

Power Requirements

AC Input Voltage, 47-63 Hz

EP 202/204/206: 1Ø, 20 to 264 VAC

EP 209: 1Ø, 90 to 264 VAC

EP 216: 3Ø, 90 to 264 VAC

(240 VAC for rated performance) SCCR 10kA

DC Input Voltage

EP 202/204/206: 10-340 VDC

EP 209/216: 140-340VDC

AC Input Current (max. continuous)

EP202: 5.0 Arms (140A for 2 ms inrush)

EP204: 8.5 Arms (140A for 2 ms inrush)

EP206: 12.0 Arms (140A for 2 ms inrush)

EP209: 16 Arms (34A for 5 ms inrush)

EP216: 16 Arms (34A for 5 ms inrush)

Output Current Continuous (rms) / Peak (4 sec.)

EP202: 2.2A / 4.4A

EP204: 4.0A / 8A

EP206: 6.5A / 13A

EP209: 9.0 A / 18A

EP216: 16.0A / 32A

Continuous Output Power

EP202: 0.77 kW

EP204: 1.27 kW

EP206: 1.77 kW

EP209: 2.32 kW

EP216 3Ø: 4.8 kW

EP216 1Ø: 2.32 kW

Switching Frequency 10 kHz

External Logic Supply +18 to 30 VDC @ 0.5A

Encoder Supply Output +5 VDC, 250 mA

I/O Supply +10 to 30 VDC

System Efficiency 93%

Cooling Method

Convection EP202 through EP209

Internal Fan EP216

Regeneration

Internal Energy Absorption (115V / 230V)

EP202: 39 Joules / 8 Joules

EP204: 58 Joules / 12 Joules

EP206: 97 Joules / 20 Joules

EP209: 117 Joules / 24 Joules

EP216: 132 Joules / 28 Joules

External: Connection to external resistor,

EP 202-209: 30 Ohm min, 12A peak, 2 kW avg.

EP216: 20 Ohm min, 20A peak, 5 kW avg.

Drive Control Inputs

Analog: (1) +/-10 VDC, 14 bit, 100 kOhm,

Differential

Analog Max. Input Rating: Differential +/-14 VDC,

Each Input with Reference to Analog Ground

+/-14 VDC

Digital: (16) (5 on EP-B) +10 to 30 VDC,

2.8 kOhm, Sourcing, Optically Isolated

Pulse: (1) Differential RS-422, 1 MHz/Channel,

50% Duty Cycle

Single Ended: (1) TTL Schmitt Trigger 500 kHz/

Channel, 50% Duty Cycle

Motor Overtemperature: 0 to +5 VDC, 10 kOhm,

single ended

Drive Control Outputs

Analog: (2) +/-10 VDC, 10 bit, Single-ended 20mA

Digital: (8) (3 on EP-B) +10 to 30 VDC, 150 mA,

Sourcing Optically Isolated

Short Circuit Protected

Pulse: Differential RS-422 and TTL compatible,

20 mA/Channel Sink or Source

Environmental

Rated Ambient Temperature: 32° to 104°F
(0° to 40°C) for rated performance

Maximum Ambient Temperature: 32° to 122°F
(0° to 50°C) with power derating of 3.0%/1.8F
(1°C) above 104°F (40°C)

Rated Altitude: 3280' (1000 m)

Maximum Altitude: For altitudes >3280'
(1000 m) derate output by 1%/328' (100 m)

Vibration: 10 to 2000 Hz @ 2g

Humidity: 10 to 95% non-condensing

Storage Temperature: -13° to 167°F
(-25° to 75°C)

Ingress Protection: IP-20

Serial Interface

2 RS485 connectors for multi-drop
applications Modbus RTU w/ 32-bit extension,
9600 to 19.2 kBaud

Ethernet Interface (EP-P only)

1 RJ-45, Modbus TCP/IP or EtherNet/IP

DeviceNet (EP-xDN models only)

Power Consumption: 25 mA

Baud Rates: 125, 250 and 500 kps

Node Addresses: 00-63

Profibus-DP (EP-PPB model only)

Baud: 1.5 to 12 Mb

Address Range: 00-126