

TA2215 PWM DRIVE

FOR BRUSHLESS SERVO MOTORS



High Efficiency, DC Powered Brushless DC Motor Drive for Constant Speed Applications

The Trust Automation TA2215 PWM Drive is a compact, low cost, programmable, constant speed drive, ideally suited for battery operated equipment. The TA2215 is designed to run a brushless motor at a constant speed using the motor's Hall sensors for the vspeed feedback. The drive can be programmed through the RS232 interface, and can be programmed to start up and ramp at a preset rate and to maintain a constant torque regardless of changes in load. Alternatively, an external pot may be used for variable applications. This low cost, highly efficient DC drive is ideal for applications requiring improved power performance and lowered operating costs. The TA2215 includes three speed setting options: 1 - external speed command via off-board 10K potentiometer, 2 – on board potentiometer for convenient fixed speed adjustment, and 3 - fixed speed set via software; as well as soft start control, self contained enclosed and optically isolated user interface for safety. The drive can be configured for either regulated speed or torque.

FEATURES

- Peak current 100A, continuous 50A RMS
- External or internal speed control
- Thermally protected
- Hall sensors
- 25-96VDC
- Soft start



APPLICATIONS

- Machine tools, conveyors
- Battery operated vehicles
- Compressors, pumps, fans

TECHNICAL SPECIFICATIONS

Electrical

DC Supply Voltage

24-96 VDC (Max continuous supply current <35A)

Equivalent Motor Voltage

PWM, 0-90VDC

PWM Switching Frequency

4/8/16/20 KHz (selectable)

Maximum Output Current

Continuous: 50A RMS
Peak: 100A

Fault

TTL Level 0 or 1

Enable

TTL Level 0 or 1

Mechanical

Length: 8.15 in (20.70 cm)

Width: 5.05 in (12.83 cm)

Height: 2.36 in (5.99 cm)

Weight: 6.0 lbs. (2.24 kg)

Connections

(J1) User Interface

10-Pin Plug, Header

(J2) Hall Input

5-Pin Plug, Header

(J4) Motor Connections

7-Pin Screw Terminal

(P1) Programming Header

10-Pin IDC

(Mating connectors supplied with drive)

Environmental

Maximum Altitude

6,560ft (2000M)

Temperature (ambient)

Normal operation: 5° C to +40° C
Storage: -40° C to +70° C
Heatsink: +70° C Maximum

Heat Dissipation

External heat sink required

Airflow

External fans may be required

Humidity

Operating: 10% to 70%, non-condensing
Storage: 10% to 95%, non-condensing

Pollution Degree 2



MECHANICAL DRAWING

