

AC Disconnects



Midwest Electric Products

Application Information

Article 440 of the National Electrical Code applies to electric motor-driven air conditioning and refrigerating equipment and to the branch circuits and controllers for such equipment. It provides for the special considerations necessary for circuits supplying hermetic refrigerant motor-compressors and for any air conditioning and/or refrigerating equipment that is supplied from an individual branch circuit that supplies a hermetic refrigerant motor-compressor.



Features and Benefits

Flexibility

- 30-100 Amps
- 240 Volts AC
- 1-phase or 3-phase, fusible or non-fusible
- Horsepower rated
- 10kAIC
- Available with GFCI receptacle

Rugged Durability

- NEMA 3R weatherproof enclosure
- Noryl® thermoplastic enclosure is corrosion resistant and extremely durable, giving long maintenance-free service
- Metallic models are made of G90 galvanized steel for superior corrosion protection and have a durable polyester powder coat finish which resists chipping and fading

User Safety

- Padlock provision on door helps prevent unauthorized access

Installation Ease

- Three-piece construction that opens up mounting and wiring areas
- Terminals approved for 60°C and 75°C wire, accepts solid 14-8 copper, 12-8 aluminum or stranded 14-3 copper, 12-3 aluminum
- Numerous knockouts reduce installation time
- Straight-in, straight-out wiring saves time and money

Featured Models

Non-Metallic, Non-Fusible Disconnects, 1-phase, 120/240V

Non-fusible disconnect pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
P065P1	60	10	D	5 x 7	2	6	Y ¹
P065P	60	10	D	6 x 8			



P065P1

Non-Metallic, Fusible Disconnects, 1-phase, 120/240V

Fusible disconnects are available in 30 and 60 Amp models. Pullers are removable or re-installable in the OFF position for user safety during equipment maintenance. The P065F UL Listing includes the ability to field replace the 60 Amp puller with 30 Amp puller (FR352) for installation flexibility. Listed for use as service entrance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
P035F	30	3	D	6 x 8	2	6	Y ¹
P065F	60	10	D	6 x 8			



P035F

Metallic, Non-Fusible Disconnects, 1-phase or 3-phase

Non-fusible disconnect pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Phase 1 – 120/240V							
U065P	60	10	D	5 x 7	3	6	Y ¹
Phase 3 – 240V							
U0653P	60	7.5-15	D	6 x 14	8.5	4	Y ¹



U065P

Metallic, Fusible Disconnects, 1-phase or 3-phase

Fusible disconnects are available in 30 and 60 Amp models. Pullers are removable or re-installable in the OFF position for user safety during equipment maintenance. Listed for use as service entrance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Phase 1 – 120/240V							
U035F2	30	3	D	5 x 7	2.5	6	Y ¹
U065F1	60	10	D	5 x 9	3.5		
Phase 3 – 240V							
U0353F	30	3-7.5	D	6 x 14	8.5	4	Y ¹
U0653F	60	7.5-15	D	6 x 14			



U065F1

Non-Automatic Disconnect Switch, 1-phase, 120/240V

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Metallic							
U065NA1	60	10	D	5 x 7	2.5	6	Y ¹
Non-Metallic							
P065NA1	60	10	D	5 x 7	2	6	Y ¹



U065NA1

¹cULus approved.

Heat Pump, Fusible Disconnects, 1-phase, 120/240V

Multiple disconnect devices are offered for heat pump applications that require individual disconnects for the heating and cooling cycles. All pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance. Their UL Listing includes the ability to field replace the 60 Amp puller in the left fuse block with a 30 Amp puller (FH352) for installation flexibility but prohibits the interchangeability of pullers between fuse blocks to ensure the proper fuse/puller combination is always reinstalled in the proper fuse block.

Model Number	Amp	Horsepower Rating	Neutral Bar	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Fusible								
U045F	90	10	NU100B2	Y	9 x 17	13.5	1	Y
U610F	100							



U610F

Evaporation Cooler, Fusible Disconnects, 1-phase, 120/240V

Evaporation cooler applications not only require fusing but switching or receptacle function depending on equipment type and local codes. Two models are offered to meet these varied evaporation cooler applications.

Model Number	Receptacles	Circuit Protection	Amp	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Fusible								
U220H	DPST, SPST Switch	(2) FH1	20	AR	5 x 7	4.5	4	N
U261F	14-20R, 5-20R2	(3) FH1	40	E	6 x 9	6		Y ¹



U261F

Disconnects, Ground Fault, 1-phase, 120/240V

Combination AC disconnects are designed for use as an AC unit, an outdoor GFCI or an in-use weather-proof cover for an outdoor GFCI receptacle. The three models offered meet NEC requirements.

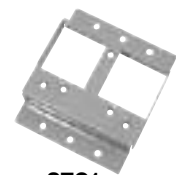
Model Number	Receptacles	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
U065P010	5-15R2GFI	60	10	D	5 x 7	4.3	6	Y ¹
U065NA1010	5-15R2GFI					4	6	
U065PC2	5-20R2					4.3	4	



U065P010

Exterior Mounting Bracket STC1

Exterior Mounting Bracket for single-phase AC & AC/GFCI disconnects in aluminum, vinyl siding and stucco applications. Order quantity in multiples of six. Mounting hardware for fastening AC disconnect to STC1 included.



STC1

¹cULus approved.

Technical Data

Model Number	Replacement Parts			Cabinet Size	Enclosure Style	Cabinet Dimensions (inches)				Knockout Figure
	Complete Block and Puller	Fuse Block Only	Puller Only			Height (A)	Width (B)	Depth (C)	Depth (D)	
P035F	FR39	—	FR352	6 x 8	C	8	5-3/4	3-1/8	—	1
P065F	FR69	—	FH682	6 x 8	C	8	5-3/4	3-1/8	—	1
P065NA1	—	—	—	5 x 7	D	7-1/4	5	2-1/8	2-3/4	2
P065P	—	NF65	NF652	6 x 8	D	8	6	5-3/4	2-3/4	2
P065P1	—	NF65	NF652	5 x 7	D	7	5	2-1/8	2-3/4	2
U035F2	FR35R	—	FR352R	5 x 7	A	7	5	2-1/8	2-3/4	2
U0353F	265A6035G27	—	265A6035G27	6 x 14	B	14-3/8	7-1/4	5-3/16	—	3
U045F	FR35XFR67	—	FR352, FH682	9 x 17	B	17-3/8	9-3/4	5-3/16	—	4
U0653F	265A6036G69	—	265A6036G69	6 x 14	B	14-3/8	7-1/4	5-3/16	—	3
U0653P	265A6036G73	—	265A6036G73	6 x 14	B	14-3/8	7-1/4	5-3/16	—	3
U065F1	FR65	—	FH682	5 x 9	A	9	5	2-1/8	2-3/4	2
U065NA1	—	—	—	5 x 7	D	7	5	2-1/8	2-3/4	2
U065NA1010	—	—	—	5 x 7	D	7	5	3-5/8	5-3/16	2
U065P	—	NF65	NF652	5 x 7	A	7-1/4	5	2-1/8	2-3/4	2
U065P010	—	NF65	NF652	5 x 7	D	7	5	3-5/8	5-3/16	2
U065PC2	—	NF65	NF652	5 x 7	D	7	5	2-1/8	2-3/4	2
U220H	—	FH1	—	5 x 7	B	7-1/8	5-3/4	5-3/16	—	5
U261F	—	FH1	—	6 x 9	B	9-1/8	7-1/4	5-3/16	—	3
U610F	FR67X2	—	FH682	9 x 17	B	17-3/8	9-3/4	5-3/16	—	4

Cabinet Dimensions

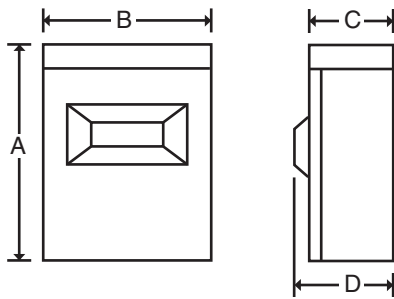


Fig. A

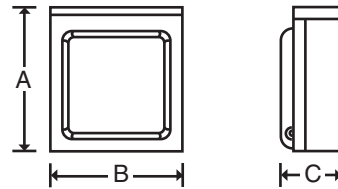


Fig. B

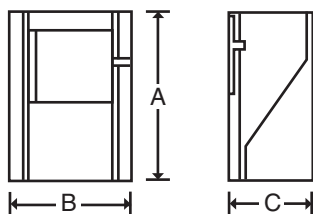


Fig. C

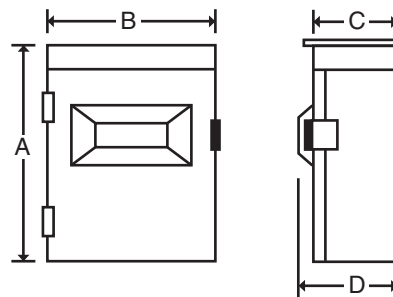


Fig. D

Knockout Configurations

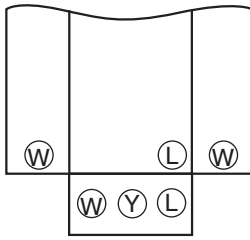


Fig. 1

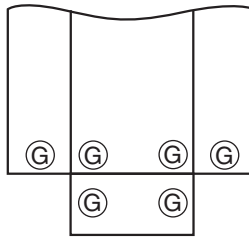


Fig. 2

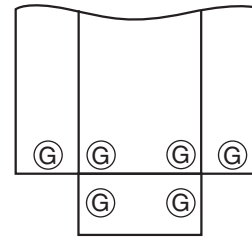


Fig. 3

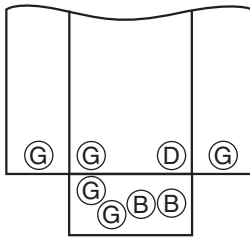


Fig. 4

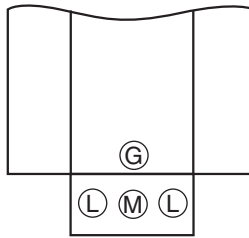


Fig. 5

Knockout Key

- B = 1", 1-1/4", 1-1/2"
- D = 3/4", 1", 1-1/4"
- G = 1/2", 3/4", 1"
- L = 1/2", 3/4"
- M = 1/2", 3/4", 1", 1-1/4"
- W = 3/4", 1"
- Y = 1", 1-1/4"

* Knockouts shown for size not for exact positions.

Wire Range Tables

D

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-8	14-2	12-8	12-2
Load	14-8	14-2	12-8	12-2
Neutral	—	—	—	—
Equipment Ground	12-8	12-2	12-8	12-2

Y

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-8	14-1/0	12-8	12-1/0
Load	14-8	14-2	12-1/0	12-2
Neutral	14-8	14-1/0	12-8	12-1/0

E

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-10	14-10	—	—
Load	14-10	14-10	—	—
Neutral	14-10	14-10	—	—
Equipment Ground	12-8	12-2	—	—

AR

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-10	14-10	—	—
Load	14-10	14-10	—	—
Neutral	—	—	—	—
Equipment Ground	12-8	12-2	—	—

Information provided is subject to change without notice. Please verify all details with Midwest. All values are design or typical values when measured under laboratory condition, and Midwest makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions.

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MET-006A (03/14)



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Features and Benefits

Flexibility

- 30-100 Amps
- 240 Volts AC
- 1-phase or 3-phase, fusible or non-fusible
- Horsepower rated
- 10kAIC
- Available with GFCI receptacle

Rugged Durability

- NEMA 3R weatherproof enclosure
- Noryl® thermoplastic enclosure is corrosion resistant and extremely durable, giving long maintenance-free service
- Metallic models are made of G90 galvanized steel for superior corrosion protection and have a durable polyester powder coat finish which resists chipping and fading

User Safety

- Padlock provision on door helps prevent unauthorized access

Installation Ease

- Three-piece construction that opens up mounting and wiring areas
- Terminals approved for 60°C and 75°C wire, accepts solid 14-8 copper, 12-8 aluminum or stranded 14-3 copper, 12-3 aluminum
- Numerous knockouts reduce installation time
- Straight-in, straight-out wiring saves time and money

Featured Models

Non-Metallic, Non-Fusible Disconnects, 1-phase, 120/240V

Non-fusible disconnect pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
P065P1	60	10	D	5 x 7	2	6	Y ¹
P065P	60	10	D	6 x 8			



P065P1

Non-Metallic, Fusible Disconnects, 1-phase, 120/240V

Fusible disconnects are available in 30 and 60 Amp models. Pullers are removable or re-installable in the OFF position for user safety during equipment maintenance. The P065F UL Listing includes the ability to field replace the 60 Amp puller with 30 Amp puller (FR352) for installation flexibility. Listed for use as service entrance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
P035F	30	3	D	6 x 8	2	6	Y ¹
P065F	60	10	D	6 x 8			



P035F

Metallic, Non-Fusible Disconnects, 1-phase or 3-phase

Non-fusible disconnect pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Phase 1 – 120/240V							
U065P	60	10	D	5 x 7	3	6	Y ¹
Phase 3 – 240V							
U0653P	60	7.5-15	D	6 x 14	8.5	4	Y ¹



U065P

Metallic, Fusible Disconnects, 1-phase or 3-phase

Fusible disconnects are available in 30 and 60 Amp models. Pullers are removable or re-installable in the OFF position for user safety during equipment maintenance. Listed for use as service entrance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Phase 1 – 120/240V							
U035F2	30	3	D	5 x 7	2.5	6	Y ¹
U065F1	60	10	D	5 x 9	3.5		
Phase 3 – 240V							
U0353F	30	3-7.5	D	6 x 14	8.5	4	Y ¹
U0653F	60	7.5-15	D	6 x 14			



U065F1

Non-Automatic Disconnect Switch, 1-phase, 120/240V

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Metallic							
U065NA1	60	10	D	5 x 7	2.5	6	Y ¹
Non-Metallic							
P065NA1	60	10	D	5 x 7	2	6	Y ¹



U065NA1

¹cULus approved.

Heat Pump, Fusible Disconnects, 1-phase, 120/240V

Multiple disconnect devices are offered for heat pump applications that require individual disconnects for the heating and cooling cycles. All pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance. Their UL Listing includes the ability to field replace the 60 Amp puller in the left fuse block with a 30 Amp puller (FH352) for installation flexibility but prohibits the interchangeability of pullers between fuse blocks to ensure the proper fuse/puller combination is always reinstalled in the proper fuse block.

Model Number	Amp	Horsepower Rating	Neutral Bar	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Fusible								
U045F	90	10	NU100B2	Y	9 x 17	13.5	1	Y
U610F	100							



U610F

Evaporation Cooler, Fusible Disconnects, 1-phase, 120/240V

Evaporation cooler applications not only require fusing but switching or receptacle function depending on equipment type and local codes. Two models are offered to meet these varied evaporation cooler applications.

Model Number	Receptacles	Circuit Protection	Amp	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Fusible								
U220H	DPST, SPST Switch	(2) FH1	20	AR	5 x 7	4.5	4	N
U261F	14-20R, 5-20R2	(3) FH1	40	E	6 x 9	6		Y ¹



U261F

Disconnects, Ground Fault, 1-phase, 120/240V

Combination AC disconnects are designed for use as an AC unit, an outdoor GFCI or an in-use weather-proof cover for an outdoor GFCI receptacle. The three models offered meet NEC requirements.

Model Number	Receptacles	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
U065P010	5-15R2GFI	60	10	D	5 x 7	4.3	6	Y ¹
U065NA1010	5-15R2GFI					4	6	
U065PC2	5-20R2					4.3	4	



U065P010

Exterior Mounting Bracket STC1

Exterior Mounting Bracket for single-phase AC & AC/GFCI disconnects in aluminum, vinyl siding and stucco applications. Order quantity in multiples of six. Mounting hardware for fastening AC disconnect to STC1 included.



STC1

¹cULus approved.

Technical Data

Model Number	Replacement Parts			Cabinet Size	Enclosure Style	Cabinet Dimensions (inches)				Knockout Figure
	Complete Block and Puller	Fuse Block Only	Puller Only			Height (A)	Width (B)	Depth (C)	Depth (D)	
P035F	FR39	—	FR352	6 x 8	C	8	5-3/4	3-1/8	—	1
P065F	FR69	—	FH682	6 x 8	C	8	5-3/4	3-1/8	—	1
P065NA1	—	—	—	5 x 7	D	7-1/4	5	2-1/8	2-3/4	2
P065P	—	NF65	NF652	6 x 8	D	8	6	5-3/4	2-3/4	2
P065P1	—	NF65	NF652	5 x 7	D	7	5	2-1/8	2-3/4	2
U035F2	FR35R	—	FR352R	5 x 7	A	7	5	2-1/8	2-3/4	2
U0353F	265A6035G27	—	265A6035G27	6 x 14	B	14-3/8	7-1/4	5-3/16	—	3
U045F	FR35XFR67	—	FR352, FH682	9 x 17	B	17-3/8	9-3/4	5-3/16	—	4
U0653F	265A6036G69	—	265A6036G69	6 x 14	B	14-3/8	7-1/4	5-3/16	—	3
U0653P	265A6036G73	—	265A6036G73	6 x 14	B	14-3/8	7-1/4	5-3/16	—	3
U065F1	FR65	—	FH682	5 x 9	A	9	5	2-1/8	2-3/4	2
U065NA1	—	—	—	5 x 7	D	7	5	2-1/8	2-3/4	2
U065NA1010	—	—	—	5 x 7	D	7	5	3-5/8	5-3/16	2
U065P	—	NF65	NF652	5 x 7	A	7-1/4	5	2-1/8	2-3/4	2
U065P010	—	NF65	NF652	5 x 7	D	7	5	3-5/8	5-3/16	2
U065PC2	—	NF65	NF652	5 x 7	D	7	5	2-1/8	2-3/4	2
U220H	—	FH1	—	5 x 7	B	7-1/8	5-3/4	5-3/16	—	5
U261F	—	FH1	—	6 x 9	B	9-1/8	7-1/4	5-3/16	—	3
U610F	FR67X2	—	FH682	9 x 17	B	17-3/8	9-3/4	5-3/16	—	4

Cabinet Dimensions

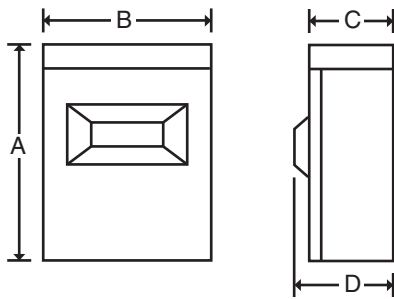


Fig. A

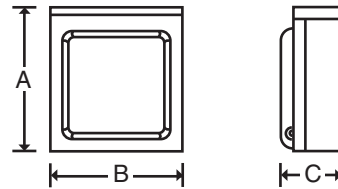


Fig. B

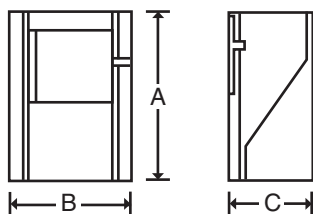


Fig. C

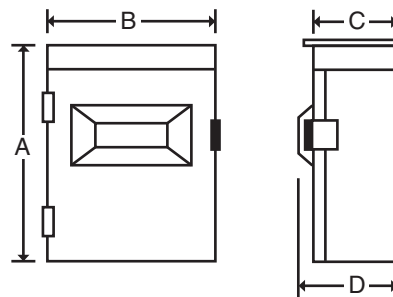


Fig. D

Knockout Configurations

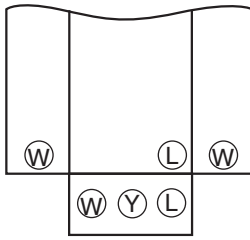


Fig. 1

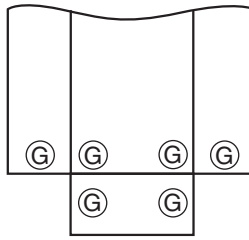


Fig. 2

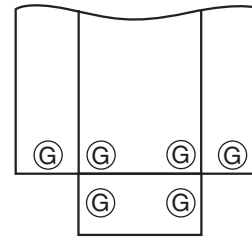


Fig. 3

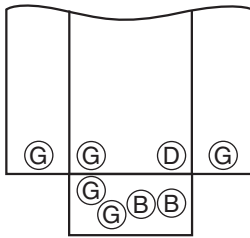


Fig. 4

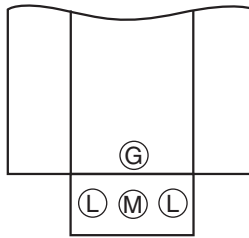


Fig. 5

Knockout Key

- B = 1", 1-1/4", 1-1/2"
- D = 3/4", 1", 1-1/4"
- G = 1/2", 3/4", 1"
- L = 1/2", 3/4"
- M = 1/2", 3/4", 1", 1-1/4"
- W = 3/4", 1"
- Y = 1", 1-1/4"

* Knockouts shown for size not for exact positions.

Wire Range Tables

D

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-8	14-2	12-8	12-2
Load	14-8	14-2	12-8	12-2
Neutral	—	—	—	—
Equipment Ground	12-8	12-2	12-8	12-2

Y

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-8	14-1/0	12-8	12-1/0
Load	14-8	14-2	12-1/0	12-2
Neutral	14-8	14-1/0	12-8	12-1/0

E

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-10	14-10	—	—
Load	14-10	14-10	—	—
Neutral	14-10	14-10	—	—
Equipment Ground	12-8	12-2	—	—

AR

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-10	14-10	—	—
Load	14-10	14-10	—	—
Neutral	—	—	—	—
Equipment Ground	12-8	12-2	—	—

Information provided is subject to change without notice. Please verify all details with Midwest. All values are design or typical values when measured under laboratory condition, and Midwest makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions.

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MET-006A (03/14)

