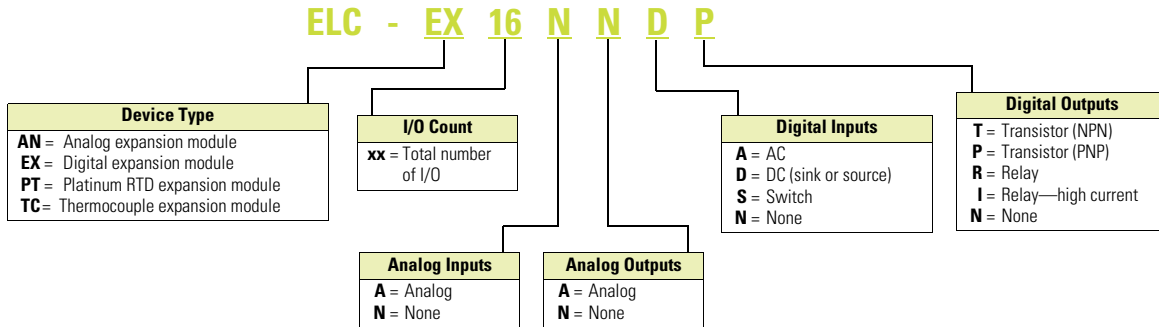


#### ELC Expansion Modules

##### Right Side Bus

##### Expansion Modules

4



#### Features

- Digital right side expansion modules can be used with any ELC controller
- They simply snap together to allow the ELC backplane to pass through each connected module
- Add only the amount of I/O you need
- Choose I/O counts as small as 6 points and as large as 14 points per module
- I/O modules are available in a broad selection of AC/DC inputs, relay/transistor and high current outputs that may be used together in any combination
- Maximum of 14 modules per controller

#### ELC-EX08NNDN



#### Digital Expansion Modules (Right Side Bus) 8-Point

Description	Inputs	Outputs	Max. Current Consumption (at 24 Vdc)	Catalog Number
8 DC input module	(8) 24 Vdc	—	50 mA	ELC-EX08NNDN
8 AC input module	(8) 110 Vac	—	50 mA	ELC-EX08NNAN
8 Transistor output module	—	(8) Transistor (sink), 0.3 A	70 mA	ELC-EX08NNNT
8 Relay output module	—	(8) Relay, 1.5 A	70 mA	ELC-EX08NNNR

#### ELC-EX08NNDT



#### Digital Expansion Modules (Right Side Bus) 16-Point

Description	Inputs	Outputs	Max. Current Consumption (at 24 Vdc)	Catalog Number
8 DC input/output module	(4) 24 Vdc	(4) Transistor (sink), 0.3 A	70 mA	ELC-EX08NNDT
8 DC input/relay output module	(4) 24 Vdc	(4) Relay, 1.5 A	70 mA	ELC-EX08NNDR
6 High current relay output module	—	(6) Relay, 6 A	70 mA	ELC-EX06NNNI
16 DC input module	(16) 24 Vdc	—	100 mA	ELC-EX16NNDN
16 DC input/output module	(8) 24 Vdc	(8) Transistor (sink), 0.3 A	90 mA	ELC-EX16NNDT
16 DC input/output module	(8) 24 Vdc	(8) Transistor (source), 0.3 A	100 mA	ELC-EX16NNDP
16 DC input/relay output module	(8) 24 Vdc	(8) Relay, 1.5 A	90 mA	ELC-EX16NNDR

**ELC-AN04ANNN**



**Analog Input and Output Modules (Right Side Bus)**

Analog input/output modules uses voltage or current mode for any channel—see table for resolution based on type and mode.

Description	Input Points	Resolution	Mode	Output Points	Resolution	Mode	Maximum Current Consumption (at 24 Vdc)	Catalog Number
4 Analog input module	4	V = 14 bit I = 13 bit	±10 V ±20 mA	—	—	—	90 mA	ELC-AN04ANNN
2 Analog output module	—	—	—	2	12 bit	0–20 mA; 4–20 mA 0–10 V; 2–10 V	125 mA	ELC-AN02NANN
4 Analog output module	—	—	—	4	12 bit	0–20 mA; 4–20 mA 0–10 V; 2–10 V	170 mA	ELC-AN04ANNN
6 Analog input/output module	4	V = 12 bit I = 11 bit	±10 V ±20 mA	2	12 bit	0–20 mA 0–10 V	170 mA	ELC-AN06AANN

**ELC-PT04ANNN**



**Temperature Input Modules (Right Side Bus)**

Thermocouple and Platinum RTD temperature sensor input modules with 14 bit resolution.

Description	Input Points	Resolution	Sensor Type	Maximum Current Consumption (at 24 Vdc)	Catalog Number
4 Thermocouple input module	4	—	J, K, R, S, T	90 mA	ELC-TC04ANNN
4 Platinum RTD input module	4	14 bit	PT100	90 mA	ELC-PT04ANNN

**ELC-MC01**



**Motion Control Module (Right Side Bus)**

Single axis motion control module.

If used with ELC2-PC controllers, it can provide a second axis because these controllers have a single axis built-in.

If used with the ELC2-PV controllers, it can provide a third axis because these controllers incorporate two axis of motion control and are capable of output pulses up to 200 kHz.

Description	Input Type	Output Type	Catalog Number
Single axis motion control module	Phase in, start, stop, and so on	Phase, pulse, direction	ELC-MC01

**ELC-485APTR**



**RS-485 Adapter Module (Right Side Bus—End Module)**

Passive RS-485 connection device module.

RJ12 port for connecting to a drive.

2-pin screw terminal to connect to ELC controller.

Male and female DB9 connectors to connect to other RS-485 devices.

Description	Connector Types	Catalog Number
RS-485 Connect adapter module	RJ12, DB9 (male and female), 2-pin screw terminals	ELC-485APTR

**ELC-EX08NNSN**



**Toggle Switch Input Module (Right Side Bus)**

8 input switch module for manual switch inputs to the ELC controllers—used for debugging applications or product training demonstrations

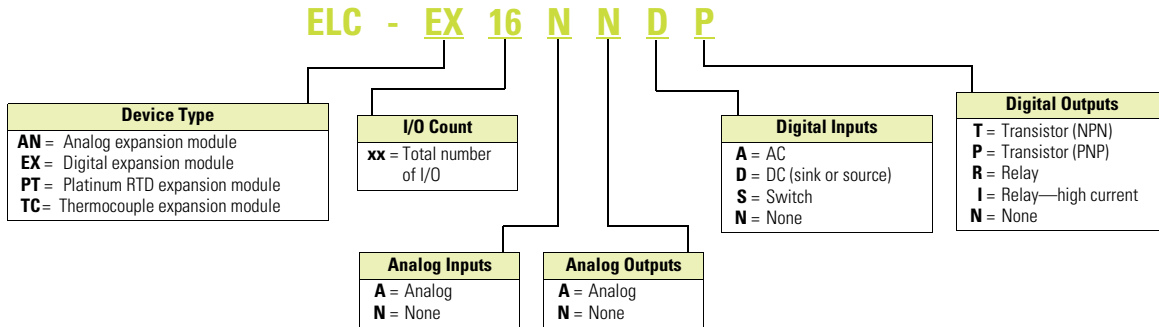
Description	Maximum Current Consumption (at 24 Vdc)	Catalog Number
8 Toggle switch input module	20 mA	ELC-EX08NNSN

#### ELC Expansion Modules

##### Right Side Bus

##### Expansion Modules

4



#### Features

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#### ELC-EX08NNDN



#### Digital Expansion Modules (Right Side Bus) 8-Point

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8 Transistor output module	—	(8) Transistor (sink), 0.3 A	70 mA	ELC-EX08NNNT
8 Relay output module	—	(8) Relay, 1.5 A	70 mA	ELC-EX08NNNR

#### ELC-EX08NNDT



#### Digital Expansion Modules (Right Side Bus) 16-Point

Description	Inputs	Outputs	Max. Current Consumption (at 24 Vdc)	Catalog Number
8 DC input/output module	(4) 24 Vdc	(4) Transistor (sink), 0.3 A	70 mA	ELC-EX08NNDT
8 DC input/relay output module	(4) 24 Vdc	(4) Relay, 1.5 A	70 mA	ELC-EX08NNDR
6 High current relay output module	—	(6) Relay, 6 A	70 mA	ELC-EX06NNNI
16 DC input module	(16) 24 Vdc	—	100 mA	ELC-EX16NNDN
16 DC input/output module	(8) 24 Vdc	(8) Transistor (sink), 0.3 A	90 mA	ELC-EX16NNDT
16 DC input/output module	(8) 24 Vdc	(8) Transistor (source), 0.3 A	100 mA	ELC-EX16NNDP
16 DC input/relay output module	(8) 24 Vdc	(8) Relay, 1.5 A	90 mA	ELC-EX16NNDR

**ELC-AN04ANNN**



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Description	Input Points	Resolution	Mode	Output Points	Resolution	Mode	Maximum Current Consumption (at 24 Vdc)	Catalog Number
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2 Analog output module	—	—	—	2	12 bit	0–20 mA; 4–20 mA 0–10 V; 2–10 V	125 mA	ELC-AN02NANN
4 Analog output module	—	—	—	4	12 bit	0–20 mA; 4–20 mA 0–10 V; 2–10 V	170 mA	ELC-AN04ANNN
6 Analog input/output module	4	V = 12 bit I = 11 bit	±10 V ±20 mA	2	12 bit	0–20 mA 0–10 V	170 mA	ELC-AN06AANN

**ELC-PT04ANNN**



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Description	Input Type	Output Type	Catalog Number
Single axis motion control module	Phase in, start, stop, and so on	Phase, pulse, direction	ELC-MC01

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Male and female DB9 connectors to connect to other RS-485 devices.

Description	Connector Types	Catalog Number
RS-485 Connect adapter module	RJ12, DB9 (male and female), 2-pin screw terminals	ELC-485APTR

**ELC-EX08NNSN**



**Toggle Switch Input Module (Right Side Bus)**

8 input switch module for manual switch inputs to the ELC controllers—used for debugging applications or product training demonstrations

Description	Maximum Current Consumption (at 24 Vdc)	Catalog Number
8 Toggle switch input module	20 mA	ELC-EX08NNSN