C.

**POWER CONSUMPTION:**  
Averages under 1 watt.

**TEMPERATURE RANGE:**  
-40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

### FEATURES

**SENSOR:** Conformal coated cadmium sulphide photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delay of up to two minutes to prevent false switching due to light from passing vehicles, lightning, etc.

**STANDARDS:** Meets ANSI/UL773A

**HOUSING & MOUNTING:** Control housing is weather-resistant molded Lexan® with ultrasonically welded seams.

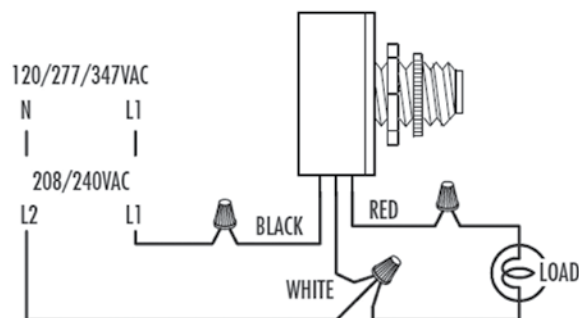
**MODEL 3000:** Flush mounting through .6875" hole in post lantern or lighting fixture, 3/8" NPT, stem 3/4" long. Gasket and nut supplied.

**MODEL 3010:** flush mounting into standard, raintight junction box. Includes aluminum plate and gasket to fit FS type outdoor junction box.

**ENERGY SAVINGS:** Works with screw base CFLs.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	SWITCH	RATING	
				TUNGSTEN	BALLAST
3000	60020	120	SPST	2000W	1800VA
3002	60019	208-277	SPST	3470-4620W	2080-2770VA
<b>NEW!</b> 3006*	60026	347	SPST	5760W	3470VA
3010	60021	120	SPST	2000W	1800VA

\*CSA certified only.





# 5000M SERIES

## DELAYED RESPONSE UTILITY GRADE MOV SURGE ARRESTOR PHOTOCONTROL



### APPLICATIONS

- For use on streets, highways and other luminaries equipped with locking type receptacles, where most stringent surge protection is needed.

### FEATURES

**SENSOR:** Conformal coated CdS photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**OPERATION:** Delayed response prevents false switching due to light from vehicles or lighting, etc.

**STANDARDS:** Meets UL773 and ANSI C136.10 including color designations. Also meets EEL NEMA standards.

**HOUSING:** Polycarbonate housing and window, UV stabilized for permanent color. Provides high impact performance, flammability resistance, and electrically safe operations.

**CONTACTS:** Bi-metal provides positive snap action switching, reducing bounce and prolonging contact life.

### SPECIFICATIONS

**ON/OFF:** Turn-ON is 1 to 3 fc. Turn-OFF to Turn-ON ratio is 5 max.

**TIME DELAY:** ON and OFF.

**CELL:** CdS, epoxy conformal coated 1/2" and 1" diameter models.

**SURGE ARRESTOR:** 380 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.

**LOCKING PRONGS:** Solid brass for maximum corrosion resistance and electrical conductivity.

**TEMPERATURE RANGE:** -40° to +140°F (-40° to +60°C).

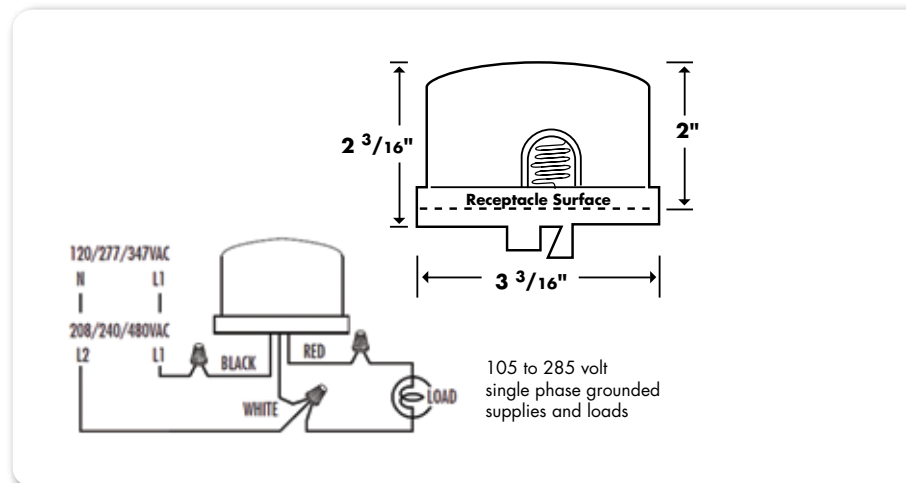
**FAIL MODE:** ON.

**WARRANTY:** 3 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	LIGHT SENSOR	RATING	
				TUNGSTEN	BALLAST
5001M	61012	105-130	1"	2000W	1800VA
5004M	61013	208-277	1"	3470-4620W	2080-2770VA
5007M	61014	105-130/208-285	1/2"	2000W 3470-4620W	1800VA 2080-2770VA
5008M*	61017	480	1"	7500W	4800VA
5021M	61015	105-130	1/2"	2000W	1800VA
5024M	61016	208-277	1/2"	3470-4620W	2080-2770VA
<b>NEW!</b> 5026M**	61045	347	1/2"	5760W	3470VA

\*Not UL listed or CSA certified.

\*\*CSA certified only. 



# 5400A SERIES CONTACTORS WITH TURN-LOCK PHOTOCONTROL



## SPECIFICATIONS

**RECEPTACLE:** 3-prong turn-lock meets the requirements of EET NEMA.

**POWER CONSUMPTION:**  
Maximum 3 watts during daylight.

## APPLICATIONS



- For street lighting. Controls all lighting loads in excess of the capacity of the photoelectric control contacts.

UL LISTED  
FOR LED

CAT. NO.	UPC CODE	PHOTOCONTROL INCLUDED	VOLTAGE (VAC) 60Hz	SWITCH
5403A	81012	2005B	120	DPST
5404A	81013	2007B	208-240	DPST
5404-3A	81014	2007B	277	DPST

## FEATURES

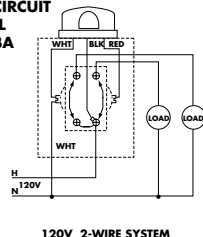
**OPERATION:** Delay up to two minutes to prevent false switching due to light from passing vehicles, lighting, etc. Photocontrol provides dusk to dawn control of lighting contactor for heavy duty switching.

**STANDARDS:** Meets UL773 and ANSI C136.10 for photocontrols.

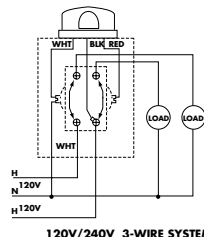
**HOUSING:** Outdoor NEMA Type 3R. Beige enamel finish. Two 1/2" - 3/4" combination KO in bottom.

TYPE	VOLTAGE (VAC)	CONTACT RATING PER POLE
Resistive	120-277	40A
Tungsten	120	30A
Ballast	120-277	40A
LED Driver	120-277	40A
Motor	120 240	3HP 7.5HP

120 VOLT CIRCUIT  
MODEL  
5403A

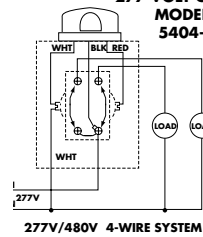


120V 2-WIRE SYSTEM



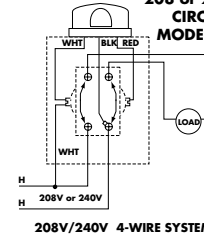
120V/240V 3-WIRE SYSTEM

277 VOLT CIRCUIT  
MODEL  
5404-3A

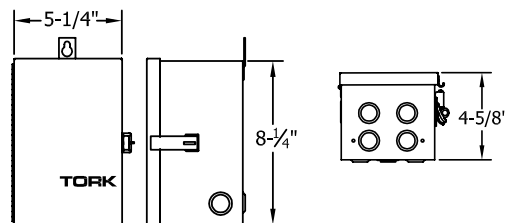


277V/480V 4-WIRE SYSTEM

208 or 240 VOLT  
CIRCUIT  
MODEL 5404A



208V/240V 4-WIRE SYSTEM



# 2005A SERIES

## INSTANT RESPONSE TURN-LOCK PHOTOCONTROL



### APPLICATIONS

- For state and county DOT & municipalities use on roadway and bridges. Also use for general commercial facilities.

### FEATURES

**SENSOR:** Conformal coated CdS photocell resists effects of moisture and airborne contaminants. Photocell responds to the light spectrum near to that of a human eye.

**STANDARDS:** Meets UL773 and ANSI C136.10 including color designations. Also meets EEL NEMA standards.

**HOUSING:** Polypropylene, UV stabilized, permanent color with UV resistant clear acrylic window. Provides high impact, flammability resistance and electrically safe operations.

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life.

### SPECIFICATIONS

**ON/OFF:** Turn-ON is 1.5 foot candle +/-0.5  
OFF/ON ratio is 1.5:1 average.

**TIME DELAY:** Instant ON/3-5 seconds OFF.

**CELL:** CdS, epoxy conformal coated 1/2" diameter.

**RELAY:** Rated life 6,000 operations

**SURGE ARRESTOR:** 360 joules MOV exceeds NEMA and ANSI requirements.

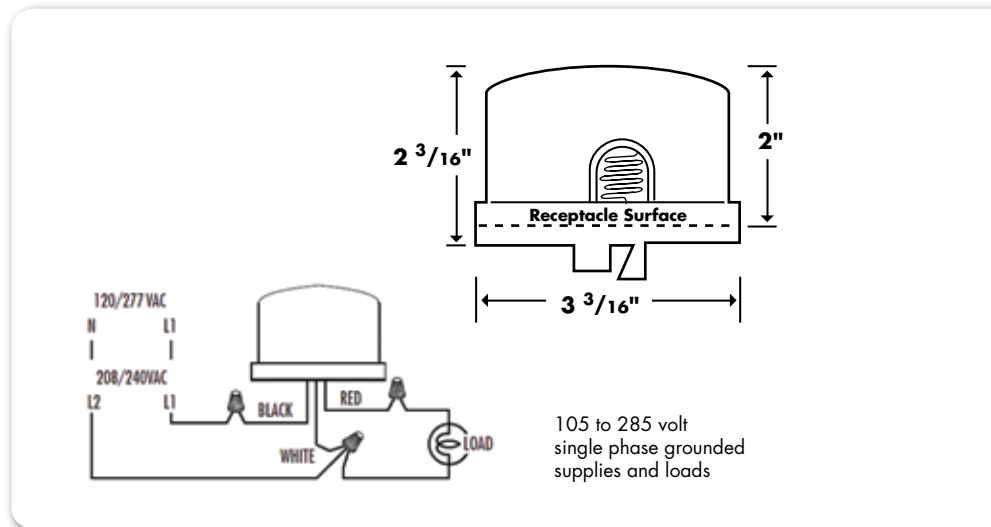
**LOCKING PRONGS:** Solid brass prongs for maximum corrosion resistance and electrical conductivity.

**TEMPERATURE RANGE:**  
-40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 3 years.

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	RATING	
				TUNGSTEN	BALLAST
2005A	62012	105-130	Grey	1000W	1800VA
2007A	62013	105-285	Blue	1000W	1800VA



# 2005B SERIES

## INSTANT RESPONSE TURN-LOCK PHOTOCONTROL



### SPECIFICATIONS

**ON/OFF:** Turn-ON is 1.5 foot candle +/-0.2 OFF/ON ratio is 1.5:1 average.

**TIME DELAY:** Instant ON/3-5 seconds OFF.

**CELL:** Molded sealed IR filtered sensor

**RELAY:** Rated life 6,000 operations

**SURGE ARRESTOR:** 360 joules MOV exceeds ANSI and NEMA requirements.

**LOCKING PRONGS:** Solid brass prongs for maximum corrosion resistance and electrical conductivity.

**TEMPERATURE RANGE:** -40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 4 years.

### APPLICATIONS



- For state and county DOT & municipalities use on roadway and bridges. Also use for general commercial facilities.

### FEATURES

**SENSOR:** Molded sealed IR filtered sensor resists effects of moisture and airborne contaminants. IR filter responds to the light spectrum near to that of a human eye.

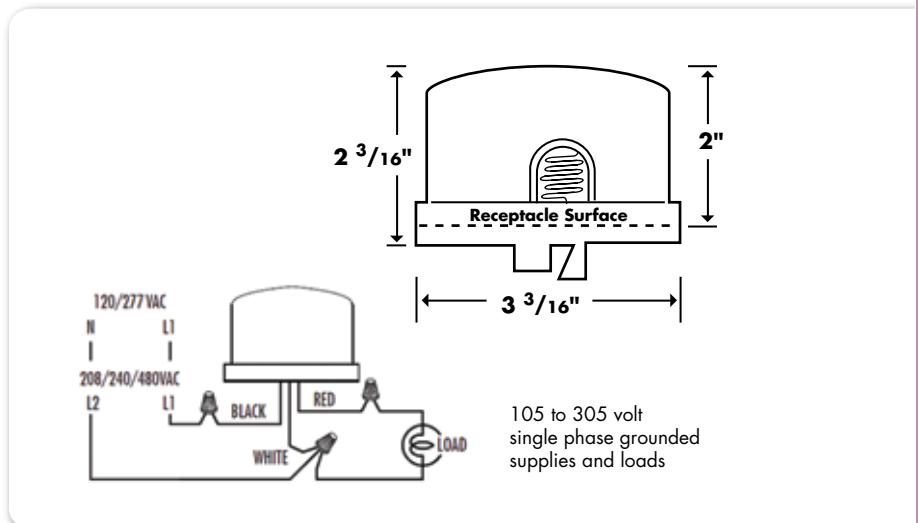
**STANDARDS:** Meets UL773 and ANSI C136.10 including color designations. Also meets EEL NEMA standards.

**HOUSING:** Polycarbonate housing and window, UV stabilized for permanent color. Polycarbonate provides high impact performance, flammability resistance, and electrically safe operations.

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety.

CAT.. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	RATING	
				TUNGSTEN	BALLAST
2005B	60015	105-130	Grey	1000W	1800VA
2007B	60016	105-305	Blue	1000W	1800VA
2008B*	62017	400-550	Yellow	1000W	1800VA

\*Not UL listed.



# 5200 SERIES

## UTILITY GRADE ELECTRONIC WITH FAIL ON MODE PHOTOCONTROL



### APPLICATIONS

- Designed meet local utility standards for street and highway lighting controls.

### FEATURES

**SENSOR:** Molded sealed silicon sensor resists effects of moisture and airborne contaminants.

**STANDARDS:** Meets ANSI C136 including color designations. Also meets EEI NEMA standards.

**HOUSING:** Polycarbonate housing and window, UV stabilized for permanent color. Polycarbonate provides high impact performance, flammability resistance, and electrically safe operations.

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety.

### SPECIFICATIONS

**ON/OFF:** Turn ON is 1.5 foot candle +/- 0.2 OFF/ON ratio is 1.5:1 average\*.

**TIME DELAY:** Instant ON/3-5 second OFF.

**CELL:** Molded sealed silicon sensor

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety.

**SURGE ARRESTOR:** 360 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.

**LOCKING PRONGS:** Solid brass for maximum corrosion resistance and electrical conductivity.

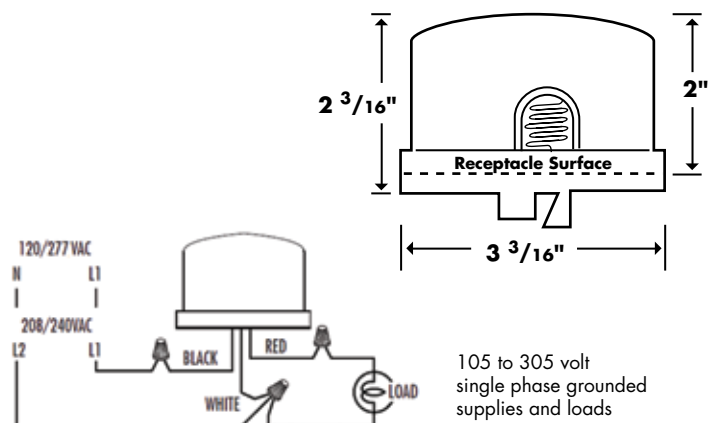
**CUSTOM:** Available for custom design to meet specific utility specification.

**TEMPERATURE RANGE:** -40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 5 years.

CAT.NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	RATING	
				TUNGSTEN	BALLAST
5231	78885	105-130	Grey	1000W	1800VA
5237	78886	105-305	Blue	1000W	1800VA



105 to 305 volt single phase grounded supplies and loads

# 5200-UL SERIES

## INSTANT RESPONSE TURN-LOCK PHOTOCONTROL



### APPLICATIONS



- Designed meet local utility standards for street and highway lighting controls.

### SPECIFICATIONS

**ON/OFF:** Turn ON is 1.5 foot candle +/- 0.2 OFF/ON ratio is 1.5:1 average.

**TIME DELAY:** Instant ON/3-5 second OFF.

**CELL:** Molded sealed IR filtered sensor

**RELAY:** Rated life 6,000 operations

**SURGE ARRESTOR:** 360 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.

**LOCKING PRONGS:** Solid brass for maximum corrosion resistance and electrical conductivity.

**CUSTOM:** Available for custom design to meet specific utility specification.

**TEMPERATURE RANGE:** -40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 6 years.

### FEATURES

**SENSOR:** Molded sealed IR filtered sensor resists effects of moisture and airborne contaminants. IR filter responds to the light spectrum near to that of a human eye.

**STANDARDS:** Meets UL773 and ANSI C136.10 including color designations. Also meets EEI NEMA standards.

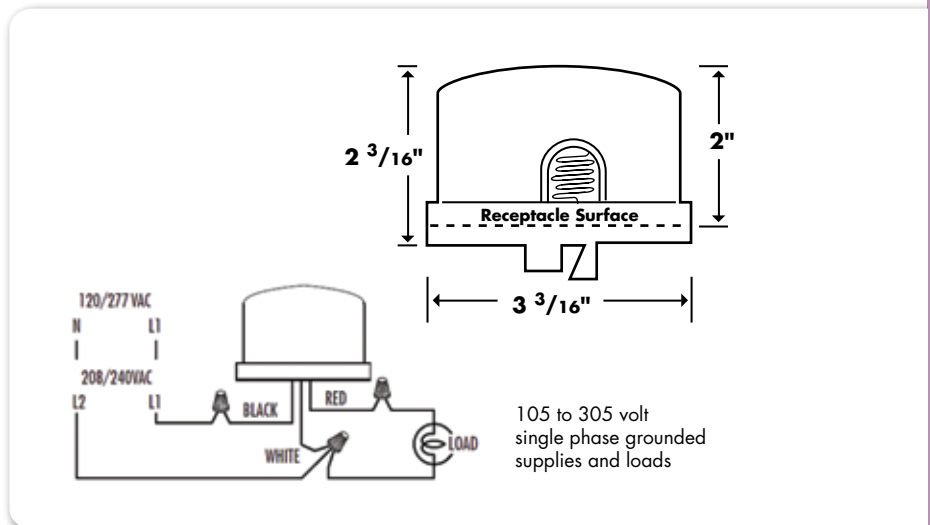
**HOUSING:** Polycarbonate housing and window, UV stabilized for permanent color. Polycarbonate provides high impact performance, flammability resistance, and electrically safe operations.

**ENERGY SAVINGS:** Listed for use with LED lamp drivers

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety.



CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	RATING		LED DRIVER
				TUNGSTEN	BALLAST	
5237-UL	78895	105-305	Blue	1000W	1800VA	1000W



# 5737 SERIES

ON AT DUSK, OFF AT MIDNIGHT  
ON EARLY MORNING,  
OFF AT DAWN  
PHOTO-TIMERS



## SPECIFICATIONS

**ON/OFF:** Turn ON at dusk is 5.0 foot candle +/- 0.5 OFF/ON ratio is 1.5:1 average.

**TIME DELAY:** Instant ON/3-5 seconds OFF.

**CELL:** Silicon photosensor

**SURGE ARRESTOR:** 360 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.

**5737TM HALF-NIGHT FUNCTION:** Allows user to adjust OFF time during the night. OFF time can be set for up to two hours before (for extra energy savings) or up to two hours after midnight. Use to stagger groups of lights to go OFF at different times during the night.

**5737TZ TWO FUNCTION:**

1) Standard: Set as a Dusk to Dawn photocontrol.

2) Half-night & Pre-Dawn: Turns on at Dusk. User adjusts OFF time for up to two hours before or after midnight. Then set countdown to Pre-dawn ON again 2 - 10 hours later. It always turns OFF at Dawn.

**LOCKING PRONGS:** Solid brass Prongs for maximum corrosion resistance and electrical conductivity.

**TEMPERATURE RANGE:**

-40° to +158°F (-40° to +70°C).

**FAIL MODE:** ON.

**WARRANTY:** 3 years.

## APPLICATIONS

- Offices
- Restaurant signage
- Billboards
- Landscape and yard lighting
- Ideal for situations when visible traffic is reduced – lights ON at dusk and OFF at 10pm or later, then on again for early morning illumination.

## FEATURES

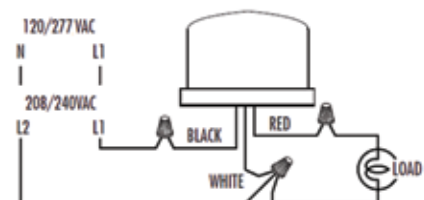
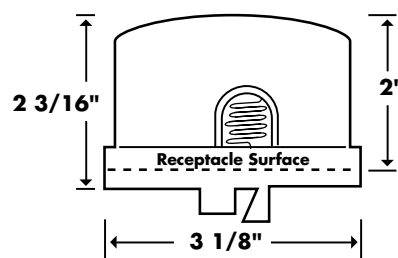
**OPERATION:** Microprocessor tracks the dusk and dawn times with the seasons and automatically determines midnight, NO PROGRAMMING REQUIRED. Automatically "re-learns" and resets after power outage, eliminating costly maintenance. DST correction built in.

**STANDARDS:** Meets ANSI C136.10 including color designations. Also meets EEL NEMA standards.

**HOUSING:** UV stabilized, ANSI color-coded polypropylene dome. UV stabilized, clear acrylic window. ABS base. Cross-linked, polypropylene gasket.

**CONTACTS:** DC relay has positive snap action switching, reducing bounce and prolonging contact life. Fail ON for safety

CAT. NO.	UPC CODE	VOLTAGE (VAC) 50-60Hz	COLOR	SWITCH	RATING	
					TUNGSTEN	BALLAST
5737TZ	62010	105-305	Blue	SPST	1000W	1800VA
5737TM	62009	105-305	Grey	SPST	1000W	1800VA



105-305 VAC  
single phase grounded supplies and loads

# PHOTOCONTROL ACCESSORIES FOR TURN-LOCK CONTROLS

## MOUNTING BRACKET

Utility mounting bracket for 1/2" threaded conduit photocontrols.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
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73866 62020 Mounting Bracket

## REPLACEMENT CAPS



5500 replaces photocontrol to change light fixture to always ON.  
5500-OC replaces photocontrol to change light fixture to always OFF.  
Durable materials and gasket provide longevity and weatherproof protection.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
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5500 Shorting cap  
480VAC max  
1800W Tungsten  
1800VA Ballast

5500-OC Open cap  
480VAC max  
(Black housing)

## RECEPTACLE



120-480V 50/60 Hz 15 amp maximum receptacle with color-coded 12" long, #14 leads, gasket and two mounting screws.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
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2223 61025 Receptacle with gasket

## RECEPTACLE



120-480V 50/60 Hz 15 amp maximum receptacle with color-coded 12" long, #14 leads, mounting bracket and one mounting screw.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
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2224 61026 Receptacle and mounting bracket

## RECEPTACLE



120-480V 50/60 Hz 15 amp maximum receptacle with color-coded 12" long, #14 leads, plastic housing, lock nut (with 1/2" NPT) and a mounting bracket.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION
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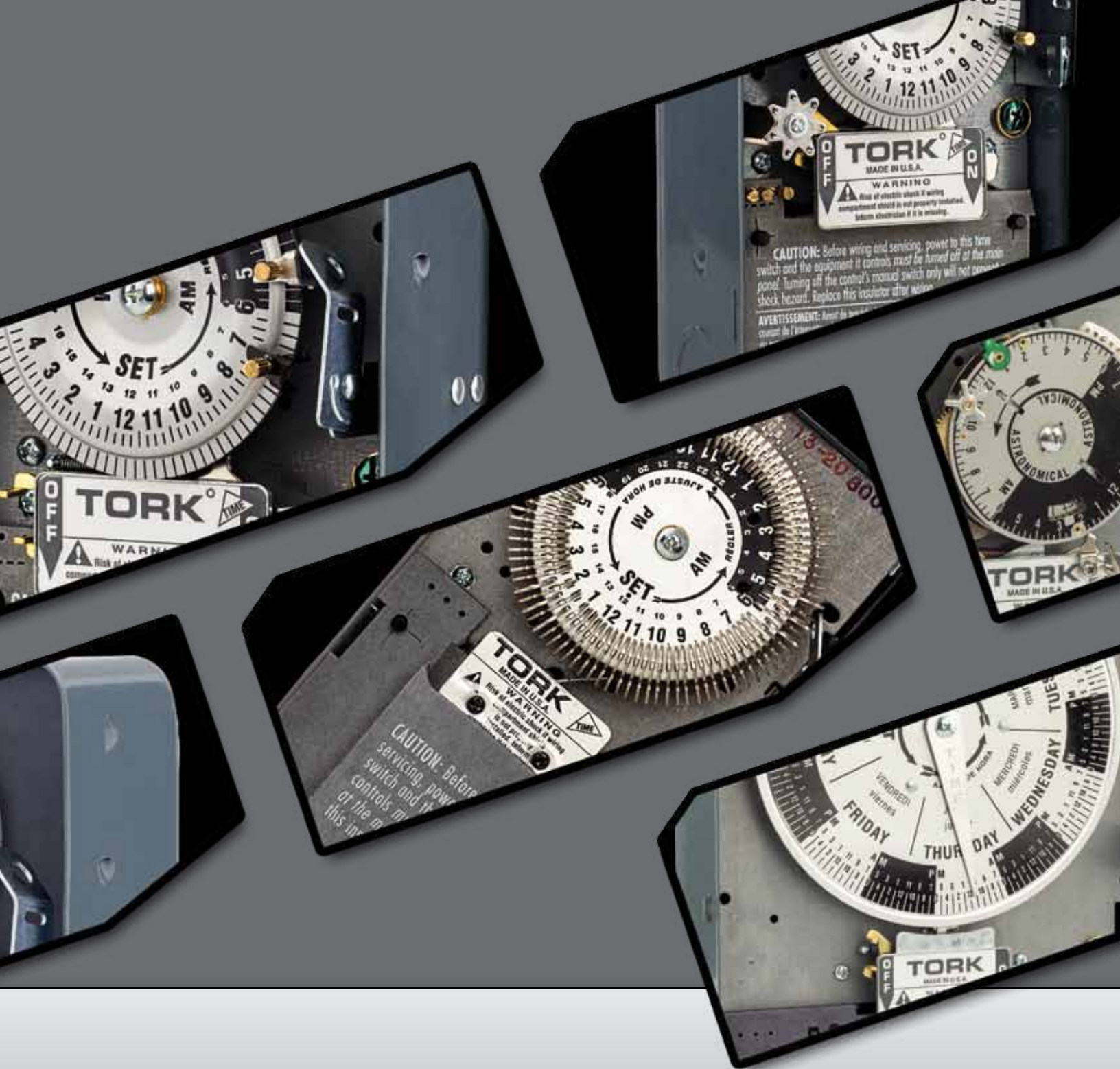
2421 61021 Receptacle with plastic housing and bracket

NSi offers many splicing options to complete the pole installation.  
See the splicing section pages 211- 232.












# TORK® ELECTROMECHANICAL TIME SWITCHES

# QUICK REFERENCE GUIDE

SERIES	PAGE NO.	CLOCK DIAL	MINIMUM SETTINGS (MINUTES)		SKIP A DAY	MANUAL OVERRIDE	SUNRISE/SUNSET	MAX ON & OFF EVENTS PER DAY	SWITCH TYPES					RATINGS (AMPS)	RESERVE POWER
			ON	OFF											
TU40	421	24 Hour	15	15		Permanent		48	SPST	DPST	SPDT	DPDT		40	
1100	423	24 Hour	20	75		Yes		12	SPST	DPST				40	
7000	425	24 Hour	20	75	Yes	Yes		12	SPST	DPST	SPDT	DPDT	3PST	40	Available
7000Z	427	24 Hour	20 or 40 Minute Offset		Yes	Yes		1	SPST	DPST	SPDT	DPDT	3PST	40	Available
TZ	441	24 Hour	20 or 40 Minute Offset		Yes	Permanent by circuit		1				DPDT	3PST	20	Standard
W	435	7 Day	60	120	Yes	Yes		2	SPST	DPST	SPDT	DPDT	3PST 4PST	40	Available
TW	439	7 Day	60	120	Yes	Permanent by circuit		2				DPDT	3PST	20	Standard
T900	437	7 Day	60	120	Yes	Permanent by circuit	Photo Control	2					2 SPDT 3 SPDT	20	Standard
1847A	433	24 Hour	20	75	Yes			12	SPDT, Momentary Contact					10	Available
1847AZ	433	24 Hour	20 or 40 Minute Offset		Yes	Yes		1	SPDT, Momentary Contact					10	Available
1847AW	433	7 Day	60	120	Yes	Yes		2	SPDT, Momentary Contact					10	Available
8000	429	24 Hour	15	15	Available			48	SPDT					20	Available
8000	431	6, 12, 30 & 60 Min.	Varies by dial 6 sec. to 1 min.					30/dial	SPDT					20	
WH2B	432	24 Hour	20	75		Yes		12	DPST					40	

## EASY TO SET DIAL ASSEMBLY



Tork's 24 hour dial assembly allows the user to set the time switch more accurately, easily moving it by hand in small increments. Dial can provide up to 12 ON/OcFFs per day with cycles as short as 20 minutes. AM and PM settings are easy to see by the light and dark areas of the dial.

## CAPTIVE TABS – DUTY CYCLE DIAL



For applications requiring many ON/OFF cycles per day, captive tabs on this dial tilt in and out just using your fingertip!

## FIELD UPGRADEABLE TO SunSet DIALS



All Tork 24 hour time switches can be upgraded in the field to a SunSet timer dial.

## SPRING WOUND RESERVE



During power outages, precision spring mechanism takes over instantly and automatically. Keeps the mechanism on time up to 16 hours on 24 hour models and up to 24 hours on 7 day models. No resetting is needed after power resumes, and field installation is easy!

## REMOVABLE DOOR



Tork time switches feature removable doors to provide easy access for installation and wiring.

## ENCLOSED MOTOR



Time switch motors are enclosed to protect from dust and damage.

## QUALITY ASSURANCE

**TORK®** Electromechanical Controls are designed and manufactured with components which adhere to the highest industry standards. Trained personnel and in-process quality procedures ensure that every unit meets our strictest quality expectations.

# TU40 SERIES

UNIVERSAL MULTI-VOLTAGE  
SAME ON/OFF TIMES EACH DAY  
24 HOUR TIME SWITCH



ALL PURPOSE  
CONTACTS,  
HOUSING,  
& VOLTAGES!

## APPLICATIONS



- Lighting
- Pumps
- Signs
- Air conditioning
- Water heaters
- Fans

## FEATURES

**MULTI-VOLTAGE:** Automatic input voltage detection.

**EASY SET:** Real time clock face and day/night markings for setting trippers.

**SCHEDULING:** Minimum ON is setting 15 minutes. Dial has 96 captive trippers.

**4 in 1 CONTACTS:** DPDT can also wire as SPST, SPDT, & DPST.

**BYPASS SWITCH:** Sets timer to permanent ON, OFF or timer operation.

**VACATION MODE:** Set timer OFF with no change of tripper settings.

**INDICATING LIGHTS:** Power ON green and load ON red and LED indicators.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 60Hz	DRY CONTACTS (UNPOWERED)	ENCLOSURE TYPE
TU40	24000	120/208-240/277	DPDT	Plastic Indoor/Outdoor NEMA 3R
TU40-Y	24001	120/208-240/277	DPDT	Metal Indoor NEMA 1

## SPECIFICATIONS

**INPUT VOLTAGE:** 120/208-240/277VAC, 60Hz (auto detection).

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #18 AWG.

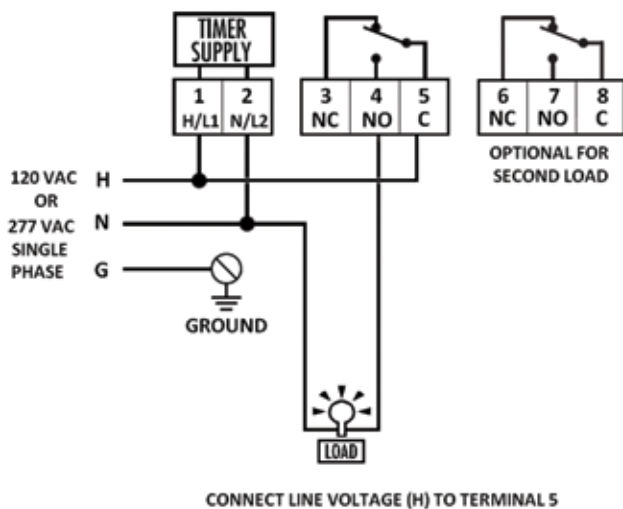
**OPERATING TEMPERATURE:** -31°F to 116°F (-35°C to +47°C).

**POWER CONSUMPTION:** 6 watts maximum.

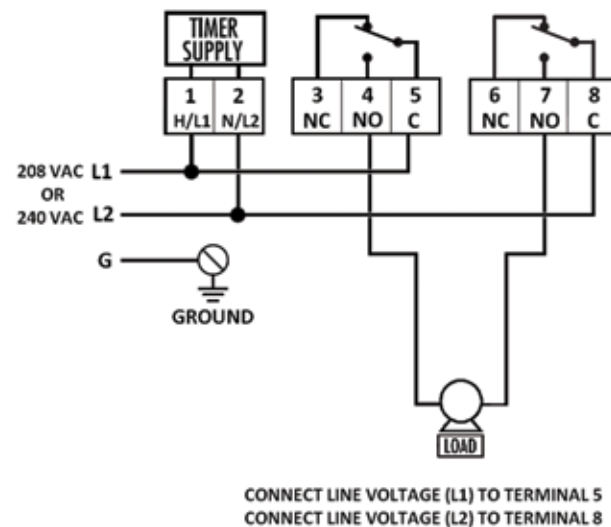
**ENCLOSURE:** Polycarbonate Indoor/Outdoor NEMA 3R or -Y suffix metal indoor NEMA 1 enclosure. Both with lockable hasp standard (see page 557 for enclosure dimensions).

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
General Purpose	120-277	40A	30A
Inductive	120-277	30A	15A
Ballast	120	30A	10A
	277	20A	10A
Tungsten	120	15A	
Motor Load	120	1HP, 30FLA, 90LRA	¼HP, 12FLA, 30LRA
	240	2HP, 20FLA, 60LRA	½HP, 12FLA, 33LRA
Pilot Duty	120	720VA	290VA
	240	720VA	360VA
Resistive	28VDC	20A	
Max above 104°F	120-277	30A	

TYPICAL SPST WIRING - LOAD SAME VOLTAGE AS TIMER SUPPLY



TYPICAL DPST WIRING - LOAD SAME VOLTAGE AS TIMER SUPPLY



For Specification Writers' Guides, please visit our website: <http://www.nsiindustries.com/support-downloads/technical-library.aspx>

# 1100 SERIES

SAME DAY ON/OFF  
TIMES EACH DAY  
24 HOUR TIME SWITCH



## APPLICATIONS

- Lighting
  - Pumps
  - Signs
  - Air conditioning
  - Water heaters
  - Fans
- Automatic ON/OFF control when operation is required at the same time every day.

## FEATURES

**SCHEDULING:** Minimum ON is setting 20 minutes with a minimum OFF setting of 75 minutes. Dial accommodates up to 12 pairs of trippers. One pair included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF automatic operation then resumes.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
1101	10011	120	SPST	Metal Indoor NEMA 1
1101B-P*	10068	120	SPST	Polycarbonate Indoor/Outdoor NEMA 3R
1101-NC	10053	120	SPST	Noryl® Indoor/Outdoor w/ clear Lexan® cover
1101-O	10015	120	SPST	Metal Indoor/Outdoor NEMA 3
1101BM-IAP*	10073	120	SPST	Mechanism and retrofit plate
1101-7**	10033	347	SPST	Metal Indoor NEMA 1
1102B	10065	208-277	SPST	Metal Indoor NEMA 1
1103	10013	120	DPST	Metal Indoor NEMA 1
1103B-P*	10069	120	DPST	Polycarbonate Indoor/Outdoor NEMA 3R
1103-NC	10054	120	DPST	Noryl® Indoor/Outdoor w/ clear Lexan® cover
1103-O	10016	120	DPST	Metal Indoor/Outdoor NEMA 3
1103M	10023	120	DPST	Mechanism
1104	10014	208-277	DPST	Metal Indoor NEMA 1
1104B-P*	10070	208-277	DPST	Polycarbonate Indoor/Outdoor NEMA 3R
1104-NC	10055	208-277	DPST	Noryl® Indoor/Outdoor w/ clear Lexan® cover
1104B-O*	10075	208-277	DPST	Metal Indoor/Outdoor NEMA 3
1104BM-MB*	10076	208-277	DPST	Mechanism and surface mounting bracket
1104BM-IAP*	10074	208-277	DPST	Mechanism and retrofit plate
Replacement Trippers	Order #P47 for a pair of ON/OFF trippers			
Replacement Motor	#101 (120V) & #201 (208-277V)			



Astronomic dial. Consult factory for correct number for your latitude

\* B suffix units cULus cULus

\*\* 1101-7 CSA only SFA

## SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277 VAC  
60 Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14 AWG.

**OPERATING TEMPERATURE:**  
-40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:**  
3 watts maximum.

**ENCLOSURE:** Lockable hasp. Type varies  
by model (see page 557 for enclosure  
dimensions).

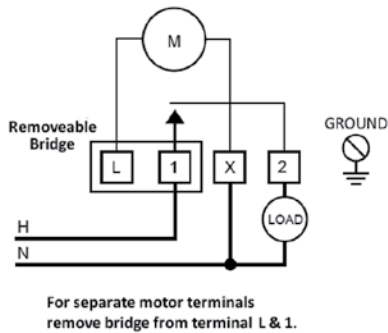
**OTHER MOUNTINGS:**

Intermatic® Adaptor Plate model #IAP allows  
any 1100 series to fit into an Intermatic case.

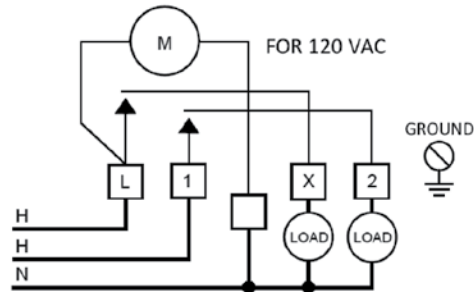
TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120 -277	40A
Resistive	120 -277	40A
Tungsten	120	40A
Ballast	120-277	20A
<b>NEW!</b> LED Driver*	120-277	20A
Pilot Duty	120 -277	1000VA**
Motor	120 240	2HP 5HP
277VAC Single Phase		

\* LED rating UL only (UL) or cULus on B suffix units (UL)us  
\*\* B suffix units 120VAC 1000VA / 240VAC 2000VA  
1101-7 is 30 AMP inductive at 347 volts and CSA only (CSA)

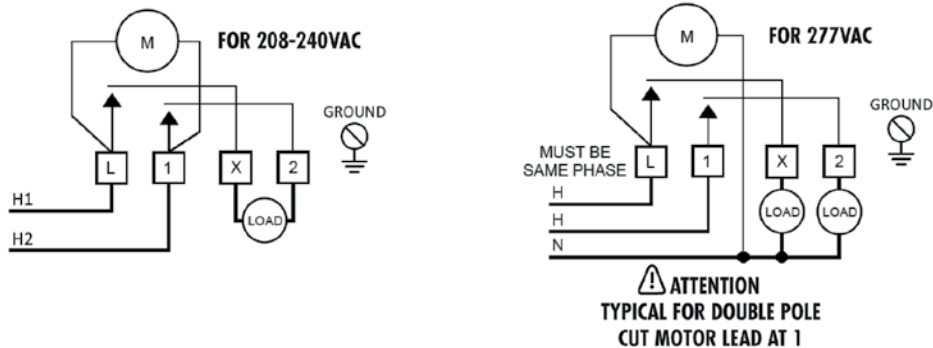
### 1101 & 1102



### 1103



### 1104



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# 7000 SERIES

WITH SKIP-A-DAY FEATURE  
RESERVE POWER OPTIONAL  
24 HOUR TIME SWITCH



**SKIP-A-DAY  
24 HOUR!**

## APPLICATIONS



CALIFORNIA Title 24

ASHRAE 90.1

- Lighting
- Heating
- Pumps
- Air conditioning
- Signs
- Automatic ON/OFF control when operation is required at the same time every day, with optional versatility of one to six days omission.

## FEATURES

**SCHEDULING:** Minimum ON setting is 20 minutes with minimum OFF setting at 75 minutes. Dial accommodates up to 12 pairs of trippers. One pair included.

**SKIP-A-DAY:** Omit operations on any day with a 7-spoke wheel marked with days of week. 3 omitting screws included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 16 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
7100	10001	120	SPST	Metal Indoor NEMA 1
7102	10002	208-277	SPST	Metal Indoor NEMA 1
7200	11001	120	DPST	Metal Indoor NEMA 1
7200-0	10512	120	DPST	Metal Indoor/Outdoor NEMA 3
7202	11002	208-277	DPST	Metal Indoor NEMA 1
7202-0	10509	208-277	DPST	Metal Indoor/Outdoor NEMA 3
7300	12001	120	3PST	Metal Indoor/Outdoor NEMA 3
7302	12002	208-277	3PST	Metal Indoor/Outdoor NEMA 3
7120	13001	120	SPDT	Metal Indoor NEMA 1
7122	13002	208-277	SPDT	Metal Indoor NEMA 1
7220	14001	120	DPDT	Metal Indoor NEMA 1
7222	14002	208-277	DPDT	Metal Indoor NEMA 1
<b>WITH RESERVE POWER</b>				
7200L	19003	120	DPST	Metal Indoor NEMA 1
7202L	19004	208-277	DPST	Metal Indoor NEMA 1
7300L	19005	120	3PST	Metal Indoor/Outdoor NEMA 3
7302L	19006	208-277	3PST	Metal Indoor/Outdoor NEMA 3
7120L	19007	120	SPDT	Metal Indoor NEMA 1
7220L	19009	120	DPDT	Metal Indoor NEMA 1
7222L	19011	208-277	DPDT	Metal Indoor NEMA 1

Replacement Trippers Order #P49 for a pair of ON/OFF per dial. Additional ON/OFF trippers per dial order #P47. 3 omitting screws #53005 supplied.

Replacement Motor #101 (120V) & #201 (208-277V). For "L" models #36 (120V) & #46 (208-277V). For Astronomic Conversion: Order #Z KIT for 7000 Series.



Astronomic dial. Consult factory for correct number for your latitude

# SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277 VAC 60 Hz varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14 AWG.

**OPERATING TEMPERATURE:** -40° to 165°F (-40° to +74°C).

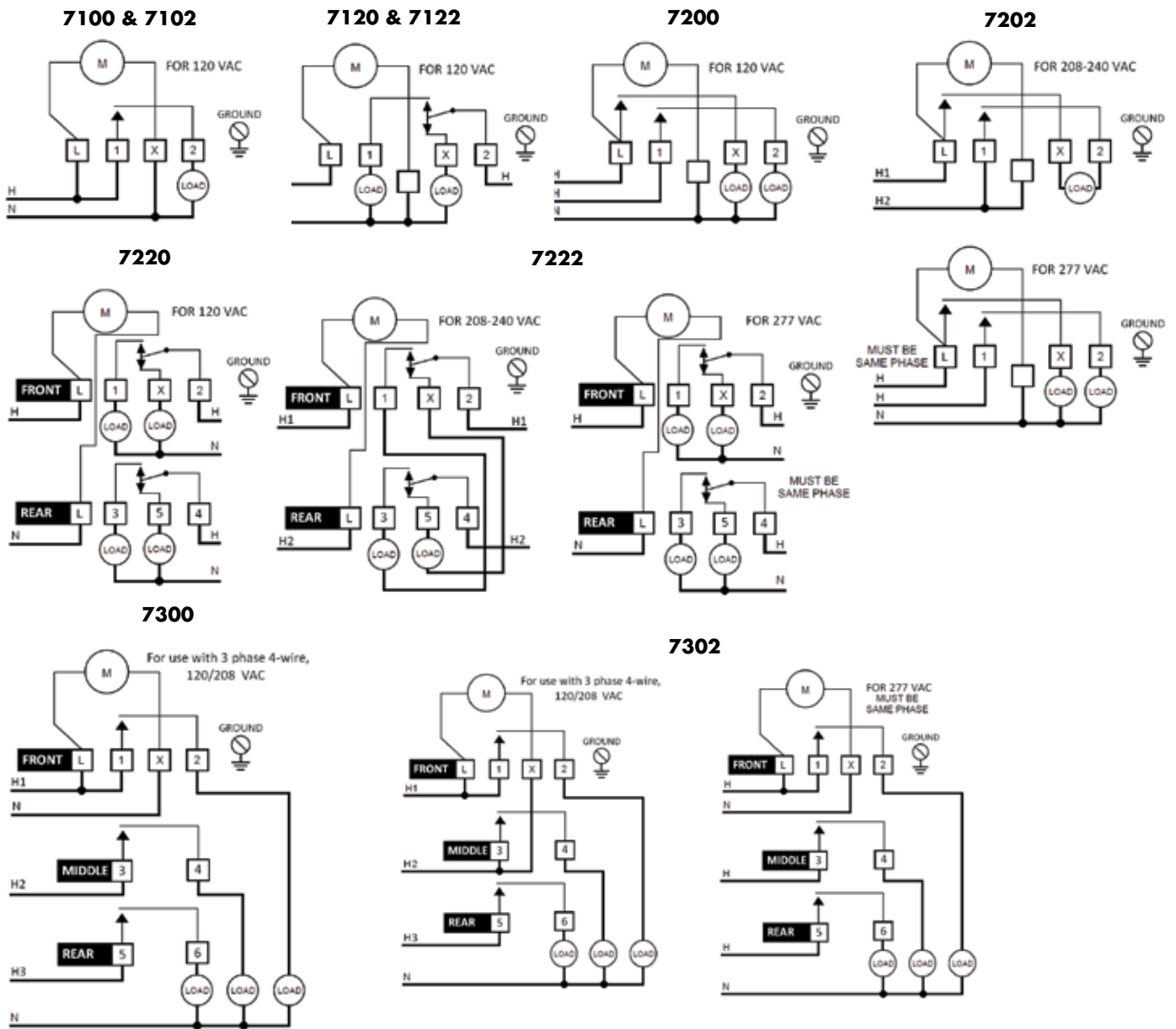
**POWER CONSUMPTION:** 3 watts, 5 watts for "L" models maximum.

**ENCLOSURE:** Lockable hasp. Type varies by model (see page 557 for enclosure dimensions).

**OTHER MOUNTINGS:** Intermatic® Adaptor Plate model #IAP allows any 7100 and 7200 series (except "L" models) to fit into an Intermatic case.

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120 -277	40A
Resistive	120 -277	40A
Tungsten	120	40A
Ballast	120-277	20A
Pilot Duty	120 -277	1000VA
Motor	120	2HP
	240	5HP

277 volt Single Phase



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# 7000Z SERIES

SunSet WITH SKIP-A-DAY FEATURE  
RESERVE POWER OPTIONAL  
ASTRONOMIC TIME SWITCH



ADJUSTS  
TO DAILY  
CHANGES IN  
SUNSET  
TIMES!

CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS



- Parking lots
- Walkways
- Outdoor signage
- Window displays
- Canopy lighting
- Landscape lighting
  
- Automatic ON at dusk, OFF at dawn. Control of outdoor lighting.

## FEATURES

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Turn ON at sunset and OFF at sunrise daily. OFF time can be set from 8:30PM to 2:30AM. Can be individually offset +/- 20 or 40 minutes from both sunset and OFF times. Available from 18° - 45° northern latitudes.

**SKIP-A-DAY:** Omit operations on any day with a 7 spoke wheel marked with days of the week. 3 omitting screws included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 16 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
7200Z-*	**	120	DPST	Noryl® Indoor/Outdoor NEMA 3R
7202Z-*	**	208-277	DPST	Noryl® Indoor/Outdoor NEMA 3R
7300Z-*	**	120	3PST	Metal Indoor/Outdoor NEMA 3
7302Z-*	**	208-277	3PST	Metal Indoor/Outdoor NEMA 3
7120Z-*	**	120	SPDT	Noryl® Indoor/Outdoor NEMA 3R
WITH RESERVE POWER				
7200ZL-*	**	120	DPST	Noryl® Indoor/Outdoor NEMA 3R
7202ZL-*	**	208-277	DPST	Noryl® Indoor/Outdoor NEMA 3R
7300ZL-*	**	120	3PST	Metal Indoor/Outdoor NEMA 3
7302ZL-*	**	208-277	3PST	Metal Indoor/Outdoor NEMA 3
7120ZL-*	**	120	SPDT	Noryl® Indoor/Outdoor NEMA 3R
7122ZL-*	**	208-277	SPDT	Noryl® Indoor/Outdoor NEMA 3R

Replacement Motor #101 (120V) & #201 (208-277V).  
For "L" models #36 (120V) & #46 (208-277V)

\*Add degrees latitude to complete number (18, 30, 34, 38, 40, 42, or 45).

\*\*Consult factory for UPC number.

**SPECIFICATIONS**

**INPUT VOLTAGE:** 120 or 208-277 VAC  
60 Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14 AWG.

**OPERATING TEMPERATURE:**  
-40° to 165°F (-40° to +74°C).

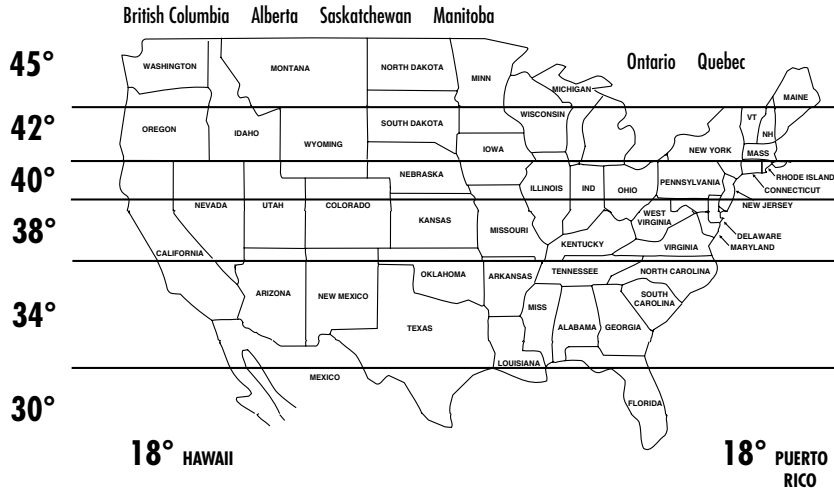
**POWER CONSUMPTION:** 3 watts,  
5 watts for "L" models maximum.

**ENCLOSURE:** Lockable hasp. Type varies  
by model (see page 557 for enclosure  
dimensions).

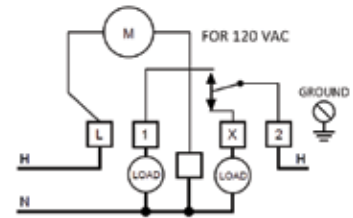
TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120 -277	40A
Resistive	120 -277	40A
Tungsten	120	40A
Ballast	120-277	20A
Pilot Duty	120 -277	1000VA
Motor	120 240	2HP 5HP

277VAC Single Phase

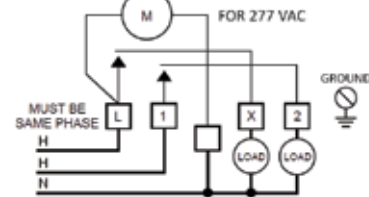
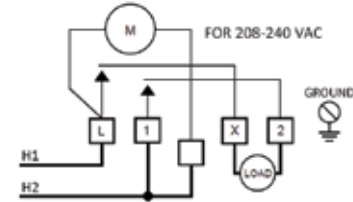
**ASTRONOMIC LATITUDE ZONES**



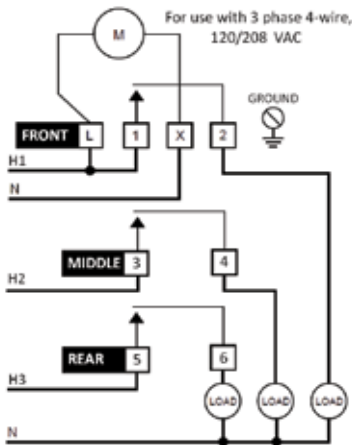
**7120Z**



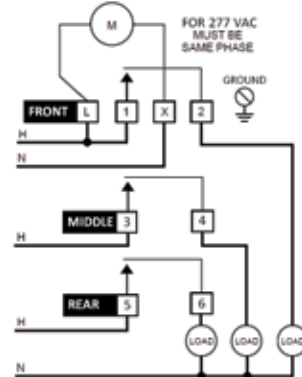
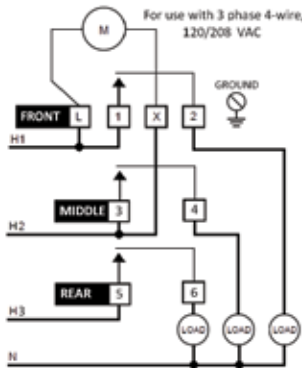
**7200Z**



**7300Z**



**7302Z**



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# 8000 SERIES

MANY DAILY ON/OFF  
OPERATIONS PER DAY  
**DUTY CYCLE**  
24 HOUR TIME SWITCH



**DUTY CYCLE  
FOR  
MULTIPLE  
ON/OFF  
OPERATIONS!**

## APPLICATIONS



- Duty cycling
- Ventilating fans
- Pumping
- Irrigation
- Process control
- Laboratory experiments
  
- For one or multiple daily ON/OFF operations.

## FEATURES

**SCHEDULING:** Minimum ON setting is 15 minutes with minimum OFF setting at 15 minutes. Dial has 96 captive tabs.

**DUTY CYCLE:** Adjustable from 1/2, 1, 2, 3, 4, 6, 12, and 24 hours.

**SKIP-A-DAY:** Some models include 7 day or 14 day wheel to omit selected days of the week.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 16 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
8001	70001	120	SPDT	Metal Indoor NEMA 1
8001-N	70025	120	SPDT	Noryl® Indoor/Outdoor NEMA 3R
8001-NC	70009	120	SPDT	Noryl® Indoor/Outdoor NEMA 3R w/ clear Lexan® cover
8001-LC/WB	70010	120	SPDT	Mechanism and bracket
8001-O	70029	120	SPDT	Metal Indoor/Outdoor NEMA 3
8004	70002	208-277	SPDT	Metal Indoor NEMA 1
8001U	70003	480/120 Trans.	SPDT	Metal Indoor NEMA 1
8001U-N	70014	480/120 Trans.	SPDT	Noryl® Indoor/Outdoor NEMA 3R
8001U-O	70011	480/120 Trans.	SPDT	Metal Indoor/Outdoor NEMA 3
<b>24 HOUR WITH 7 DAY OMIT</b>				
8007	70005	120	SPDT	Metal Indoor NEMA 1
8007-O	70012	120	SPDT	Metal Indoor/Outdoor NEMA 3
8008	70006	208-277	SPDT	Metal Indoor NEMA 1
8007U	70008	480/120 Trans.	SPDT	Metal Indoor NEMA 1
8007U-O	70028	480/120 Trans.	SPDT	Metal Indoor/Outdoor NEMA 3
<b>24 HOUR WITH 7 DAY OMIT &amp; RESERVE POWER</b>				
8007L	70015	120	SPDT	Metal Indoor NEMA 1
8008L	70016	208-277	SPDT	Metal Indoor NEMA 1
<b>24 HOUR WITH 14 DAY OMIT</b>				
8007V	70007	120	SPDT	Metal Indoor NEMA 1
<b>24 HOUR WITH 14 DAY OMIT &amp; RESERVE POWER</b>				
8007VL	70017	120	SPDT	Metal Indoor NEMA 1

Replacement Motor

#101(120V) & #201 (208-277V).  
For "L" models #36 (120V) & #46 (208-277V)

## SPECIFICATIONS

**INPUT VOLTAGE:** 120, 208-277VAC or 480VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

**OPERATING TEMPERATURE:**

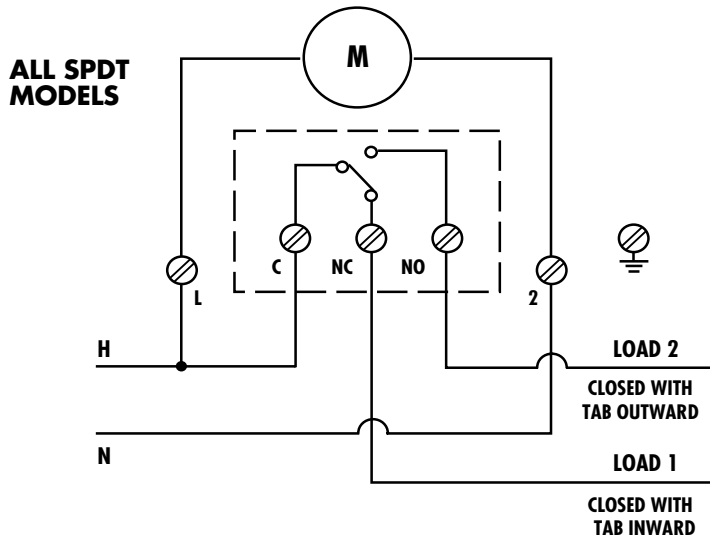
-40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:** 3 watts, 5 watts for "L" models maximum.

**ENCLOSURE:** Lockable hasp. Type varies by model (see page 557 for enclosure dimensions).

**OTHER MOUNTINGS:** Intermatic® Adaptor Plate model #IAP allows 8001 & 8004 to fit into an Intermatic case.

TYPE	VOLTAGE (VAC)	CONTACT RATING
Resistive	120 or 240 480	20A 20A
Motor	120	3/4 HP



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# 8000 SERIES

MULTIPLE ON/OFF CYCLES  
REPEATING VARIABLE CYCLE  
TIME SWITCH



## SPECIFICATIONS

- INPUT VOLTAGE:** 120VAC, 60Hz.  
**TIMING ACCURACY:** Line frequency.  
**TERMINAL RANGE:** #8 - #14AWG.  
**OPERATING TEMPERATURE:**  
 -40° to 165°F (-40° to +74°C).  
**POWER CONSUMPTION:**  
 3 watts maximum.  
**ENCLOSURE:** Indoor NEMA 1 Metal  
 with lockable hasp (see page 557 for  
 enclosure dimensions).

## APPLICATIONS



- Duty cycling
  - Ventilating fans
  - Pumping
  - Irrigation
  - Process control
  - Laboratory experiments
- For one or many daily ON/OFF operations.

## FEATURES

**SCHEDULING:** 60 captive tabs per dial with minimum ON/OFF settings:

- 60 minute dial with 1 minute tabs.
- 30 minute dial with 30 second tabs.
- 12 minute dial with 12 second tabs.
- 6 minute dial with 6 second tabs.

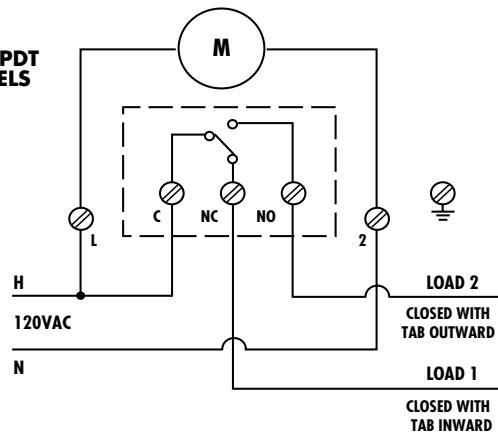
**DUTY CYCLE:** Settings of  $\frac{1}{60}$  th of dial speed.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	TYPE
8601	70034	120	SPDT	60 Minute
8301	70033	120	SPDT	30 Minute
8121	70032	120	SPDT	12 Minute
8061	70031	120	SPDT	6 Minute

Replacement Motor For 8601 #102, for 8301 #108, for 8121 #107, and for 8061 #105.

TYPE	VOLTAGE (VAC)	CONTACT RATING
Resistive	120 or 240 480	20A 20A
Motor	120	3/4 HP

### ALL SPDT MODELS



# WH2B 24 HOUR WATER HEATER TIME SWITCH



Avoid utility peak rates  
Turn off when not needed

## SPECIFICATIONS

**INPUT VOLTAGE:** 208 – 250V 60 Hz.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

**OPERATING TEMPERATURE:**  
-40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:**  
3 watts maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp (see page 557 for enclosure dimensions).

## APPLICATIONS

Automatic ON/OFF control of electric water heaters. Schedules the water heater to turn ON only when needed, avoiding energy waste when hot water is not needed.



## FEATURES

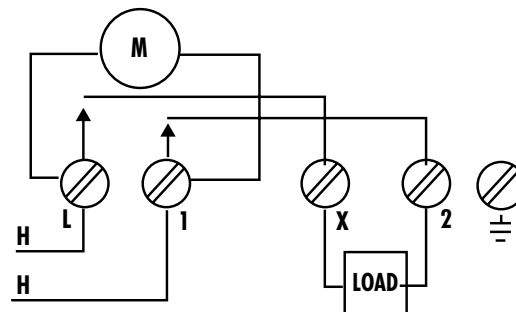
**SCHEDULING:** Minimum ON is setting 20 minutes with a minimum OFF setting of 75 minutes. Dial accommodates up to 12 pairs. 3 pairs of trippers supplied.

**EXTERNAL MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF automatic operation then resumes.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
WH2B	70044	208-250	DPST	Metal Indoor NEMA 1

TYPE	VOLTAGE (VAC)	CONTACT RATING
Resistive	208-250	40 A 10,000W
Replacement Motor	#201 (208-277)	
Replacement Trippers	Order #P47 for a pair of ON/OFF trippers	

### TYPICAL FOR 240 VOLT SUPPLY





# 1800 SERIES

FOR MECHANICALLY HELD CONTACTORS  
AND LOW VOLTAGE REMOTE CONTROL  
MOMENTARY CONTACT  
TIME SWITCH



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS



- Mechanically-held contactors
- 3-wire momentary
- lighting systems
- Remote station switching

## FEATURES

**SCHEDULING:** Choice of three types.

**24 HOUR SKIP-A-DAY:** Minimum ON setting is 20 minutes with minimum OFF setting at 75 minutes. Dial accommodates up to 12 pairs of trippers. Omit operations on any day with a 7 spoke wheel marked with days of week.

**ASTRONOMIC SCHEDULING:** Turn ON at sunset and OFF at sunrise daily. OFF time can be set from 8:30PM to 2:30AM. Can be individually offset +/- 20 or 40 minutes from both sunset and OFF times.

**7 DAY SCHEDULING:** Minimum ON setting is 1 hour with a minimum OFF setting of 2 hours. Minimum 8 hours between 2 OFF settings. 7 day calendar dial will accommodate up to 2 pairs on ON/OFF trippers per day - 7 pairs are supplied.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 16 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	TYPE
1847A	52001	120	SPDT Momentary	24 Hour
1848A	52014	208-277	SPDT Momentary	24 Hour
1847AZ*	**	120	SPDT Momentary	Astronomic
1847AW	52005	120	SPDT Momentary	7 Day
WITH RESERVE POWER				
1847AL	52006	120	SPDT Momentary	24 Hour
1847AZL*	**	120	SPDT Momentary	Astronomic
1847AWL	52010	120	SPDT Momentary	7 Day
Replacement Trippers	For 24 hour models order #P49 for a pair ON/OFF per dial. Additional ON/OFF trippers per dial order #P47. 3 omitting screws #53005 supplied. 7 day models order #P69 for 7 pairs of ON/OFF trippers.			
Replacement Motor	#101(120V) & #201 (208-277V). For "L" models #36 (120V)			

\*Add degrees latitude to complete number (18, 30, 34, or 42).

\*\*Consult factory for UPC number.

## SPECIFICATIONS

**INPUT VOLTAGE:** 120VAC or 208-277VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #12 - #22AWG.

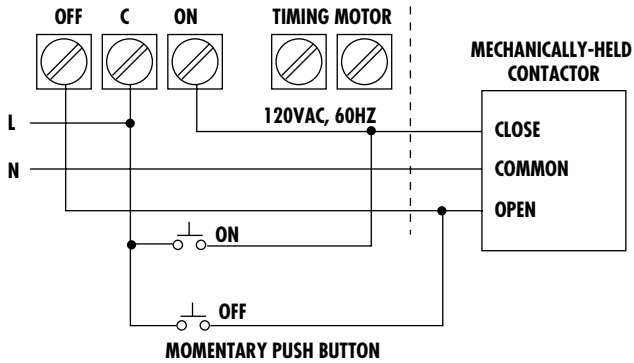
**OPERATING TEMPERATURE:**

-40° to 165°F (-40° to +74°C).

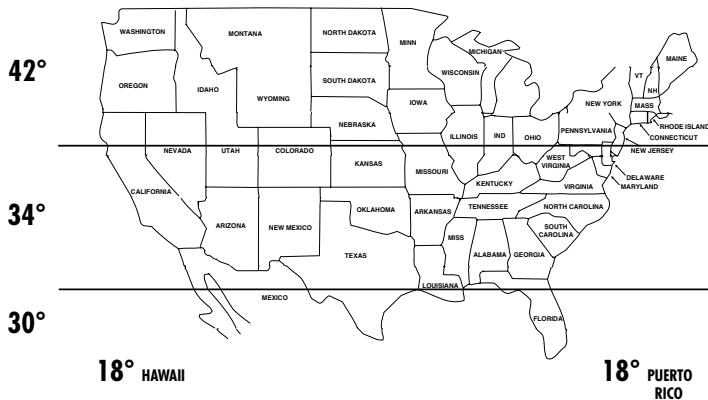
**POWER CONSUMPTION:** 3 watts, 5 watts for "L" models maximum.

**ENCLOSURE:** NEMA 1 Metal with lockable hasp (see page 557 for enclosure dimensions).

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	24-277	10A
Pilot Duty	24-277	360VA



## ASTRONOMIC LATITUDE ZONES



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# W SERIES

## DIFFERENT SCHEDULES EACH DAY

### 7 DAY TIME SWITCH



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS



- Heating
- Air conditioning
- Display lighting
- Ventilating systems
- Lighted signage
- Storefront lighting

## FEATURES

**SCHEDULING:** Minimum ON setting is 1 hour with a minimum OFF setting of 2 hours. Minimum 8 hours between 2 OFF settings. Models W400A and W402A offer minimum ON/OFF settings of 3½ hours. 7 day calendar dial accommodates up to 2 pairs of ON/OFF trippers per day – 7 pairs are supplied.

**SKIP-A-DAY:** Omit operations on any day.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF automatic operation then resumes.

**OPTIONAL RESERVE POWER:** "L" models keep dial on time up to 24 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
W100	30001	120	SPST	
W120	33001	120	SPDT	
W200	31001	120	DPST	
W202	31011	208-277	DPST	Metal Indoor NEMA 1
W220	34001	120	DPDT	
W222	34011	208-277	DPDT	
W300	32001	120	3PST	
W300-0	32003	120	3PST	Metal Indoor/Outdoor NEMA 3
W302	32002	208-277	3PST	
W400B*	35003	120	4PST	Metal Indoor NEMA 1
W402B*	35004	208-277	4PST	
WITH RESERVE POWER				
W220L	39009	120	DPDT	
W222L	39010	208-277	DPDT	
W300L	39005	120	3PST	Metal Indoor NEMA 1
W302L	39006	208-277	3PST	
W400BL*	39008	120	4PST	
Replacement Trippers	Order #P69 for 7 pairs of ON/OFF trippers			

Replacement Motor #101 (120V) & #201 (208-277V). For "L" models order #36 (120V) and #46 (208-277V).

\*UL Listed only.

# SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

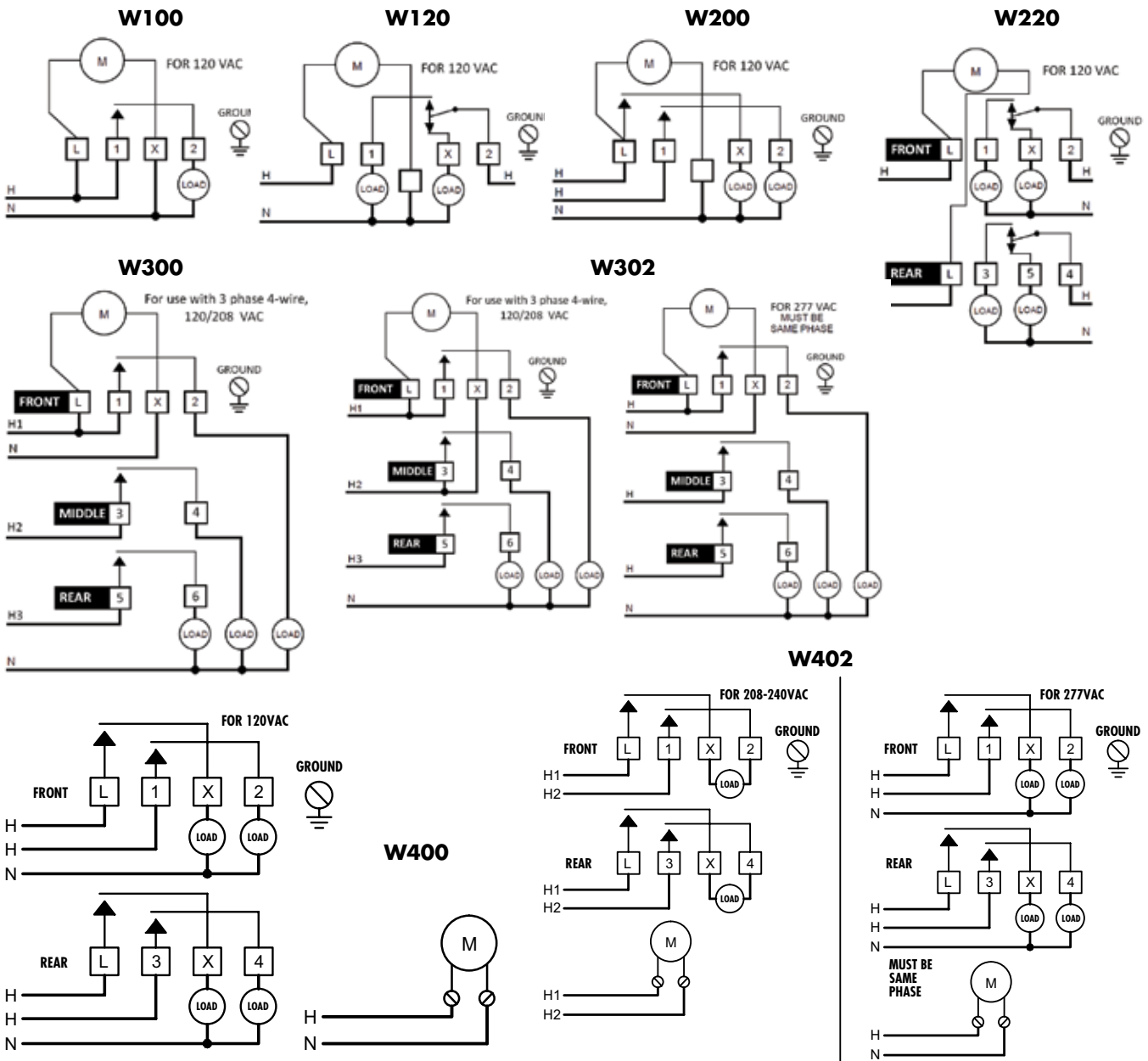
**OPERATING TEMPERATURE:** -40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:** 3 watts, 5 watts for "L" models maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp. Other enclosures include metal Indoor/Outdoor NEMA 3 with suffix "O" (see page 557 for enclosure dimensions).

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120 -277	40A
Resistive	120 -277	40A
Tungsten	120	40A
Ballast	120-277	20A
Pilot Duty	120 -277	1000VA
Motor	120 240	2HP 5HP

277VAC Single Phase



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# T900 SERIES

PHOTOELECTRIC & 7 DAY CONTROL COMBO  
DIFFERENT SCHEDULES EACH DAY  
RESERVE POWER STANDARD  
2 & 3 CIRCUIT CONTROL CENTERS

## APPLICATIONS

- Parking lot lighting
- HVAC
- Display lighting
- Security lighting
- Lighted signage
- Storefront lighting



Optional "E" cover



Model 2101  
supplied with unit.



CALIFORNIA Title 24

ASHRAE 90.1

## FEATURES

### SCHEDULING:

**CIRCUIT 1:** ON automatically at dusk, OFF at individual preset times each day, including skipping days when desired. Unit can be set to turn ON before dawn for early morning lighting.

**CIRCUIT 2:** ON at dusk, OFF at dawn automatically, daily.

**CIRCUIT 3:** Individual daily ON and OFF settings at desired times, including skipping any desired day or days. Minimum ON is setting 1 hour with a minimum OFF setting of 2 hours. Minimum 8 hours between 2 OFF settings. 7 day calendar dial will accommodate up to 2 pairs of ON-OFF trippers per day – 7 pairs are supplied.

**SKIP-A-DAY:** Omit operations on any day.

**MANUAL BY-PASS SWITCHES:** Single pole, 20 Amps – one per circuit. Factory pre-wired to terminal strip. ON/OFF/AUTO positions for each circuit is independent – will not disturb automatic settings.

**RESERVE POWER:** Standard feature on all models keep dial on time up to 24 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
T920L	41033	120	2 SPDT	Metal Indoor NEMA 1
T920L-E	41034	120	2 SPDT	Metal Indoor NEMA 1 with switch access
T920L-O	41035	120	2 SPDT	Metal Indoor/outdoor NEMA 3
T930L	41055	120	3 SPDT	Metal Indoor NEMA 1
T930L-E	41056	120	3 SPDT	Metal Indoor NEMA 1 with switch access
T930L-O	41057	120	3 SPDT	Metal Indoor/outdoor NEMA 3
Replacement Trippers		#P69 for 7 pairs of ON/OFF trippers.		
Replacement Motor		#36 (120V)		
Replacement Bypass Switch		#66061		

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120/277	20A
Motor	120 240	1HP 2HP

**NOTE:** All models are designed to control a contactor circuit and are not recommended for direct switching of most lighting loads.

## SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277VAC, 60 Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

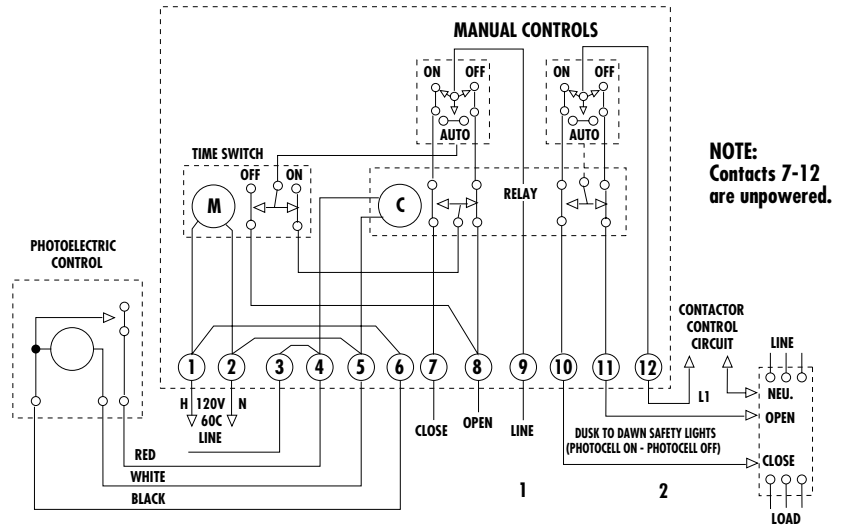
**OPERATING TEMPERATURE:**

-40° to 165°F (-40° to +74°C).

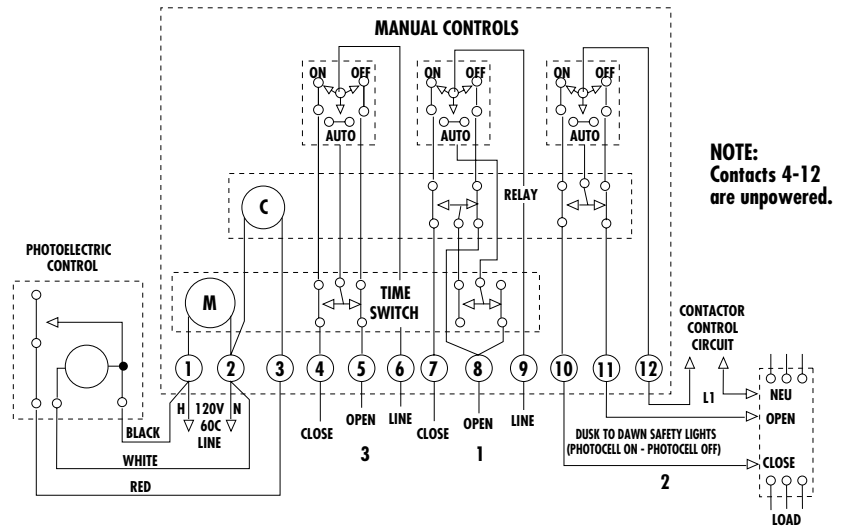
**POWER CONSUMPTION:** 5 watts maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp. Other enclosures include cover for access to by-pass switches with suffix "E" or Indoor/Outdoor NEMA 3 metal with suffix "O" (see page 557 for enclosure dimensions).

## T920L ONLY CIRCUITS 1 AND 2 ARE INCLUDED IN T920L



## T930L ALL 3 CIRCUITS ARE INCLUDED IN T930L



**NOTE 1:** All models designed to control mechanically-held and magnetic contactors, when wired in accordance with manufacturers recommendations. Contacts are unpowered control circuits rated for 24-277V contactor coils. See notes on wiring schematics.

**NOTE 2:** For momentary Contact of contactor coils, use TORC Model SMC-3D, in our Digital Controls Catalog.

For Specification Writers' Guides, please visit our website: <http://www.nsiindustries.com/support-downloads/technical-library.aspx>

# TW SERIES

DIFFERENT SCHEDULES EACH DAY  
MANUAL BYPASS SWITCHES  
RESERVE POWER STANDARD  
7 DAY TIME SWITCH

## APPLICATIONS

- Heating
- Air conditioning
- Display lighting
- Ventilating systems
- Lighted signage
- Storefront lighting



## FEATURES

**SCHEDULING:** Minimum ON setting is 1 hour with a minimum OFF setting of 2 hours. Minimum 8 hours between 2 OFF settings. 7 day calendar dial accommodates up to 2 pairs of ON-OFF trippers per day – 7 pairs are supplied.

**SKIP-A-DAY:** Omit operations on any day.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**MANUAL BY-PASS SWITCHES:** Single pole, 20 Amps – one per circuit. Factory pre-wired to terminal strip. ON/OFF/AUTO positions for each circuit is independent – will not disturb automatic settings.

**RESERVE POWER:** Standard feature on all models keep dial on time up to 24 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
TW-220L	39013	120	DPDT	Metal Indoor NEMA 1
TW-220L-E	39021	120	DPDT	Metal Indoor NEMA 1 with switch access
TW-222L	39014	208-277	DPDT	Metal Indoor NEMA 1
TW-300L	39015	120	3PST	Metal Indoor NEMA 1
TW-302L	39016	208-277	3PST	Metal Indoor NEMA 1
Replacement Trippers	Order #P69 for 7 pairs of ON/OFF trippers.			
Replacement Motor	#36 (120V) & #46 (208-277V)			
Replacement Bypass Switch	#66061			

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120/277	20A
Motor	120 240	1HP 2HP

**NOTE:** All models are designed to control a contactor circuit and are not recommended for direct switching of most lighting loads.

## SPECIFICATIONS

### INPUT VOLTAGE:

120 or 208 - 277VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

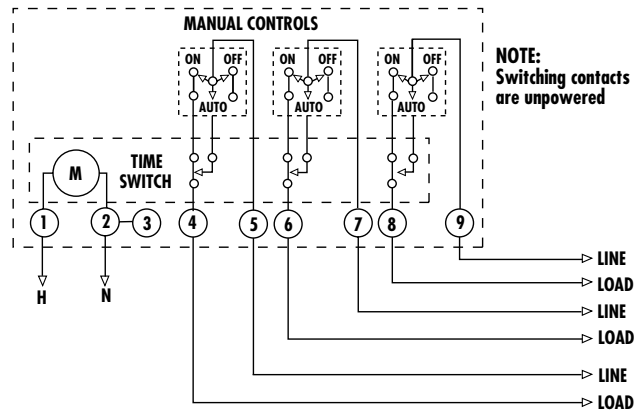
**TERMINAL RANGE:** #8 - #14AWG.

### OPERATING TEMPERATURE:

-40° to 165°F (-40° to +74°C).

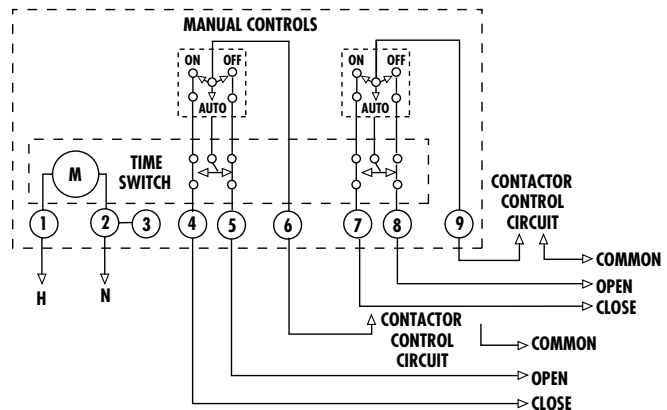
**POWER CONSUMPTION:** 5 watts maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp (see page 557 for enclosure dimensions).



## TW300L

When single line source is used, jumper terminals 1-5-7-9 and connect all commons to terminals 2 and 3.



## TW220L

Wiring shown is for mechanically-held contactors. Use CLOSE terminal only for magnetically-held contactors and to control direct loads not exceeding 2000 watts.

For Specification Writers' Guides, please visit our website: <http://www.nsiindustries.com/support-downloads/technical-library.aspx>



# TZ SERIES

MANUAL BYPASS SWITCHES  
RESERVE POWER STANDARD  
ASTRONOMIC TIME SWITCH



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS

- Schools
- Industrial yards
- Shop windows
- Parking lots
- Highway signs
- Bridges

## FEATURES

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Turn ON at sunset and OFF at sunrise daily. OFF time can be set from 8:30PM to 2:30AM. Can be individually offset +/- 20 or 40 minutes from both sunset and OFF times. Available from 18° - 45° northern latitudes.

**SKIP-A-DAY:** Omit operations on any day with a 7 spoke wheel marked with days of the week. 3 omitting screws included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**MANUAL BYPASS SWITCHES:** Single pole, 20 Amps - one per circuit. Factory pre-wired to terminal strip. ON/OFF/AUTO positions for each circuit is independent, will not disturb automatic settings.

**RESERVE POWER:** Standard feature on all models keep dial on time up to 24 hours during power outage.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
TZ220L*	**	120	DPDT	Metal Indoor NEMA 1
TZ220L-0*	**	120	DPDT	Metal Indoor/outdoor NEMA 3
TZ222L*	**	208 - 277	DPDT	Metal Indoor NEMA 1
TZ300L*	**	120	3PST	Metal Indoor NEMA 1
TZ300L-0*	**	120	3PST	Metal Indoor/outdoor NEMA 3
TZ302L*	**	208 - 277	3PST	Metal Indoor NEMA 1

Replacement Motor For "L" models #36 (120V) & #46 (208-277V)

Replacement Bypass Switch #66061

\*Add degrees latitude to complete number (18, 30, 34, 38, 40, 42, or 45).

\*\*Consult factory for UPC number.

TYPE	VOLTAGE (VAC)	CONTACT RATING
General Purpose	120/277	20A
Motor	120	1HP
	240	2HP

**NOTE:** All models are designed to control a contactor circuit and are not recommended for direct switching of most lighting loads.

## SPECIFICATIONS

### INPUT VOLTAGE:

120 or 208 - 277VAC, 60Hz, varies by model.

**TIMING ACCURACY:** Line frequency.

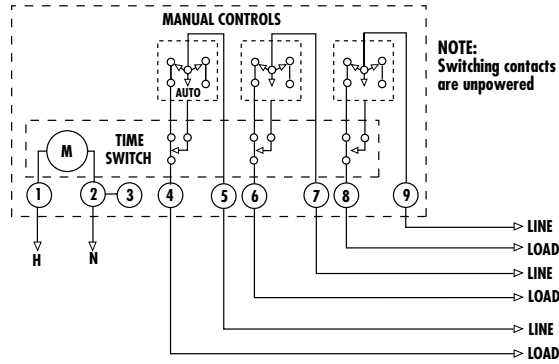
**TERMINAL RANGE:** #8 - #14AWG.

### OPERATING TEMPERATURE:

-40° to 165°F (-40° to +74°C).

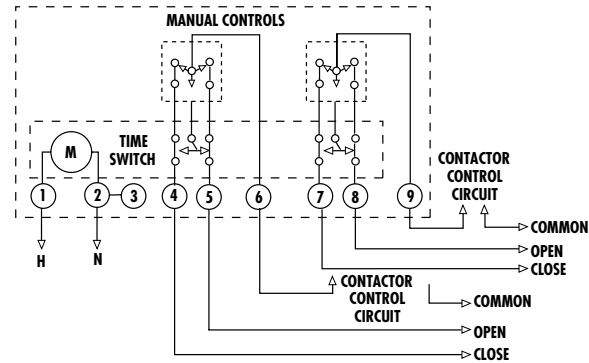
**POWER CONSUMPTION:** 5 watts maximum.

**ENCLOSURE:** Indoor NEMA 1 Metal with lockable hasp and for some models enclosures is Indoor/Outdoor NEMA 3 metal with suffix "O" (see page 557 for enclosure dimensions).



## TZ300L

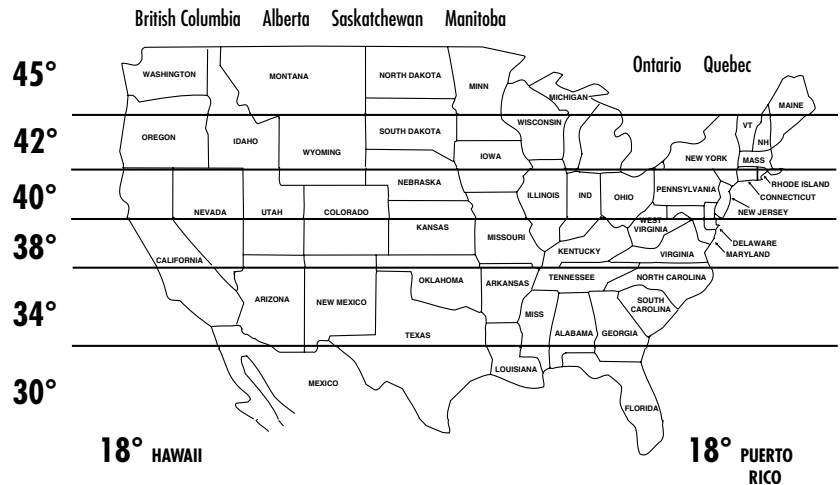
When single line source is used, jumper terminals 1, 5, 7, 9 and connect all commons to terminals 2 and 3.



## TZ220L

Wiring shown is for mechanically held contactors. Use CLOSE terminal only for magnetically held contactors and to control direct loads not exceeding 2000 watts.

## ASTRONOMIC LATITUDE ZONES



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# TORK® DIGITAL TIME SWITCHES

# QUICK REFERENCE GUIDE

	DTU40 DTWH40	EH20C	SA300	E-PB	E	EW	EWZ	DG	DGM	DW	DWZ	DTS
Page No.	447	449	451	453	453	455	457	459	459	461	461	463
Number of Channels	1	1	1	1	1 or 2	1 or 2	1 or 2	1 or 2	1	2	1	1, 2 or 4
ON/OFF Set Points	7 pair	14	1 pair	20	20	20	20	56	56	99	99	99
365 Day/7 Day Scheduling	7 day	7 day	7 day	24 hour	24 hour	7 day	7 day	7/365 day	7/365 day	7/365 day	7/365 day	7/365 day
Automatic Daylight Savings Adjustment	Manual	Yes	Manual	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leap Year		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Holiday Schedules										24	24	24
Block Holiday		Yes						9	9			
Season Scheduling												4
 SunSet (Astronomic)			ZipSet				Yes				Yes	
Photosensor Input												
Remote Override Input												
Signal/Pulse Duration												Yes
Momentary for Contactors					Option	Option	Option		Yes			
Duty Cycle												
31 Day Cycle												
Manual Override	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clock Format	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM	AM/PM	12/24	12/24	12/24	12/24	12/24
Power Outage Backup	Rechargeable Battery	4 day Super Capacitor	Battery	4 day Super Capacitor	4 day Super Capacitor	4 day Super Capacitor	4 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor
Schedule Retention without power	Battery	Permanent	Battery	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent
Staggered Start					Yes	Yes	Yes	Yes	Yes	Yes		Yes
Memory Module												
Computer Programming Software												
Output Contacts: Amps Resistive or General Purpose	40A	40A	40A	30A	40A	40A	40A	20A	20A	30A	30A	30A
Contact Type: Dry Unpowered	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Voltage Input AC	120/208-240/277	120-277	120 or 120/277	120	120-277	120-277	120-277	120-277	120-277	120/208-240/277	120/208-240/277	120/208-240/277
Other Voltage Inputs Available												

	LIGHTING CONTROLS							CYCLE - SIGNAL TIMER		DIN
	DZS	DZM	ELC74/78/712	DGU	DGUM	DGLC	DLC400	DG	DGS	
Page No.	465	467	473	471	471	471	475	479	479	485
Number of Channels	1, 2, or 4	2	4, 8, or 12	1	1	1 or 2	4	1 or 2	1	1 or 2
ON/OFF Set Points	99	99	128	56	56	56	99	56	56	8 pair 3 pair/ch
365 Day/7 Day Scheduling	7/365 day	7/365 day	7/365 day	7/365 day	7/365 day	7/365 day	7/365 day	24 Hour	7 Day	7 Day
Automatic Daylight Savings Adjustment	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Leap Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Individual Holiday Schedules	24	24	26				24			
Block Holiday			10	9	9	9				
Season Scheduling	4	4					4			
 SunSet (Astronomic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Photosensor Input			Yes	Yes	Yes	Yes	Yes			
Remote Override Input			Yes	Yes	Yes	Yes	Yes			
Signal/Pulse Duration	Yes		Yes					Yes	Yes	
Momentary for Contactors		Yes	Yes		Yes					
Duty Cycle			Yes					Yes	Yes	
31 Day Cycle								Yes		
Manual Override	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clock Format	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	AM/PM
Power Outage Backup	7 day Super Capacitor	7 day Super Capacitor	2 day Capacitor 1 year battery	7 day Super Capacitor	7 day Super Capacitor	7 day Super Capacitor	6 month battery	7 day Super Capacitor	7 day Super Capacitor	8 year battery
Schedule Retention without power	Permanent	Permanent	Battery	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Battery
Staggered Start	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Memory Module	Yes	Yes					Yes			
Computer Programming Software	Yes	Yes					Yes			
Output Contacts: Amps Resistive or General Purpose	30A/20A	30A	20A	20A	20A	20A	30A	20A	20A	16A
Contact Type: Dry Unpowered	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Voltage Input AC	120/208-240/277	120/208-240/277	24/120/208 240/277	120-277	120-277	120-277	120/208-240/277	120-277	120-277	120
Other Voltage Inputs Available	12VDC 24VAC		24VAC All Models					12VDC 24VAC	24VAC	

# DT SERIES

## AUTOMATIC VOLTAGE DETECTION 7 DAY TIME SWITCH AND WATER HEATER TIMER

**MORE  
WIRING  
SPACE!**

### APPLICATIONS



DTU40

DTWH40



Avoid utility peak rates  
Turn off when not needed

- **DTU40**
- Pumps, motors, fans
- Signs and lighting
- Water heaters
- Heating and air conditioning
  
- **DTWH40**
- Water Heaters
- This timer turns OFF when rates are high and turns OFF when no one is home.

### FEATURES

**SCHEDULING:** 7 ON & OFF pairs of set points for individual programs on each day of the week. Minimum setting is 1 minute.

**DAYLIGHT SAVING:** Manual button push for one hour adjustment.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**EXTERNAL MANUAL OVERRIDE:** DTWH40 only on clear door. Override without opening case.

**RANDOM MODE:** Varies ON and OFF times to create "lived-in" look when away.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Battery retains time and schedule.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DTU40	24004	120/208-240/277	1	DPDT
DTWH40	24005	120/240	1	DPDT

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	120-277	40A	30A
Inductive	120-277	30A	15A
Ballast	120	30A	10A
	277	20A	10A
Tungsten	120	15A	
Motor	120	1HP/30FLA/90LRA	1/4HP/12FLA/30LRA
	240	2HP/20FLA/60LRA	1/2HP/12FLA/33LRA
Pilot duty	120	720VA	290VA
	240	720VA	260VA
Resistive	28VDC	20A	
Max above 104°F	120-277	30A	

## SPECIFICATIONS

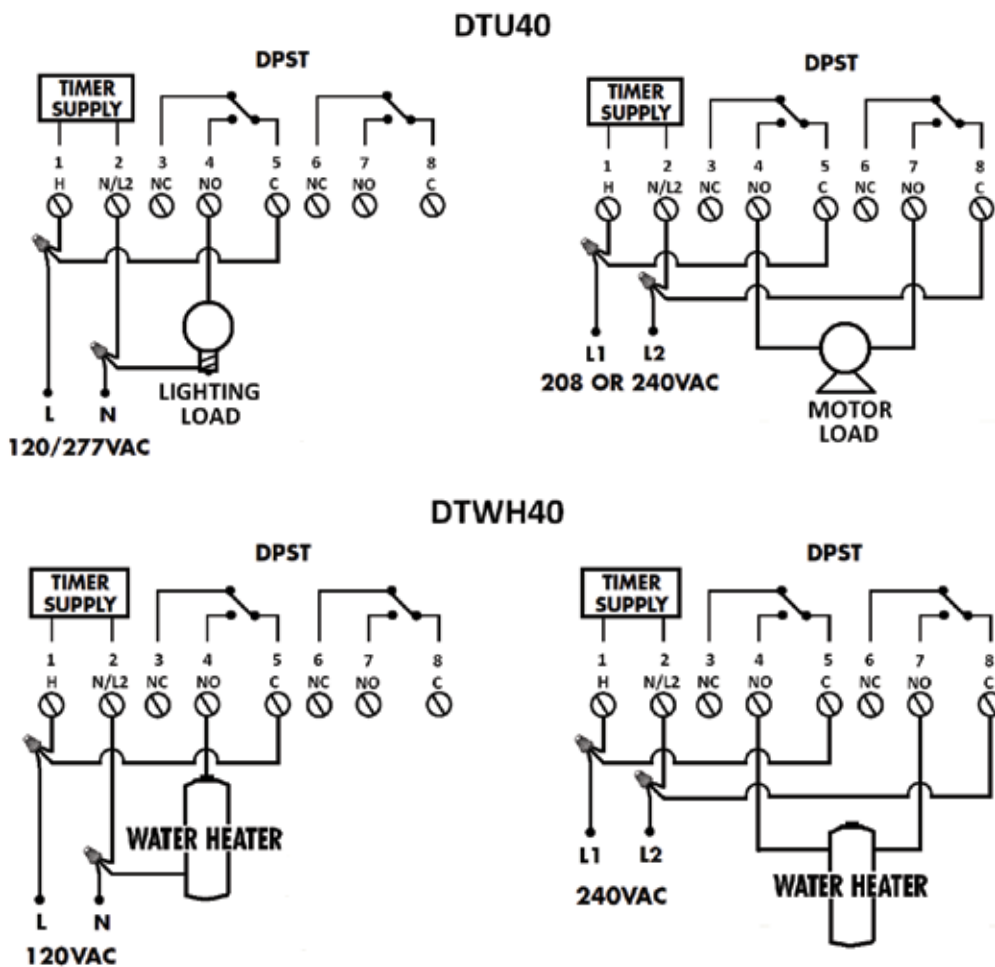
**INPUT VOLTAGE:** 120/208-240/277 VAC, 50/60 Hz (auto detection). DTWH40 is 120/240VAC 50/60Hz (auto detection).

**TERMINAL RANGE:** #8 - #18AWG.

**OPERATING TEMPERATURE:** -31°F to 116°F (-35°C to +47°C).

**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** DTU40 polycarbonate Indoor/Outdoor NEMA 3R. DTWH40 polycarbonate indoor NEMA 1 enclosure with clear cover. Both with lockable hasp (see page 557 for enclosure dimensions).





# EH20C

## AUTOMATIC VOLTAGE DETECTION WATER HEATER TIMER WITH SUMMER LOAD SHED



NEW!



Avoid utility peak rates  
Turn off when not needed

PRE  
PROGRAMMED  
FOR EASY  
SET-UP

### APPLICATIONS



- Electric water heaters for residential or commercial.

### FEATURES

**PRE-PROGRAMMED:** Unit preset for daily OFF time from 12:00am to 4:00am daily.

**SUMMER LOAD SHED:** Additional OFF time from 3:00pm to 7:00pm during Summer time (6/1 to 9/30) annually to avoid peak usage.

**SCHEDULING:** Additional 14 ON or OFF set points for individual programs for each day of the week. Minimum setting 1 minute.

**HOLIDAY SCHEDULE:** Extend to the load shed date throughout the year or preset extra load shed schedules while on vacation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF. Override during pre-programmed times limited to 60 minutes per day.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Lithium battery. Non-rechargeable with 8 year expected life.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50-60Hz	OUTPUT CONTACTS
EH20C	82314	120-277	DPST

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120-277	40A
Inductive	120-277	40A
Pilot duty	120-277	720VA
Motor	120	1 HP
	208	1 1/2 HP
	240-277	2 HP

**SPECIFICATIONS**

**TIMING ACCURACY:** Line Frequency.

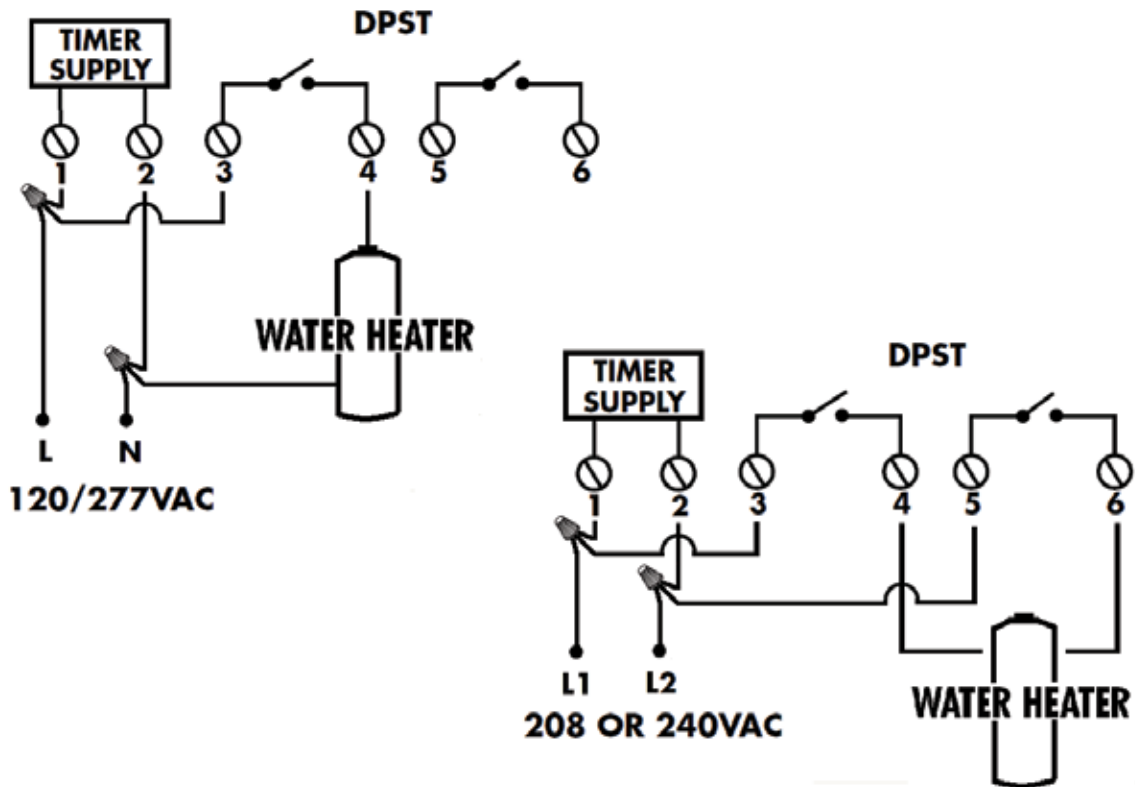
**INPUT VOLTAGE:** 120-277VAC, 50/60Hz  
(automatic detection).

**TERMINAL RANGE:** #8 - #16AWG.

**OPERATING TEMPERATURE:**  
-40° to +149°F (-40° to +65°C).

**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Indoor/Outdoor NEMA 3R  
Polycarbonate with locking hasp.  
(see page 557 for enclosure dimensions).



# SA300 SERIES

## Zip-Set™

### DIGITAL TIME SWITCH



NEW!



AREA CODE  
ENTRY  
FOR FAST  
SET-UP

## APPLICATIONS



- Outdoor lighting
- Electric motors
- Indoor lighting or signs

## FEATURES

**ZIP-SET:** Fast and easy. Just enter area code and timer adjusts to your time with preset program of Sunset ON and time off program.

**SCHEDULING:** One On/Off set point pair is active at a time. Only one schedule may be active at a time: Schedule 1, Schedule 2, a combination of 1 & 2, or ZipSet™. Day combinations for 7-5-2 speed programming.

### MANUAL DAYLIGHT SAVING:

Simple switch adjustment.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**RANDOM FEATURE:** Varies on time +/-90 minutes each day for lived in look.

**CLOCK FORMAT:** AM/PM.

### POWER OUTAGE BACKUP:

Replaceable batteries

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS
SA300	16546	120	SPST
SA306	16549	120	DPST
SA400	16552	120/277	SPST

TYPE	VOLTAGE (VAC) 60Hz	RATING
Resistive	120*	40A
Inductive	120*	40A
Tungsten	120*	40A
Incandescent	120*	40A

Motor 120 1 1/2HP

\*SA400 120/277

## SPECIFICATIONS

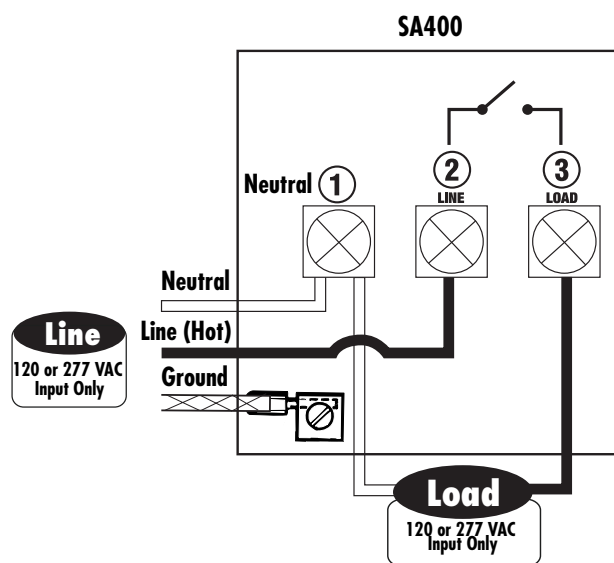
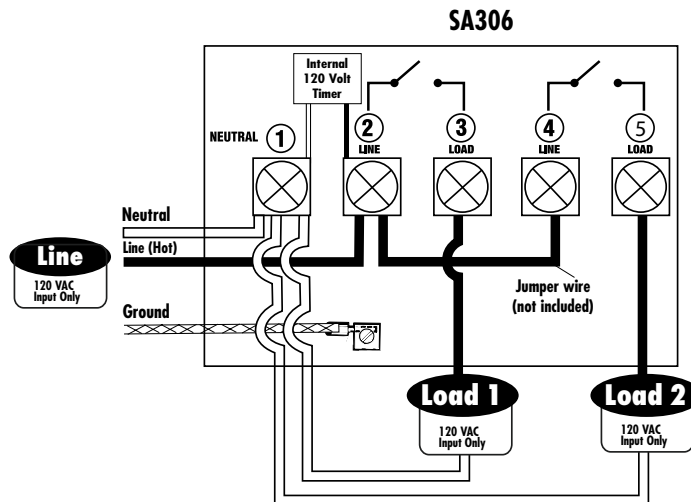
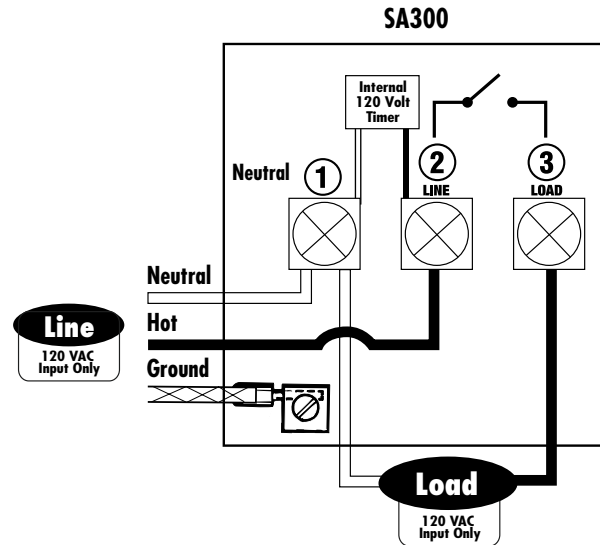
**INPUT VOLTAGE:** 120VAC, 60Hz  
SA400 120/277VAC, 60Hz

**TERMINAL RANGE:** #8 - #16AWG.

**OPERATING TEMPERATURE:**  
32° to +100°F (0° to +37°C).

**POWER CONSUMPTION:** 5VA Max.

**ENCLOSURE:** Indoor Metal with locking hasp.  
SA400 Outdoor Metal with locking hasp.  
(see page 557 for enclosure dimensions).



# E & E-PB SERIES

## MULTIPURPOSE CONTROLS

### 1 OR 2 CHANNEL

### 24 HOUR TIME SWITCH



**BACKUP  
WITHOUT  
BATTERY, ECO  
FRIENDLY!**

## APPLICATIONS



- Signs
- Air conditioning
- Lighting
- Sump pumps
- Ventilating fans

## FEATURES

**SCHEDULING:** 20 ON/OFF set points repeat each day. Minimum setting 1 minute.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 4 days of real time backup.

**MOMENTARY OPTION:** For mechanically held contractors: Model E201B only. Configure with simple jumper change for single-channel momentary operation.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT DRY CONTACTS
E101B	82401	120-277	1	SPST
E103B	82411	120-277	1	DPST
E120B	82406	120-277	1	SPDT
E201B	82466	120-277	2	SPST
E101PB	82461	120	1	SPST

TYPE	E101B, E103B, E201B		E120B		E101PB	
	VOLTAGE (VAC)	RATING NO	RATING NO	NC	VOLTAGE (VAC)	RATING NO
General Purpose	120-277	40A	30A	30A	120/240 277	30A 12A
Inductive	120-277	40A	30A	30A	120/240 277	30A 12A
Ballast	120	30A	30A	10A	120	20A
	208-277	20A	20A	10A	277	6A
Tungsten	120	15A	15A	2A	120	5A
Pilot Duty	120-277	720VA	720VA	720VA	120-240 277	470VA 690VA
	120	1HP	1HP	1HP	120	1HP
Motor	208	1 1/2HP	1 1/2HP	1 1/2HP	240	2HP
	240-277	2HP	2HP	2HP		
Resistive	28VDC	30A	30A	30A	28VDC	20A

# SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

**E SERIES**

120 - 277VAC, 50/60Hz (automatic detection).

**E-PB**

120VAC, 50/60Hz.

**TERMINAL RANGE:** #8 - #16AWG.

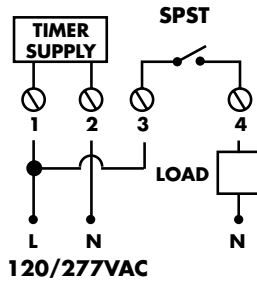
**OPERATING TEMPERATURE:**

-40° to +149°F (-40° to +65°C).

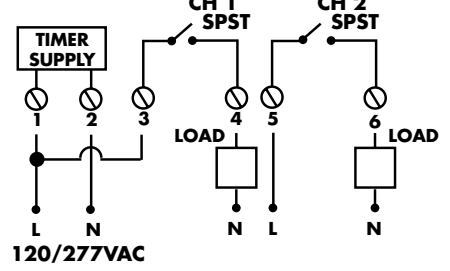
**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Polycarbonate Indoor/Outdoor  
NEMA 3R is standard with lockable hasp (see page 557 for enclosure dimensions).

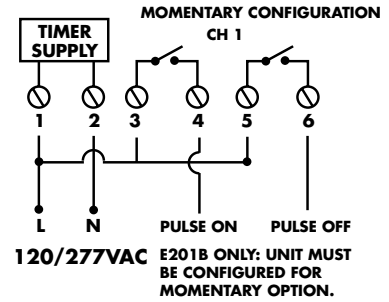
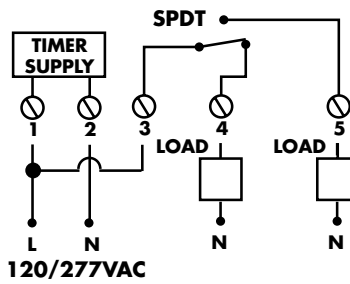
## E101B



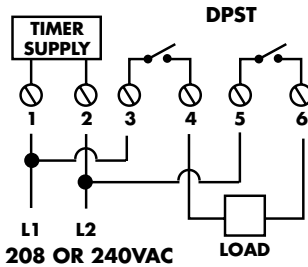
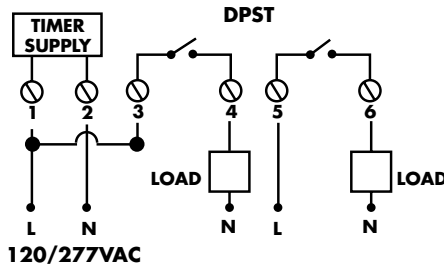
## E201B



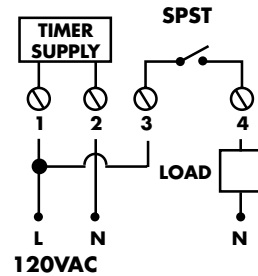
## E120B



## E103B



## E101PB



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# EW SERIES

## MULTIPURPOSE CONTROL

### 1 OR 2 CHANNEL

### 7 DAY TIME SWITCH



CALIFORNIA Title 24

ASHRAE 90.1

**AUTOMATIC DST  
SAVES TIME  
CHANGES  
TWICE A YEAR!**

## APPLICATIONS

- Outdoor signs
- Lighting security
- Heating and air conditioning



## FEATURES

**SCHEDULING:** 20 ON & OFF set points for individual programs for each day of the week. Minimum setting is 1 minute.

**DAYLIGHT SAVING:**

Automatic (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 4 days of real time backup.

**MOMENTARY OPTION:** For mechanically held contractors: Model EW201B only. Configure with simple jumper change for single-channel momentary operation.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT DRY CONTACTS
EW101B	82431	120-277	1	SPST
EW103B	82441	120-277	1	DPST
EW120B	82436	120-277	1	SPDT
EW201B	82467	120-277	2	SPST
EW101B-Y	82249	120-277	1	SPST
EW103B-C	82253	120-277	1	DPST
EW103B-Y	82255	120-277	1	DPST
EW120B-C	82437	120-277	1	SPDT
EW120B-Y	82261	120-277	1	SPDT
EW201B-Y	82299	120-277	2	SPST

TYPE	EW101B, EW103B, EW201B		EW120B		
	VOLTAGE (VAC)	RATING NO	VOLTAGE (VAC)	RATING NO	RATING NC
General Purpose	120-277	40A	120-277	30A	30A
Inductive	120-277	40A	120-277	30A	30A
	120	30A	120	30A	10A
Ballast	208-277	20A	208-277	20A	10A
	120	15A	120	15A	2A
Pilot Duty	120-277	720VA	120-277	720VA	720VA
Motor	120	1HP	120	1HP	1HP
	208	1 1/2HP	208	1 1/2HP	1 1/2HP
	240-277	2HP	240-277	2HP	2HP
Resistive	28VDC	30A	28VDC	30A	30A

**SPECIFICATIONS**

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120 - 277VAC, 50/60Hz (automatic detection).

**TERMINAL RANGE:** #8 - #16AWG.

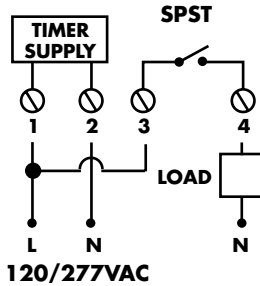
**OPERATING TEMPERATURE:**

-40° to +149°F (-40° to +65°C).

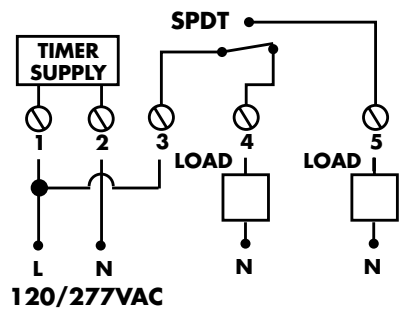
**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Polycarbonate Indoor/Outdoor NEMA 3R. Suffix -C plastic clear cover Indoor/Outdoor NEMA 3R. Suffix -Y metal Indoor enclosure NEMA 1. All with lockable hasp (see page 557 for enclosure dimensions).

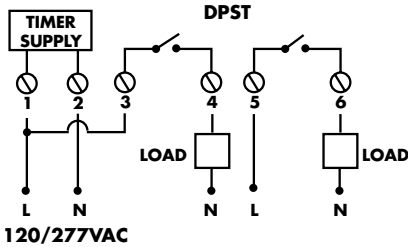
**EW101B**



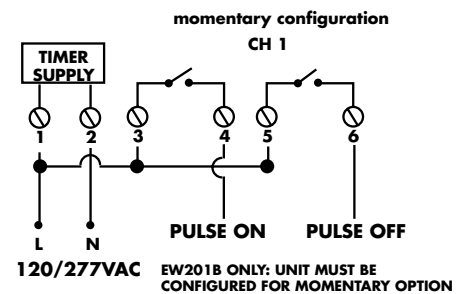
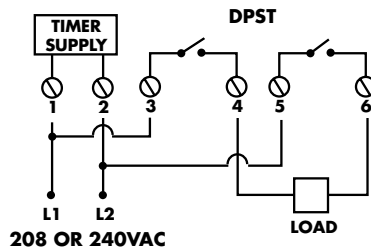
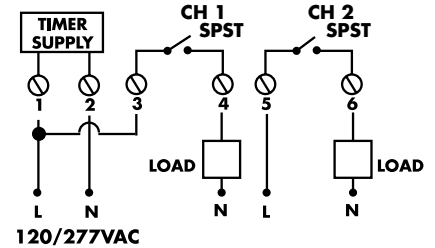
**EW120B**



**EW103B**



**EW201B**



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# EWZ SERIES

## SunSet 1 OR 2 CHANNEL 7 DAY TIME SWITCH



**PREFERRED FOR  
OUTDOOR  
LIGHTING!**

### APPLICATIONS



CALIFORNIA Title 24

ASHRAE 90.1

- Outdoor signs
- Lighting security
- Heating and air conditioning

### FEATURES

**SCHEDULING:** 20 ON & OFF set points for individual programs for each day of the week. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes. Can be individually offset +/- 1-240 minutes from both sunset and sunrise times.

**DAYLIGHT SAVING:** Automatic (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 4 days of real time backup.

**MOMENTARY OPTION:** For mechanically held contactors: Model EWZ201 only. Configure with simple jumper change for single-channel momentary operation.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT DRY CONTACTS
EWZ101	82470	120-277	1	SPST
EWZ103	82473	120-277	1	DPST
EWZ120	82471	120-277	1	SPDT
EWZ201	82472	120-277	2	SPST
EWZ101-MB	82263	120-277	1	SPST
EWZ103-MB	82269	120-277	1	DPST
EWZ120-MB	82275	120-277	1	SPDT
EWZ201-MB	82281	120-277	2	SPST

TYPE	EWZ101,EWZ103, EWZ201		EWZ120		
	VOLTAGE (VAC)	RATING NO	VOLTAGE (VAC)	RATING NO	RATING NC
General Purpose	120-277	40A	120-277	30A	30A
Inductive	120	30A	120	30A	10A
	208-277	20A	208-277	20A	10A
Tungsten	120	15A	120	15A	2A
Pilot Duty	120-277	720VA	120-277	720VA	720VA
Motor	120	1HP	120	1HP	1HP
	208	1 1/2HP	208	1 1/2HP	1 1/2HP
	240-277	2HP	240-277	2HP	2HP
Resistive	28VDC	30A	28VDC	30A	30A

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120 - 277VAC, 50/60Hz (automatic detection).

**TERMINAL RANGE:** #8 - #16AWG.

**OPERATING TEMPERATURE:**

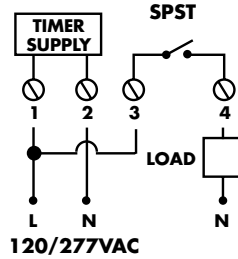
-40° to +149°F (-40° to +65°C).

**POWER CONSUMPTION:** 6VA Max.

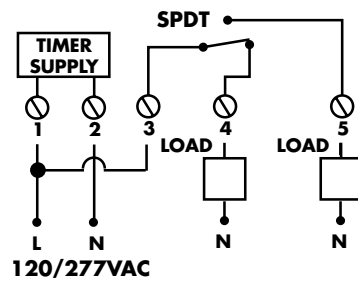
**ENCLOSURE:** Polycarbonate Indoor/Outdoor NEMA 3R is standard with lockable hasp (see page 557 for enclosure dimensions). Suffix -MB without enclosure and includes mounting bracket.

**OPTIONS:** Suffix -Q Quartz crystal timing. Maintains accurate timing where 50 or 60 Hz is not consistent such as on-site generator produced power. Consult factory for minimum order size.

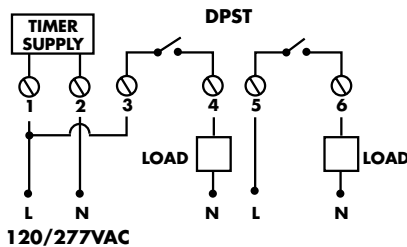
**EWZ101**



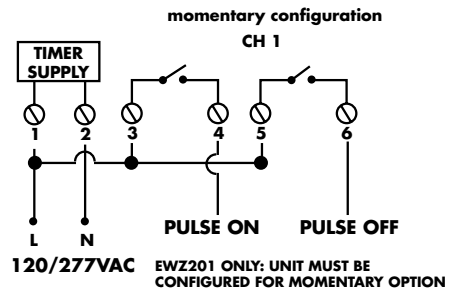
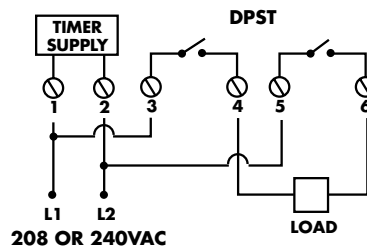
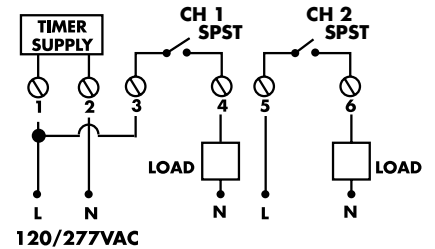
**EWZ120**



**EWZ103**



**EWZ201**



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# DG100 SERIES

## MULTIPURPOSE CONTROLS

### 1 OR 2 CHANNEL

### 365/7 DAY

### TIME SWITCH

**HOLIDAY  
PROGRAMMING  
FOR MORE  
SAVINGS!**



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS

- Indoor/Outdoor lighting
- HVAC equipment
- School warning and other
- Traffic lights
- Water heaters in offices, churches and factories

## FEATURES

**SCHEDULING:** 56 ON & OFF set points provide individual programs for each day of the week. Minimum setting is 1 minute.

**MOMENTARY CONTACT:** DGM100A has 2 second contact closures for ON & OFF control of mechanically held contactors or latching relays.

**BLOCK HOLIDAY:** 9 holiday blocks can be set for individual days or for duration of any number of days.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM or 24 Hour format.

**POWER OUTAGE BACKUP:** Permanent schedule retention is provided. Supercapacitor provides 7 days of real time back up.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT CONTACTS
DG100A	82201	120-277	1	DPDT
DG200A	82209	120-277	2	SPDT
DGM100A	82210	120-277	1	SPDT Momentary
DG100A-Y	82221	120-277	1	DPDT
DGM100A-Y	82222	120-277	1	SPDT Momentary

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	24-277	20A	10A
Ballast	120-277	20A	10A
Tungsten	120	15A	
Pilot Duty	120	720VA	290VA
	240		360VA
Motor	120	1HP	1/4HP
	240	2HP	1/2HP
Resistive	28VDC	20A	10A

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120 - 277VAC, 50/60Hz (automatic detection).

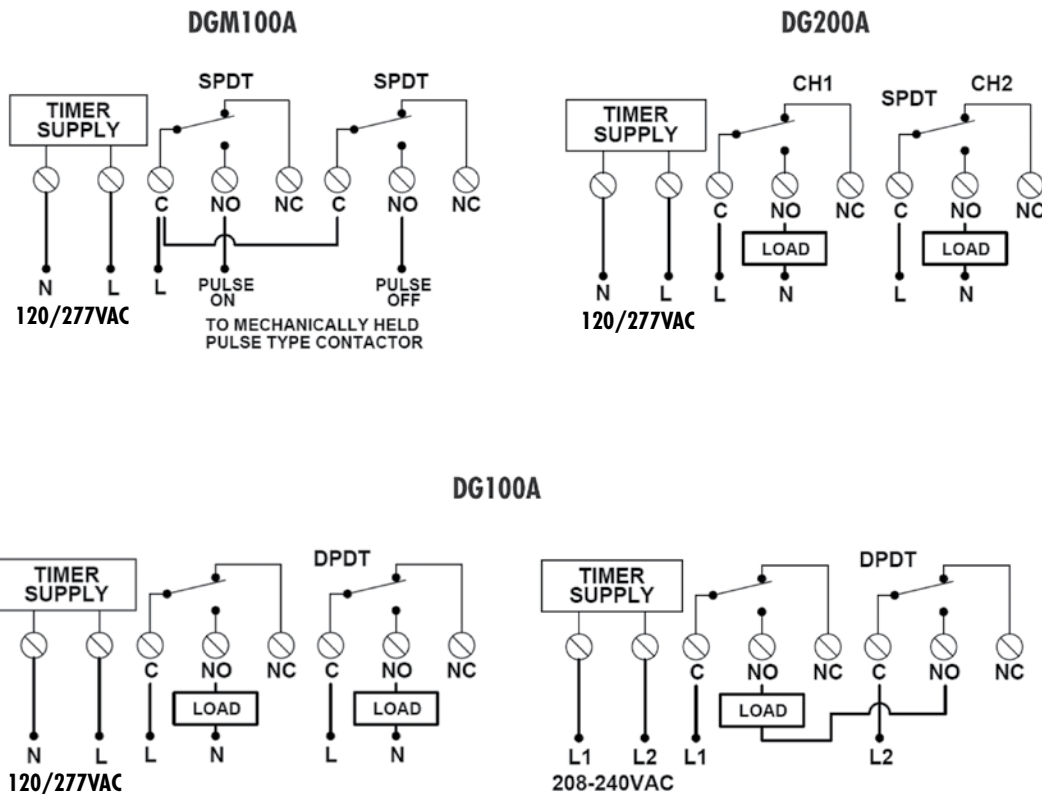
**TERMINAL RANGE:** #12 - #18AWG.

**OPERATING TEMPERATURE:**

-31° to +131°F (-35° to +55°C).

**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA 3R. Suffix -Y metal indoor enclosure NEMA 1. All with lockable hasp (see page 557 for enclosure dimensions).



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# DW SERIES

## MULTIPURPOSE CONTROLS

### 1 OR 2 CHANNEL

### 365 / 7 DAY ADVANCE

### TIME SWITCHES



**SPECIFICATION FAVORITE!**

## APPLICATIONS



- **1 CHANNEL**
  - Outdoor lighting
  - Security lighting
  - Parking lot lighting
  - Canopy lighting
- **2 CHANNEL**
  - HVAC equipment
  - Interior lighting
  - Electric motors
  - Refrigerator defrost control: condensers, heaters.

## FEATURES

- SCHEDULING:** 99 ON & OFF set points allow individual programs for each day of the week at a minimum 1 minute apart.
- SunSet ASTRONOMIC (DWZ100B only):** Adjusts daily to changes in sunset times. Adjustable 10°- 60° Northern or Southern latitudes. Can be individually offset +/- 1 to 240 minutes from both sunset and sunrise times.
- HOLIDAYS:** 1 to 24 individual dates.
- DAYLIGHT SAVING:** Automatic adjustment (can be omitted).
- LEAP YEAR:** Automatic Compensation scheduled ON or OFF, automatic operation then resumes.
- MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.
- CLOCK FORMAT:** AM/PM or 24 Hour Format
- POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 7 days of real time backup.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DWZ100B	82189	120/208-240/277	1	SPDT
DW200B	82190	120/208-240/277	2	SPDT
DW200B-0	82231	120/208-240/277	2	SPDT

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
General Purpose	24-277	30A	30A
Ballast	120	30A	10A
	277	20A	10A
Tungsten	120-277	15A	2A
Pilot Duty	120-277	720VA	720VA
Motor Load	120	1HP	1HP
	208-277	2HP	2HP
Resistive	28VDC	30A	30A

TORK DIGITAL TIME SWITCHES

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120/208-240-277VAC, 50/60Hz.

**TERMINAL RANGE:**

#14 - #16AWG for line input.

#12 - #16AWG load outputs.

**OPERATING TEMPERATURE:**

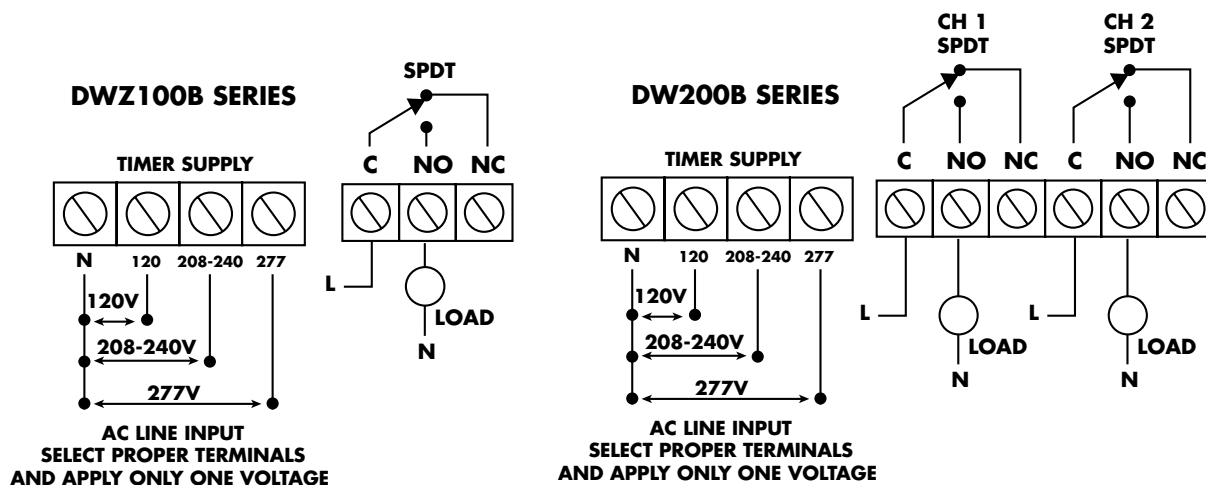
-40° to +158°F (-40° to 70°C).

**POWER CONSUMPTION:** 5VA Max.

**ENCLOSURE:** Noryl® Indoor/Outdoor

NEMA 3R. Suffix -0 metal Indoor/Outdoor NEMA

3. All with lockable hasp (see page 557 for enclosure dimensions).



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# DTS SERIES

## MULTIPURPOSE CONTROLS

### 1, 2 OR 4 CHANNEL

### 365 / 7 DAY ADVANCE

### TIME SWITCH

**MAINTAINED  
AND  
SIGNAL  
TIMING!**



CALIFORNIA Title 24

ASHRAE 90.1

## APPLICATIONS

- Indoor and outdoor lighting
- Heating and air conditioning
- Security systems
- Horns and bells
- Low voltage lighting
- Misting and spraying
- Roof cooling
- Clock correction systems
- Process functions

## FEATURES

**SCHEDULING:** 99 ON/OFF set points allow individual programs for each day of the week at a minimum 1 minute apart.

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year.

**HOLIDAYS:** 1 to 24 individual dates.

**SIGNAL/PULSE DURATION:** 2 different settings per channel: each 1-99 seconds.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes. In signal mode, activates pulse.

**CLOCK FORMAT:** AM/PM or 24 Hour Format.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 7 days of real time back up.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DTS100B	82185	120/208-240/277	1	DPDT
DTS200B	82186	120/208-240/277	2	SPDT
DTS400B	82187	120/208-240/277	4	SPDT

TYPE	DTS100B, DTS200B		DTS400B	
	VOLTAGE (VAC)	RATING NO NC	VOLTAGE (VAC)	RATING NO NC
General Purpose	24-277	30A 30A	24-277	20A 20A
Ballast	120	30A 10A	120-277	13A
	277	20A 10A		
Tungsten	120-277	15A 2A	120	8A
Pilot Duty	120-277	720VA 720VA	120-277	720VA 360VA
Motor Load	120	1HP 1HP	120/240	1/2HP 1/2HP
	208-277	2HP 2HP		
Resistive	28VDC	30A 30A	-	-

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:** 120/208-277VAC,  
50/60Hz.

**TERMINAL RANGE:**

#14 - #16AWG for line input.

#12 - #16AWG load outputs.

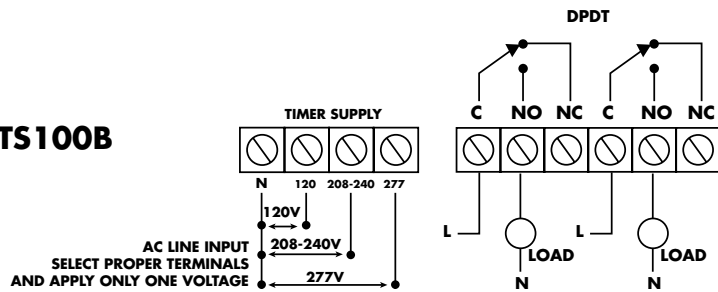
**OPERATING TEMPERATURE:**

-40° to +149°F (-40° to +65°C).

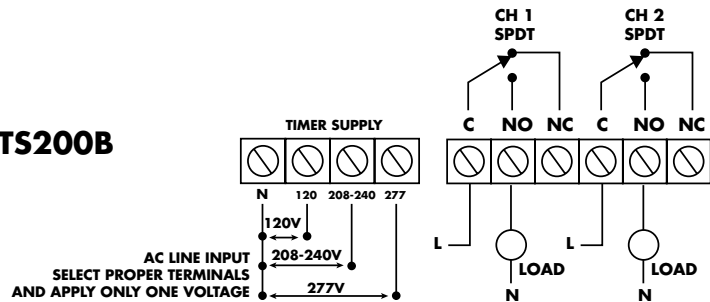
**POWER CONSUMPTION:** 6VA Max.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA  
3R with lockable hasp (see page 557 for enclosure  
dimensions).

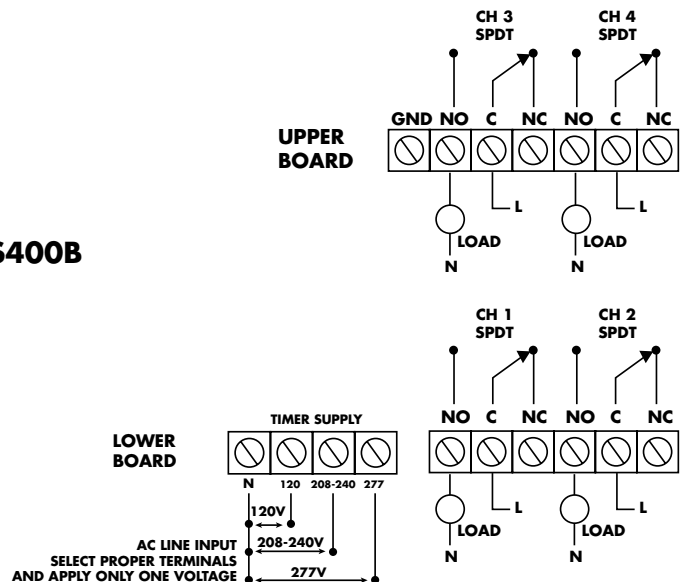
### DTS100B



### DTS200B



### DTS400B



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# DZS SERIES

## MULTIPURPOSE CONTROLS

### 1, 2 OR 4 CHANNEL

### 365 / 7 DAY ADVANCED

### TIME SWITCH



**REMOVABLE  
MEMORY  
MODULE FOR  
COMPUTER  
PROGRAMMING!**

## APPLICATIONS



- HVAC equipment
- Horns and bells
- Interior lighting
- Electric motors
- Outdoor lighting and signs

CALIFORNIA Title 24

ASHRAE 90.1



Memory Module  
Programmer optional

## FEATURES

**SCHEDULING:** 99 ON & OFF set points allow individual programs for each day of the week at a minimum 1 minute apart.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes can be individually offset +/- 1 to 240 minutes from both sunset and sunrise times.

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year.

**HOLIDAYS:** 1 to 24 individual dates.

**SIGNAL/PULSE DURATION:** 2 different settings per channel: 1-99 seconds.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes. In signal mode, activates pulse.

**CLOCK FORMAT:** AM/PM or 24 Hour Format.

**POWER OUTAGE BACKUP:** Permanent schedule retention with memory module. Supercapacitor provides 7 days of real time backup.

**MEMORY MODULE:** Removable MM can be programmed at any one location and inserted into another DZS series unit.

**COPY FEATURE:** Unit can be configured to copy program schedule to multiple memory modules.

**OPTION:** Memory Module Programmer with software for computer connection programming. Also allows stand alone battery operation for portable copy feature.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DZS100BP	82182	120/208-240/277	1	DPDT
DZS200BP	82183	120/208-240/277	2	SPDT
DZS400BP	82184	120/208-240/277	4	SPDT
DZS100BP-0	82215	120/208-240/277	1	DPDT
DZS200BP-0	82227	120/208-240/277	2	SPDT
DZS200BP-12	82228	12VDC	2	SPDT
DZS200BP-24	82229	24VAC	2	SPDT
DZS400BP-0	82230	120/208-240/277	4	SPDT

USB-MMP 82196 Memory Module Programmer Includes software

TYPE	DZS100BP, DZS200BP			DZS400BP		
	VOLTAGE (VAC)	RATING NO	RATING NC	VOLTAGE (VAC)	RATING NO	RATING NC
General Purpose	24-277	30A	30A	24-277	20A	20A
Ballast	120	30A	10A	120-277	13A	-
	277	20A	10A			-
Tungsten	120-277	15A	2A	120	8A	-
Motor Load	120	1HP	1HP	120/240	1/2HP	1/2 HP
	208-277	2HP	2HP			
Pilot Duty	120-277	720VA	720VA	120-277	720VA	360VA
Resistive	28VDC	30A	30A	-	-	-

TORK DIGITAL TIME SWITCHES

# SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:** 120/208-240/277VAC, 50/60Hz.

**TERMINAL RANGE:**

#14-#16AWG for line input.  
#12-#16AWG load outputs.

**OPERATING TEMPERATURE:**

-40° to +158°F (-40° to 70°C).

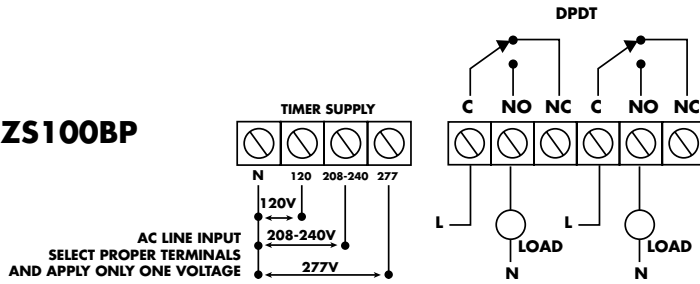
**POWER CONSUMPTION:**

5VA Max: DZS100/200BP.

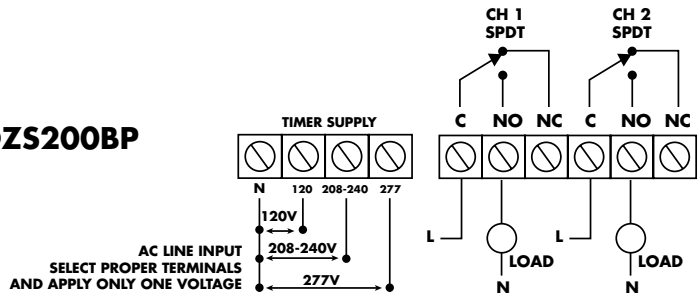
6VA Max: DZS400BP.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA 3R. Suffix -0 metal Indoor/Outdoor NEMA 3. All with lockable hasp (see page 557 for enclosure dimensions).

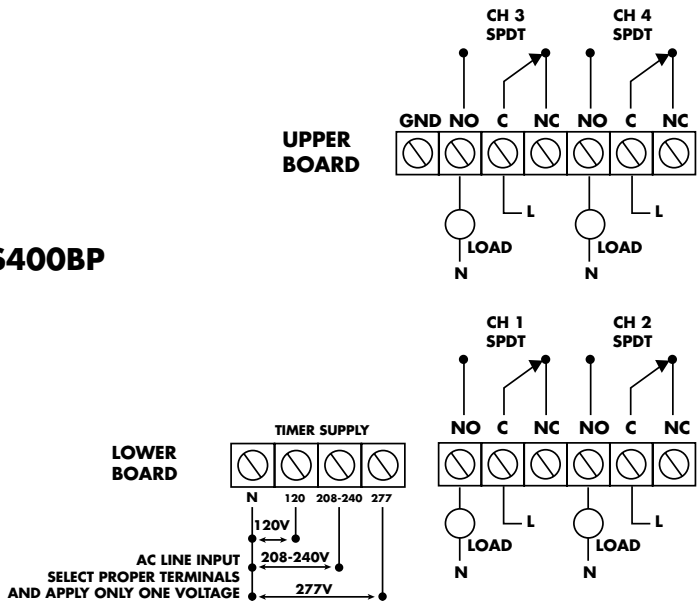
## DZS100BP



## DZS200BP



## DZS400BP



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# DZM SERIES

## MOMENTARY OUTPUT 365 / 7 DAY ADVANCED LIGHTING CONTROL TIME SWITCH



**GREAT FOR  
LATCHING  
CONTACTORS!**

CALIFORNIA Title 24

ASHRAE 90.1



### APPLICATIONS

- Low voltage latching relays
- Direct wire to mechanically held contactors



Memory Module  
Programmer optional

### FEATURES

**SCHEDULING:** 99 ON & OFF set points allow individual programs for each day of the week at a minimum 1 minute apart.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes can be individually offset +/- 1 to 240 minutes from both sunset and sunrise times.

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year.

**HOLIDAYS:** 1 to 24 individual dates.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM or 24 Hour Format.

**POWER OUTAGE BACKUP:** Permanent scheduled retention with memory module. Supercapacitor provides 7 days of real time backup.

**MEMORY MODULE:** Removable MM can be programmed at any one location and inserted into another DZM series unit.

**COPY FEATURE:** Unit can be configured to copy program schedule to multiple memory modules.

**OPTION:** Memory Module Programmer with software for computer connection programming. Also allows stand alone battery operation for portable copy feature.

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	DRY CONTACTS (UNPOWERED)
DZM200BP	82188	120/208-240/277	2	SPDT Momentary
DZM200BP-0	82232	120/208-240/277	2	SPDT Momentary
USB-MMP	82196		Memory Module Programmer	Includes software

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120-277	20A
Pilot Duty	120-277	720VA

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:** 120/208-240/277VAC,  
50/60Hz.

**TERMINAL RANGE:**

#14 - #16AWG for line input.

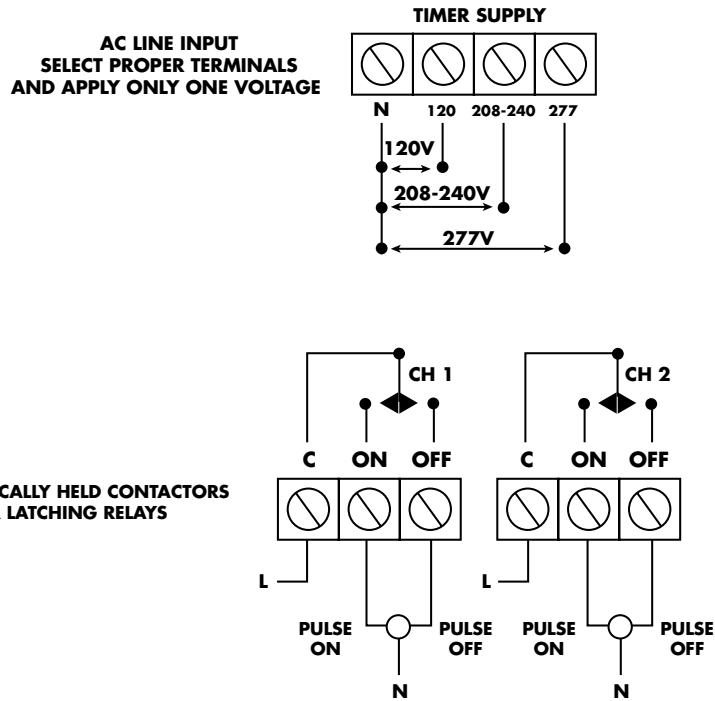
#12 - #16AWG load outputs.

**OPERATING TEMPERATURE:**

-40° to 158°F (-40° to +70°C).

**POWER CONSUMPTION:** 4VA Max.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA  
3R. Suffix -0 metal Indoor/Outdoor NEMA 3. All  
with lockable hasp (see page 557 for dimensions).



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# LC200 SERIES

LIGHT LEVEL / TIME OF DAY OPTION  
2 ZONES LIGHTING CONTROL

STAGE  
LIGHTING  
TURN ON  
LEVEL

## APPLICATIONS



- 24 hour convenience stores
- Open wall parking structures
- Large canopies
- Building perimeters  
Atriums
- Use to control two different outdoor lighting circuits utilizing one photocell. Sign lighting can turn ON at one ambient light level while parking lot lighting turns ON at a different light level.



EPC1 sensor  
supplied with unit.

ASHRAE 90.1

## FEATURES

**PHOTOSENSOR INPUT:** EPC1 included.

**DUAL OUTPUTS:** with independent turn-ON adjustment for Stage1 and Stage 2.

**LIGHT LEVEL ACTIVATION:** Turn ON is user settable from 2 to 100 footcandle; Independent light level adjustment for each zone. Turn OFF is a maximum of 2 times turn ON level. Built-in delay OFF of 30 seconds to avoid reaction to lightning or headlights.

**SWITCHED INPUT:** Turns off loads. Can be used for photocell ON and time switch OFF operation.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	NO. OF ZONES	OUTPUT CONTACTS
LC200	82111	120/240/277	2	SPDT
LC200M	82113	120/240/277	2	SPDT

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	120/240	20A	10A
	277	12A	
Ballast	120	20A	10A
	240/277	6A	3A
Tungsten	120/240/277	5A	3A
Pilot Duty	120/240	470VA	275VA
	277	690VA	

## SPECIFICATIONS

**INPUT VOLTAGE:**

120/240/277VAC, 50/60Hz.

**TERMINAL RANGE:** Relay #12AWG; input

power terminals #14 - #22AWG; TOD/sensor terminals accept #18 - #22AWG.

**OPERATING TEMPERATURE:**

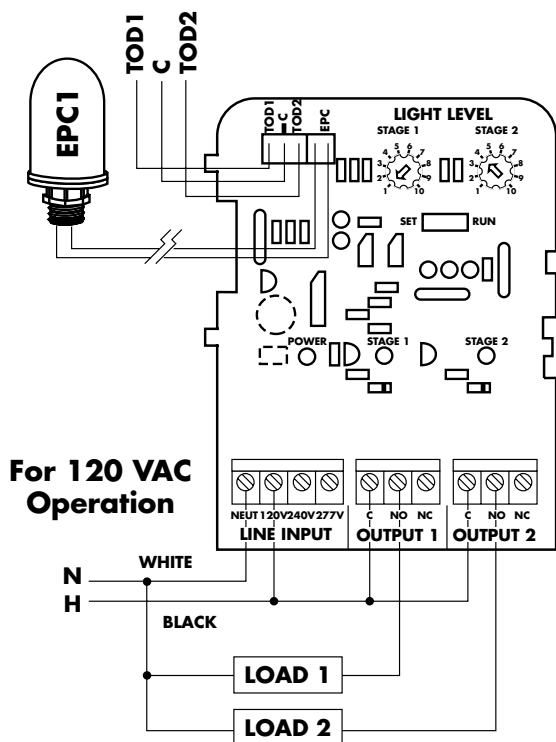
-40°F to +140°F (-40°C to + 60°C).

**POWER CONSUMPTION:** 5VA Maximum.

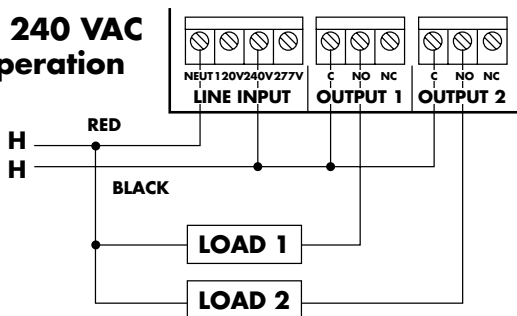
**ENCLOSURE:** LC200 includes metal Indoor NEMA 1 with lockable hasp (see page 557 for dimensions).

**OTHER MOUNTINGS:**

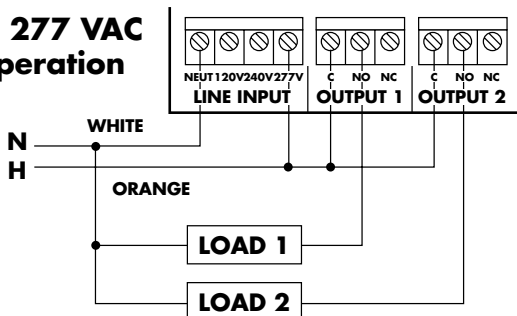
LC200M mechanism only.



**For 240 VAC Operation**



**For 277 VAC Operation**



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# DGU & DGLC SERIES

LIGHTING CONTROL WITH PHOTO  
OR OVERRIDE INPUT  
7 DAY LIGHTING  
CONTROL TIME SWITCH

NEW!

SunSet

responsible  
energy

SMALL  
BUSINESS  
ENERGY CODE  
PANEL

## APPLICATIONS

### INTERIOR LIGHTING

- Open office zoning
- Hallways
- Meeting and sales areas
- Stock rooms and warehouses

### EXTERIOR LIGHTING

- Signage and store windows
- Security
- Parking lots



CALIFORNIA Title 24

ASHRAE 90.1

Model EPC-A supplied  
with DGLC-A unit.

With optional  
Timed Override

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	NO. OF CHANNELS	OUTPUT CONTACTS
DGU100A-Y	82211	120-277	1	DPDT
DGUM100A	82212	120-277	1	SPDT Momentary
DGUM100A-Y	82224	120-277	1	SPDT Momentary
DGLC100A-NC	82223	120-277	1	DPDT
DGLC200A-NC	82213	120-277	2	SPDT
EPC-A	82112	Accessory Photo Sensor	-	-
SS410	14033	24VAC/24VDC	-	SPDT
TRP-24B	98225	120/277	Transformer Power Pack	SPST

## FEATURES

**SCHEDULING:** 56 ON & OFF set points provide individual programs for each day of the week. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes. Can be individually offset +/- 1-240 minutes from both sunset and sunrise times.

**PHOTOSENSOR INPUT:** Unique push button set-up assures accurate operation with automatic calibration that adjusts for wire size and distance. EPC-A photo sensor is included with the DGLC-A and may be ordered as an option for use with model DGU100A & DGUM100A.

**LIGHT LEVEL ACTIVATION:** Turn ON is user settable from 1 to 100 footcandle; Turn OFF is a maximum of 2 times turn ON level. Each channel has an independent setting. Includes a user settable delay before ON and OFF between 1 – 90 seconds.

**REMOTE OVERRIDE ON:** Each channel has independent input for a maintained dry-contact closure. May use TORK model SS410 and TRP-24B for timed override. May use with occupancy sensor with dry contacts as override.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**MOMENTARY CONTACT - DGUM100A:** 2 second contact closure ON & OFF to control mechanically held contactors or latching relays.

**BLOCK HOLIDAY:** 9 holiday blocks can be set for individual days or for duration of any number of days.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**CLOCK FORMAT:** AM/PM or 24 Hour format.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 7 days of real time backup.

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:** 120-277VAC, 50/60Hz (auto detection).

**TERMINAL RANGE:**

#12 - #18AWG for line/load.

#18 - #26AWG sensor/switch input.

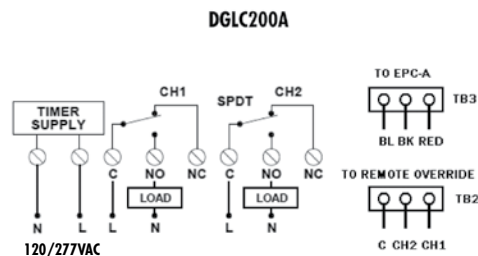
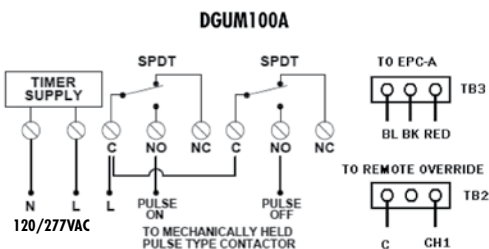
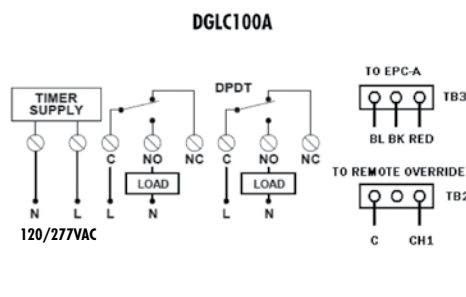
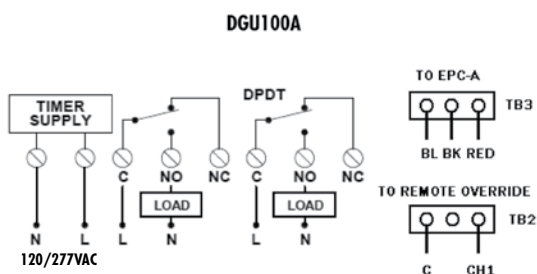
**OPERATING TEMPERATURE:**

-31°F to +131°F (-35°C to +55°C).

**POWER CONSUMPTION:** 6VA Maximum.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA 3R . Suffix -NC Noryl® Indoor/Outdoor NEMA 3R with clear Lexan® cover. Suffix -Y metal Indoor enclosure NEMA 1. All with lockable hasp (see page 557 for dimensions).

TYPE	VOLTAGE	RATING	
		NO	NC
Resistive	24-277VAC	20A	10A
Ballast	120-277VAC	20A	10A
Tungsten	120VAC	15A	
Pilot Duty	120VAC 240VAC	720VA	290VA 360VA
Motor	120VAC 240VAC	1HP 2HP	1/4HP 1/2HP
Resistive	28VDC	20A	10A



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# ELC SERIES

## ENERGY AND LIGHTING CONTROL

### 4, 8 & 12 ZONE

## LIGHTING CONTROL

THE  
DO-IT-ALL  
ENERGY  
& LIGHTING  
CONTROLLER

### APPLICATIONS

- HVAC equipment
- Indoor/Outdoor lighting
- Meets indoor/outdoor lighting energy code requirements



CALIFORNIA Title 24

ASHRAE 90.1

EPC-LC

LCS115M

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT CONTACTS
ELC74	82523	24/120/208-240/277	4	SPDT
ELC78	82524	24/120/208-240/277	8	SPDT
ELC712	82525	24/120/208-240/277	12	SPDT
EPC-LC	82233	Accessory Photo Sensor	-	-
LCS115M	82082	Accessory Momentary Switch	-	SPST

### FEATURES

**SCHEDULING:** 128 time based events allow individual programs for each day of the week at a minimum 1 minute apart. Event types include ON, OFF, Duration, or Duty Cycle.

**SENSOR EVENT:** 32 sensor driven events allow individual programs for each day of the week.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Adjustable 10° - 70° Northern or Southern latitudes. Settings can be offset from both sunset and sunrise times.

**UNIVERSAL INPUT:** 8 inputs may be assigned to any channel. ELC74 includes 4.

**SWITCHED INPUT:** Accepts input from optional momentary or maintained switch for a timed override.

**PHOTOSENSOR INPUT:** Accepts input from optional sensor. EPC-LC (indoor/outdoor) has a range from 0 - 250 foot-candels.

**MOMENTARY CONTACT:** May be configured for momentary ON/OFF operation to control latching contactors. The ELC74 operates as a two channel unit. The ELC78 operates as a four channel unit. The ELC712 operates as a six channel unit.

**HOLIDAYS:** 26 holidays may be set using 10 individual dates, 10 month type (last Monday in May), or 6 specific holidays with one of 3 independent holiday schedules.

**BLOCK HOLIDAY:** 10 holiday blocks can be set for individual days or for duration of any number of days and may use one of 3 holiday schedules.

**PULSE/TIME DURATION:** 4 different ON settings from 1 second to 23 hours, 59 minutes, 59 seconds.

**DUTY CYCLE:** 4 different ON and OFF patterns from 1 second to 23 hours, 59 minutes, 59 seconds.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**REMOTE OVERRIDE:** Universal input may be programmed for timed override from a momentary or maintained dry contact switch.

**MANUAL OVERRIDE:** Keyboard button control until the next regularly scheduled ON or OFF, automatic operation then resumes.

**STAGGERED START:** Optional stagger up time between channels, after a power outage; selectable from 5 seconds, 15 seconds, 30 seconds, 1 minute, 5 minutes, 10 minutes, and 15 minutes.

**CLOCK FORMAT:** AM/PM or 24 hour format.

**POWER OUTAGE BACKUP:** The program and time of day are maintained for a minimum of 2 days by means of a capacitor. After two days, a lithium battery takes over and provides a minimum accumulated time of 1 year. The lithium battery should provide over 10 years of protection.

**SPECIFICATIONS**

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:**

24/120/208-240/277VAC, 50/60Hz.

**TERMINAL RANGE:**

#10 - #16AWG for line input.

#10 - #16AWG for load output.

#14 - #22AWG universal input.

**OPERATING TEMPERATURE:**

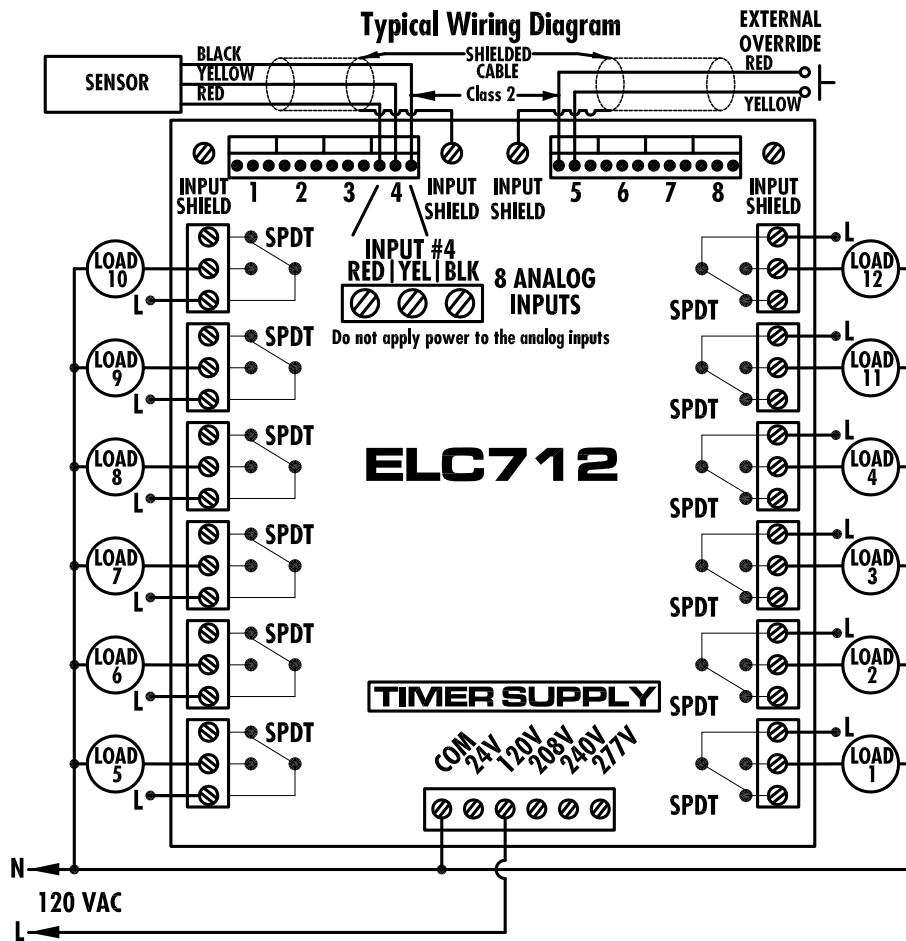
-20°F to +140°F (-29°C to + 60°C).

**POWER CONSUMPTION:** 10VA Maximum.

**ENCLOSURE:** Metal Indoor NEMA 1 with

lockable hasp (see page 558 for dimensions).

TYPE	VOLTAGE	RATING	
		NO	NC
General Purpose	24/120 - 277VAC	20A	15A
Ballast	120-277VAC	20A	20A
Tungsten	120-277VAC	5A	-
Pilot Duty	120-240VAC	470VA	275VA
Motor	120VAC	1HP	1/4HP
	208-277VAC	2HP	1/2HP



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# DLC400BP

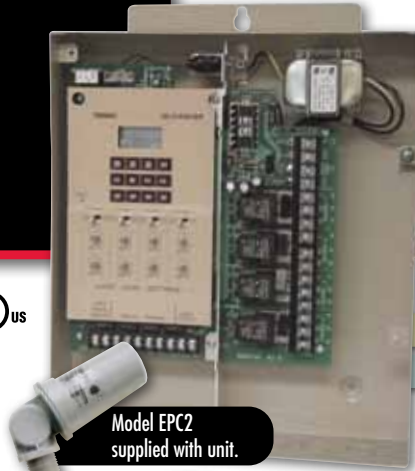
## 4 ZONE LIGHTING CONTROL TIME SWITCH

**FLEXIBLE  
INDOOR &  
OUTDOOR  
LIGHTING  
CONTROLLER**



CALIFORNIA Title 24

ASHRAE 90.1



Model EPC2  
supplied with unit.



Memory Module  
Programmer optional



With optional  
Timed Override

### APPLICATIONS

#### INTERIOR LIGHTING

- Open office zoning
- Hallways
- Meeting and sales areas
- Stock rooms and warehouses

#### EXTERIOR LIGHTING

- Signage and store windows
- Security
- Parking lots

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	NO. OF CHANNELS	OUTPUT CONTACTS
DLC400BP	82191	120/208-240/277	4	SPDT
USB-MMP	82196	Memory Module Programmer	Includes Software	
SS410	14033	24VAC/24VDC	-	SPDT

### FEATURES

**CONFIGURABLE ZONES:** Simple three position slide switch sets logic for each zone: Time ON/Time OFF, Photo ON/Photo OFF, or Photo ON/ Time OFF.

**SCHEDULING:** 99 ON & OFF set points allow individual programs for each day of the week. Minimum 1 minute apart.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. **1.** Adjustable 10° - 60° Northern or Southern latitudes. **2.** Can be individually offset +/-1-240 minutes from both sunset and sunrise times.

**PHOTOSENSOR INPUT:** EPC2 photo sensor included.

**LIGHT LEVEL ACTIVATION:** Turn ON and OFF level is user settable from 1 to 100 footcandle. Each channel has an independent setting.

**REMOTE OVERRIDE:** Maintained dry contact closure or use TORK Model SS410 for timed override with flash warning before OFF. May use with occupancy sensor as override.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**SEASONS:** 1 to 4 with different daily schedules which can wrap around into the new year.

**HOLIDAYS:** 1 to 24 individual dates.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**POWER OUTAGE BACKUP:** Permanent schedule retention with memory module. Battery provides real time backup for 6 months cumulative.

**MEMORY MODULE:** Removable MM can be programmed at any one location and inserted into another DZS series unit.

**OPTION:** Memory Module Programmer with software for computer connection programming. Also allows stand alone battery operation for portable copy feature.

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:**

120/208 - 240/277VAC, 50/60Hz.

**TERMINAL RANGE:** #10 - #14AWG.

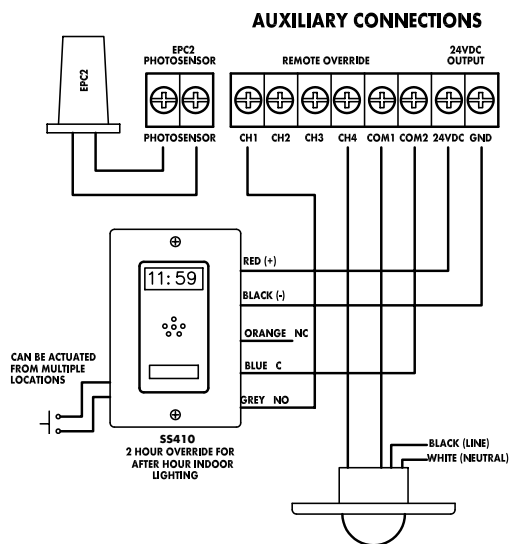
**OPERATING TEMPERATURE:**

-40°F to +158°F (-40°C to + 55°C).

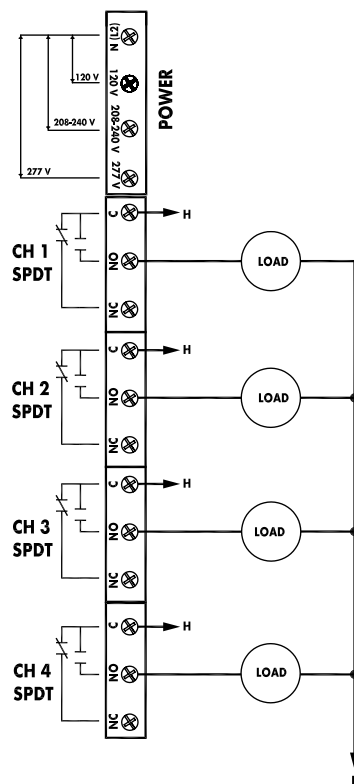
**POWER CONSUMPTION:** 30VA Maximum.

**ENCLOSURE:** Metal Indoor/Outdoor NEMA 3 with lockable hasp (see page 557 for dimensions).

TYPE	VOLTAGE	RATING	
		NO	NC
General Purpose	24-277VAC, 30VDC	30A	30A
Ballast	120-277VAC	20A	10A
Tungsten	120VAC	10A	
Pilot Duty	120-277VAC	720VA	720VA



TORK DIGITAL CONTROL TERMINAL BLOCK



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# LD SERIES

## EXTENDED LIGHTING CONTROL LIGHTING DELAY TIME SWITCH



ASHRAE 90.1

ADD A  
WARNING  
BLINK TO ANY  
CONTROL

### APPLICATIONS



- Open offices
- Gymnasiums
- Warehouses
- Outdoor recreation courts
- User-activated lights with time limits
- Match with photocontrol and timer to limit hours of use

### FEATURES

**MAINTAINED INPUT WITH LOAD WARNING BLINK:** LDS Series controls output load contacts based on power applied to the time switch input contact. At removal of power from the time switch input, LDS Series provides 1 second blink then keeps load contacts closed for an extra 1 or 5 minutes (user selectable) before turn off.

**MAINTAINED INPUT WITH AUXILIARY WARNING:** LDSH Series controls output load contacts based on power applied to the time switch input contact. At removal of power from the time switch input, LDSH Series closes a second set of contacts for a user supplied audible or visual warning device. The warning circuit closes for a selected time of 4 seconds (best for audible device or continuous, then keeps load contacts closed for an extra 1 or 5 minutes (user selectable) before turn OFF.

**MOMENTARY INPUT:** Provides timed override when time switch input contact is unpowered (timer OFF). When activated during the warning period, load contacts are kept closed and timing starts. Both series can accept momentary input contact closure for ON to start the timing and OFF to end the timing.

**TIMED OVERRIDE SETTINGS:** User may select override times of 1/2, 1, 1 1/2, 2, 6, 9, or 12 hours. Warning before OFF is always active after override time.

### SPECIFICATIONS

**INPUT VOLTAGE:**  
120/208/240/277VAC, 50/60Hz.

**TERMINAL RANGE:** #10 - #16AWG for line/load. #18 - #26AWG switch input.

**OPERATING TEMPERATURE:**  
-22° to 150°F (-30° to +65°C).

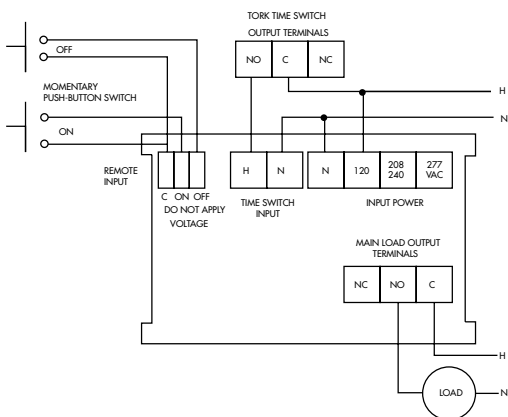
**POWER CONSUMPTION:**  
5VA Maximum.

**ENCLOSURE:** Metal Indoor NEMA 1 with lockable hasp (see page 557 for dimensions).

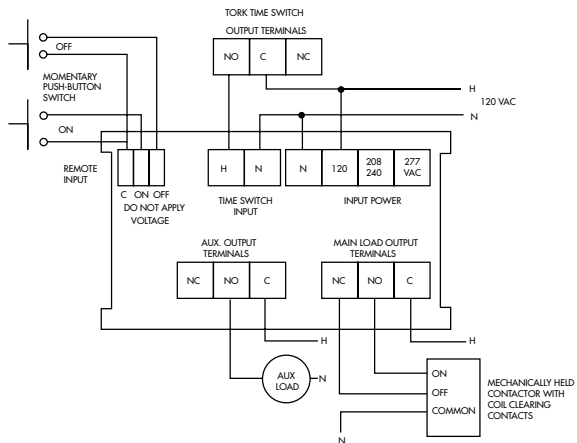
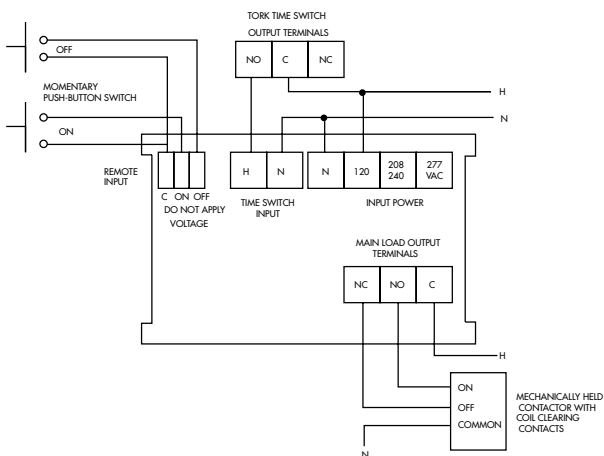
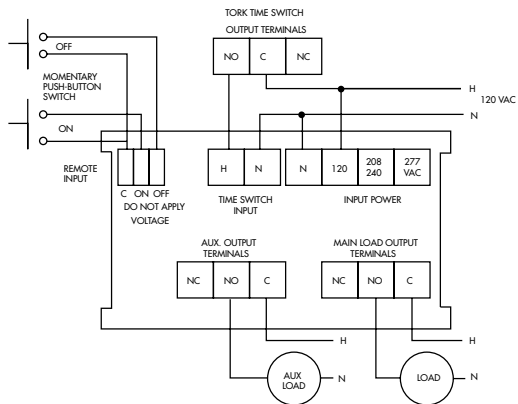
CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
LDS-A	81026	120/208-240/277	SPDT	Metal Indoor NEMA 1
LDS	81025	120/208-240/277	SPDT	Mechanism
LDSH-A	81031	120/208-240/277	SPDT	Metal Indoor NEMA 1
LDSH	81028	120/208-240/277	SPDT	Mechanism

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
General Purpose	24/240 277	20A	10A
		20A	3A
Ballast	120 208-277	20A	10A
		10A	3A
Tungsten	120-277	5A	3A
Pilot Duty	120-240 277	470VA	275VA
		690VA	
Resistive	28VDC	20A	10A

**LDS WIRING**

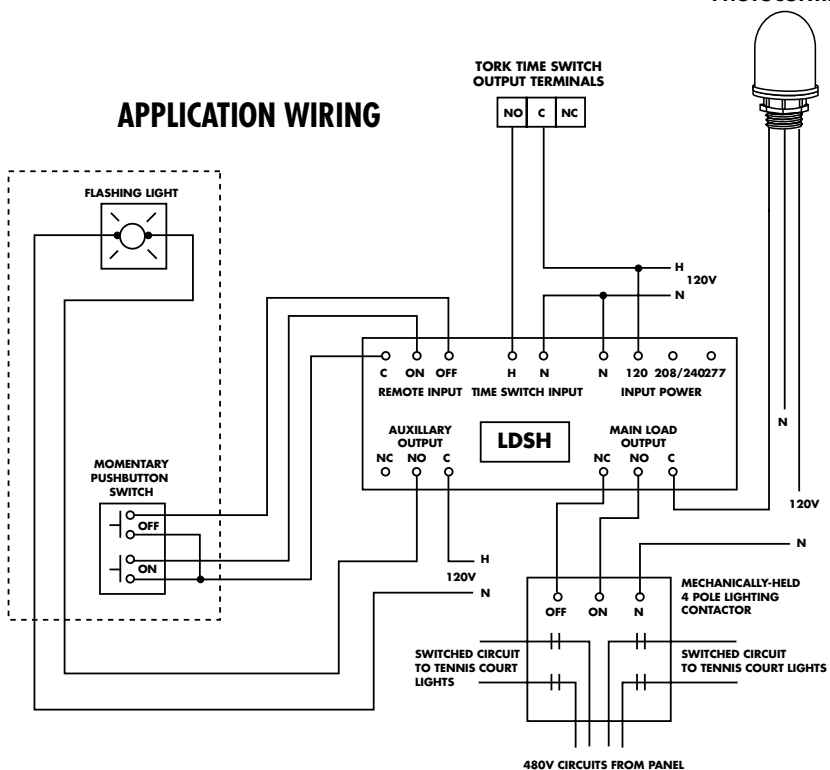


**LDSH WIRING**



**PHOTOCONTROL**

**APPLICATION WIRING**



# DGS SERIES

## SIGNALING AND DUTY CYCLE

### 24 HOUR OR 7 DAY

### TIME SWITCH



**31 DAY  
CYCLE TIME:  
AN INDUSTRY  
FIRST!**

## APPLICATIONS



- Signaling
- Duty cycle

## FEATURES

**DG180A & DG280A:** 56 ON & OFF set points provide daily repeated programs. Minimum setting is 1 minute.

**DGS100A:** 56 ON & OFF set points provide individual programs for each day of the week. Minimum setting is 1 minute.

**DUTY CYCLE & SIGNALING:** Two different ON/OFF patterns or signal durations may be programmed. The durations can be up to 23 hours, 59 minutes and 59 seconds in length.

**SKIP FUNCTION (24 HOUR UNITS ONLY):** Each channel can be set for ACTIVE/SKIP operations that alternate from 1 - 31 days. This becomes an effective way to cycle loads on varying days within the month. Using the two-circuit DG280A, two loads can be set to operate on alternate days in a simple manner.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM or 24 hour.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 7 days of real time backup.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	NO. OF CHANNELS	OUTPUT CONTACTS
<b>24 HOUR MODELS</b>				
DG180A	82206	120-277	1	DPDT
DG280A	82207	120-277	2	SPDT
DG280A-24	82220	24VAC	2	SPDT
<b>7 DAY MODELS</b>				
DGS100A	82205	120-277	1	DPDT
DGS100A-12	82218	12VDC	1	DPDT
DGS100A-24	82219	24VAC	1	DPDT

## SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:**

120 - 277 VAC, 50/60 Hz (auto detection).

**TERMINAL RANGE:** #12 - #18AWG.

**OPERATING TEMPERATURE:**

-31°F to +131°F (-35°C to + 55°C).

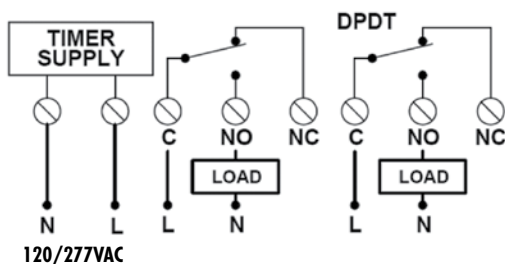
**POWER CONSUMPTION:** 6VA Maximum.

**ENCLOSURE:** Noryl® Indoor/Outdoor NEMA

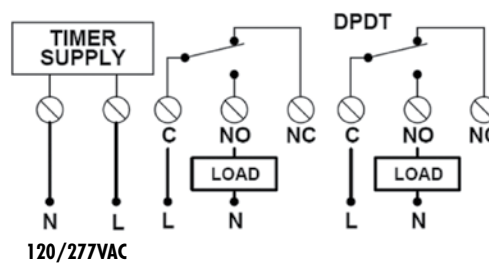
3R with lockable hasp (see page 557 for enclosure dimensions).

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	24-277	20A	10A
Ballast	120-277	20A	10A
Tungsten	120	15 A	
Pilot Duty	120	720VA	290VA
	240		360VA
Motor	120	1HP	1/4HP
	240	2HP	1/2HP
Resistive	28VDC	20A	10A

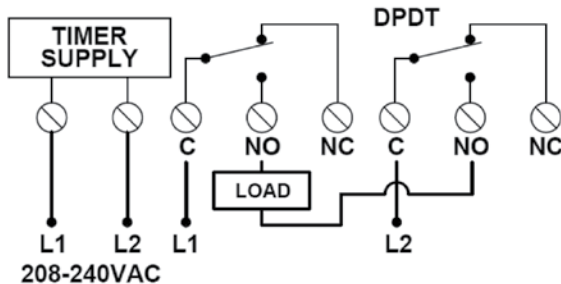
**DGS100A**  
FOR 120V/277VAC



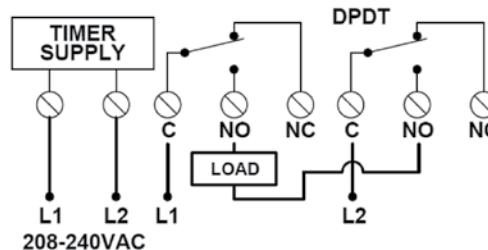
**DG180A**  
FOR 120V/277VAC



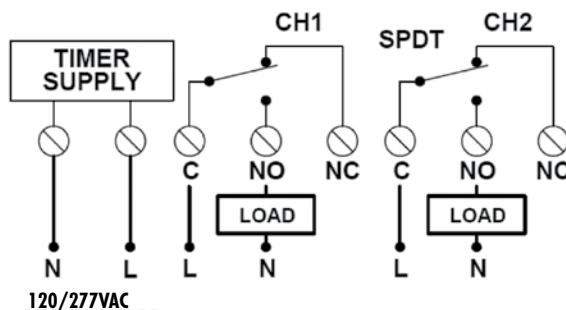
**DGS100A**  
FOR 208-240VAC



**DG180A**  
FOR 208-240VAC



**DG280A**



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# EJWT & E500T SERIES

DELAY, INTERVAL &  
PERCENTAGE TIME CYCLE  
TIME SWITCHES

PERFECT FOR  
PROCESS  
CONTROL

## APPLICATIONS



- Poultry and livestock
- Agriculture or greenhouse
- Oil well pumping
- Ventilation
- Process control



## FEATURES

### EJWT – PERCENTAGE TIMER

960 time combinations with two dials.  
Cycle Time Dial sets 32 repeating cycles from 15 seconds to 24 hours.  
Percentage ON Dial has 32 steps from 0% to 100%.  
Repeats cycle as long as power is applied.

### E500T – ON DELAY TIMER

Dial sets 30 time delay durations from 5 seconds to 3 hours.  
External switch activated starts delay to ON.  
Runs until external switch turns OFF.

### E501T – AUTO OFF INTERVAL TIMER

Dial sets 30 time durations from 10 seconds to 12 hours.  
Start/Stop button or External switch starts interval ON.  
Automatically turns OFF at end of preset time.  
START/STOP or External switch turns OFF.

### E502T – OFF DELAY TIMER

Dial sets 30 time durations from 5 seconds to 3 hours.  
External switch starts interval ON.  
Automatically turns OFF at end of preset time.  
External switch turns OFF.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	OUTPUT CONTACT
EJWT	82513	120-240	SPDT
E500T	82514	120-240	SPDT
E501T	82515	120-240	SPDT
E502T	82516	120-240	SPDT

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
General Purpose	120-240	20A	10A
Resistive	120-240	20A	10A
Motor	120	1HP	1/4HP
	208-240	2HP	1/2HP
Pilot Duty	120/240	470VA	275VA

## SPECIFICATIONS

**TIMING ACCURACY:** 1% of timing range.

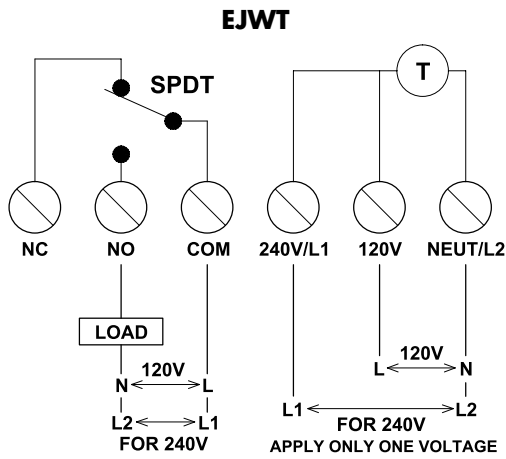
**INPUT VOLTAGE:** 120/240VAC, 60Hz.

**TERMINAL RANGE:** #12 - #18AWG.

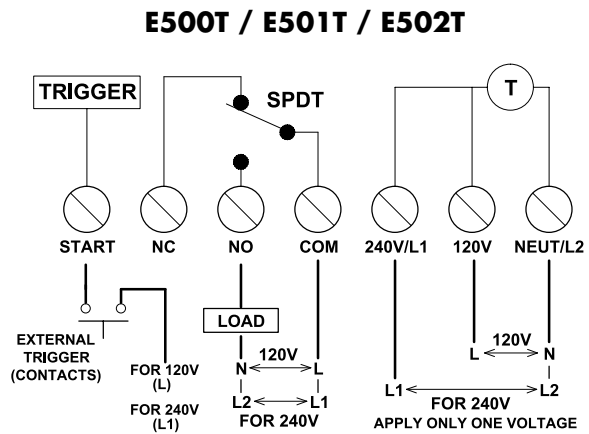
**OPERATING TEMPERATURE:**  
32°F to +122°F (0°C to + 50°C).

**POWER CONSUMPTION:** 16VA Maximum.

**ENCLOSURE:** Indoor NEMA 4X is standard (see page 558 for enclosure dimensions).



Use copper conductors. For supply connections use AWG #12 wire rated for at least 90°C (194°F) or equivalent.



Use copper conductors. For supply connections use AWG #12 wire rated for at least 90°C (194°F) or equivalent.

# PCT SERIES PANEL MOUNT CYCLE TIME SWITCHES

NEW!



## SPECIFICATIONS

**TIMING ACCURACY:**  
1% of timing range.

**INPUT VOLTAGE:** 120-240VAC,  
50/60Hz (automatic detection).

**TERMINAL RANGE:** #14 - #16AWG  
for line input, #12 - #16AWG for load  
output.

**OPERATING TEMPERATURE:**  
-40° to +149°F (-40° to +65°C).

**POWER CONSUMPTION:** 5VA Max.

## APPLICATIONS



- Oil field pumping stations
- Poultry and livestock feeding and watering
- Ventilation
- Process control

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	OUTPUT CONTACT
PCT15M	82528	120-240	SPDT

TYPE	RATINGS	
	NO	NC
120-240VAC General Purpose & Resistive	20A	20A
120VAC Motor	1HP	1/4HP
240VAC Motor	2HP	1/2HP

## FEATURES

**FIXED TIMER CYCLE:** 15 minutes repeating cycle when unit is powered.

**PERCENTAGE ON:** 1% to 99% increments.

**DISPLAY:** Digital percentage reading.

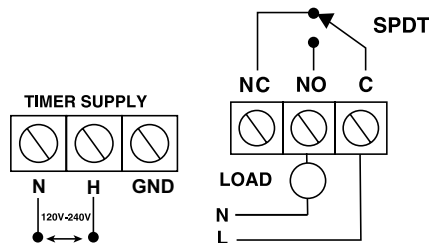
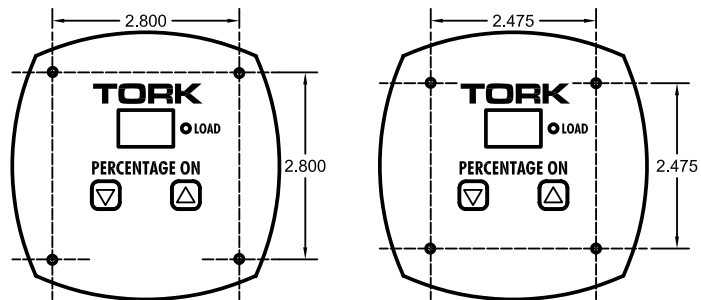
**ON SETTING:** Hold ON.

**OFF SETTING:** Hold OFF.

**POWER OUTAGE BACKUP:** Remembers place in cycle when power resumes.

**TEST MODE:** For temporary ON/OFF cycle verification.

**PANEL MOUNTING:** 3" diameter back housing retrofits to existing mechanical timer dimensions. Two sets of mounting dimensions to choose from. (see page 558 for enclosure dimensions).



# ACT30MA SERIES

## ADJUSTABLE CYCLE TIMER TIME SWITCHES



### SPECIFICATIONS

**INPUT VOLTAGE:** 120-240VAC

**TERMINAL RANGE:** #18 - #12AWG

**CONTACTS:** SPDT

**ENCLOSURE:**

Indoor NEMA 4X is standard (see page 558 for enclosure dimensions).

### APPLICATIONS

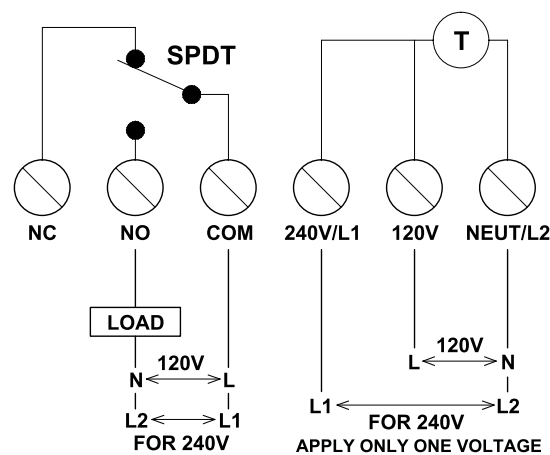
- Poultry and livestock feeding and watering
- Agriculture irrigation for field or greenhouse
- Oil well pumping daily cycle
- Ventilation
- Process control

### FEATURES

**960** time combinations with two dials  
**ON** time dial sets 30 time steps from 30 seconds to 15.5 minutes  
**OFF** dial has 30 steps time steps from 30 seconds to 15.5 minutes  
 Repeats cycle as long as power is applied  
 Hold On or Hold Off positions included

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	OUTPUT CONTACT
ACT30MA	82527	120-240	SPDT

TYPE	RATINGS	
	NO	NC
120-240VAC General Purpose & Resistive	20A	10A
120VAC Motor	1HP	1/4HP
208-240VAC Motor	2HP	1/2HP
120-240VAC Pilot Duty	470VA	275VA

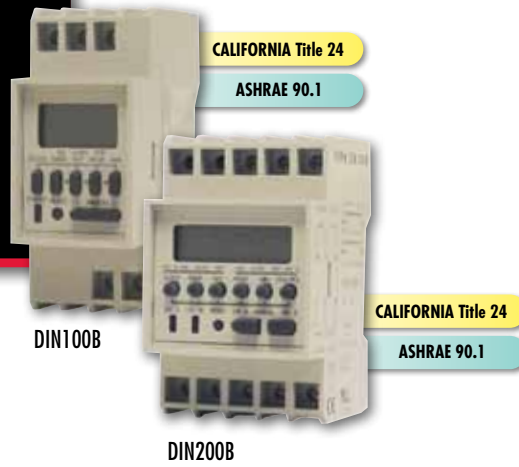


Use copper conductors. For supply connections use AWG #12 wire rated for at least 90°C (194°F) or equivalent.

# DIN SERIES

## 1 OR 2 CHANNEL

### 7 DAY TIME SWITCH



**PANEL BUILDERS' CHOICE**

## APPLICATIONS



- Panel builders
- Indoor/Outdoor lighting
- Security systems
- HVAC equipment

## FEATURES

**SCHEDULING:** 8 ON and OFF pairs of set points for DIN100B. 4 ON and OFF (CH A) and 3 ON and OFF (CH B) pairs of set points for DIN200B. Individual programs on each day of the week. Minimum setting is 1 minute.

**MANUAL OVERRIDE:** Until the next regular scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Battery retains time and schedule.

CATALOG NO.	UPC CODE	DRY CONTACTS	CLOCK INPUT (VAC)50/60 Hz	NO. OF CHANNELS	NUMBER OF ON/OFF
DIN100B	82193	SPDT	120	1	8
DIN200B	82192	SPDT	120	2	4 Channel A 3 Channel B

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	120	16A	16A
General Purpose	120	8A	8A
Motor (DIN100 only)	120	1/2HP	

# SPECIFICATIONS

**INPUT VOLTAGE:** 120VAC, 50/60Hz.

**TERMINAL RANGE:** #12 - #18AWG.

**OPERATING TEMPERATURE:**

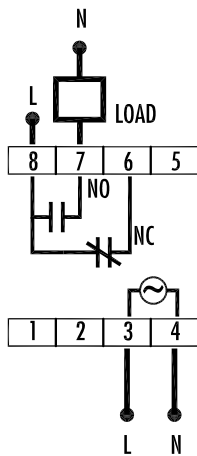
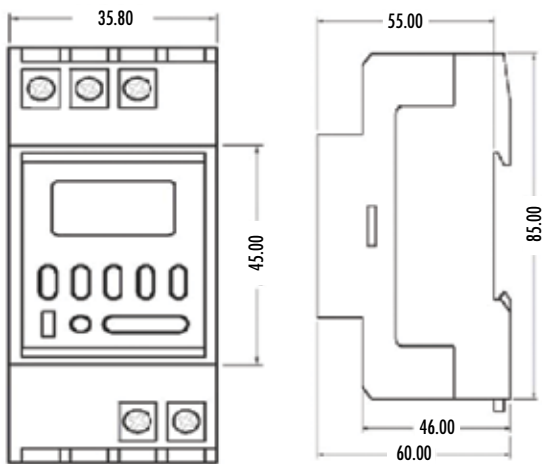
DIN100B: 14° - 131°F (-10° - +55°C).

DIN200B: 14° - 113°F (-10° - +45°C).

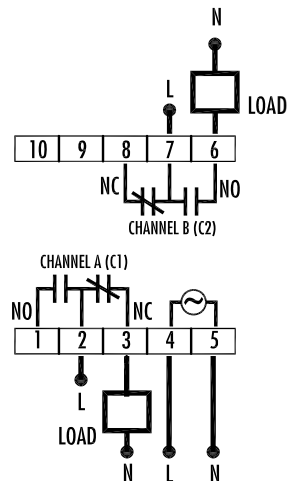
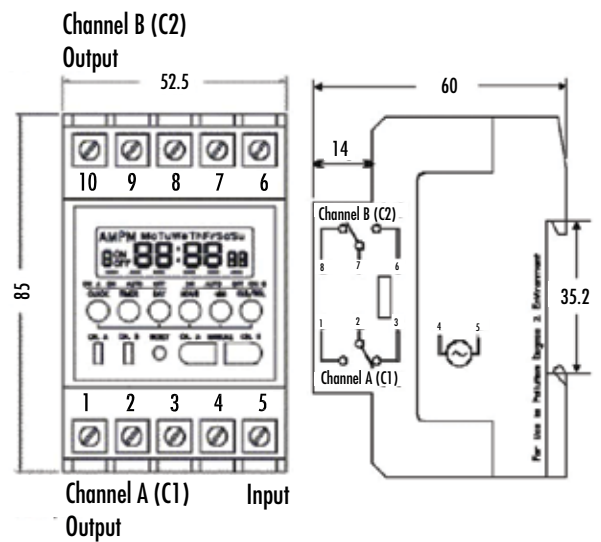
**POWER CONSUMPTION:** 4VA Maximum.

**MOUNTING:** DIN rail #50022 (35mm) or flat surface using supplied adapter.

DIN100B



DIN200B



# SMC SERIES MOMENTARY CONTACT ADAPTER



## SPECIFICATIONS

**INPUT VOLTAGE:** 120VAC, 50/60Hz.

**TERMINAL RANGE:** #12 - #18AWG.

**OPERATING TEMPERATURE:**  
-31°F to +131°F (-35°C to + 55°C).

**POWER CONSUMPTION:** 6VA max.

**ENCLOSURE:** Noryl® Indoor/Outdoor  
NEMA 3R with lockable hasp (see page  
557 for dimensions).

## APPLICATIONS

- Converts maintained contacts for pulse switching
- Timer to latching contactor control
- Photocell to latching contactor control Signaling

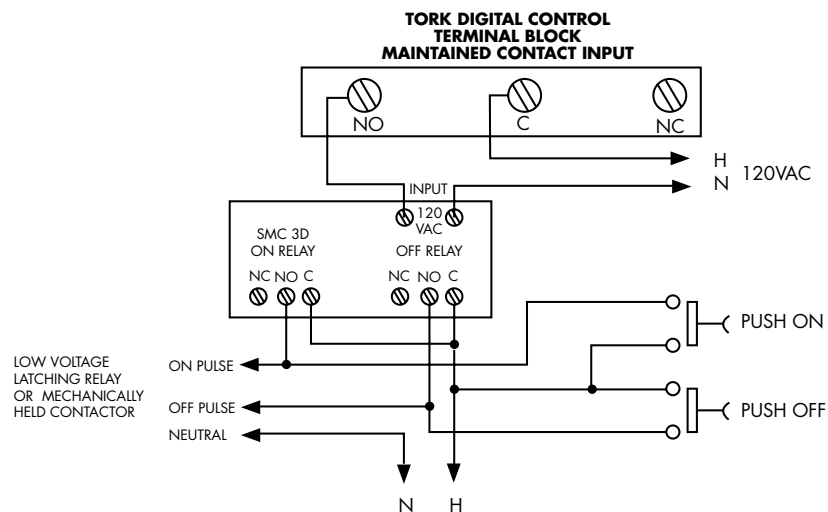
## FEATURES

**MAINTAINED INPUT:** SMC3D accepts maintained input power from any 120 volt control. When power is applied or removed a short contact closure (pulse) is created on the dry output contacts.

**MOMENTARY OUTPUT:** SMC3D provides two dry output contacts. The ON contact provides a 2 second contact closure (pulse) when power is applied to the input contacts. The OFF contact provides a 2 second pulse when power is removed from the input contacts.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	OUTPUT CONTACTS
SMC3D	52011	120	SPDT Momentary

TYPE	VOLTAGE (VAC)	RATING	
		NO	NC
Resistive	120	10A	10A
General Purpose	120	10A	10A
Motor	120	1/4HP	



# 5401 SERIES

## INCREASED AMPERAGE & VOLTAGE SWITCHING

### 40 AMP CONTACTORS

#### APPLICATIONS



- Lighting loads
- Exhaust fans
- Electric and hot water heaters
- Refrigeration and defrosting



5401A

5441A

#### FEATURES

**CONTACT RATINGS:** Can switch up to 40 AMPS per pole from 120VAC to 277V lighting loads, one to three circuits simultaneously.

**EASY WIRING:** Includes 120 volt control wiring compartment. 5441 has terminal strip pre-mounted for quick connection.

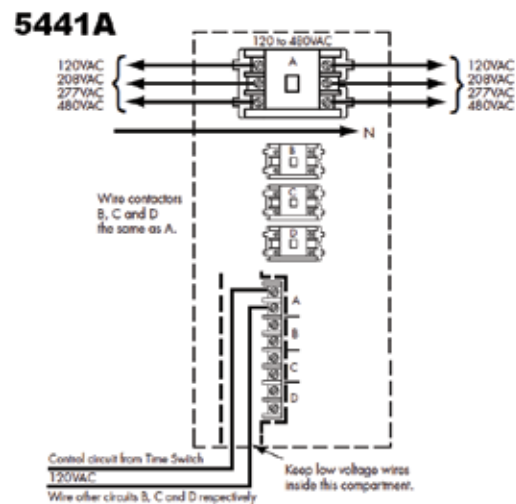
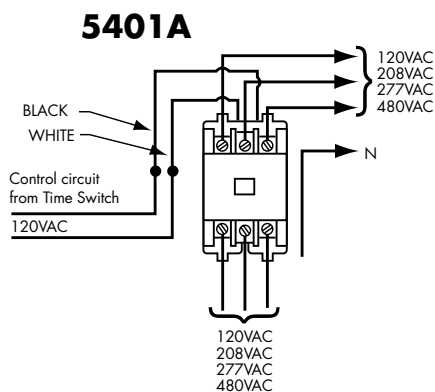
**ENCLOSURE:** Metal NEMA 1 Indoor enclosure (see page 557 for enclosure dimensions).

CATALOG NO.	UPC CODE	COIL VOLTS	NO. OF CONTACTORS	OUTPUT CONTACTS
5401A	81019	120	1	3PST
5441A	81020	120	4	3PST

TYPE	VOLTAGE (VAC)	FLA	RATING
Tungsten*	120	-	30A
Ballast*	120/277	-	40A
LED Driver*	120/277	-	40A
Motor (Single Phase)	120 240	40 40	3HP 7.5HP
Motor (3 Phase)	240 480	40 40	10HP 20HP

Coil Data: 120VAC @ 60Hz  
6VA Holding/seal; 60VA inrush

\* Ratings for single phase load





# HPS STARTER

## FOR HIGH PRESSURE SODIUM LAMPS STARTING AID



## SPECIFICATIONS

**LINE VOLTAGE:** 105 - 347VAC.

**LAMP VOLTAGE:** 55 or 100VAC.

**LAMP WATTAGE:** 35 to 400 watts.

**OPERATING TEMPERATURE:**  
-40°F to +221°F (-40°C to +105°C).

**LEAD LENGTH:** 9 inches.

**ENCLOSURE:** Durable, high temperature Lexan® housing.

## APPLICATIONS

- Designed to operate as a starting aid, for all
- H.P.S. ballasts from 35 to 400 watts, with lamp voltage of 55 or 100 volts.

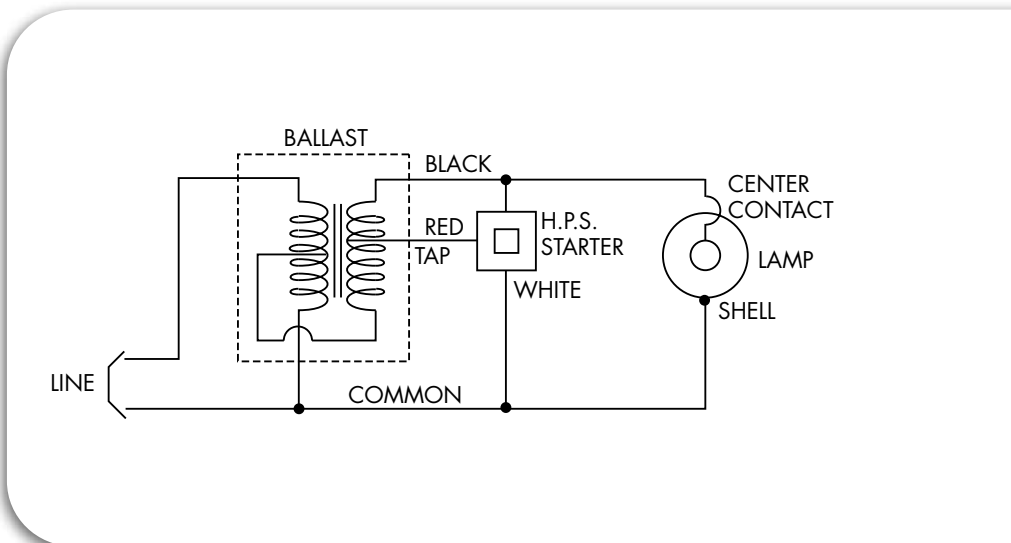
## FEATURES

**SMART VOLTAGE:** Delivers appropriate trigger spikes for lamp ignition, then reduces voltage to good lamps. Continues to feed voltage spikes to old or poorly working lamps.

**HIGH GRADE MATERIAL:** All components are sealed with high grade die-electric material to protect against contaminants and other adverse environmental conditions.

**EASY INSTALLATION:** Universal 3 wire design, color coded for ease of installation.

CATALOG NO.	UPC CODE	DESCRIPTION
HPS30	81030	High Pressure Sodium Starter

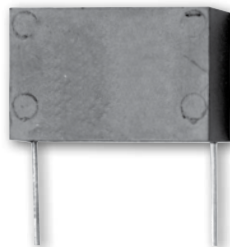


# SURGE SUPPRESSOR

## FOR HIGH ELECTRICAL NOISE

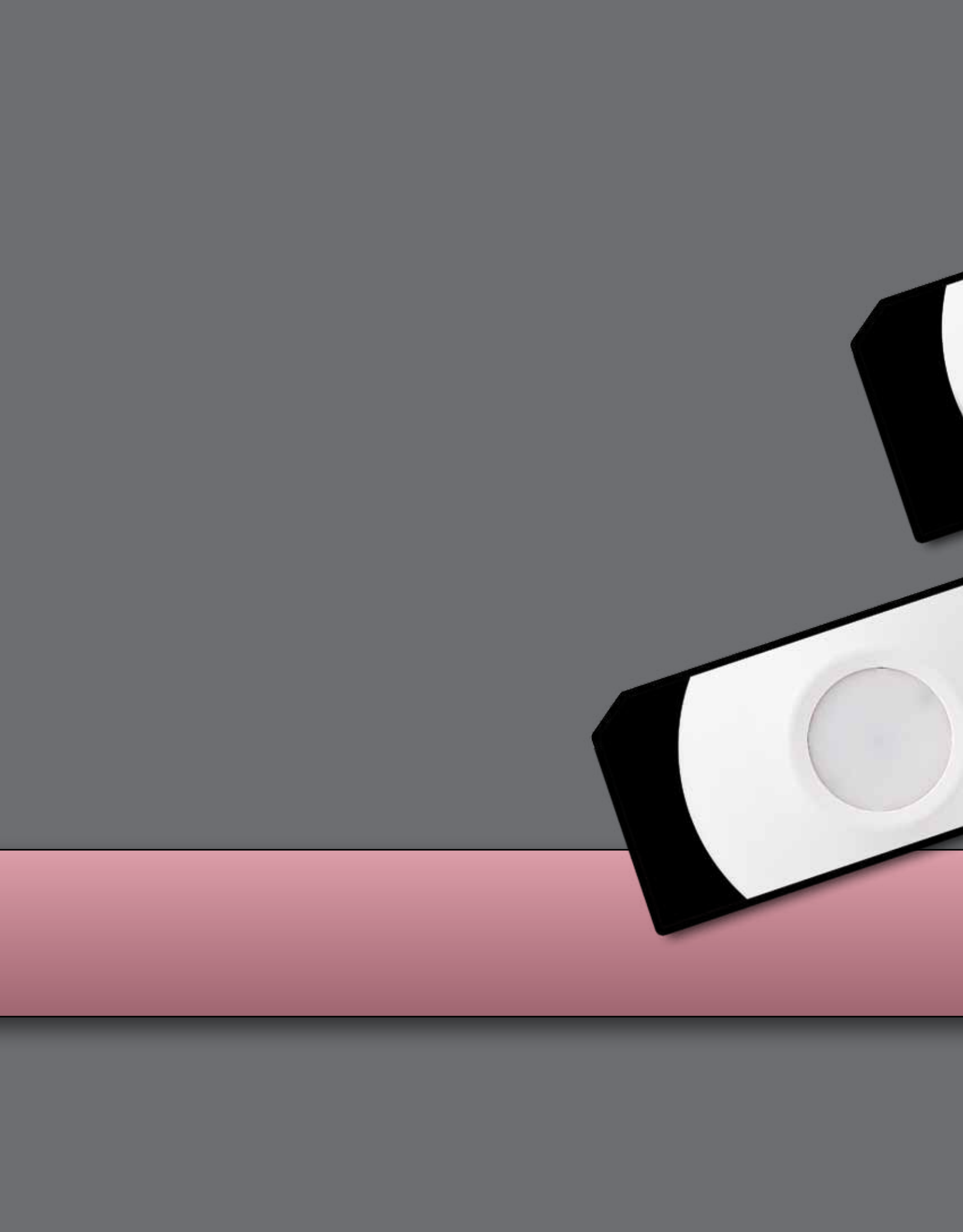
## APPLICATIONS

- For high electrical noise interference, recommended for all digital controls.



CATALOG NO.	UPC CODE	DESCRIPTION
90058-1	81024	Surge Suppressor







# **TORK® OCCUPANCY SENSORS**

## TECHNOLOGY PIR AND ULTRASONIC

A **Passive Infrared Sensor** (PIR sensor), is a device that measures infrared radiation (IR), or heat, from objects in its field of view. Because it only receives information, it is considered passive. The IR sensor views a human body as an IR generating object. The lens of the occupancy sensor breaks up the field of view into IR sensitive bands. The occupancy sensor is designed to only react when heat is sensed moving from band to band. For PIR occupancy sensors to work object must have direct "line of sight" to the PIR sensor.

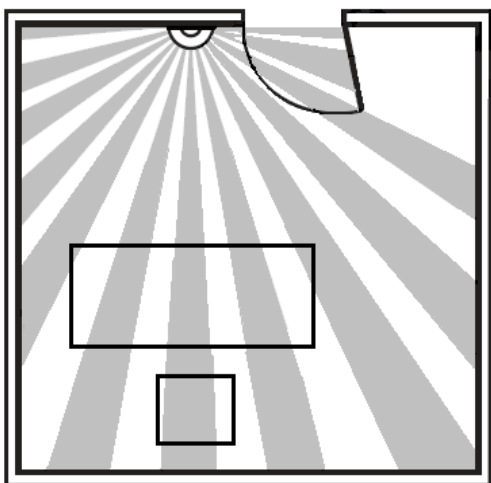
An **Ultrasonic Sensors** (US sensor) is a technology that works on a principle similar to radar or sonar. It is an active technology that sends and receives. It emits an inaudible high-frequency sound wave and evaluates the echo which is received back after bouncing around in the room. This allows the sensor to evaluate the whole room and can "look" over walls and obstructions to identify movement.

Both technologies show higher sensitivity closer to the sensor to allow small movements to be noticed. Sensitivity reduces further away from the sensor and may require a walking step to activate the sensor.

## PLACEMENT GUIDELINES WALL SENSOR

A **Wall Switch Sensor** provides a 180° coverage pattern, extending outward from the sensor. This will allow for instant turn ON when an occupant enters the space. Total area covered will be over 400 square feet.

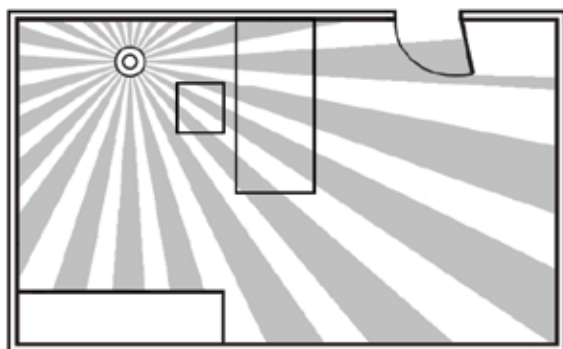
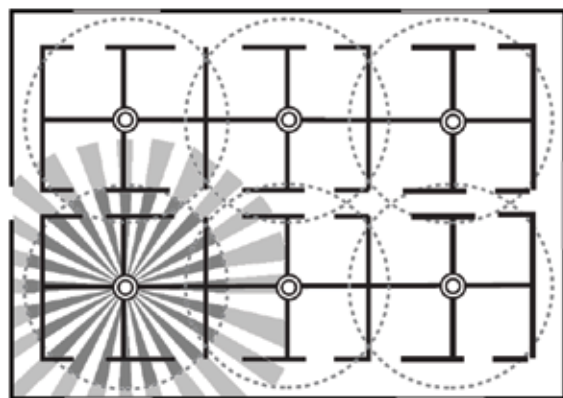
- Proper placement gives the sensor a clear line of sight to the entry door without viewing the hallway.
- The occupant must be able to see the sensor from their normal work position otherwise the sensor will not be able to detect their presence.
- For offices where there are other obstructions between the sensor and the occupant or the entry door, a ceiling sensor is required.



## PLACEMENT GUIDELINES CEILING SENSOR

A **Ceiling Sensor** provides a 360° coverage pattern of up to 1200 square feet when using passive infrared only. When using dual technology the coverage pattern extends to over 2000 square feet. Barriers within the space that block line-of-sight to sensor detection will decrease coverage area when using passive infrared by itself, ultrasonic dual technology will allow the sensor to get around the obstructions.

- Designed for ceiling mounting at a height of 8-10 feet (mounting sensor at greater heights decreases the sensitivity to motion, while lower mounting height will decrease range).
- The sensor needs a visually unobstructed view of the normally occupied workspace and entry door(s).
- Avoid sensor placement with a direct view out a doorway. Placing the sensor offset from the center and away from the door is recommended.
- If the occupant cannot see a PIR sensor from their normal work position, the sensor will not be able to detect their presence.
- File cabinets, partitions, or walls are typical types of obstructions. If there are other obstructions between the sensor and the occupant, an ultra-sonic or dual technology ceiling sensor is recommended.
- When the light level feature is used, mount within 15 feet of the windows or skylight and avoid mounting the sensor close to lighting fixtures.
- Place the sensor no closer than 5 feet to an HVAC air duct when using dual technology sensors.
- Open office designs encourage placement of the sensors to allow overlapping coverage of small motion range and a clear view into each cubicle. Walking step motion may cover the entry to the space. Dual technology units provide added sensitivity to small motion.



# WOS SERIES

## PIR WALL SWITCH OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Offices areas
- Meeting rooms
- Equipment room & storage spaces



### SPECIFICATIONS

**VOLTAGE:**  
120VAC 50/60 Hz

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 3 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
120V ¼ HP Motor

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Two selectable modes: Automatic On/Off or energy saving Walk Through. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**FLASH WARNING:** Optional load flicker 2 minutes before Off.

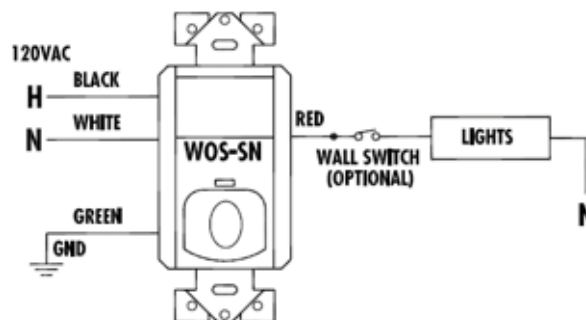
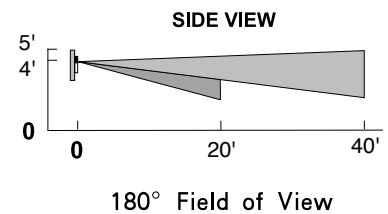
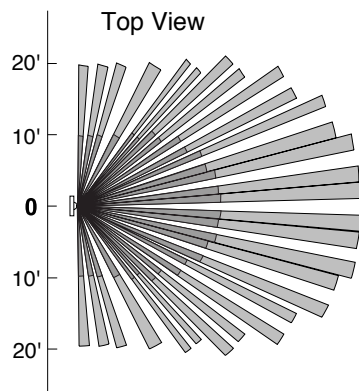
**TAMPER RESISTANT:** Captive button, rugged lens, and optional disable button function for public areas. Use in bathrooms to avoid manual off condition for occupant as another person leaves.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**COLOR:** White (single gang decorator wall plate included).

CATALOG NO.	UPC CODE	INPUT SUPPLY VAC 50/60Hz	WIRING
WOS-SN	98213	120	Requires Neutral



# WOS-M SERIES

## PIR WALL SWITCH OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Offices areas
- Meeting rooms
- Equipment room & storage spaces
- New construction & retrofit

### SPECIFICATIONS

**VOLTAGE:**

120/230/277VAC 50/60 Hz

**OPERATING TEMPERATURE:**

32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**

120V 800W Tungsten

120V 1000W Electronic Ballast

230V 1500W Electronic Ballast

277V 1800W Electronic Ballast

120V ¼ HP Motor

CATALOG NO.	UPC CODE	INPUT SUPPLY VAC 50/60Hz	WIRING
WOS-M	98217	120/230/277	No Neutral Required
WOS-MN	98215	120/230/277	Requires Neutral

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Four selectable modes: Automatic On/Off, Manual on (vacancy), energy saving Walk Through, or Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**DAYLIGHT PHOTOSENSOR:** Optional light-level turn off from 5 to 200fc. Save energy if windows provide enough light.

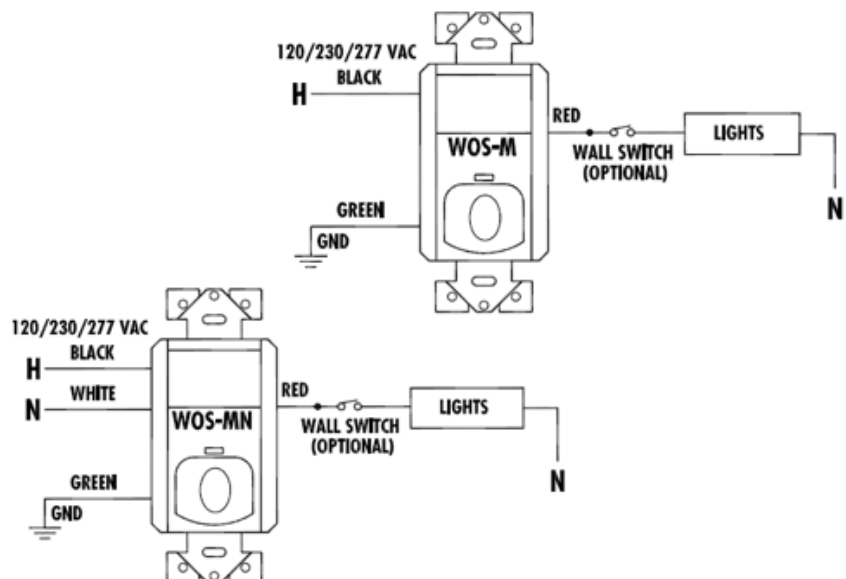
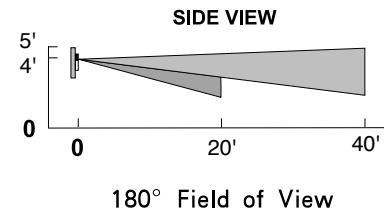
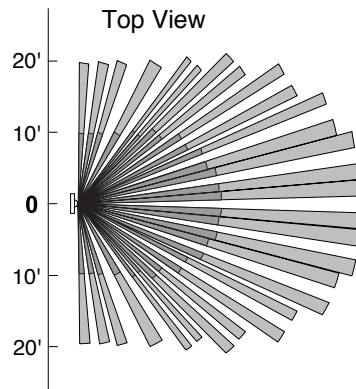
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**TAMPER RESISTANT:** Captive button, rugged lens, and optional disable button function for public areas. Use in bathrooms to avoid manual off condition for occupant as another person leaves.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**COLOR:** White (single gang decorator wall plate included).



# WOS-M2R SERIES

## PIR WALL SWITCH TWO RELAY OCCUPANCY SENSOR



ASHRAE 90.1

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60 Hz

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
230V 1500W Electronic Ballast  
277V 1800W Electronic Ballast  
120V ¼ HP Motor

### APPLICATIONS



- Offices areas
- Meeting rooms
- Equipment room & storage spaces
- New construction & retrofit

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming. Each relay can have different settings.

- **BATHROOM MODE:** set fan relay time delay longer than lighting relay.
- **TWO STEP LIGHT LEVEL:** set each relay to turn off at different daylighting levels
- **PUBLIC AREAS:** Disable one relay button manual OFF function. Use in bathrooms to avoid full off condition for occupant as another person leaves.

**MODES:** Four selectable modes: Automatic On/Off, Manual on (vacancy), energy saving Walk Through, or Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**DAYLIGHT PHOTOSENSOR:** Optional light-level turn off from 5 to 200fc. Save energy if windows provide enough light.

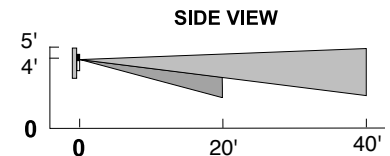
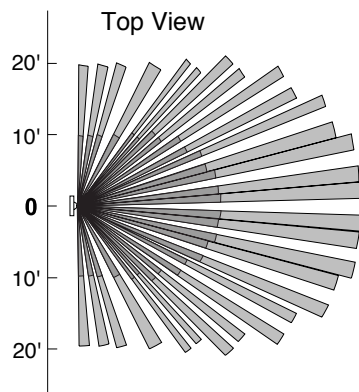
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**TAMPER RESISTANT:** Captive button, rugged lens, and optional disable button function for public areas.

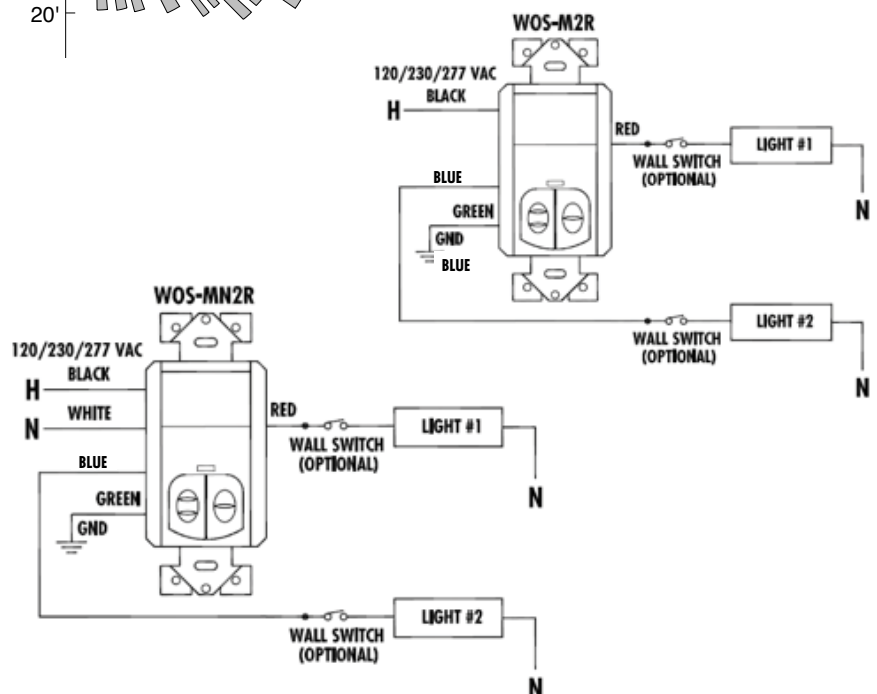
**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**COLOR:** White (single gang decorator wall plate included).



180° Field of View





# WOS-M2T SERIES

## ULTRASONIC AND PIR WALL SWITCH OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Offices areas
- Meeting rooms
- Equipment room & storage spaces
- New construction & retrofit

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming. Each relay can have different settings.

- INITIAL ON: customize and set one technology only to trigger turn on.
- MAINTAIN ON: customize and set one technology to keep lights on.
- PUBLIC AREAS: Disable button manual OFF function. Use in bathrooms to avoid full off condition for occupant as another person leaves.

**MODES:** Four selectable modes: Automatic On/Off, Manual on (vacancy), energy saving Walk Through, or Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**DAYLIGHT PHOTOSENSOR:** Optional light-level turn off from 5 to 200fc. Save energy if windows provide enough light.

**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**TAMPER RESISTANT:** Captive button, rugged lens, and optional disable button function for public areas.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**SENSOR CHOICES:** Factory default setting allows either technology to trigger the unit. Optional is a disable function of one technology for initial and/or maintain on operations.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**COLOR:** White (single gang decorator wall plate included).

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60 Hz

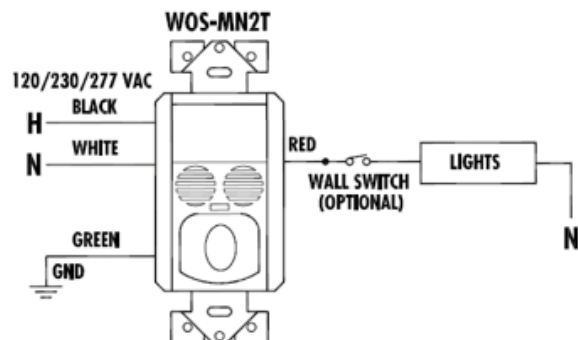
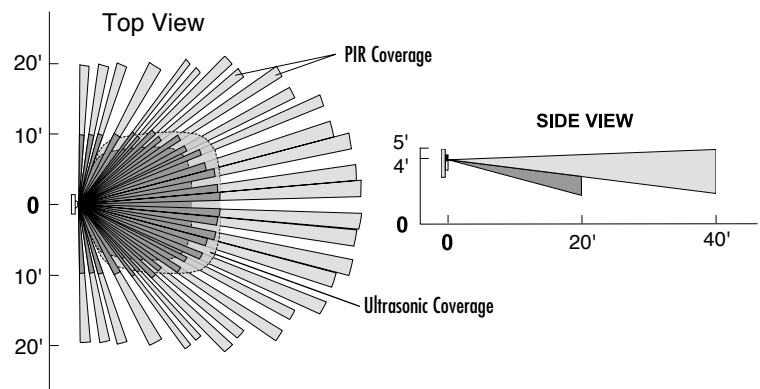
**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:**  
PIR 1200 sq. ft.  
Ultra-Sonic 400 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
230V 1500W Electronic Ballast  
277V 1800W Electronic Ballast  
120V ¼ HP Motor

CATALOG NO.	UPC CODE	INPUT SUPPLY VAC 50/60Hz	WIRING
WOS-MN2T	98223	120/230/277	Requires Neutral



# COS-L2T SERIES

ULTRASONIC AND PIR  
CEILING MOUNTING  
OCCUPANCY SENSOR



ASHRAE 90.1

## SPECIFICATIONS

**VOLTAGE:**  
24VDC

**CURRENT CONSUMPTION:**  
9mA

**POWER SUPPLY:**  
TPR-24I or TRP-24B Power Packs provided separately

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:**  
PIR 1200 sq. ft.  
Ultra-Sonic 900 sq. ft.

**WARRANTY:** 5 YRS.

## APPLICATIONS



- Large offices areas
- Larger meeting rooms
- Classrooms
- Bathroom & storage spaces

## FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

- INITIAL ON: customize and set one technology only to trigger turn on.
- MAINTAIN ON: customize and set one technology to keep lights on.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**FLASH WARNING:** Optional load flicker 2 minutes before Off.

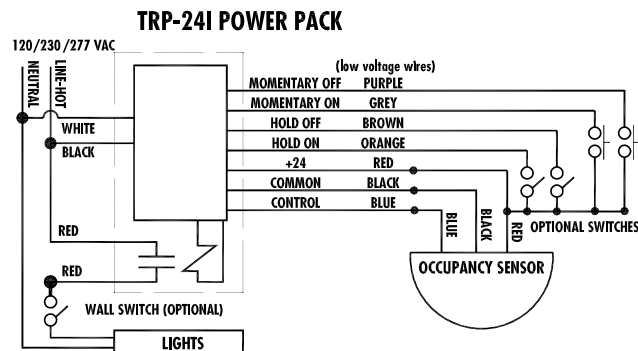
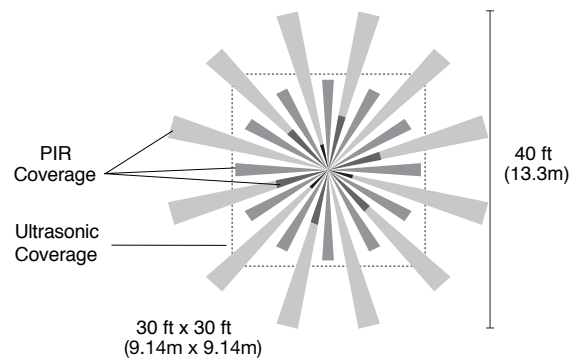
**COVERAGE AREA:** Adjustable for three steps of sensitivity for ultrasonic and two steps for PIR.

**SENSOR CHOICES:** Factory default setting allows either technology to trigger the unit. Optional disable function of one technology for initial and/or maintain on operations.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**MOUNTING:** Mounts direct to box or ceiling. Available is optional adapter for pendant or side mounting with 1/2" threaded nipple.

CATALOG NO.	UPC CODE	INPUT SUPPLY	DESCRIPTION
COS-L2T	98207	24VDC	White
TRP-24I	98227	120/277VAC	Power Pack
COS-ADP	98229	1/2" pendant/side mounting adapter	



# COS-L SERIES

## PIR CEILING MOUNTING OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Large offices areas
- Larger meeting rooms
- Classrooms
- Equipment room & storage spaces

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**MOUNTING:** Mounts direct to box or ceiling. Available is optional adapter for pendant or side mounting with 1/2" threaded nipple.

### SPECIFICATIONS

**VOLTAGE:**  
24VDC

**CURRENT CONSUMPTION:**  
9mA

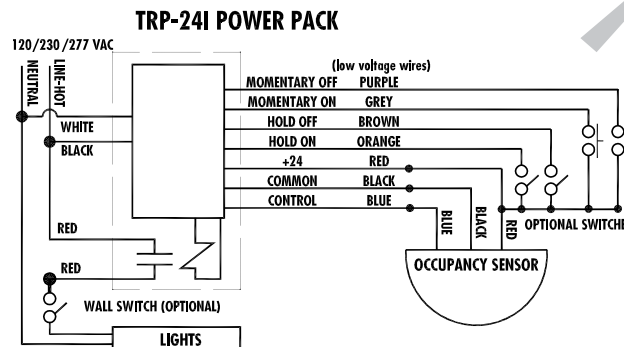
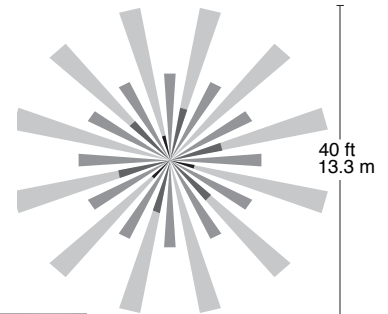
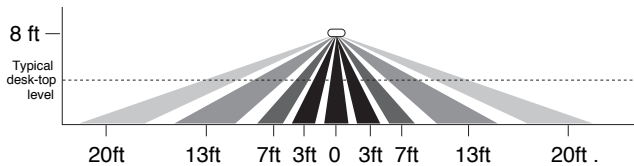
**POWER SUPPLY:**  
TPR-24I or TRP-24B Power Packs provided separately

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 5 YRS.

CATALOG NO.	UPC CODE	INPUT SUPPLY	DESCRIPTION
COS-L	98203	24VDC	White
TRP-24I	98227	120/277VAC	Power Pack
COS-ADP	98229	1/2" pendant/side mounting adapter	



# COS-LU SERIES

## ULTRASONIC CEILING MOUNTING OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Large offices areas
- Larger meeting rooms
- Classrooms
- Bathroom & storage spaces

### SPECIFICATIONS

**VOLTAGE:**  
24VDC

**CURRENT CONSUMPTION:**  
9mA

**POWER SUPPLY:**  
TPR-24I or TRP-24B Power Packs provided separately.

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 900 sq. ft.

**WARRANTY:** 5 YRS.

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

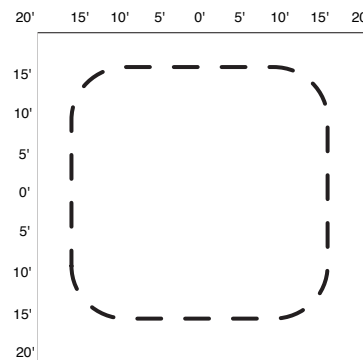
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**COVERAGE AREA:** Adjustable for three steps of sensitivity.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

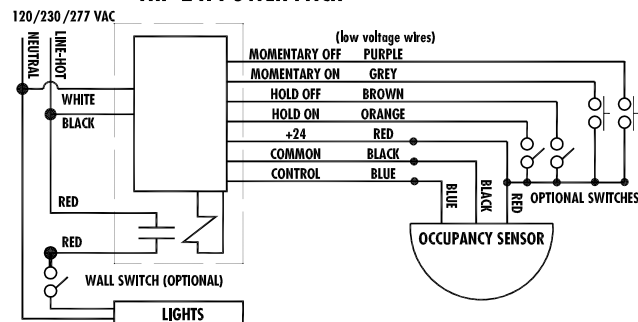
**MOUNTING:** Mounts direct to box or ceiling. Available is optional adapter for pendant or side mounting with 1/2" threaded nipple.

CATALOG NO.	UPC CODE	INPUT SUPPLY	DESCRIPTION
COS-LU	98205	24VDC	White
TRP-24I	98227	120/277VAC	Power Pack
COS-ADP	98229	1/2" pendant/side mounting adapter	



30 ft x 30 ft  
(9.14m x 9.14m)

### TRP-24I POWER PACK



# COS-M SERIES

## PIR CEILING MOUNTING LINE VOLTAGE OCCUPANCY SENSOR



ASHRAE 90.1



### APPLICATIONS

- Large offices areas
- Larger meeting rooms
- Classrooms
- Equipment room & storage spaces

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60Hz

**POWER SUPPLY:**  
Built-in

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1200 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
230V 1500W Electronic Ballast  
277V 1800W Electronic Ballast  
120V ¼ HP Motor

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

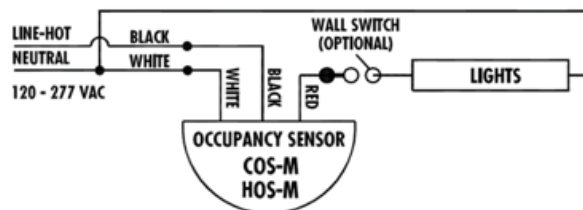
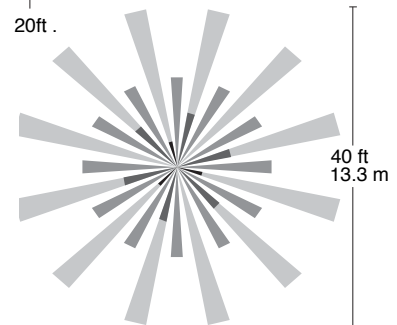
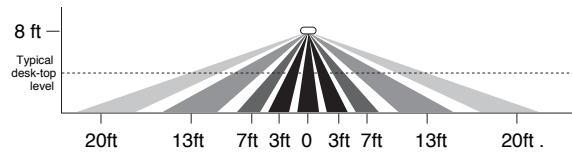
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**MOUNTING:** Mounts direct to a box. Available is optional adapter for pendant or side mounting with ½" threaded nipple.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC)	DESCRIPTION
COS-M	98201	120/230/277	White
COS-ADP	98229	1/2" pendant/side mounting adapter	



# HOS-M SERIES

## HIGH BAY PIR MOUNTING LINE VOLTAGE OCCUPANCY SENSOR



ASHRAE 90.1

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60Hz

**POWER SUPPLY:**  
Built-in

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**COVERAGE:** 1000 sq. ft.

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 800W Tungsten  
120V 1000W Electronic Ballast  
230V 1500W Electronic Ballast  
277V 1800W Electronic Ballast  
120V ¼ HP Motor

### APPLICATIONS



- Warehouse
- Tall aisle
- High ceiling equipment room & storage spaces

### FEATURES

**SOFTWARE SET:** Completely customizable functions through button push programming.

**MODES:** Three selectable modes: Automatic On/Off, energy saving Walk Through, and Test. Factory default setting is Automatic.

**TIME DELAY:** 6 steps settings 5, 10, 15, 20, 25, and 30 minutes. Factory default setting is 10 minutes.

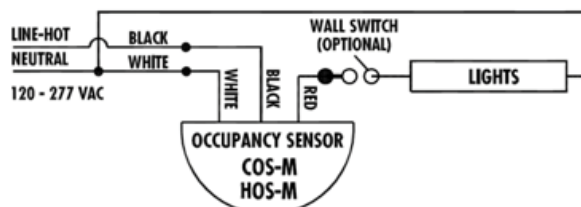
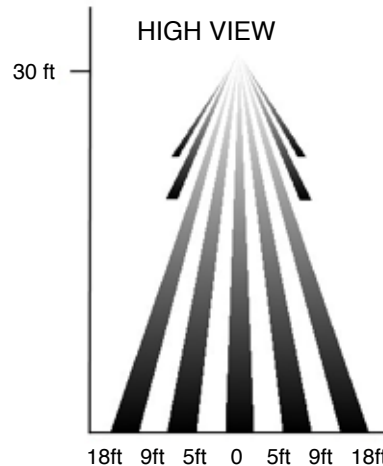
**FLASH WARNING:** Optional load flicker 2 minutes before Off.

**COVERAGE AREA:** Preset for full coverage area. Optional half size area is selectable.

**TEST MODE:** Used for initial installation. Changes back Auto mode within 30 minutes without resetting.

**MOUNTING:** Includes as standard an adapter for pendant or side mounting with ½" threaded nipple. Also mounts direct to box or ceiling.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC)	DESCRIPTION
HOS-M	98209	120/230/277	White



# CPS-L SERIES

## CEILING MOUNTING PHOTO SENSOR



ASHRAE 90.1



### APPLICATIONS

- Side window areas of offices
- Spaces with skylights
- Classrooms

### SPECIFICATIONS

**VOLTAGE:**  
24VDC

**CURRENT CONSUMPTION:**  
9mA

**POWER SUPPLY:**  
TPR-24B Power Packs provided separately

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**WARRANTY:** 5 YRS.

### FEATURES

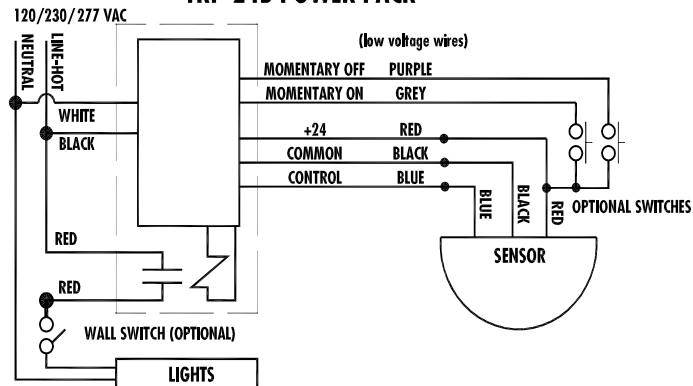
**SOFTWARE SET:** Completely customizable functions through button push programming.

**LIGHT LEVEL SETTING:** Light level between 5 to 200 fc.

**MOUNTING:** Mounts direct to box or ceiling. Available is optional adapter for pendant or side mounting with 1/2" threaded nipple.

CATALOG NO.	UPC CODE	INPUT SUPPLY	DESCRIPTION
CPS-L	98211	24VDC	White
TRP-24B	98225	120/277VAC	Power Pack
COS-ADP	98229	1/2" pendant/side mounting adapter	

### TRP-24B POWER PACK



# TRP-24 SERIES

## POWER PACK FOR OCCUPANCY SENSORS



ASHRAE 90.1



### APPLICATIONS

- Power and switching for occupancy or light sensors
- Power and switching for SS410 auto-off switch
- BAS compatible
- Demand shedding applications
- Low cost momentary switching of loads

### SPECIFICATIONS

**VOLTAGE:**  
120/230/277VAC 50/60Hz

**OPERATING TEMPERATURE:**  
32° to 131°F (0° to 55°C)

**WARRANTY:** 5 YRS.

**CONTACT RATINGS:**  
120V 15A Incandescent  
120V 20A Ballast  
230V 20A Ballast  
277V 20A Ballast  
120V 1 HP Motor

CATALOG NO.	UPC CODE	INPUT SUPPLY VAC 50/60Hz	OUTPUT CONTACTS
TRP-24B	98225	120/230/277	SPST
TRP-24I	98227	120/230/277	SPST
LCS115M	82082	Momentary Switch SPST	

### FEATURES

**OPERATION:** Switches line voltage loads ON/OFF based on a contact closure from an occupancy sensor, AUTO OFF switch, or relay.

**SENSOR CONTROL:** Three wires for typical device control. Red and black wires for 24VDC output to power a device. Blue control wire to receive ON/OFF signal back from device.

**TRP-24B INPUT:** Two additional input wires to control TRP.

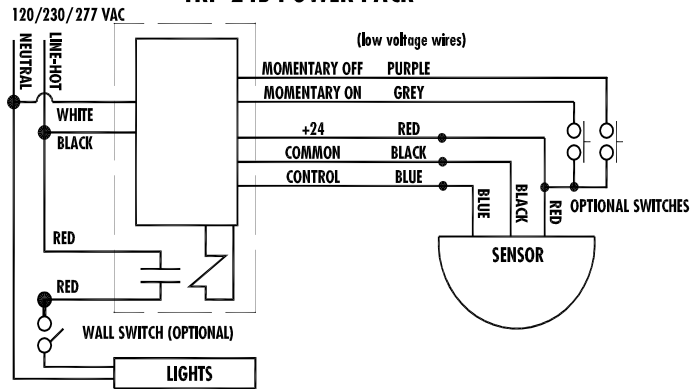
1. ON from momentary switch.
2. OFF from momentary switch.

**TRP-24I INPUT:** Four additional input wires to control TRP.

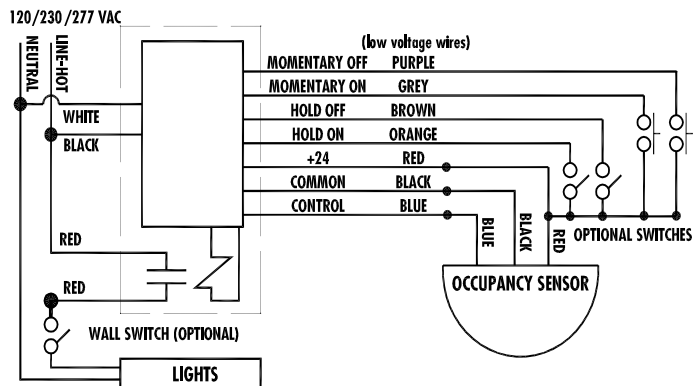
1. Hold OFF for demand shed control.
2. Hold ON override.
3. ON from momentary switch.
4. OFF from momentary switch.

**MOUNTING:** Box mount to 1/2" KO

#### TRP-24B POWER PACK



#### TRP-24I POWER PACK











# **TORK® IN-WALL TIME SWITCHES**

# QUICK REFERENCE GUIDE

	SS700Z	SS721Z	SS720A	SS720Z	SA170	701A 711A	SS403	SS423	SS410	SS	D1060 D212	A	C	
Page No.	509	509	511	512	513	514	515	515	515	517	518	519	520	
Timer Type	SunSet 7 Day Digital	SunSet 7 Day Digital	7 Day Digital	SunSet 7 Day Digital	ZipSet Digital	24 Hour Mechanical	Auto OFF Digital	Auto OFF Digital	Auto OFF Digital	Auto OFF Electronic	Auto OFF Electronic	Auto OFF Mechanical	Auto OFF Mechanical	
Voltage	120/277	120/277	120	120	120	120	120/277	120/277	24	24/120/ 208-240/277	120	125/250/ 277	125/250/ 277	
Minimum Settings	ON	1 min.	1 min.	1 min.	1 min.	1 min.	30 min.	5 min-24 hr	5 min-24 hr	5 min-24 hr	1 min-18 hr	10-60 min. 2-12 hr	Various 2 min-12 hr	Various 2 min-12 hr
	OFF	1 min.	1 min.	1 min.	1 min.	1 min.	30 min.	5 min.	5 min.	5 min.	1 min.	10 min.		
Manual Override	Yes	Yes	Yes	Yes	Yes	Yes								
 SunSet (Astronomic)	Yes	Yes		Yes	ZipSet									
ON/OFF Set Points	10 Pair	10 Pair	7 Pair	7 Pair	1 Pair	24								
Flash Warning							Yes	Yes	Yes	Yes				
Audible Warning							Yes	Yes	Yes	Yes				
Power Outage Backup	Capacitor	Capacitor	Battery	Battery	Battery									
Switch Type	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPDT	SPST or SPDT	SPST	SPDT	SPDT or DPST	
Resistive Ratings	16A	16A	15A	15A	15A	15 & 20A	15A	15A	1A	4A or 7.5A	15A	20/10/ 10A	20/10/ 10A	
 LED Ratings	10A	10A					1200W	1200W						
Neutral Required for Wiring	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	No	
3-Way Wiring	Yes	Yes	No	No	No	No	Yes	Yes	Yes	SS13 Yes	No	No	No	



# TORK® SS700Z & SS721Z

## SunSet IN-WALL TIMER SUNSET / SUNRISE / 7 DAY



CALIFORNIA Title 24

ASHRAE 90.1



With wall plate  
(not included)



**BACK-UP  
WITHOUT  
BATTERIES!**

### APPLICATIONS

- Commercial outdoor security lighting
- Interior lobby lighting
- Contactors for fans and motors
- Sign lighting

### SPECIFICATIONS

**TIMING ACCURACY:** Line frequency.

**INPUT VOLTAGE:** 120/277VAC, 50/60Hz.

**WIRE SIZE:** #12AWG input/output - #16AWG 3-way (remote).

**OPERATING TEMPERATURE:** 32°F to +104°F (0°C to + 40°C).

### FEATURES

**SCHEDULING:** 10 ON and OFF pairs of set points for individual programs on each day of the week. 11 day groups speed programming. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Sunset and sunrise times are adjustable from 10°-60° Northern or Southern latitudes. Can be individually offset +/- 1-240 minutes for earlier or later operation.

**RANDOM MODE:** Varies ON and OFF times to create lived in look when away.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**MANUAL MODE:** Does not run programs until set to AUTO (automatic) mode.

**VACATION MODE:** No operation when away.

**EASY WIRING:**

**SS700Z** does not require a neutral, can be used as a 3-way switch.

**SS721Z** Requires a neutral, can be used as a 3-way switch.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Permanent schedule retention. Supercapacitor provides 2 days of real time backup.

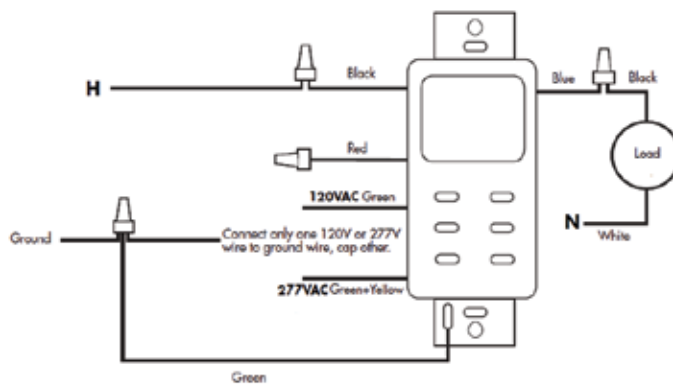
**COMMERCIAL GRADE SPECS:** Control lighting contactors and 277VAC loads. Compatible with CFL lamps.

**FULL SWITCHING:** No minimum load requirement.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	SWITCH TYPE	COLOR
SS700Z	14019	120/277	SPST	White
SS700ZA	14020	120/277	SPST	Light Almond
SS721Z	14027	120/277	SPST	White
SS721ZA	14028	120/277	SPST	Light Almond

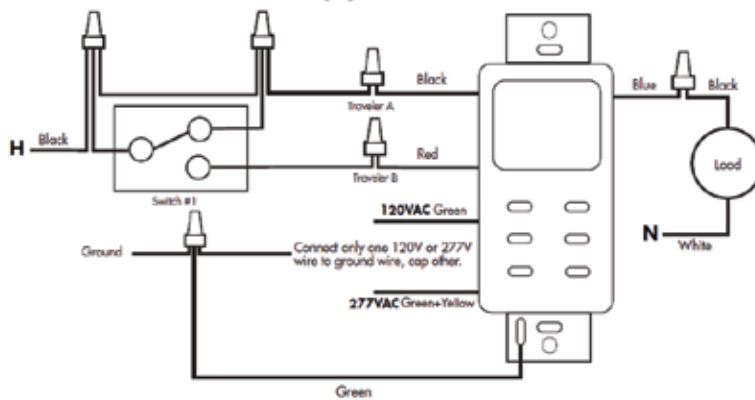
TYPE	SS700Z SERIES		SS721Z SERIES RATINGS
	RATING	VOLTAGE (VAC)	
Resistive	16A	120-277	16A
Ballast	10A	120-277	13A
LED Driver	10A	120-277	10A
Tungsten	8A	120	8A
Pilot Duty	360VA	120	720VA
Motor	1/2HP	120	1/2HP

**WIRING DIAGRAM: INSTALLATION SS700Z**

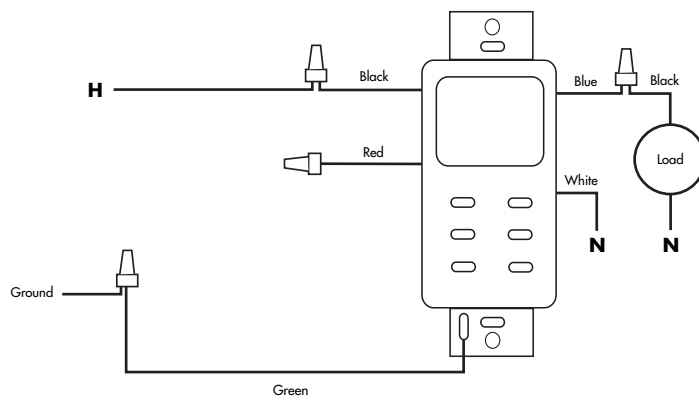


**WIRING DIAGRAM: THREE-WAY INSTALLATION SS700Z**

Connect a wire inside the gang-box between Traveler A and Hot.

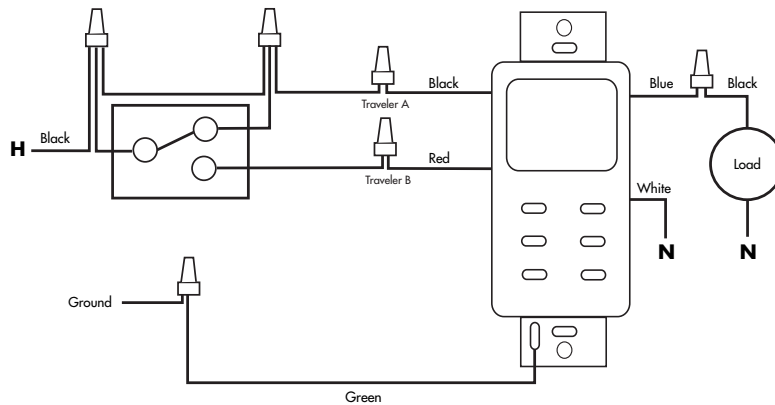


**WIRING DIAGRAM: INSTALLATION SS721Z**



**WIRING DIAGRAM: THREE-WAY INSTALLATION SS721Z**

Connect a wire inside the gang-box between Traveler A and Hot.



# SS720A SERIES

## 7 DAY IN-WALL RESIDENTIAL TIMER



### APPLICATIONS

- Residential interior lights
- Random for lived-in look
- Small fans and motors
- Appliances

### FEATURES

**SCHEDULING:** 7 ON and OFF pairs of set points for individual programs on each day of the week. Minimum setting is 1 minute.

**RANDOM MODE:** Varies ON and OFF times to create "lived in" look when away.

**DAYLIGHT SAVING:** Manual button push for one hour adjustment.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**WIRING:** Requires a neutral.

**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Rechargeable Ni-Cad battery retains time and schedule.

**WALL PLATE:** Supplied with standard single gang decorator wall plate.

### SPECIFICATIONS

**TIMING ACCURACY:** +/- 1 minute/month

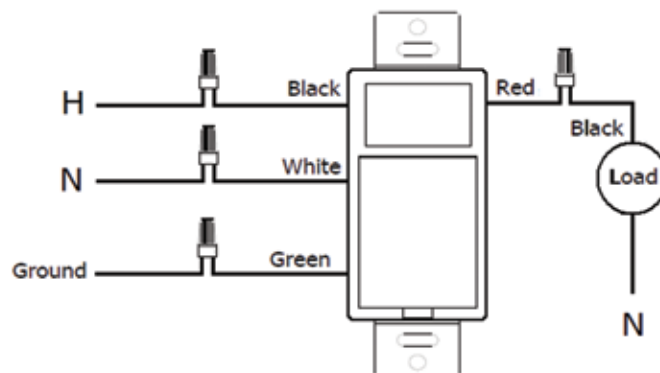
**INPUT VOLTAGE:** 125VAC, 60Hz.

**WIRE SIZE:** #14AWG.

**OPERATING TEMPERATURE:** 32°F to +104°F (0°C to +40°C).

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	COLOR
SS720A	14017	120	White
SS720AA	14018	120	Light Almond

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120	15A
Resistive	120	15A
Tungsten	120	15A
Motor	120	1HP
Electronic Ballast	120	500VA



# TORK® SS720Z

## SunSet IN-WALL RESIDENTIAL TIMER SUNSET / SUNRISE / 7 DAY



### SPECIFICATIONS

**TIMING ACCURACY:** +/- 1 minute/  
month

**INPUT VOLTAGE:** 120VAC, 60Hz.

**WIRE SIZE:** #14AWG

**OPERATING TEMPERATURE:**  
32°F to +104°F (0°C to + 40°C).

### APPLICATIONS



- Residential Interior lights
- Small fans and motors
- Appliances

### FEATURES

**SCHEDULING:** 7 ON and OFF pairs of set points for individual programs on each day of the week. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:** Adjusts daily to changes in sunset times. Sunset and sunrise times with five zones: North USA/Southern Canada, Central USA, South USA, Northern Canada/Alaska, and Hawaii/Puerto Rico.

**RANDOM MODE:** Varies ON and OFF times to create "lived in" look when away.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**WIRING:** Requires a neutral.

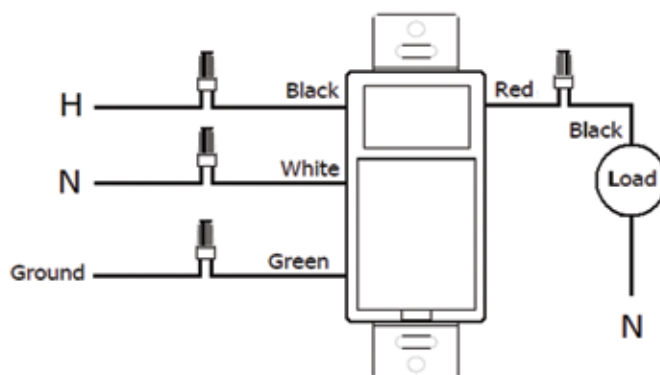
**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Rechargeable Ni-Cad battery retains time and schedule.

**WALL PLATE:** Supplied with standard single gang decorator wall plate.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	COLOR
SS720Z	14023	120	White

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120	15A
Resistive	120	15A
Tungsten	120	960W
Motor	120	½HP
Electronic Ballast	120	500VA





# SA170 SERIES

**Zip-Set™** IN-WALL

**RESIDENTIAL TIMER  
SUNSET / TIME OFF**



\*Wall plate not included

## SPECIFICATIONS

**TIMING ACCURACY:** +/- 1 minute/month

**INPUT VOLTAGE:** 120VAC, 60Hz.

**WIRE SIZE:** #14AWG.

**OPERATING TEMPERATURE:** 32°F to +104°F (0°C to +40°C).

## APPLICATIONS



- Residential Exterior lights
- Small fans and motors
- Appliances

## FEATURES

**Zip-Set™** factory preset time. Just enter area code and it finds correct time and sunset time.

**SCHEDULING:** One On/Off set point pair is active at a time. Schedule 1, Schedule 2, a combination of 1 & 2, or ZipSet™. Day combinations for 7-5-2 speed programming.

**RANDOM MODE:** Varies ON and OFF times to create "lived in" look when away.

**COUNTDOWN:** Button press turns lights ON and starts a 5 minute countdown to OFF.

**DAYLIGHT SAVING:** Manual button push for one hour adjustment.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**WIRING:** Requires a neutral.

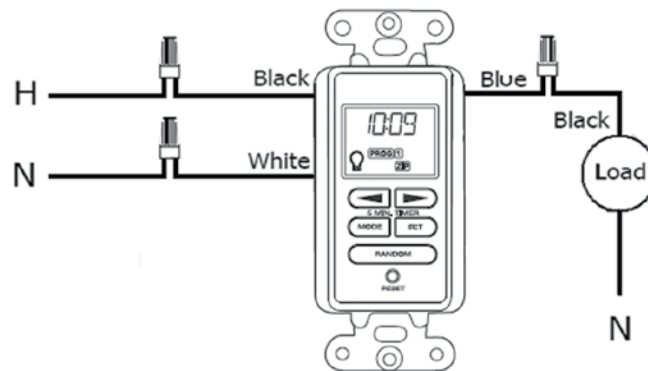
**CLOCK FORMAT:** AM/PM.

**POWER OUTAGE BACKUP:** Lithium batteries retain time and schedule.



CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	COLOR
SA170	16528	120	White

TYPE	VOLTAGE (VAC)	RATING
Resistive	120	15A
Inductive	120	15A
Tungsten	120	5A
Motor	120	1/2HP



# 701A & 711A SERIES 24 HOUR IN-WALL TIMER



## SPECIFICATIONS

**INPUT VOLTAGE:** 125VAC, 60Hz.

**WIRE SIZE:** #14AWG.

**OPERATING TEMPERATURE:**  
32°F to +104°F (0°C to +40°C).

## APPLICATIONS



- Porch or patio
- Doorway
- Pool
- Outdoor security lighting

## FEATURES

**SCHEDULING:** Minimum ON setting is 30 minutes. Dial has 48 captive trippers.

**BYPASS SWITCH:** Slide switch for ON, OFF, or TIMER (automatic) operation.

**VACATION MODE:** Set timer OFF with no change of tripper settings.

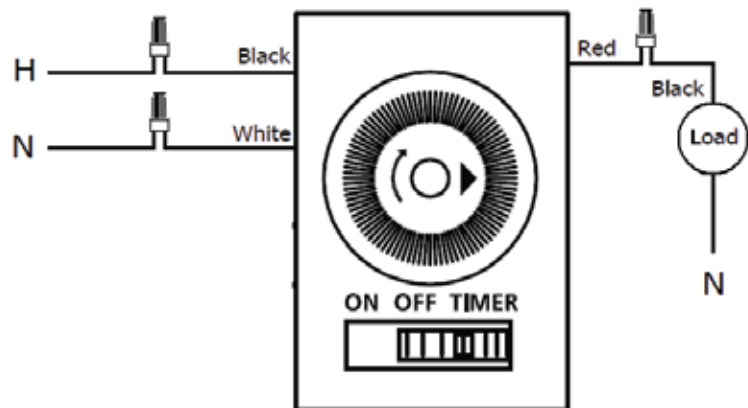
**WIRING:** Requires a neutral.

**CLOCK FORMAT:** AM/PM marked on dial.

**WALL PLATE:** Supplied with single gang wallplate.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60 Hz	COLOR
701A	10113	125	White
701AA	10118	125	Light Almond
711A	10114	125	White

TYPE	VOLTAGE (VAC)	RATING	
		701A SERIES	711A SERIES
General Purpose	125	20A	15A
Resistive	125	20A	15A
Tungsten	125	1500W	1250W
Motor	125	1 HP	1/2 HP



# TORK® SS400 SERIES DIGITAL AUTO OFF IN-WALL TIMER



CALIFORNIA Title 24

ASHRAE 90.1



SS400 Series  
\*Wall plate included

**PROGRAMMABLE!**

## APPLICATIONS



- Offices, meeting rooms
- Energy code timed override
- Exhaust fans
- Equipment room and storage spaces

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency

**INPUT VOLTAGE:** SS403/SS423 – 120/230/277VAC 50/60 Hz  
SS410 – 24VDC OR 24VAC 50/60 Hz

**WIRE SIZE:** SS403/SS423 – #14AWG input/output - #16AWG 3-way (remote)  
SS410 – #18AWG

**OPERATING TEMPERATURE:** 32°F to +104°F (0°C to + 40°C)

**WARRANTY:** 5 Yrs.

## FEATURES

### WIRING CHOICES:

SS403 – no neutral for retrofit  
SS423 – with neutral for new construction  
SS410 – multiple circuits with power packs  
– low voltage for class 2 wiring

**ENERGY CODE PRESET:** 2 hour timing for Title 24 and IECC (default). 4 hour timing for ASHRAE 90.1 (with quick dip switch adjustment)

**PROGRAMMABLE:** 5 minutes to 24 hour: 5 minute steps from 5 minutes to 1 hour. 10 minute steps from 1 to 4 hours. 30 minute steps from 4 to 12 hours. 1 hour steps from 12 to 24 hours.

**SCROLL LOCK:** Limits user adjustment to a maximum equal to the preset time.

**FLASH WARNING:** Optional one second flicker turns load off/on 2 minutes before end of time cycle.

**BEEPER WARNING:** Optional beep will sound every 15 seconds during the last 2 minutes of the time cycle.

**TAMPER RESISTANT:** Wall plate locks access to dip switch adjustments.

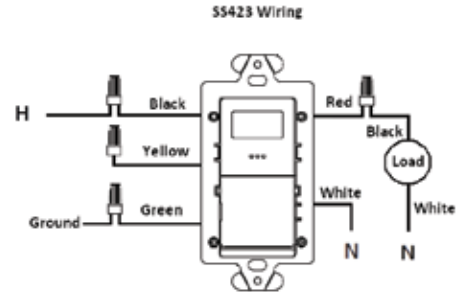
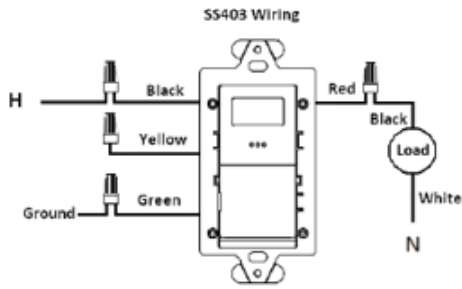
**THREE-WAY & MULTI-WAY:** Three-way compatible with existing switch. Multi-way requires momentary switches at the additional locations. Maximum distance 100 feet.

**DISPLAY:** Backlit LCD Display.

**COLOR:** White (single gang decorator wall plate included).

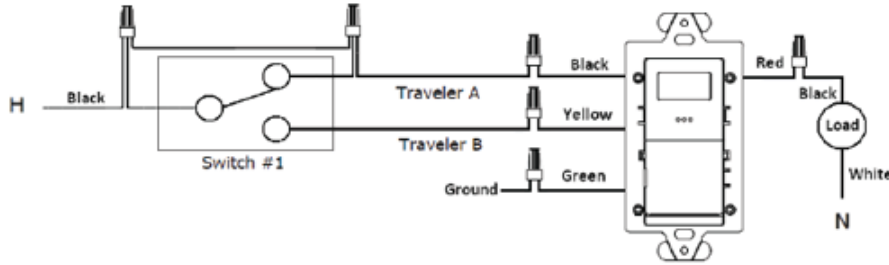
CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60 Hz	SWITCH TYPE	COLOR
SS403	14029	120/230/277	SPST	White
SS423	14030	120/230/277	SPST	White
SS410	14033	24VDC or 24VAC	SPDT	White

TYPE	VOLTAGE	SS403 RATING	VOLTAGE (VAC)	SS423 RATING
Resistive	120-277VAC	15A	120-277	15A
Ballast	120-277VAC	10A	120-277	13A
LED Lamp Driver	120-277VAC	1200W	120-277	1200W
Tungsten	120VAC	8A	120	8A
Pilot Duty	120VAC	360VA	120-277	720VA
Motor	120VAC	1/4HP	120-277	1HP
SS410				
VOLTAGE	RATING	VOLTAGE (VAC)		RATING
28VDC	.5A Max	24		1A Max
Minimum Load 1ma @ 5V				



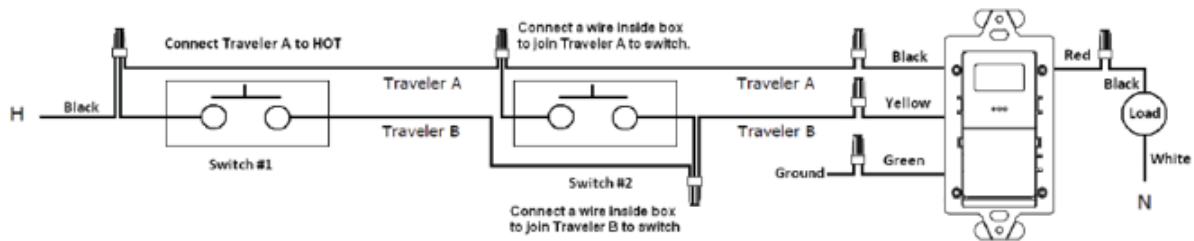
**SS403 Wiring for 3-Way**

Connect a wire inside the gang-box between Traveler A and HOT

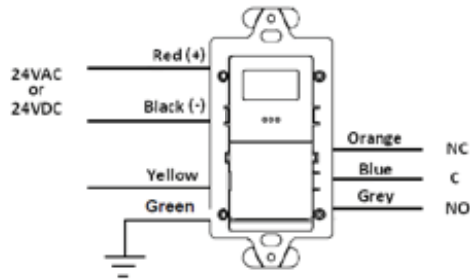


**SS403 Wiring for 4-Way**

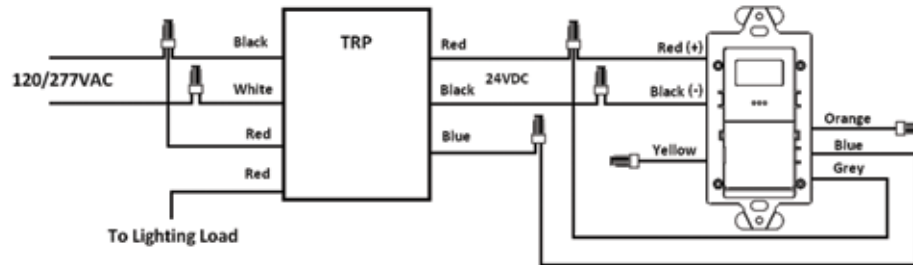
Use momentary switches at all additional locations.  
Tork #LCS115M



**SS410 Series Wiring**



**SS410 Series Wiring to a TRP**



# SS SERIES

## AUTO OFF IN-WALL TIMER



### SPECIFICATIONS

#### TIMING ACCURACY:

±5% @ 60° to 80°F.

#### INPUT VOLTAGE:

24/120/208-240/277VAC, 50/60Hz.

#### WIRE SIZE: #18AWG.

#### OPERATING TEMPERATURE:

0°F to +100°F (-17°C to +37°C).

### APPLICATIONS



- Bathroom fans and lights
- Indoor/Outdoor lighting
- Storage areas
- Hospitality areas

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50/60Hz	WARNING BEFORE TIME OUT	SWITCH TYPE
SS20	14005	24/120/208-240/277	None	Single pole
SS20F	14008	24/120/208-240/277	*Flicker	Single pole
SS13F	14007	24/120/208-240/277	*Flicker	3-way
SS13B	14006	24/120/208-240/277	**Beep	3-way

\*Flicker feature turns load OFF for 1/2 second, 2 minutes before end of timed cycle and again 1 minute before end of timed cycle.

\*\*Beep feature will begin a 1/2 second audible warning every 12 seconds during the last 2 minutes of timed cycle.

### FEATURES

**VARIABLE TIMING:** Choose from 1 minute to 18 hours.

**FLASH WARNING:** "F" suffix models with flicker feature turns load off for 1/2 second, 2 minutes before end of timed cycle and again 1 minute before end of timed cycle.

**AUDIBLE WARNING:** "B" suffix model will buzz that every 12 seconds during the last 2 minutes of timed cycle.

**TAMPER RESISTANT:** Time ON interval preset is hidden behind wall plate.

**EASY SET:** Small screw driver adjustment provides quick set-up of timing.

**EASY WIRING:** No neutral needed, great for retrofit.

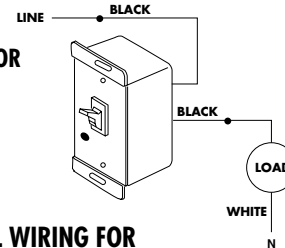
**3-WAY:** SS13 SERIES replaces standard 3-way switch with no re-wiring.

**COLOR:** White.

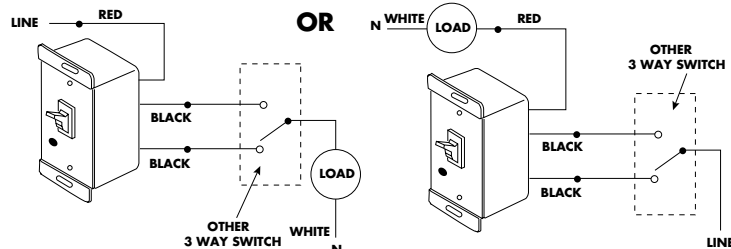
TYPE	CONTACT RATINGS	MINIMUM LOAD	
		VOLTS	WATTS
SS13F & SS13B	.25-4.0A Resistive	24	6
	.25-4.0A Ballast*	120	30
	.25-4.0A Tungsten	208	50
	1/8 HP @ 120VAC	240	60
	1/3 HP @ 240VAC	277	70
SS20 & SS20F	.50-7.25A Resistive	24	12
	.50-7.25A Ballast*	120	60
	.50-4.0A Tungsten	208	105
	1/6 HP @ 120VAC	240	120
	1/2 HP @ 240VAC	277	150

\*Not compatible with compact fluorescent lamps (CFL) and electronic fluorescent ballasts.

#### TYPICAL WIRING FOR 120 VAC SINGLE POLE



#### TYPICAL WIRING FOR 120 VAC – 3 WAY (Red is common)



# D SERIES

## ELECTRONIC AUTO OFF IN-WALL TIMER



### SPECIFICATIONS

**TIMING ACCURACY:** Line voltage.

**INPUT VOLTAGE:** 120VAC, 60Hz.

**WIRE SIZE:** #14AWG.

**OPERATING TEMPERATURE:**  
32°F to 122°F (0°C to 50°C).

### APPLICATIONS



- Whole house fans
- Indoor/Outdoor lighting
- Bathroom fans and lights
- Self storage

### FEATURES

**VARIABLE TIMING:**

Button push changes time ON setting.

**D1060M:** 10, 20, 30, 60 minute.

**D212H:** 2, 4, 8, 12 hour.

**LED DISPLAY:** Indicator moves to new range as timer counts down.

**TAMPER RESISTANT:** Time ON interval preset.

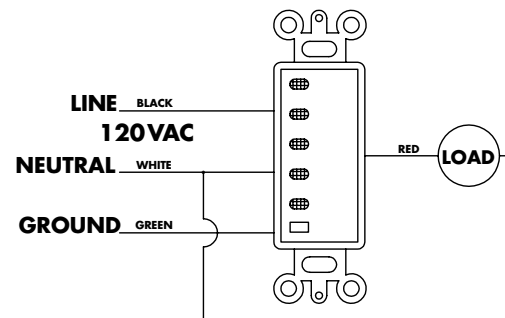
**EASY SET:** No adjustments, just wire and go!

**WIRING:** Requires a neutral.

**THREE COLORS:** Ivory, Light Almond, White.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	TIME SETTINGS	OUTPUT CONTACTS
D212H	14021	120	Ivory	2, 4, 8, 12 HOURS
D212HA	14022	120	Light Almond	2, 4, 8, 12 HOURS
D212HW	14023	120	White	2, 4, 8, 12 HOURS
D1060M	14025	120	Ivory	10, 20, 30, 60 MINUTES
D1060LA	14024	120	Light Almond	10, 20, 30, 60 MINUTES
D1060MW	14025	120	White	10, 20, 30, 60 MINUTES

TYPE	VOLTAGE (VAC)	RATING
General Purpose	120	15A
Resistive	120	1000W
Tungsten	120	1000W
Motor	120	1/4 HP
Ballast	120	1000VA



# A SERIES SPRINGWOUND AUTO OFF IN-WALL TIMER



**NEW!**  
SPDT, 2 IN 1  
CONTACTS

## SPECIFICATIONS

**INPUT VOLTAGE:**  
125/250/277VAC, 50/60Hz.

**TERMINAL SIZE:** #12AWG.

**OPERATING TEMPERATURE:**  
32°F to 122°F (0°C to 50°C).

## APPLICATIONS



- Whole house fans
- Indoor/Outdoor lighting
- Bathroom fans and lights
- Self storage

\*Wallplate not included

## FEATURES

**VARIABLE TIMING:** Twist knob for time ON setting. Time ON lengths from 15 minutes to 12 hour vary by model.

**HOLD FEATURE:** Some models have position for constant ON.

**EASY SET:** No adjustments. Just wire and go!

**EASY WIRING:** No neutral required. Great for retrofit! Use as single or in multi-gang box with no de-rating.

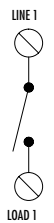
**SWITCH TYPE:** SPDT "2 in 1" contacts wire has SPST also.

**COLOR:** Ivory, Light Almond, White.

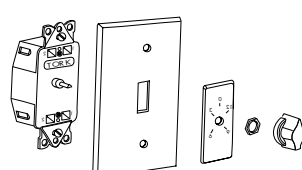
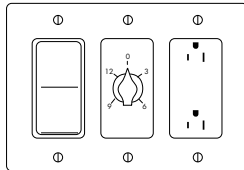
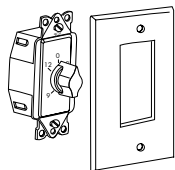
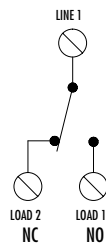
**WALL PLATE:** Fits standard or decorator style wall plates, see below (not included).

TYPE	VOLTAGE (VAC)	RATING
Resistive	125	20A
	250	10A
	277	10A
Inductive	125	20A
	250	10A
	277	10A
Tungsten	125	7A
Motor	125	1HP
	250	2HP

USE FOR SPST



USE FOR SPDT



**CAUTION:** This timer is not to be used in precision timing applications where inaccurate timing could have dangerous consequences (i.e. sun lamp, sauna, etc.).

CATALOG NO.	UPC CODE	HOLD FEATURE	COLOR
<b>15 MINUTE MAX.</b>			
A515MH	15020	With Hold	Ivory
A515MHW	15120		White
A515M	15013	No Hold	Ivory
A515MW	15113		White
A515MA	15127		Light Almond
<b>30 MINUTE MAX.</b>			
A530MH	15021	With Hold	Ivory
A530MHW	15121		White
A530M	15014	No Hold	Ivory
A530MW	15114		White
A530MA	15128		Light Almond
<b>60 MINUTE MAX.</b>			
A560MH	15022	With Hold	Ivory
A560MHW	15122		White
A560M	15015	No Hold	Ivory
A560MW	15115		White
<b>2 HOUR MAX.</b>			
A502HHW	15123	With Hold	White
A502H	15016	No Hold	Ivory
A502HW	15116		White
<b>6 HOUR MAX.</b>			
A506HHW	15125	With Hold	White
A506H	15018	No Hold	Ivory
A506HW	15118		White
<b>12 HOUR MAX.</b>			
A512HH	15026	With Hold	Ivory
A512HHW	15126		White
A512H	15019	No Hold	Ivory
A512HW	15119		White

# C SERIES

## COMMERCIAL STYLE SPRINGWOUND AUTO OFF IN-WALL TIMER



\*Wallplate included

**NEW!**  
SPDT, 2 IN 1  
CONTACTS

### SPECIFICATIONS

**INPUT VOLTAGE:**  
125/250/277VAC, 50/60Hz.

**TERMINAL SIZE:** #12AWG.

**OPERATING TEMPERATURE:**  
32°F to 122°F (0°C to 50°C).

### APPLICATIONS



- Ventilating fans
- HVAC
- Whirlpools
- Self storage
- Motors and pumps

### FEATURES

**VARIABLE TIMING:** Twist knob for time ON setting. Time ON lengths from 15 minutes to 12 hour vary by model.

**HOLD FEATURE:** Some models have position for constant ON.

**EASY SET:** No adjustments. Just wire and go!

**EASY WIRING:** No neutral required. Great for retrofit!

**SWITCH TYPE:** SPDT "2 in 1" contacts wire as SPST also, except C460M and C412H are DPST.

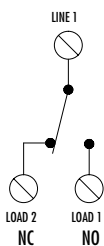
**COLOR:** Metal-brushed aluminum.

**WALL PLATE:** Includes real metal wall plate with screw mounting, to add extra security for commercial applications.

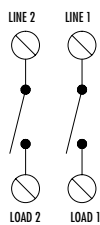
USE FOR SPST



USE FOR SPDT



USE FOR DPST



TYPE	VOLTAGE (VAC)	RATING
Resistive	125	20A
	250	10A
	277	10A
Inductive	125	20A
	250	10A
	277	10A
Tungsten	125	7A
Motor	125	1HP
	250	2HP

CATALOG NO.	UPC CODE	HOLD FEATURE
15 MINUTE MAX.		
C515M	15501	No Hold
30 MINUTE MAX.		
C530M	15503	No Hold
60 MINUTE MAX.		
C560M	15505	No Hold
C560MH	15506	With Hold
C460M*	15011	No Hold
2 HOUR MAX.		
C502H	15507	No Hold
6 HOUR MAX.		
C506H	15511	No Hold
12 HOUR MAX.		
C512H	15513	No Hold
C512HH	15514	With Hold
C412H*	15010	No Hold

\*DPST switch type.

**CAUTION:** This timer is not to be used in precision timing applications where inaccurate timing could have dangerous consequences (i.e. sun lamp, sauna, etc.).







# TORK® PLUG-IN TIMERS

# 400 SERIES INDOOR PLUG-IN MECHANICAL TIMERS

## APPLICATIONS



- Automatically turn ON/OFF items in the home.
- Control lamps, radios, televisions, appliances.
- Give the home a "lived in" look while away.
- Save energy and provide security.

## FEATURES

**REPEAT SCHEDULE:** Daily.

**VARIABLE TIMING:** Multiple ON/OFF times.

**ON/OFF:** Manual ON/TIMER switch.



401A



402A



403A



405A

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
401A	16001		1	Polarized	Multiple ON/OFF Lighting Timer	15 minute
402A	16002	125 VAC, 15A, 1875W Resistive 125VAC, 10A, 1250W Tungsten	1	Grounded	Heavy Duty 24 hour Timer	15 minute
403A	16013	125VAC, 1/3HP	1	Polarized	Powerful & Compact Automatic Timer	30 minute
405A	16014		2	Grounded	Heavy Duty 15 AMP Automatic Timer	15 minute

**NOTE:** "▲" = Indicates outlet location.

# SA 100 SERIES INDOOR PLUG-IN MECHANICAL TIMERS

**NEW!**

## APPLICATIONS



- Automatically turn ON/OFF items in the home.
- Control lamps, radios, televisions, appliances.
- Give the home a "lived in" look while away.
- Save energy and provide security.

## FEATURES

**REPEAT SCHEDULE:** Daily.

**VARIABLE TIMING:** Multiple ON/OFF times.

**ON/OFF:** Manual ON/TIMER switch.



SA011



SA105



SA100



SA110

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA011	16501	120VAC 15A Resistive, 120VAC 15A Inductive, 120VAC 1800W Tungsten, 120VAC 1/2HP Motor	1	Polarized	Lamp Timer with LED night light	Two Pair of On/Off trippers
SA100	16507		1	Polarized	Basic Timer with cover to hide dial	15 Minutes
SA105	16510	120VAC 15A Resistive 120VAC 15A Inductive 120VAC 1800W Tungsten	1 Timed 1 Untimed	Polarized Polarized	Table Top Timer for easy access with 6" cord	15 Minutes
SA110	16513		1 Timed 1 Untimed	Grounded Polarized	Heavy Duty Appliance Timer with cover to hide dial	15 Minutes

**NOTE:** "▲" = Indicates outlet location.

# SA100 & 400 SERIES INDOOR DIGITAL PLUG-IN TIMERS

**NEW!**



SA134



SA130



455D



457Z

SunSet

## APPLICATIONS



- Automatically turn ON/OFF items in the home.
- Vary schedules daily.
- Give the home a "lived in" look while away.
- Save energy and provide security.

## FEATURES

### SA134:

24 hour programming  
Battery Back-up for power outages

### SA130 & 455A:

7 day programming  
Random feature for lived in look  
Manual Daylight Savings  
Battery Back-up for power outages

### SunSet™ TIMER 457Z:

Sunset On with 7 day programmable Off or sunrise Off  
Random feature for lived in look  
Automatic Daylight Savings  
Battery Back-up for power outages  
Never come home to a dark house

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA134	16522	120VAC 8.3 amp Resistive 120VAC 600W Tungsten	1	Polarized	Easy Set 24 hour daily repeat timer	2 On/Off Settings
SA130*	16519	120VAC 15A Resistive, 120VAC 15A Inductive, 120VAC 500W Tungsten 120VAC 1/2 HP Motor	1 Timed 1 Untimed	Polarized	Easy Set Lamp Timer with cover to hide buttons	2 On/Off settings. 1 setting may be active at a time
455D	16015	125VAC 15A General Purpose 125VAC 15A Resistive 125VAC 1000W Tungsten	2	Grounded	Seven Day Programmable	24 ON/OFFs Different schedule for each day of the week. Multiple ON/OFFs
457Z	16016	125VAC 15A General Purpose 125VAC 15A Resistive 125VAC 1000W Tungsten	2	Grounded	SunSet™ Timer Dusk to Dawn with automatic daylight savings	20 ON/OFFs Different schedule for each day of the week. Multiple ON/OFFs

NOTE: "▶" = Indicates outlet location.



\*ETL Listed for US and Canada

# SA200 & SA500 SERIES WIRELESS PLUG-IN CONTROLS



## APPLICATIONS



- Remotely turn ON/OFF items.
- Control lamps, radios, appliances, outdoor lighting.
- Safety: enter and leave rooms in full light.
- Provide a convenient control from your chair.



SA230



SA500

## FEATURES

### INDOOR REMOTE OUTLET - SA500 :

Control indoor outlet up to 80' away  
 Transmitter has 3 pair ON/OFF buttons to allow independent control of 3 receivers  
 Match receiver and outlet with simple dial. No fussy programming.  
 Get one for each room. No cross talk.  
 Wireless control without moving across room

### OUTDOOR REMOTE OUTLET - SA230:

Control indoor outlet up to 80' away  
 Matched receiver and outlet. No programming  
 Transmitter has 1 pair ON/OFF button  
 Wireless control from the comfort of inside

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA500	16555	125VAC 8A Resistive 125VAC 625W Tungsten	1	Grounded	Indoor Remote Controlled Outlet	Manual On/Off with push button transmitter
SA230	16564	125VAC 8A Resistive 125VAC 600W Tungsten	2	Grounded	Outdoor Remote Controlled Outlet	Manual On/Off with push button transmitter

**NOTE:** "▲" = Indicates outlet location.

# 600 & SA200 SERIES OUTDOOR PLUG-IN MECHANICAL TIMERS

**NEW!**

## APPLICATIONS



- Automatically turn ON/OFF outdoor lighting.
- Save energy. Don't run lights all night.
- Match dusk On with light activated timer.



601A



652B



602A



SA205

## FEATURES

### MECHANICAL TIMERS:

TIMER REPEAT SCHEDULE: Daily.  
VARIABLE TIMING: Multiple ON/OFF times.  
MANUAL SWITCH: ON or TIMER mode

### LIGHT ACTIVATED TIMERS:

TIMER REPEAT SCHEDULE: Daily turns on at dusk  
VARIABLE TIMING: Dial turn to choose a countdown time to turn Off hours after dusk

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
601A	16020	125 VAC, 15A, 1875W General Purpose 125VAC, 15A, 1875W Resistive	1	Grounded	Outdoor Lighting Timer	15 Minutes
602A	16021	125VAC, 10A, 1250W Tungsten 125VAC, 1/2HP	2	Grounded	Outdoor Lighting Timer	15 Minutes
SA205*	16534	120VAC 15A Resistive 120VAC 15A Inductive 120VAC 1800W Tungsten 120VAC 1800W Incandescent 120VAC 1/2 HP Motor	1 Timed 1 Untimed	Grounded	Landscape Timer	15 Minutes
652B	16018	125VAC 15A General Purpose 125VAC 15A Resistive 125VAC 1000W Tungsten 125 VAC 500VA Electronic Ballast 125VAC 1/3HP, TV-5	2	Grounded	Light Activated Outdoor Lighting Timer	Turns on at Dusk and countdown Off 2, 4, 6 or 8 hours later

\* ETL listed for U.S. and Canada.



**NOTE:** "▲" = Indicates outlet location.

# 600 & SA200 SERIES OUTDOOR PLUG-IN DIGITAL TIMERS

**NEW!**

## APPLICATIONS



- Automatically turn ON/OFF outdoor lighting
- Save energy. Don't run lights all night
- Match dusk On with light activated timer



**621D & 631D**  
(621D without photocell)



**611D**



**654A**



**SA204**

## FEATURES

### DIGITAL TIMER:

7 day programming  
Manual Daylight Savings  
Random feature for lived in look  
Battery Back-up for power outages

### PHOTO-TIMERS:

Dusk to Dawn operation  
Set a fixed time off before Dawn  
Battery Back-up for power outages

### LIGHT ACTIVATED TIMERS:

**TIMER REPEAT SCHEDULE:** Daily turns on at dusk.  
**VARIABLE TIMING:** Choose a countdown time to turn Off from 1 to 9 hours after dusk.  
**654A USER SELECT MODE:** Start countdown at any time and repeats daily.

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
621D	16056	125 VAC, 15A, 1875W General Purpose	2	Grounded	Digital Outdoor Timer	7 On/Off pairs. Schedule for each day of week
611D	16018	125VAC, 15A, 1875W Resistive	1	Grounded	Digital Outdoor Photo-Timer	Photocell Turns on at Dusk and off at Dawn or off at a pre-set time
631D	16027	125VAC, 1000W Tungsten 125VAC, 8A Ballast 125VAC, 1/2HP	2	Grounded	Digital Outdoor Photo-Timer	
SA204*	16561	120VAC 8A Resistive 120VAC 600W Tungsten	2	Grounded	Light Activated Landscape Timer	Turns on at Dusk and countdown off 1 through 9 hours later
654A	16025	125VAC 15A General Purpose, 125VAC 15A Resistive, 125VAC 625W Tungsten 125VAC 1/3HP, TV-5	2	Grounded	Light Activated Outdoor Lighting Timer or User Selected Daily Repeat	Turns on at Dusk and countdown off 1 through 9 hours later. Includes user select mode.

\* ETL listed for U.S. and Canada.



**NOTE:** "▲" = Indicates outlet location.



# SA200 SERIES OUTDOOR PLUG-IN STAKE TIMERS

**NEW!**

## APPLICATIONS



- Automatically turn ON/OFF outdoor lighting
- Save energy. Don't run lights all night
- Multiple outlets for holiday lighting

## FEATURES

**REPEAT SCHEDULE:** Daily.

**VARIABLE TIMING:** Multiple ON/OFF times.

**MANUAL SWITCH:** ON or TIMER mode.



CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS (▶)	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA215	16540	125V 15A Resistive 125V 1250W Tungsten 125V 1/2HP Motor	6	Grounded	Holiday Décor Stake Timer	30 minutes

**NOTE:** "▲" = Indicates outlet location.

# SA200 SERIES

## OUTDOOR *Zip-Set*

### DIGITAL PLUG-IN TIMERS

**NEW!**

#### APPLICATIONS



- Automatically turn ON/OFF outdoor lighting
- Save energy. Don't run lights all night
- Match dusk On everyday



#### FEATURES

- Fast programming with ZIP-SET™ One-Step™ set-up.  
Just enter your area code
- ZIP-SET™ turns lights ON at sunset & OFF at countdown or preset time.
- 7-5-2 settings for full week, weekdays, and weekends
- Option to set with one of three on/off programs
- Manual Daylight Savings
- Random feature for lived in look
- Battery Back-up for power outages

CATALOG NO.	UPC CODE	RATINGS	NO. OF OUTLETS	TYPE OF PLUG	DESCRIPTION	VARIABLE TIMING SEGMENTS
SA210	16537	120VAC 15A Resistive 120VAC 15A Inductive 120VAC 1000W Tungsten 120VAC 1/4 HP Motor	2 Timed 1 Untimed	Grounded	Zip-Set™ Outdoor Living Wall Mount Timer	Sunset On and countdown hours to Off or same fixed time off each day
SA220	16534	120VAC 15A Resistive 120VAC 15A Inductive 120VAC 600W Tungsten 120VAC 1/4 HP Motor	6 Timed 1 Untimed	Grounded	Zip-Set™ Outdoor Lighting Stake Timer	Sunset On and countdown hours to Off or same fixed time off each day





# **TORKALERT™ SIGNALING DEVICES**

# MECHANICAL STROBE HORNS



TA880-N5

TA5508H-G1



## APPLICATIONS

- High performance for industrial signaling applications. Offers high sound output, low current draw and dependable operation. Strobes use xenon flashtube, ideal for maximum efficiency and reliability.

## FEATURES

**ALARM:** Penetrating mechanical sound.

**WIRING:** Low current draw. Horn may be wired separately

**MOUNTING:** 4" square surface mounting.

CATALOG NO.	UPC CODE	INPUT VOLTAGE	INPUT CURRENT (AMPS)	dB @10 FEET	CANDELA
TA880-N5	96015	120VAC	0.115	96	15
TA5508H-G1	96071	24VDC	.059	strobe only	15/75

**NOTE:** TA880-N5 For outdoor use, unit must be mounted in a TA-WBBF outdoor backbox. See page 550 for ordering. TA5508H-G1 for indoor mounting only.

# MECHANICAL HORNS



## APPLICATIONS

- Loud tone with typical decibel output of 87 dB at 10 feet. Low frequency resonance for strong penetration of noisy areas like boiler rooms, water pumping stations, elevators and air compressor rooms.

## FEATURES

**INPUT VOLTAGE:** Wide input voltage ratings for compatibility with unregulated power supplies.

**WIRING:** Screw terminals for convenient IN/OUT wiring. Low current draw for minimizing power supply and wiring cost.

**HOUSING:** Steel, painted Dawn Mist. Resonant grill design for high sound output.

**MOUNTING:** To indoor box TA-BBSF or outdoor box TA-WBBF, see accessories page 550.

CATALOG NO.	UPC CODE	INPUT VOLTAGE	INPUT CURRENT (AMPS)
SURFACE TYPE			
TA874-N5	96023	120VAC, 60Hz	0.070
TA874-N5R (Red)	97613	120VAC, 60Hz	0.070
TA875-G1	97687	24VDC	0.035
WITH WEATHERPROOF BACKBOX TA-WBBF UL LISTED FOR OUTDOOR USE			
TA876-N5	96026	120VAC, 60Hz	0.070

**NOTE:** Use TORK signal timers for 24 hour or 7 day scheduling, see page 485.

# MULTI-TONE ELECTRONIC HORNS

24VDC & 115VAC



TA875-1G1  
cUL<sub>us</sub>

TA-MTS  
UL

## APPLICATIONS

- For indoor and outdoor use. Superior sound penetration for various room conditions. Screw terminals accept #12AWG.

## FEATURES

### OPERATING TEMPERATURE:

TA-MTS: -31°F to +150°F (-35°C to +66°C).

### DIMENSIONS AND MOUNTING:

TA-MTS: 4 1/8"H x 4 1/8"W x 3 17/32"D

Can be mounted on ceiling or wall.

TA875-1G1: 4 3/4"H x 4 3/4"W x 1 3/8"D

1 gang, 2 gang or 4" square backbox.

TA875-1G1 24VDC HORN		
ALARM TONE	CURRENT (AMPS)	TYPICAL dB @ 10 FEET
BELL	0.020	91
HI-LO	0.025	96
CHIME	0.028	93
SINGLE STROKE BELL	0.026	93
HORN	0.023	97
3 BEEPS, PAUSE	0.023	97
SIREN	0.040	95
SLOW WHOOP	0.040	96

TA-MTS 115VAC HORN				
ALARM TONE	AMPS @ 120VAC		TYPICAL dB @ 10 FEET	
	HIGH	STANDARD	HIGH OUTPUT	STANDARD OUTPUT
HORN	0.050	0.042	85	82
BELL	0.041	0.039	82	75
HORN 2	0.050	0.040	85	79
CODE 3 HORN	0.050	0.042	82	75
CODE 3 TONE	0.042	0.040	79	75
SLOW WHOOP	0.050	0.042	85	82
SIREN	0.045	0.041	85	82
HI-LO	0.042	0.039	82	79

CATALOG NO.	UPC CODE	INPUT VOLTAGE	DESCRIPTION
TA875-1G1	97641	20-31VDC	Multi-tone Electric Horn
TA-MTS	97674	115 VAC	Multi-tone Electric Horn

# HEAVY DUTY BELLS

4", 6", 10" DIAMETERS  
AC VIBRATING BELLS



## APPLICATIONS



- For indoor or outdoor applications. High sound output, durable and dependable performance. Ideal for schools and hospitals.

## FEATURES

**TERMINAL SIZE:** #12 - 22 AWG.

**WIRING:** Screw terminals permit fast IN/OUT field wiring.

**HOUSING:** Steel gong and cast aluminum. See page 551 for dimensional drawings.

**MOUNTING:** To indoor box TA-BBSF or outdoor box TA-WBBF, see accessories page 550.

CATALOG NO.	UPC CODE	SHELL SIZE	VOLTAGE	INPUT CURRENT (AMPS)	dB @ 10 FEET	COLOR
TA340-4G5	96001	4"	24VAC	0.320	81-90	Dawn Mist
TA340-4N5	96002	4"	120VAC	0.065	81-90	Dawn Mist
TA340-6G5	96003	6"	24VAC	0.320	81-95	Dawn Mist
TA340-6N5	96004	6"	120VAC	0.065	81-95	Dawn Mist
TA340-10G5	96005	10"	24VAC	0.320	84-98	Dawn Mist
TA434-4N5	98005	4"	120VAC	0.065	81-95	Red
TA434-6N5	97521	6"	120VAC	0.065	81-95	Red
TA434-10N5	96522	10"	120VAC	0.065	84-98	Red

# LIGHT DUTY AND GENERAL PURPOSE BELLS & BUZZER



## APPLICATIONS

- Designed to operate on either bell ringing transformers or batteries. Non-adjustable sound.

## FEATURES

**ALARM:** Bell ringing, non-adjustable sound.

**DIMENSIONS FOR TA725:**  
3" H x 2½" W x 1" D.

**MOUNTING:** Fully enclosed sturdy steel bases and covers. Base and cover snap together, no screws required.

CATALOG NO.	UPC CODE	DESCRIPTION	VAC	VDC	AMPS	dB
TA740	96228	2½" Gong	8-16	3-6	1	76 @ 10'
TA744	96230	4" Gong	8-16	3-6	1	78 @ 10'
TA725	96226	Buzzer	8-16	3-6	1	88 @ 3'

# CHIMES & CHIME KITS



## APPLICATIONS

- Powerful and loud, pleasant sounding push-button chimes. Ideal for homes, apartments and offices.

CATALOG NO.	UPC CODE	DESCRIPTION	DIMENSIONS
TAC212WS	96064	16VAC Chime + Push Button clip for Stucco + 10VA Transformer	7 3/16"L x 4"W x 2"D
TAC212WL	96054	16VAC Chime +1 Illuminated & 1 Non-illuminated Push-button +10VA Transformer	7 1/4"L x 4 3/4"W x 2 1/2"D

## FEATURES

**INPUT:** 16V, 10VA, 120VAC.

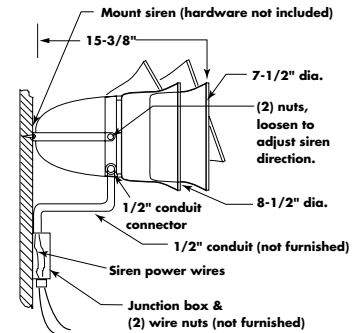
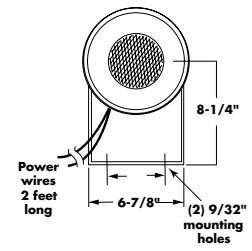
**ALARM:** Chime.

**MOUNTING:** Fully enclosed sturdy steel bases.

# WEATHERPROOF MOTOR DRIVEN SIREN



## DIMENSIONS



## APPLICATIONS



- For industrial and outdoor use. Ideal for evacuation and warning systems.

## FEATURES

**INPUT VOLTAGE:** 120AC & DC, 60Hz.

**ALARM:** Loud, distinctive tone. Designed to be effective over standard horns or bells.

**HOUSING:** Red enamel paint over heavy gauge aluminum housing. Fully enclosed motor. 180° swivel and adjustable direction.

CATALOG NO.	UPC CODE	INPUT VOLTAGE	dB @10 FEET	AMPS	VA
TA315-1N5	96599	120VAC/DC	117	2.5	300

# MANUAL FIRE ALARM PULL-DOWN STATION



## APPLICATIONS



- Designed for indoor use. Ideal for schools, hospitals, industrial plants, warehouses and retail stores. Key required to close and reset device. Meets requirements, BSA, MEA, CA and UL.

## FEATURES

**ALARM:** Loud, distinctive tone. Designed to be compatible with any control panel to initiate local alarm signals, trip municipal fire alarm box and start fire pumps.

**MOUNTING:** Sturdy metal construction, mounts to a standard single gang electrical box.

CATALOG NO.	UPC CODE	SWITCH	VOLTS	AMPS
TA270A	96521	SPST, NO	30V AC/DC	1



# TELEPHONE RELAY



## APPLICATIONS



- This device activates appliances when a telephone ring voltage is detected. For indoor and outdoor use with horns, bells or strobes. Recommended use where ambient noise levels are high. FCC approved.

## FEATURES

**INPUT:** Accepts RJ-11C phone plug.

**WIRING:** Hard wire connections, for analog phone lines.

**MOUNTING:** Weatherproof, indoor and outdoor, includes mounting bracket.

CATALOG NO.	UPC CODE	INPUT TELEPHONE RING VOLTAGE	AC INPUT VOLTAGE	RINGER EQUIVALENCE	PEAK CANDLEPOWER
TA-B-8332	97100	39-150V/20-30Hz	115VAC-5A, 230VAC-2A	Up to 115VDC-500MA	0.6

# WALL CLOCKS

## QUARTZ & ELECTRIC



### APPLICATIONS

- Each model meets United States Government Specifications. All Clocks provide second hand for accurate timing.

### FEATURES

#### QUARTZ

Accurate to one minute per year. Low power consumption for long battery life. Uses AA battery (not supplied).

#### ELECTRIC

110VAC, 60 Hz synchronous motor. 66 inch line cord and plug. Does not require grounding.

**MOUNTING:** Concealed mounting brackets allow for simple, neat placement on walls.

#### QUARTZ CLOCK

CATALOG NO.	UPC CODE	TYPE	SIZE	FRAME COLOR
TA1886 G	96156	QUARTZ	8"	Grey
TA1886 B	96155	QUARTZ	8"	Brown
TA1887 G	96159	QUARTZ	12"	Grey
TA1887 B	96157	QUARTZ	12"	Brown
TA1887 BK	96158	QUARTZ	12"	Black

#### ELECTRIC CLOCK

CATALOG NO.	UPC CODE	TYPE	SIZE	FRAME COLOR
TA1880 G	96152	ELECTRIC	8"	Grey
TA1880 B	96151	ELECTRIC	8"	Brown
TA1882 G	96154	ELECTRIC	12"	Grey
TA1882 B	96153	ELECTRIC	12"	Brown

# ELECTRIC DOOR OPENERS



## REMOTE CONTROL & CONTACT DEVICES

### APPLICATIONS

- For unlocking or locking metal or wooden doors using low voltage wiring. For AC, use TA591 or TA592 transformer.


### MORTISE TYPE REMOTE OPENER

Reversible for right or left hand door. Use with mortise entrance locks having a latch bolt with up to 1/2" width and throw. 6" wire leads. Dimensional drawings available.

DEVICE	CATALOG NO.	UPC CODE	VOLTS	AMPS
	TA09	96960	8-16VAC 3-6VDC	.95-1.75 1.25-1.80
	TA154	96962	16VAC 3-6VDC	.95-1.75 1.25-1.80


### RIM TYPE REMOTE OPENER

Reversible for right or left hand door. Standard surface type used with lock latches with up to 5/8" width and throw. 6" wire leads. Dimensional drawings available

DEVICE	CATALOG NO.	UPC CODE	VOLTS
	TA152	96961	8-16VAC, 3-6VDC


### MAGNETIC SWITCH CONTACTS

For activating a variety of signals, ideal for limiting space applications. Self-insulating and can be mounted in any direction. All units include companion magnet. Dimensions: 2 3/16" L x 1/2" W x 1/2" D

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS MAX.
	TA60	96975	Circuit closed with magnet engaged		
	TA61	96976	Make & break NO and NC	24VAC 12VDC	.5
	TA62	96977	Circuit open with magnet engaged		
	TA67W	96979	Terminal Cover		


### DOOR/WINDOW CONTACTS, ROLLING BALL TYPE

Signals automatically with the opening and closing of doors, windows and transoms. Operates from pressure in any direction. Non-tilt, non-jamming design. Fits 3/4" hole; no need to mortise.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS MAX.
	TA44	96995	Normally closed Push to open		
	TA45	96996	Normally open Push to close	12-24V AC/DC	2
	TA46	96997	Momentary contact Push to make & break		


### ELECTRIC DOOR SWITCH

For turning lights/signals on or off when doors are opened or closed. Ideal for closets, dark rooms, storage areas of walk-in refrigeration. Rust resistant steel case with 4 knockouts, antique brass plate. Box dimensions: 1 1/4"W x 3 7/8"H x 2"D. Plate dimensions: 1 1/4"W x 4"

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS MAX.
	TA502	96964	Light ON when door is open	125VAC 250VAC	6 3

### DOOR TRIP SWITCH

Signals automatically as door is openend. Commonly used on store doors to announce entrance of customers. Mounts on top of door frame. Solid cast brass. Size: 3 x 1 5/8"

DEVICE	CATALOG NO.	UPC CODE	VOLTS	AMPS MAX.
	TA236	96963	12-24VAC	2







# PUSH-BUTTONS

ILLUMINATED,  
NON-ILLUMINATED &  
WEATHERPROOF



## APPLICATIONS

- For outdoor use to activate low voltage bells, buzzers, horns or any other audible signal. Ideal for factory doors, receiving departments, small office buildings, limited access retail stores and private homes.

## ILLUMINATED PUSH-BUTTONS, UP TO 16VAC

BUTTON	CATALOG NO.	UPC CODE	COLOR	SIZE
	TA603L	96035	Gold	1 3/4" (diameter)
	TA631L	96089	White	2 3/4" x 7/8"
	TA656B	96039	Gold	15/16 x 2 3/4"
	TA215LB	96031	Brass	1 1/4 x 2"
	TA620L*	96037	Chrome	5/8" (diameter)
	TA620LB*	96038	Brass	5/8" (diameter)

## WEATHERPROOF PUSH-BUTTONS / SOLID CAST BRASS

BUTTON	CATALOG NO.	UPC CODE	DESCRIPTION	INPUT VOLTAGE
	TA1786B	96090	Without conduit backplate	Momentary Contacts 4 amps AC/DC @ 12V 4 amps AC, 2 amps DC @ 24V
	TA1786CB	96091	With conduit backplate	2 amps AC 1 amp DC @48V

## NON-ILLUMINATED PUSH-BUTTONS, UP TO 24VAC

BUTTON	CATALOG NO.	UPC CODE	COLOR	SIZE
	TA600	96041	Polished Brass	2 1/4" (diameter)
	TA603	96044	Polished Brass	1 3/4" (diameter)
	TA631	96088	White	2 3/4" x 7/8"
	TA635	96047	Ivory, black bar	2 3/4" x 7/8"
	TA666BK	96048	Black, ivory bar	2 3/4" X 2 3/4"
	TA602	96043	Polished Brass	13/8" x 5 1/4"
	TA601	96042	Sprayed Brass	2 x 2 9/16"
	TA620*	96045	Chrome	5/8" (diameter)
	TA620B*	96046	Brass	5/8" (diameter)

\*Stainless steel plate to fit TA620 models: Order TA 147-1

# WARNING LIGHTS INDUSTRIAL UNITS


LETTER	INDICATES COLOR
R	Red
A	Amber
C	Clear
B	Blue

## APPLICATIONS

- 1/2" conduit mounting. Full selection of dome colors, see "Ordering Info". For outdoor use. All units must be mounted vertically with base at bottom.


### TA47N5 / TA47R5 – ALL PURPOSE 360° BEACON

Large parabolic reflector rotates around a 100 watt bulb. Long range beam. Use to indicate equipment malfunctions, security intrusion, etc.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA47RN5	96061	90 FPM Corrosion resistant/Outdoor use Glass filled polypropylene housing	117VAC	
	TA47AN5	96161	Acrylic dome	117VAC	.9
	TA47AR5	96162	Tamper resistant dome clamps Nominal current draw 9 1/2"H x 8 1/2" diameter	240VAC, 60Hz	


### TA52N5 – COMPACT ROTATING BEACON

Light intensifying reflector rotates around a low current 25 watt bulb. Bayonet socket for easy lamp replacement. Ideal for restricted or dangerous areas.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA52RN5	96063	80-90 FPM 360° rotation		
	TA52AN5	96163	Dependable belt & turntable design Acrylic dome	117VAC	.21
	TA52BN5	96263	Nominal current draw 6 1/2"H x 5 5/8" diameter		


### TA93-2N5 – MIDI-STROBE

Solid state circuitry in a low profile design. No moving parts means less Maintenance!

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA93-2RN5	99622	70-80 FPM Solid state electronic circuitry		
	TA93-2AN5	97623	High output 3-4 watt, 3.6 joules Vertically mounted flash tube	117VAC	.04
	TA93-2CN5	96968	Snap out socket base for 360° Fresnel dome optics		
	TA93-2BN5	97624	Nominal current draw 6 1/2"H x 5 1/8" diameter		

### TA94N5 – ELECTRONIC STROBE

High intensity strobe tube with inner fluted lens for maximum brilliance. No moving parts makes it immune to shock and vibration. Ideal for security alert.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA94RN5	97626	70-80 FPM Solid state electronic circuitry High output 3-4 watt, 3.6 joules		
	TA94AN5	97627	Acrylic dome	117VAC	.04
	TA94BN5	97628	Glass filled polypropylene housing Suitable for outdoor use 9 1/2"H x 8 1/2" diameter		

# WARNING LIGHTS VEHICULAR UNITS


LETTER	INDICATES COLOR
R	Red
A	Amber

## APPLICATIONS

- 1/2" conduit mounting.
- Full selection of dome colors, see "Ordering Info".
- For outdoor use. All units must be mounted vertically with base at bottom.


### TA53E1 – ROTATING BEACON

Single point shock-mounting. Ideal for use on security or service vehicles.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS
	TA53AF1	96185	90-100 FPM	36VDC
	TA53AG1	96184	Dependable belt & turntable design 25 watt lamp Acrylic Dome Nominal current draw 7 1/2"H x 6" diameter	24VDC

### TA54E1 – PORTABLE, MAGNETIC, ROTATING BEACON


Single point shock-mounting. Ideal for use on security or service vehicles.

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS
	TA54AE1	96187	75 FPM, 12 watt lamp Quiet belt-drive motor.	12VDC
	TA54RE1	96087	Teardrop design fits under windshields. Includes glare shield, velcro tape 4 1/2" H x 7 1/2" diameter	

### TA131DN5 / TA131DU1 – DOUBLE FLASH SUPER STROBE


Ideal for industrial applications requiring extremely high visibility. One model covers all popular mounting methods: 1/2" pipe, surface, flange, electrical box.



DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS	AMPS
	TA131DRN5	96510	60 FPM, 7.5 JPF High intensity 85,000 peak CP Flashtube Rated at 7000-8000 hrs. Durable Lexan® housing 5"H x 7 1/4" diameter	120VAC	.2
	TA131DAN5	96610			
	TA131DRU1	96511		10.5-	
	TA131DAU1	97611		31.0VDC	

### TA879 – VEHICULAR BACKUP ALARM

Solid state electronic unit. Helps to comply with OSHA and State regulations. Makes distinctive noise, ideal for extreme variations in background noise

DEVICE	CATALOG NO.	UPC CODE	DESCRIPTION	VOLTS
	TA879	96102	2 sound levels 97 or 87 dB +/- dB at 4ft Multi-voltage Water-resistant housing	12 to 48VDC

**NOTE:** "FPM" = Flashes per minute  
"JPF" = Joules per flash

For replacement parts and accessories, see page 550.

# POWER SUPPLY UNITS 24 VDC UNITS



## APPLICATIONS

- Units provide power to multiple signaling devices, depending on requirements.

## FEATURES

### TA606

Regulated and filtered 24VDC up to 600mA. Easy-to-use screw terminals, accepts #16-24AWG. No conduit is required for installation.

### TA640

Dual output unit, each providing 2 Amps fo current. If connected in parallel, will provide up to 4 Amps. Circuit breaker provides input protection.

CATALOG NO.	UPC CODE	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	REGULATION	RIPPLE VOLTAGE
TA606	96109	117VAC	24VDC	600mA		
TA640	96110	115VAC	24VDC	4A	+/-5%	10mVRMS

# TRANSFORMERS



## APPLICATIONS

- Engineered to ensure long use for bells, buzzers and chimes.



CATALOG NO.	UPC CODE	TYPE	VOLTS-AMPS (VA)	PRIMARY VOLTAGE AC	SECONDARY VOLTAGE AC	Hz
TA590	96104	Bell	5	120	10	60
TA591	96105	Chime	10	120	16	60
TA592	96106	Tri-Volt	10-10-20	120	8-16-24	50/60
TA598	96602	Tri-Volt	20-30-30	120	8-16-24	60
TA599	96108	Heavy Duty	40	120	24	60
TA1245Y-50	96166	Heavy Duty	50VA	120/208/240	24	60
TA1245Y-75	96167	Heavy Duty	75VA	120/208/240	24	60

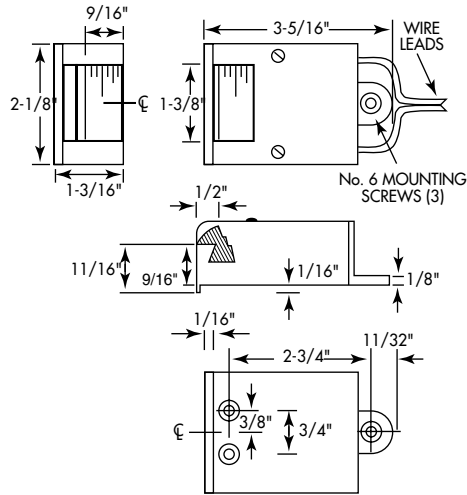
# ACCESSORIES, REPLACEMENT PARTS

UNIT	CATALOG NO.	UPC CODE	DESCRIPTION
TA93-2	TA-L6-2	96982	110VAC Xenon Flash Tube
TA52	TA-L8	96134	110VAC Bulb
TA94	TA-L10	96136	110VAC Xenon Flash Tube
TA-94	TA-L10-1	96981	110VAC Xenon Flash Tube
TA502	TA502SW	96966	Replacement switch
TA874 Series	TA-BBSF	97694	Backbox – 4" painted Dawn Mist 3/4" and 1" KO's
TA874 Series	TA-WBBF	97692	Weatherproof Backbox – 1/2" KOs 4" painted Dawn Mist
TA-BBSF, TA-WBBF	TA-SFPF	97707	Semi-Flush plate – Dawn Mist
TA-BBSF, TA-WBBF	TA-SFPFR	97697	Semi-Flush plate – Red
TA47, TA94	TA-ADR	96111	Acrylic Dome – Red
TA47, TA94	TA-ADA	96311	Acrylic Dome – Amber
TA52, TA53	TA-D5B	96419	Acrylic Dome – Blue
TA54	TA-D6A	96320	Dome – Amber
TA93, TA94	TA-D7R	96121	Fresnal Dome – Red
TA93, TA94	TA-D7A	96321	Fresnal Dome – Amber
TA93, TA94	TA-D7C	96621	Fresnal Dome – Clear
TA131D	TA-D8R	96970	Acrylic Dome – Red

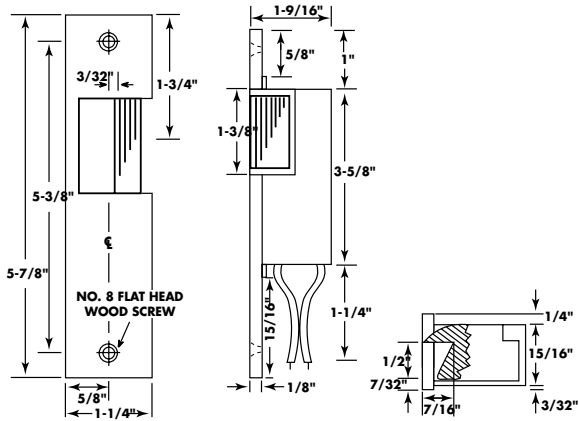


### REMOTE CONTROL DOOR OPENERS

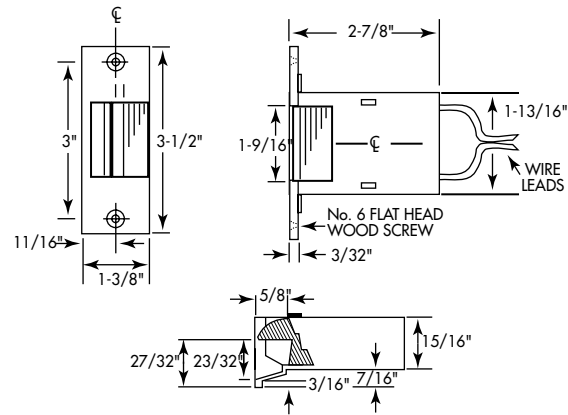
TA152



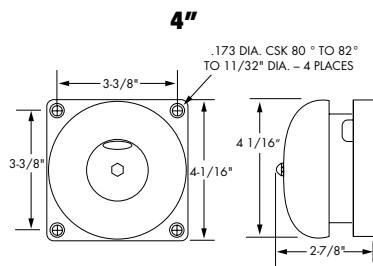
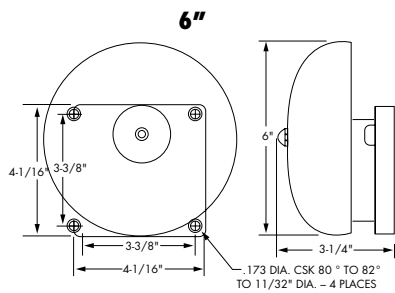
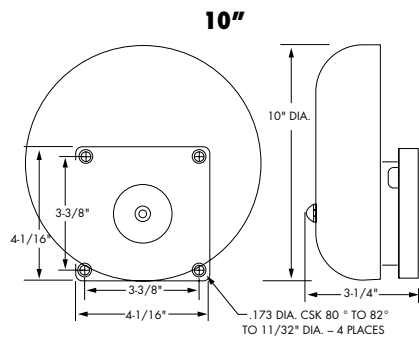
TA09



TA154

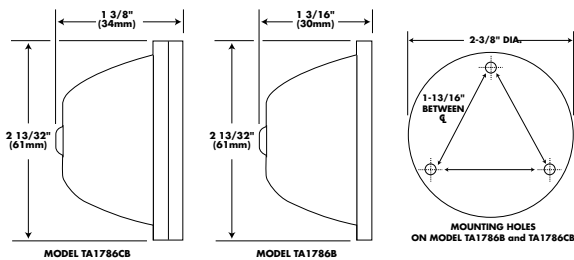


### HEAVY DUTY BELLS

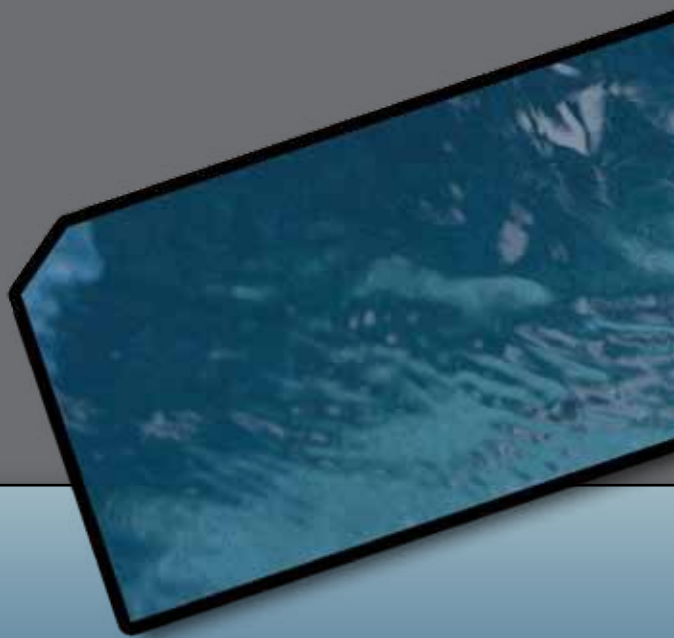


### WEATHERPROOF BUTTON

TA1786B ONLY









# TORK® POOL & SPA CONTROLS

# PP PANEL SERIES

## POOL AND SPA PANELS

### APPLICATIONS

- Pumps
- Swimming pools
- Fountains
- Ponds



### FEATURES

**COMBINATION PANEL:** The PP Panel Series provides a flexible platform to create a custom pool and spa control at an off the shelf price. Start with a blank panel and add timers, freeze controls, circuit breakers, switches and outlets for a custom installation.

**PP-100R:** 100 amp load center 120-240V, 5/10 circuit breaker base.

**PP-125R:** 125 amp load center 120-240V, 8/16 circuit breaker base.

**CONTROLS:** Freeze protection or mechanical and digital timers are all available with unique features not found elsewhere in the industry. Find specification details on pages 557 and 558.

**BREAKERS:** Listed for Cutler Hammer (BR), GE (THQL), Murray/Siemens (MP) and Square D (HOM) (not included).

**REVERSIBLE DOOR:** Easy-Hinge patented removable and reversible door. Change from left to right opening. Solves installation issues in the field.

**WHILE-IN-USE COMPARTMENT:** Inside mounting for two devices with cord exit.

**DEVICE MOUNTING:** Provision for mounting one or two devices in any combination accepts toggle, GFCI, X-10 and UPB type devices in, PP-100R and PP-125R enclosures.

**TRANSFORMER:** Select panels include 120V input: 100 watt with output 12V/13V or 300 watt with output 12V/13V/14V.

**ENCLOSURE:** Metal NEMA 3R with lockable hasp. See page 558 for dimensions.



PP-125R-P4

PP-125R-P4-100X

CATALOG NO.	UPC CODE	CONTROL	CONTROL INPUT	ADDITIONAL INFORMATION
PP-100R	94016	-	-	Panel only. Add controls from page 557 and 558.
PP-125R	94017	-	-	Panel only. Add controls page 557 and 558.
PP-125R-P4	53007	P1104-M	240VAC	Add another control from page 557 and 558.
PP-125R-P4-100X	94018	P1104-M	240VAC	Includes 100 watt Low Voltage Transformer
PP-125R-P4-300X	94019	P1104-M	240VAC	Includes 300 watt Low Voltage Transformer

# P1100 SERIES

## SWIMMING POOL TIMERS, 24 HOUR ELECTROMECHANICAL CONTROL



**QUICK INSTALL/RELEASE LEVER:**  
For easy installation and removal when installing into pool panels.

**LOAD INDICATOR LAMP**

**CONVENIENT EXTERNAL ROCKER SWITCH:**  
3 position switch: OFF/ON/AUTO. Use switch to turn OFF pump at the end of pool season.

**REAL TIME SWITCH FACE:** Easy to set and check time.

**CAPTIVE TRIPPERS:** 15 minute intervals, no lost trippers.

**HEATER CONTACTS:** FM suffix includes "Fireman Switch" to turn off pool heater 20-30 minutes before timer turns OFF. Contact rates SPST, 15A @120V.

**THERMOSTAT:** PFP models include built in Freeze Protection. No extra wiring. Thermostat turns on load at user settable level between 33°F and 42°F. Moving water prevents costly freeze damage.

**ACCESSORY CONTACT:** PF models include extra contact to accept PFPT Freeze Protection Accessory. Thermostat turns ON load at user settable level between 33°F and 42°F. Moving water prevents costly freeze damage.

**TIMER INTERLOCK:** Makes one second timer dependant on operation of another timer.



CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	CONTACTS	RESISTIVE/INDUCTIVE RATINGS	HP RATING	NOTES
❄️ PFP2-M	94026	240	DPST	40A	7.5HP @ 240V	Thermostat only
❄️ PFP3-M	94027	120/240 w/neutral	DPST	40A	3 HP @ 120V 7.5HP @ 240V	Thermostat only
P1101-M	10056	120	DPST	40A	3 HP @ 120V	
P1101FM-M	10060	120	DPST	40A	3 HP @ 120V	Fireman Switch
PF1101-M	94020	120	DPST	40A	3 HP @ 120V	Accepts PFPT thermostat input
PF1101FM-M	94024	120	DPST	40A	3 HP @ 120V	Fireman Switch & Accepts PFPT thermostat input
❄️ PFP1102-M	94022	240	DPST	40A	7.5HP @ 240V	Freeze Protection included
❄️ PFP1103-M	94023	120/240 w/neutral	DPST	40A	3 HP @ 120V 7.5HP @ 240V	Freeze Protection included
P1104-M	10057	240	DPST	40A	7.5HP @ 240V	
P1104FM-M	10061	240	DPST	40A	7.5HP @ 240V	Fireman Switch
❄️ PF1104-M	94021	240	DPST	40A	7.5HP @ 240V	Accepts PFPT thermostat input
PF1104FM-M	94025	240	DPST	40A	7.5HP @ 240V	Fireman Switch & Accepts PFPT thermostat input
❄️ PFPT	94028	120/240	-	-	-	Thermostat accessory

\*PFPT



**NOTE:** "❄️" = Indicates Freeze Protection.

# PEW100 SERIES

## SWIMMING POOL TIMERS, 7 DAY DIGITAL CONTROL



**QUICK INSTALL/RELEASE LEVER:** For easy installation and removal when installing into pool panels.

**LOAD INDICATOR LAMP**

**LARGE LCD DISPLAY**

**LARGE "MANUAL" BUTTON:** 3 operating modes available: OFF/ON/AUTO. Using the OFF mode, the pool can be closed down without disrupting the time settings.

**POWER OUTAGE BACKUP:** Battery retains time and schedule.

**7 DAY PROGRAMMING ONE MINUTE INTERVAL:** Allows for the control of various electrical equipment on a 7 day schedule. 15 schedule weekly programs.

**THERMOSTAT:** PFPEW models include built in Freeze Protection. No extra wiring. Thermostat turns on load at user settable level between 33°F and 42°F. Moving water prevents costly freeze damage.

**ACCESSORY CONTACT:** PFEW models include extra contact to accept PFPT Freeze Protection Accessory. Thermostat turns ON load at user settable level between 33°F and 42°F. Moving water prevents costly freeze damage.

**TIMER INTERLOCK:** Makes one timer dependant on operation of another timer.



CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	CONTACTS	RESISTIVE/INDUCTIVE RATINGS	HP RATING	NOTES
PEW101-M	82432	120	DPST	40A	3 HP @ 120	
PFEW101-M	94029	120	DPST	40A	3 HP @ 120	Accepts PFPT thermostat input
PFPEW1102-M	94031	240	DPST	40A	7.5HP @ 240V	Freeze protection included
PFPEW1103-M	94032	120/240 w/neutral	DPST	40A	3 HP @ 120V 7.5HP @ 240V	Freeze protection included
PEW104-M	82442	240	DPST	40A	7.5HP @ 240V	
PFEW104-M	94030	240	DPST	40A	7.5HP @ 240V	Accepts PFPT thermostat input

**NOTE:** "❄️" = Indicates Freeze Protection.



# 1100 SERIES

## SAME ON/OFF TIMES EACH DAY

### SWIMMING POOL

### TIME SWITCHES



## APPLICATIONS

- Pool pumps
- Heaters
- Lighting

## SPECIFICATIONS

**INPUT VOLTAGE:** 120 or 208-277VAC, 60Hz (varies by model).

**TIMING ACCURACY:** Line frequency.

**TERMINAL RANGE:** #8 - #14AWG.

**OPERATING TEMPERATURE:** -40° to 165°F (-40° to +74°C).

**POWER CONSUMPTION:** 3 watt max.

**ENCLOSURE:** Lockable hasp. Type varies by model. See page 557 for dimensions and additional enclosure information.

## FEATURES

**SCHEDULING:** Minimum ON setting is 20 minutes with a minimum OFF setting of 75 minutes. Dial accommodates up to 12 pairs of trippers. One pair included.

**MANUAL OVERRIDE:** Until the next regularly scheduled ON or OFF automatic operation then resumes.

TYPE	VOLTAGE	CONTACT RATING
General Purpose	120-277VAC	40A
Resistive	120-277VAC	40A
Tungsten	120VAC	40A
Ballast	120-277VAC	20A
LED Driver*	120-277VAC	20A
Motor	120VAC 240VAC	2HP 5HP

277VAC Single Phase

\*UL only or cULus on B suffix units

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 60Hz	OUTPUT CONTACTS	ENCLOSURE TYPE
1101	10011	120	SPST	Metal Indoor NEMA 1
1101BM-IAP*	10073	120	SPST	Mechanism and mounting plate
1104	10014	208-277	DPST	Metal Indoor NEMA 1
1104B-P*	10070	208-277	DPST	Polycarbonate Indoor/Outdoor NEMA 3R
1104B-O*	10075	208-277	DPST	Metal Indoor/Outdoor NEMA 3
1104BM-IAP*	10074	240	DPST	Mechanism and mounting plate
1101FM-N	10043	120	SPST	Noryl® Indoor/Outdoor NEMA 3R with fireman switch
1104FM-N	10044	208-277	DPST	Noryl® Indoor/Outdoor NEMA 3R with fireman switch
1101FM-M	10043	120	SPST	Mechanism with fireman switch
1104FM-M	10044	208-277	DPST	Mechanism with fireman switch
1101D	10028	120	Two 1101 SPST each	Metal Indoor/Outdoor NEMA 3R
1104D	10029	208-277	Two 1104 DPST each	Metal Indoor/Outdoor NEMA 3R
1104DF	10032	208-277	One 1104 One 1104FM	Metal Indoor/Outdoor NEMA 3R
Replacement Trippers				Order #P47 for a pair of ON/OFF trippers Order #PF48 for a pair of ON/OFF trippers for 1100FM series
Replacement Motor				#101 (120V) & #201 (208-277V)

\* B suffix units cULus cULus

# POOL & SPA JUNCTION BOXES

JPB75175



## APPLICATIONS



- For installation of underwater pool lights or low voltage connections.

## FEATURES

- Durable PVC molded case
- INTERIOR & EXTERIOR bonding
- Flexibility for conduit sizing
- Built-in strain relief cord clamps
- Line or low voltage wiring
- Complete compliance with UL Standard 1241

CATALOG NO.	UPC CODE	DESCRIPTIONS	CONDUIT HUBS
JBP75175	95457	Two Light Junction Box	3/4" / 1/2" / 1"
JBP57510	95485	Four Light Junction Box	1/2" / 3/4" / 3/4" / 1" / 1"

# DPC201 SERIES

## DIGITAL TWO-SPEED PUMP TIMER



### APPLICATIONS



- Swimming pools with two-speed pump motors

### FEATURES

**PUMP PROTECTION:** Unit always starts on HIGH with 5 minute countdown before switching to low.

**SCHEDULING:** Up to 3 HIGH/LOW/OFF cycles repeat each day. Minimum setting 5 minute.

**MANUAL OVERRIDE:** Hold OFF until midnight then follows the next regularly scheduled HIGH/LOW/OFF operation.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted)

**LEAP YEAR:** Automatic Compensation

**CLOCK FORMAT:** AM/PM

**POWER OUTAGE BACKUP:** Permanent schedule retention. Super capacitor provides 4 days of real time backup.

CATALOG NO.	UPC CODE	INPUT SUPPLY (VAC) 50-60Hz	OUTPUT CONTACTS
DPC201	82457	120-277	SPST

LOAD TYPE	RATINGS	
	120VAC	208-277VAC
Motor	1HP	1 1/2 HP@208VAC 2 HP@240-277VAC
Resistive	40A	40A
Inductive	40A	40A
Ballast	30A	20A
Tungsten	15A	
Pilot Duty	720VA	720VA

## SPECIFICATIONS

**TIMING ACCURACY:** Line Frequency.

**INPUT VOLTAGE:**

120-277VAC, 50/60Hz (automatic detection)

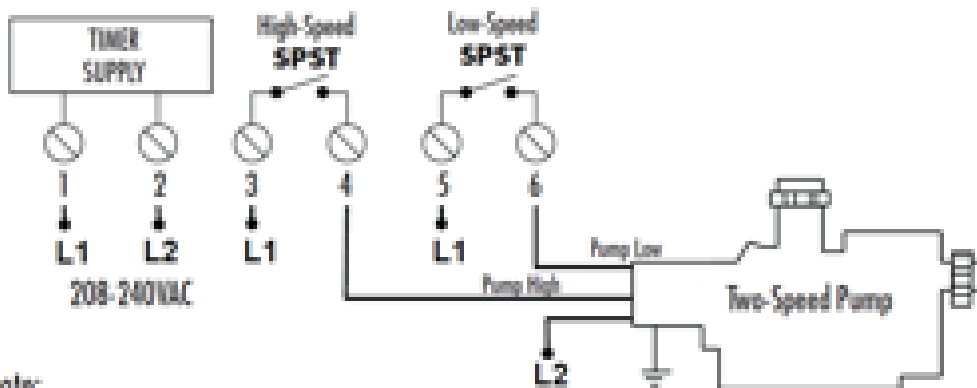
**TERMINAL RANGE:** #8 - #16AWG.

**OPERATING TEMPERATURE:**

-40° to +149°F (-40° to +65°C)

**POWER CONSUMPTION:** 6VA max.

**ENCLOSURE:** Indoor/Outdoor NEMA 3 Metal with locking hasp. See page 557 for dimensions and additional enclosure information.



**Note:**

A) Power must be supplied to each terminal marked L1

B) For 120VAC motors use Neutral in place of L2

# ENCLOSURES

**STANDARD FOR MODELS**

1101	7120	EW101B-Y
1102	7122	EW103B-Y
1103	8001	
1104	8004	
1101FM	8061	
1104FM	8121	
7100	8301	
7102	8601	
7200	8602	
7202	TU40-Y	
1101-7	EW201-Y	
WH2B	EW120B-Y	

**METAL INDOOR NEMA 1 ENCLOSURE #68229**

**STANDARD FOR MODELS**

TZ220L-0	TZ300L-0
TZ300L-0	T920L-0
T930L-0	W300-0

**METAL INDOOR/OUTDOOR MODEL #9006**

**STANDARD FOR MODELS**

TZ220L	TW220L
TZ300L	TW300L
W300	T920L
W302	T930L
W300L	TW222L
W302L	TW302L

**METAL INDOOR NEMA 1 ENCLOSURE #63016-1**

#62158 "E" DOOR

T920L-E T930L-E  
TW220L-E

**STANDARD FOR MODELS**

7220	1847AZL	DGM100A-Y
7222	8007	DGU100A-Y
7200L	8007L	DGUM100A-Y
7202L	8007V	LC200
7120L	8007U	
1847A	8007VL	
1848A	8008	
1847AZ	8008L	
1847AL	LDS-A	
DG100A-Y	LDSH-A	

**METAL INDOOR NEMA 1 ENCLOSURE #63100-6**

**STANDARD FOR MODELS**

DLC400BP
----------

**DLC400BP**

**STANDARD FOR MODELS**

1101NC	DGLC100A-NC
1103NC	DGLC200A-NC
1104NC	
8001-NC	

**NORYL® & LEXAN® INDOOR/OUTDOOR NEMA 3R MODEL #9000NC**

**STANDARD FOR MODELS**

7200Z, ZL	
7202Z, ZL	
7120Z, ZL	
7122Z, ZL	
DG Series	DZS Series
8001-N	DTS Series
8001U-N	DW Series
SMC-3D	DWZ Series
DZM Series	

**NORYL® INDOOR/OUTDOOR NEMA 3R MODEL #9000N**

**STANDARD FOR MODELS**

W100	W220L
W200	W222L
W202	1847AW
W120	1847AWL
W220	W400B
W222	W402B
	W400BL

**METAL INDOOR NEMA 1 ENCLOSURE #70100**

**MODELS**

TU40	DTU40
1101B-P	E101PB
1103B-P	E Series
1104B-P	EW Series
EH20C	EWZ Series

**PLASTIC INDOOR/OUTDOOR NEMA 3R #9000P**

**STANDARD FOR MODELS**

1101D	1101DF
1114D	1114DF
1104D	1104DF

**METAL DUPLEX INDOOR/OUTDOOR MODEL #9004L**

**MODELS**

EW103B-C	EW120B-C
----------	----------

**PLASTIC INDOOR/OUTDOOR NEMA 3R WITH CLEAR COVER**

NEMA 1 ENCLOSURE STANDARD FOR MODELS  
DTWH40

**STANDARD FOR MODELS**

7300, L, Z, ZL	8001-0
7302, L, Z, ZL	8001U-0
8007U-0	8007-0
DZS100BP-0	DZS200BP-0
DZS200BP	DW200B-0
DZM200BP-0	5401A

**METAL INDOOR/OUTDOOR NEMA 3 MODEL 9000A - SUFFIX "O"**

**STANDARD FOR MODELS**

1101-0	1104B-0
DPC201	7200-0
1103-0	7202-0

**METAL INDOOR/OUTDOOR MODEL 9000B - SUFFIX "O"**

**MODELS**

LC200M
--------

**LC200M MOUNTING WITH BRACKET**

## MODELS

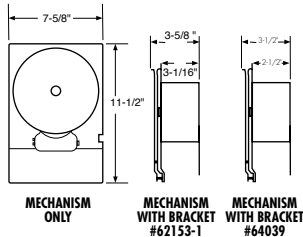
## MECHANISM & MOUNTING BRACKET #62153-1

Use Bracket #64039

W100 W120  
W200 W220  
W202 W222

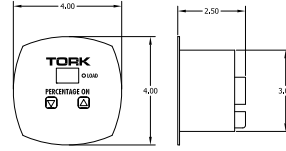
Use Bracket #62153-1

W300 W302



## PCT15M

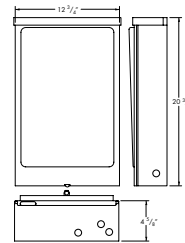
PCT15M



## MODELS

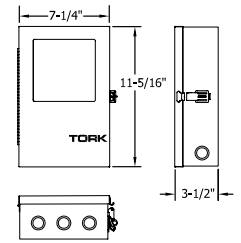
## 5441A ENCLOSURE

5441A



## ELC74 ENCLOSURE

ELC74



## IAP BRACKET INTERMATIC ADAPTER PLATE

1101BM-IAP 7200

1104BM-IAP 7202

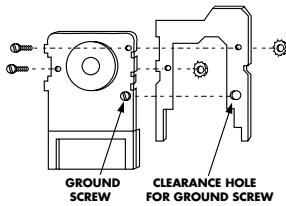
1102 7120

1103 7122

7100 E Series

7102 EW Series

EW Series

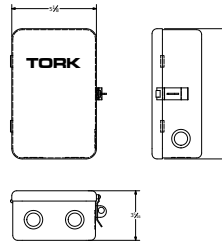


## MODELS

## METAL INDOOR

SA300

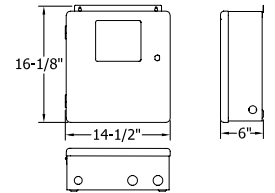
SA306



## ELC78 & ELC712 ENCLOSURE

ELC78

ELC712



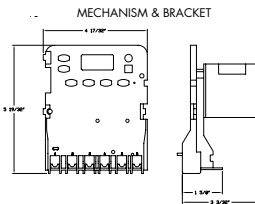
## E/EW/EWZ SERIES

EWZ101-MB

EWZ103-MB

EWZ120-MB

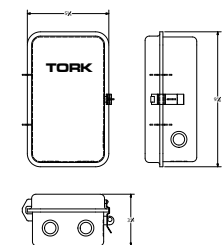
EWZ201-MB



## MODELS

## METAL INDOOR

SA400



## EWJT & E500T SERIES ENCLOSURE

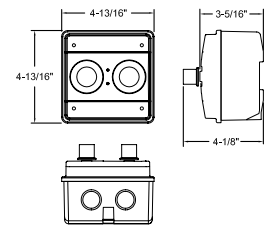
EJWT

E500T

E501T

E502T

ACT30MA



## MODELS

## MECHANISM & MOUNTING BRACKET #65447

1101-M 1102-M

1103-M 1104-M

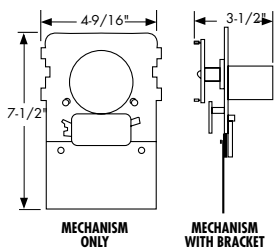
7000 Series 1847A, Z

1848A 8001-LC/WB

8601 8121

8602 8061

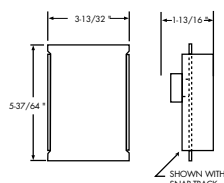
8301



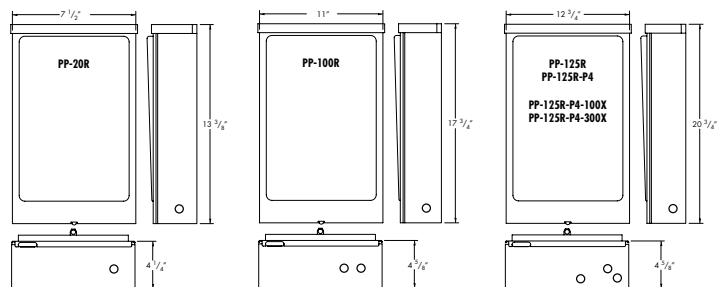
## MODELS

## LDS SERIES MOUNTING WITH BRACKET

LDS LDSH



## POOL PANEL SERIES



# ALPHANUMERIC INDEX

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
0T – 1000T	13	2002	406	5231	413
0TC – 6TC-1	39	2005A	411	5237	413
1012 – 1042	133	2005B	412	5237-UL	414
1101	423, 553	2006	406	5401A	488
1101-7	423	2007A	411	5403A	410
1101BM-IAP	423, 553	2007B	412	5404A	410
1101B-P	423	2008B	412	5404-3A	410
1101D	553	2018	406	5441A	488
1101FM-M	553	2021	407	5500	416
1101FM-N	553	2022	407	5500-OC	416
1101-NC	423	2024 – 2042	135	5737TM	415
1101-O	423	2101	403	5737TZ	415
1102B	423	2104	403	601A	527
1103	423	2107	403	602A	527
1103B-P	423	2115	404	611D	528
1103M	423	2116	404	621D	528
1103-NC	423	2117	404	631D	528
1103-O	423	2223	416	640-PM	323
1104	423, 553	2224	416	652A	527
1104BM-IAP	423, 553	2421	416	652B	527
1104BM-MB	423	300T-2 – 800T-4	19	654A	528
1104B-O	423, 553	350LL2 – 8-1000LL12	29	701A	514
1104B-P	423, 553	36175 – 481750	325	701AA	520
1104D	553	3000	408	705-16 – 1150-20	314
1104DF	553	3002	408	711A	514
1104FM-M	553	3006	408	750P – 1450P	323
1104FM-N	553	3010	408	7100	425–426
1104-NC	423	4-250L4 – 4-1000L4	17	7102	425–426
1847A	433–434	401A	523	7120	425–426
1847AL	433–434	402A	523	7120L	425–426
1847AW	433–434	403A	523	7120Z	425–427
1847AWL	433–434	405A	523	7120ZL	425–427
1847AZ	433–434	418 – 60175	319–320	7122	425–426
1847AZL	433–434	418-4 – 1450-5	327–328	7122ZL	425–427
1848A	433–434	418-ID – 818H-ID	324	7200L	425–426
2/0–14	129	418-SB – 14120-SB	335	7200-O	425–426
2/0TP – 2-600TP	23	418X – 14500X	319–320	7200	425–426
2-14 – 4-14	129	455D	525	7200Z	427–428
2-210T≠2-1000T	13	457Z	525	7200ZL	427–428
2-350L4 – 8-350L8	31	4180 – 601750	321	7202	425–426
2-350T2 – 8-350T4	31	530MH – 141200MH	333	7202L	425–426
2C-14, 4C-14	129	5001M	409	7202-O	425–426
2SR – 750SR	21	5004M	409	7202Z	427–428
200-3-2	285	5007M	409	7202ZL	427–428
250L2 – 600L2	15	5008M	409	7220	425–426
2000	405	5021M	409	7220L	425–426
2000-2	405	5024M	409	7222	425–426
2001	406	5026M	409	7222L	425–426

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
7300	425-426	A506H	519	CAL	63
7300L	425-426	A506HHW	519	CB-11 - CB-120	132
7300Z	427-428	A506HW	519	CB	159
7300ZL	427-428	A512H	519	CBH	159
7302	425-426	A512HH	519	CCM	158
7302L	425-426	A512HHW	519	CCR	158
7302Z	427-428	A512HW	519	CD	156
7302ZL	427-428	A515M	519	CDP	104
73866	416	A515MA	519	CG	393
75(000)CW, CQ	300	A515MH	519	CN	131
76(000)PS	301-303	A515MHW	519	COS-ADP	498-501, 503
76(000)PW	301-302	A515MW	519	COS-L	499
77(000)RQ	297-298	A530M	519	COS-L2T	498
77(000)RW	299	A530MA	519	COS-LU	500
78(000)TQ	304-306	A530MH	519	COS-M	501
78(000)TS	304-307	A530MHW	519	CPS-L	503
78(000)TW	304	A530MW	519	CSP	104
79(000)LW	308-310	A560M	519	CT	102
79(000)LQ	309	A560MH	519	CTH	103
79(000)MS	299-300, 307	A560MHW	519	CTP	331
79(000)MSR	307	A560MW	519	D1060LA	518
850-R	326	ACT30MA	484	D1060M	518
8001	429	ADJCC	342	D1060MW	518
8001-LC/WB	429	AL	49	D1082	154
8001-N	429	AL (C.Blok), AM, AS	115-120	D212H	518
8001-NC	429	AL-N	51	D212HA	518
8001-O	429	APS	108	D212HW	518
8001U	429	ASC	53	DBL	157
8001U-N	429	B	271	DE	41
8001U-O	429	BKM	383, 385	DFR	293
8004	429	BKS	382, 384	DG100A	459-460
8007	429	BS400T, T2	25	DG100A-Y	459-460
8007L	429	BT	356	DG180A	479-480
8007-O	429	BTP	23	DG200A	459-460
8007U	429	BY	157	DG280A	479-480
8007U-O	429	C	267	DG280A-24	479-480
8007V	429	C-8 - C-750	87	DGLC100A-NC	471-472
8007VL	429	C2 - C9	59	DGLC200A-NC	471-472
8008	429	C412H	520	DGM100A	459-460
8008L	429	C460M	520	DGM100A-Y	459-460
8061	431	C502H	520	DGS100A	479-480
8121	431	C506H	520	DGS100A-12	479-480
8301	431	C512H	520	DGS100A-24	479-480
8601	431	C512HH	520	DGU100A-Y	471-472
90058-1	489	C515M	520	DGUM100A	471-472
A502H	519	C530M	520	DGUM100A-Y	471-472
A502HHW	519	C560M	520	DIN100B	485-486
A502HW	519	C560MH	520	DIN200B	485-486



# ALPHANUMERIC INDEX

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
DLC400BP	475-476	ESB2	310	FLLP	378
DMT	285	ESGHS	218	FLM	379
DPC201	555-556	ESGS	215	FLPTM	378
DRD, DRE, DRF, DRJ, DRT	126	ESGTS	216	FQC	122
DS	168	ESSLK	217	FS	255
DSS	355	ESUF	214	FS-136	359
DTS100B	463-464	ET-CP	263-264	FS-814	359
DTS200B	463-464	EW101B	455-456	FSIC	359
DTS400B	463-464	EW101B-Y	455-456	FSP	359
DTU40	447-448	EW103B	455-456	FSPP	359
DTWH40	447-448	EW103B-C	455-456	FTBFP	125
DW200B	461-462	EW103B-Y	455-456	FTH	338
DW200B-0	461-462	EW120B	455-456	FTS	159
DWZ100B	461-462	EW120B-C	455-456	FW	166
DZM200BP	467-468	EW120B-Y	455-456	G-(1)-S-BS	237
DZM200BP-0	467-468	EW201B	455-456	G-(1)-S-DB	237
DZS100BP	465-466	EW201B-Y	455-456	G-(1)-S-DBR	239
DZS100BP-0	465-466	EWDT	315	G-1 - G-66	240-242
DZS200BP	465-466	EWEF	316	G-140DB	238
DZS200BP-12	465-466	EWFT	316	G-1-S - G-6-S	240
DZS200BP-24	465-466	EWG	314	G-20DB	238
DZS200BP-0	465-466	EWGC	317	G-3-BS	239
DZS400BP	465-466	EWHR	317	G-79 - G-90	244
DZS400BP-0	465-466	EWMT	317	GBA	249
E101B	453-454	EWP	313	GBC	249
E101PB	453-454	EWPP	314	GBIAL, GBIBZ	248
E103B	453-454	EWRT	315	GC	27
E120B	453-454	EWSR	316	GCA	241
E201B	453-454	EWWH	315	GGC	256
E500T	481-482	EWZ101	457-458	GH	245
E501T	481-482	EWZ101-MB	457-458	GHM	245
E502T	481-482	EWZ103	457-458	GL	79-82
EC	47	EWZ103-MB	457-458	GLA	25
EEL	387	EWZ120	457-458	GL-B	89
EG	243	EWZ120-MB	457-458	GLC	235-236
EH20C	449	EWZ201	457-458	GLN	99
EJWT	481-482	EWZ201-MB	457-458	GL-N	83
EL	390	EXL	387	GL-NB	95
ELC712	473-474	F	295	GLN-X	101
ELC74	473-474	FBP	389	GP	27
ELC78	473-474	FCT	289	GRC	246-247
EMFW	386, 392	FD	349	GSC, GSH	256
EMHD	389	FL	379	GSS	219
EMFW	386	FLBR	379	GST	394
EMTW	386, 388	FLHBR	380	GZ	246
EMWL	388	FLC	377	GZB	246
EPC-A	471	FLF	377	HB	166
EPC-LC	473	FLH	380	HHK	228

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
HLC	47	LCS115M	473, 504	PPF3	551
HMSS	222	LDS	477-478	PFPEW1102-M	552
HN	166	LDS-A	477-478	PFPEW1103-M	552
HOS-M	502	LDSH	477-478	PFPT	551
HPS30	489	LDSH-A	477-478	PFS	288
HSC	224	LK	139	PG	256
HTF	287	LN, LN-P	71-76	PHMN	380
HTGE	254	L-NB	93	PIWC	265
HTM	288	LT	35	PL	203-206
HTP	288	M	289	PLH	201
HTR	287	M-250, M-500	157	PM	285
HTS, HTSF	287	MP	350	PNC	340-341
HWHS	225	MPM	342	Polaris Custom	207
IF	291-292	N	105-106	Polaris Installation	209
IFL	293	N121D, N1240	153	PP-100R	549-550
IFS	291-292	NC	343	PP-125R	549-550
IM	289	NCH	343	PP-125R-P4	549-550
IPCS	113-114	NH-1, NH-2	160	PP-125R-P4-100X	549-550
IPL	181-184	NMS, NMT	137	PP-125R-P4-300X	549-550
IPLD	185-188	NSi-12	155	PT	55
IPLDH	191	N-SP	107	PT-12V - PT-22V	285
IPLDS	189	OD	157	PTC	285
IPLG	171	OJB	157	PTO	57
IPLM	193	OX	168	PTS	57
IPLMD	195-198	P	291	QF	381
IPLW	175	P-750	153	R	279-284
ISE	65	P1101-2M	551	RDC 1/0	157
ISPB	199	P1101FM-M	551	RLD	351
ISPC	199	P1101-M	551	ROS	220
ISR	179	P1104FM-M	551	RS200	393
ISW	173	P1104-M	551	RSK	221
IT	177	P47	553	S	273-278
ITB	127	PAA	45	S300	23
IT-BW	351	PAE	45	SA 382 - SA 582	255
ITG	171	PC-LC, PC-LSW	345-349	SA011	524
ITH	177	PCT15M	483	SA100	524
ITO	177	PEW101-M	552	SA10-400, SA500-1000	78
ITOG	171	PEW104-M	552	SA105	524
ITW	175	PF	285	SA110	524
J	122	PF1101FM-M	551	SA130	525
JBP57510	554	PF1101-M	551	SA134	525
JBP75175	554	PF1104FM-M	551	SA170	513
KA	154	PF1104-M	551	SA204	528
KC	154	PFEW101-M	551	SA205	527
L, L-P	67-70	PFEW104-M	552	SA210	530
L-B	91	PFP1102-M	551	SA215	529
LC200	469-470	PFP1103-M	551	SA220	530
LC200M	469-470	PFP2	551	SA230	526

# ALPHANUMERIC INDEX

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
SA300	451–452	T920L-E	437–438	TA53AF1	542
SA306	451–452	T920L-O	437–438	TA53AG1	542
SA400	451–452	T930L	437–438	TA54AE1	542
SA500	526	T930L-E	437–438	TA54RE1	542
SB	267–268, 271	T930L-O	437–438	TA5508H-G1	533
SC	393	TA09	539	TA590	543
SC	85	TA1245Y-50	543	TA591	543
SC-B	97	TA1245Y-75	543	TA592	543
SF	293	TA131DAN5	542	TA598	543
SFTZ	35	TA131DAU1	542	TA599	543
SITG	171	TA131DRN5	542	TA60	539
SKAB, SKCB, SKDB	223	TA131DRU1	542	TA600	540
SKSS	222	TA152	539	TA601	540
SKUF	223	TA154	539	TA602	540
SL-N	77	TA1786B	540	TA603	540
SLUL	393	TA1786CB	540	TA603L	540
SLW	166	TA1880 B	538	TA606	543
SM	339	TA1880 G	538	TA61	539
SMC3D	487	TA1882 B	538	TA62	539
SOTZ	35	TA1882 G	538	TA620	540
SPM	109–110	TA1886 B	538	TA620B	540
SR	360	TA1886 G	538	TA620L	540
SRNY	355	TA1887 B	538	TA620LB	540
SRPE	355	TA1887 BK	538	TA631	540
SS13B	517	TA1887 G	538	TA631L	540
SS13F	517	TA215LB	540	TA635	540
SS20	517	TA236	539	TA640	543
SS20F	517	TA270A	536	TA656B	540
SS34 – SS66	167	TA315-1N5	536	TA666BK	540
SS403	515–516	TA340-10G5	534	TA67W	539
SS410	515–516	TA340-4G5	534	TA725	535
SS423	515–516	TA340-4N5	534	TA740	535
SS700Z	509–510	TA340-6G5	534	TA744	535
SS700ZA	509–510	TA340-6N5	535	TA874-N5	533
SS720A	511	TA434-10N5	534	TA874-N5R	533
SS720AA	511	TA434-4N5	534	TA875-1G1	534
SS720Z	512	TA434-6N5	534	TA875-G1	533
SS721Z	509–510	TA44	539	TA876-N5	533
SS721ZA	509–510	TA45	539	TA879	542
SS8100 – SS26250	326	TA46	539	TA880-N5	533
SSBW	167	TA47AN5	541	TA93-2AN5	541
SSCT	337	TA47AR5	541	TA93-2BN5	541
SSFW	167	TA47RN5	541	TA93-2CN5	541
SSHN	167	TA502	539	TA93-2RN5	541
SSSLW	167	TA502SW	544	TA94AN5	541
STL	33	TA52AN5	541	TA94BN5	541
SWL	318	TA52BN5	541	TA94RN5	541
T920L	437–438	TA52RN5	541	TA-ADA	544

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
TA-ADR	544	TW-220L-E	439-440	WH2B	432
TA-B-8332	537	TW-222L	439-440	WLD	350
TA-BBSF	544	TW-300L	439-440	WMB	352
TAC212WL	535	TW-302L	439-440	WMC	353
TAC212WS	535	TWBS	165	WOS-M	495
TA-D5B	544	TWHB	165	WOS-M2R	496
TA-D6A	544	TWHS	229-232	WOS-MN	495
TA-D7A	544	TWSB	165	WOS-MN2R	496
TA-D7C	544	TZ-220L	441-442	WOS-MN2T	497
TA-D7R	544	TZ-220L-0	441-442	WOS-SN	494
TA-D8R	544	TZ-222L	441-442	WP	371
TA-DOK	392	TZ-300L	441-442	WPC	372
TA-L10	544	TZ-300L-0	441-442	WPGC	371
TA-L10-1	544	TZ-302L	441-442	WPL	374
TA-L6-2	544	U-BG	157	WPLD	374
TA-L8	544	UC	250-251	WPCRKY	375
TA-MTS	534	UCF	394	WPLRKY	375
TA-SFPF	544	ULT, ULTD	356	WPMRKY	376
TA-SFPFR	544	USB-MMP	467	WPM	373
TA-WBBF	544	V	465, 467, 475	WRD	59-62
TB	121	V850-V7200	334	WWC, WWC-GR, WWC-N1, WWC-N2	261-262
TBO - TB4	124	VL	355		
TBS	123	VM	354		
TC	111	VRM	390		
TCP	112	VRS	391		
TES	162-164	VTB	393		
TFZ	324	VTW	393		
TGE	253	W	47		
THK	227	W100	435-436		
TL	43	W120	435-436		
TL-5-1, TL-6-1	160	W200	435-436		
TL-ADJ5	160	W202	435-436		
TL-CCIH	161	W220	435-436		
TL-CRP	161	W220L	435-436		
TL-DC	161	W222	435-436		
TL-ISS	161	W222L	435-436		
TL-LP, TL-LNP	161	W300	435-436		
TL-RCR	160	W300L	435-436		
TL-WS6	160	W300-0	435-436		
Tool and Die Charts	141-149	W302	435-436		
TOP	267	W302L	435-436		
TRP-24I	498-500, 504	W400B	435-436		
TRP-24B	503-504	W400BL	435-436		
TRT	337	W402B	435-436		
TS	37	WAGS	213		
TU40	421	WAHS	225, 231		
TU40-Y	421	WC	259-260		
TW-220L	439-440	WC-HB1, HB3	259-260		