



SPECIFICATIONS

OVERVIEW

Micro-stepping controller(s) with dynamic current control in a single, low cost integrated package, complete with internal 85-264 VAC power supply. Control 1-3 axis from a single ½ DIN 3U rack mount device. 6 axis version available in 19" 3U rack mount.

FEATURES

Speed:

50kHz step rate per axis.

Motor Driver:

3A/axis @ 24V nominal, peak current scalable in 50mA increments. 36V and 48V versions also available for increased performance. 6 Amp drive available in both Integrated AC and remote DC versions.

Motion Control:

Velocity or Position control. Missed step or stall detection without encoders on select models. Encoder option(s) on select models.

Software:

Up to 20 set points for position control via simple ascii commands. Networked devices can be synchronized to 100 µSec by issuing broadcast set points "go to" commands.

Motion Control Products

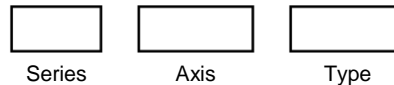


Integrated Touchscreen Stepper Motor Controller

1-3 axis micro-stepping driver/controller with integrated 100-250W power supply. 3U Rack mount (1/2 DIN) with universal 85-264VAC input. Control 1-3 motors via 4.3" color touchscreen. Select or edit recipes for autonomous control sequences.

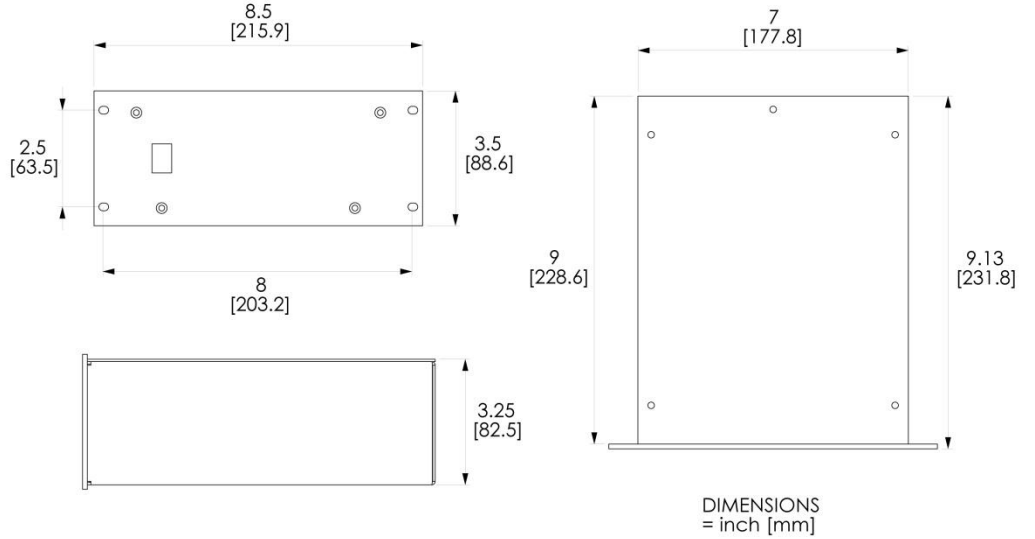
NOW WITH ADAPTIVE TORQUE CONTROL – Dynamically delivers load-dependent motor current.

Part Number and Ordering Information



| Series | | Axis | |
|--|-----------|-------------|-------------|
| Integrated AC 85-264V | 91 | Single | 01 |
| Integrated AC 85-264V w/Touch | 92 | Dual | 02 |
| Integrated AC 85-264V 19" Rack Mount | 93 | 3-Axis | 03 |
| Type | | | |
| Micro-Step Controller Adaptive Torque Control 3A Drive | | | 9903 |
| Standard Micro-Step Controller 3A Drive | | | 9904 |
| Micro-Step Controller Adaptive Torque Control 6A Drive | | | 9906 |

Dimensions



ELECTRICAL

Rated Input voltage:

24VDC Nominal for 9903 Type

24VDC Nominal for 9904 Type

48VDC Nominal for 9906 Type

Rated Input protection:

26/50VDC Max, reverse input protection with auto-reset PTC fuse.

AC: 85-264VAC

Auto Thermal Shutdown

COMMUNICATIONS

RS232 Standard

Optional:

USB

Ethernet

RS485

CAN

INPUTS

4x 24VDC compatible inputs

OUTPUTS

2x Open collector TTL outputs.

60V 50mA drive, configurable as source or sink.

SENSOR INTERFACE

Fused 5VDC @ 100mA sourced on 2-pins.

Fused 24VDC @ 100mA sourced on 2-pins.

3-Channel Encoder Interface with integrated 5VDC power.

ENVIRONMENTAL

90% Humidity non-condensing

70°C max operating temperature

RELIABILITY

MTBF:

>10,000 hours

Approvals:

CE electromagnetic compatibility

RoHS

Accessories

| | |
|---|-------------------|
| Cable, Motor Drive w/encoder interface, 6 ft. | 71-06-0912 |
| Cable, Motor Drive w/encoder interface, 8 ft. | 71-08-0912 |
| Cable, Motor Drive, 6 ft. | 71-06-0904 |
| Cable, Motor Drive, 8 ft. | 71-08-0904 |
| Cable, Communications, RS232, 91/92 Series, 8 ft. | 71-08-0004 |
| Cable, Communications, RS232, 90 Series, 8 ft. | 71-08-0005 |

Motors

| Size | Stack | A/Phase | H. Torque | Winding | P/N Standard | P/N w/Encoder |
|----------------|----------|------------|------------|-----------------|-------------------|-------------------|
| NEMA 23 | 1 | 0.62 | 112 | Series | 81-18-4412 | 82-18-4412 |
| NEMA 23 | 1 | 2.5 | 112 | Parallel | 81-18-4425 | 82-18-4425 |
| NEMA 23 | 2 | 1.5 | 155 | Series | 81-18-6415 | 82-18-6415 |
| NEMA 23 | 2 | 2.5 | 155 | Parallel | 81-18-6425 | 82-18-6425 |
| NEMA 23 | 3 | 1.5 | 254 | Series | 81-18-8415 | 82-18-8415 |
| NEMA 23 | 3 | 2.5 | 254 | Parallel | 81-18-8425 | 82-18-8425 |
| NEMA 23 | 4 | 3 | 396 | Series | 81-18-2430 | 82-18-2430 |
| NEMA 23 | 4 | 4.2 | 396 | Parallel | 81-18-2410 | 82-18-2410 |

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