

# Control Accessories Selection

## Control Accessories

### I/O and Communication Modules

Type	Name	Model	Function
I/O Expansion Cards	Analog input	AI-A3	<ul style="list-style-type: none"> <li>Allows high precision, high resolution analog reference input</li> <li>Input channels: 3</li> <li>Voltage input: -10 to 10 Vdc (20 k<math>\Omega</math>), 13-bit signed</li> <li>Current input: 4 to 20 mA or 0 to 20 mA (250 <math>\Omega</math>), 12 bit</li> </ul>
	Analog monitor	AO-A3	<ul style="list-style-type: none"> <li>Provides extra multi-function analog output terminals</li> <li>Output channels: 2</li> <li>Output voltage: -10 to 10 V, 11 bit (signed)</li> </ul>
	Digital Input	DI-A3	<ul style="list-style-type: none"> <li>Sets the frequency reference by digital inputs</li> <li>Input channels: 16 (including SET signal and SIGN signal)</li> <li>Input signal type: BCD 16-bit (4-digit), 12-bit (3-digit), 8 bit (2-digit)</li> <li>Input signal: 24 Vdc, 8 mA</li> </ul>
	Digital output	DO-A3	<ul style="list-style-type: none"> <li>Provides extra insulated multi-function digital outputs</li> <li>Photocoupler relays: 6 (48 V, up to 50 mA)</li> <li>Contact relays: 2 (250 Vac/up to 1 A, 30 Vdc/up to 1 A)</li> </ul>
Drive Mounted Option Cards Feedback Cards	Line Driver Encoder interface	PG-X3	<ul style="list-style-type: none"> <li>For speed feedback input by connecting a motor encoder</li> <li>A QUAD B, and Z output matches RS-422 level, line driver, 300 kHz max</li> <li>Encoder power supply: 5 V or 12 V, max current 200 mA</li> </ul>
	Complimentary Encoder interface	PG-B3	<ul style="list-style-type: none"> <li>For speed feedback input by connecting a motor encoder</li> <li>A QUAD B, and Z output, HTL encoder connection, 50 kHz max</li> <li>Output: open collector 24 V max. 30 mA</li> <li>Encoder power supply: 12 V, max current 200 mA</li> </ul>
	Resolver Interface	PG-RT3	For speed feedback
Communication Cards	EtherNet/IP	SI-EN3	Connects to an EtherNet/IP network
	Modbus TCP/IP	SI-EM3	Connects to a Modbus TCP/IP network
	DeviceNet	SI-N3	Connects to a DeviceNet network
	PROFIBUS-DP	SI-P3	Connects to a PROFIBUS-DP network
	MECHATROLINK-II	SI-T3	Connects to a MECHATROLINK-II network.
	PROFINET	SI-EP3	Connects to a PROFINET network
	EtherCAT	SI-ES3	Connects to a EtherCAT network
	Metasys N2 / Apogee FLN (P1)	SI-J3	Connects to a Metasys N2 / Apogee FLN (P1) network
	BACnet	SI-B3	Connects to a BACnet network
	LonWorks	SI-W3	Connects to a LonWorks network

Note: When using configuration software installed in a drive on various field networks, a file is required to connect the software to the drive.

\* Consult factory for availability

### 24VDC Auxiliary Control Power Input

The 24VDC auxiliary control power input maintains drive control circuit power in the event of a main power outage. The control circuit keeps the network communications and I/O data operational in the event of a power outage. It supplies external power to the control circuit only.

Drive Model	Part No.
240V Class	PS-A10L
480V and 600V Class	PS-A10H



The installed option adds 50 mm to the total width of the drive.

