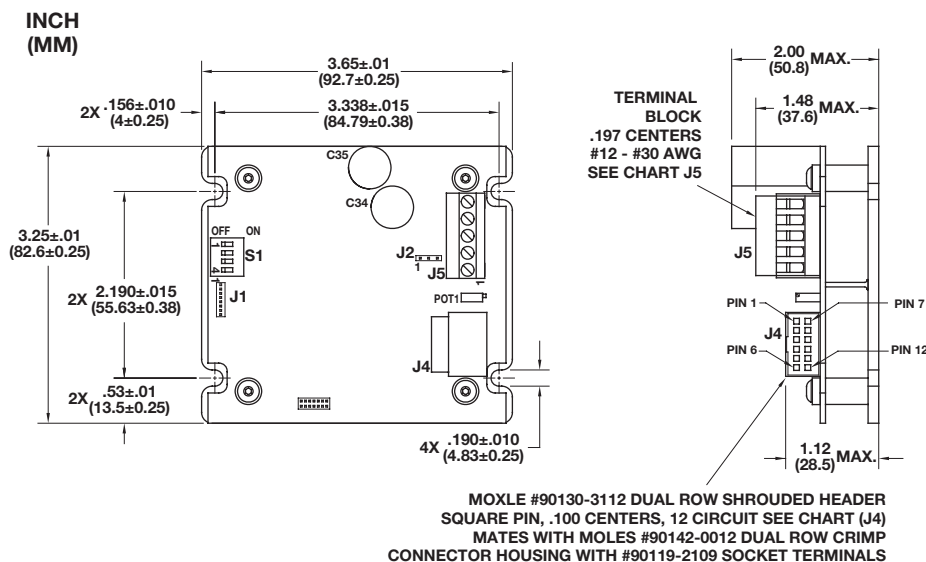


# 20 Amp Programmable Motor/Blower Controller

## with Digital Signal Processor (DSP)



### FEATURES:

- **Input Voltage Range:** 11 to 52 VDC (Optional 60 VDC).
- **Thermal Trip:** 105°C or programmable.
- **Braking:** Connect J4-6 to Vin.
- **Rotation:** Direction can be changed during operation.
- **Acceleration:** Fast, slow, or programmable.

Controller Data	Motor/Blower Controller
	48140*
Maximum Continuous Current	20 A
Input Voltage Range	11-52 VDC (optional 60 VDC)
Controller PWM Frequency	20 kHz
Analog Speed Input	0-5 VDC, 2k-20k Potentiometer
Electrical Hall Spacing	60° or 120°
Waveform	6-Step Trapezoidal
Current Limit Protection	Yes
Rotation	CW / CCW

\*These part numbers are available through AMETEK Technical & Industrial Products distributors.

### NOTES:

- **Temperature:** Operating: 0°C to 50°C, Storage Air: -40°C to 85°C.

### Switch Settings:

- S1.1 Off - 60° Electrical (4 Pole)  
On - 120° Electrical (8 Pole)
- S1.2 Off - OE Active when pulled high  
On - OE Active when pulled low
- S1.3 Off - External speed control  
On - Internal potentiometer speed control
- S1.4 Off - Fast acceleration  
On - Slow acceleration

### Jumper Settings:

- J2 1-2, 11-18 VDC  
J2 2-3, 16-52 VDC
- J4-1 Ground  
J4-2 Hall 1  
J4-3 Hall 2  
J4-4 Hall 3  
J4-5 Hall +  
J4-6 Brake  
J4-7 Ground  
J4-8 Vref  
J4-9 Output Enable  
J4-10 Forward/Reverse  
J4-11 Tach Out  
J4-12 Analog/In
- J5-1 Ground  
J5-2 Phase C  
J5-3 Phase B  
J5-4 Phase A  
J5-5 Vin

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions using AMETEK BLDC motor controllers. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Marketing and Sales.

### AMETEK TECHNICAL & INDUSTRIAL PRODUCTS

627 Lake Street, Kent OH 44240

Tel: +1 330-673-3452 • Fax: +1 330-677-3306 • [www.ametektip.com](http://www.ametektip.com)