

TA2230 PWM DRIVE

FOR BRUSHLESS SERVO MOTORS



High Efficiency, AC Powered Brushless DC Motor Drive for Constant Velocity Applications

The Trust Automation TA2230 PWM Drive is a compact, low cost, programmable, constant velocity drive. The TA2230 is designed to run a brushless motor at a constant velocity using the motor's Hall sensors for the velocity 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 velocity regardless of changes in load. Alternatively, an external speed pot may be used for variable speed applications. This low cost, highly efficient AC drive is ideal for applications requiring improved power performance and lowered operating costs. The TA2230 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, integral AC line filtering, and self contained enclosed, and optically isolated user interface for safety.

FEATURES

- Integral forced air cooling and heat sink
- Peak current 45A, continuous 25A RMS
- External or internal speed control
- 100-220VAC @ 50-60Hz
- Hall sensors
- Thermally protected
- Soft start



APPLICATIONS

- Industrial automation
- Automated power tools
- Conveyors
- Pumps, compressors

TECHNICAL SPECIFICATIONS

Electrical

AC Supply Voltage

100-220VAC @ 50/60 Hz

Equivalent Motor Voltage

PWM, 0-300VDC

PWM Switching Frequency

4/8/16kHz (selectable)

Maximum Output Current

Continuous: 25A RMS

Peak: 45A

Fault

TTL Level 0 or 1

Enable

TTL Level 0 or 1

Mechanical

Length: 9.11 in (23.14 cm)

Width: 5.64 in (14.33 cm)

Height: 3.52 in (8.94 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

Airflow

Internal fans

Humidity

Operating: 10% to 70%, non-condensing

Storage: 10% to 95%, non-condensing

Pollution Degree 2

MECHANICAL DRAWING

