

PS-6244-24-N16M09 Controller Specs

Electrical

Input Voltage	20 - 30 VDC. Keypad/display is powered from controller.
Input Current	500 mA maximum (control only)
Power Consumption:	35 VA
Permanent Memory:	EEPROM (no battery required)
Accessory Power Out:	20 - 30 VDC, 250 mA Max (same source and voltage as input power)
Safety Compliance:	Listed to UL 508 industrial control equipment, file E151636

Environment

Operating Temp:	32° to 131° F (0° to +55° C)
Storage Temp:	-40° to 160° F (-40° to +70° C)
Humidity:	95% maximum relative non-condensing
UL/NEMA Rating:	Keypad/display: 1, 4, 4X, or 12 enclosure

Physical

Overall Dimensions:	See Figure 4
Weight:	Controller: 3.5 lbs (1.6 kg). Keypad/Display: 0.5 lbs. (0.2 kg)

Mounting

Controller:	Brackets accept EN-50035 ("G" profile) or EN-50022 ("Top Hat" profile) DIN rail.
Keypad/Display:	May be mounted up to 1000' from controller. Multiple keypads may be connected to one controller.

Inputs

DC Inputs:	8 sinking or sourcing DC inputs, optically isolated.
Input On State Voltage:	10-30 VDC
Input Current:	11 mA @ 24 VDC
Program Select Response:	100 msec (hardware response plus processing time)
Response of All Other Inputs:	1 msec

Outputs

DC (Transistor) Outputs:	Outputs #1 through #16 are sinking, optically isolated.
Real World Outputs:	Outputs #17 through #24 may be any mix of AC, DC, or reed relay Slimline modules. Output #24 may also be a Slimline analog module. Output #25 must be a Slimline analog module. All modules optically isolated.

Analog Output

Output Types:	4-20 mA or 0-10 VDC, proportional to RPM.
Resolution:	12 bit
Update Frequency:	10 times/sec (100 msec)
Linearity:	±0.2% @ 77° F (25° C)
Set-up:	Offset & full scale RPM are programmable.

Operation

Scan Time:	100-250 microseconds (exact time determined by programming)
Position Resolution:	1000 increments
Speed Compensation:	Programmed in 0.1 msec steps. 16 individually compensated outputs max. Updated ten times per second.
Multiple Programs:	48 programs
Total Pulse Memory:	926 pulses
Pulses per Program:	512 maximum
Pulses per Output:	512 maximum
Maximum Speed:	3000 RPM

SLIMLINE Output Module Specifications

AC Outputs

Part # EC-OAC240-3

Output Voltage:	24 to 280 VAC
Output Current:	3 Amps cont. up to 113° F 2 Amps cont. @ 158° F
1 Cycle Surge:	80 Amps peak
Turn On Time:	Random (Not 0 Cross)
Turn Off Time:	0 Cross (max time: 1/2 cycle)
Off State Leakage:	2 mA max
Output Voltage Drop:	1.6 Volts max
Operating Temp.	-22° to +158° F

DC Output, 60 VDC

Part # EC-ODC060-3

Output Voltage:	0 to 60 VDC
Output Current:	3 Amps cont. up to 113° F 2 Amps cont. @ 158° F
1 Second Surge:	5 Amps
Turn On Time:	40 Microseconds
Turn Off Time:	140 Microseconds
Off State Leakage:	1 uA typical
Output Voltage Drop:	1.6 Volts max
Operating Temp.	-22° to +158° F

DC Outputs, 200 VDC

Part # EC-ODC200-1 (Slimline)

Output Voltage:	0 to 200 VDC
Output Current:	1 Amp cont. up to 113° F .5 Amps cont. @ 158° F
1 Second Surge:	5 Amps
Turn On:	40 Microseconds
Turn Off:	140 Microseconds
Off State Leakage:	1 uA typical
Output Voltage Drop:	1.6 Volts max
Operating Temp.	-22° to +158° F

Transistor Outputs

Part # PS-9011-2803 (ULN 2803A)

Output Type:	Current Sinking (NPN)
Output Voltage:	5-30 VDC
Output Current:	50 mA cont. max (each output)
Input Voltage:	10-30 VDC

Analog Output, 0-10 VDC

Part # EC-SANL-010V

Resolution:	12 Bits (4096 Increments)
Output Voltage:	0-10 VDC
Output Current:	5 mA Max
Output Type:	Isolated
Load Resistance:	2 K Ohm min.
Linearity:	±0.2% @ 77° F (25° C)

Analog Output, 4-20 mA

Part # EC-SANL-420M

Resolution:	12 Bits (4096 Increments)
Output Voltage:	4-20 mA
Output Current:	20 mA Max
Output Type:	Isolated
Load Resistance:	275 Ohm max.
Linearity:	±0.2% @ 77° F (25° C)

Factory Defaults

Analog Outputs	
Quantity:	0
Offset:	0
High RPM:	2000
Communications	
Type:	RS-485
Baud Rate:	9600
Default Program:	1
Enable Codes	
Operator:	1
Setup:	2
Master:	3
Enable Options:	ON for all functions
Increasing Direction:	CCW
Input ANDing:	OFF
Keyboard Quantity:	1
Motion ANDing:	OFF
Motion Detection:	Lo 10 RPM, Hi 3000 RPM both levels
Offset:	0
Per Channel Enable:	All channels ON
Program Select Mode:	BIN (Binary)
Rate:	1X, RPM
RPM Update:	1/S
Shift Position:	0
Shift Reg. ANDing:	OFF
Speed Comp:	All channels 0
Toggle RPM:	20 RPM

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