

# TA115 LINEAR DRIVE

## FOR BRUSH SERVO MOTORS



A robust, linear amplifier, built to provide quiet and smooth power to brush motors. The Trust Automation TA115 Linear Drive is a linear servo motor amplifier designed to drive a brush motor with up to 340W of power. The TA115 is an excellent solution for voice coil type motors, high precision positioning applications and systems requiring ultra quiet driving power where low noise operation is essential. The TA115 can be operated in voltage (velocity) mode or current (torque) mode, selected via a user accessible DIP switch. Fault logic level is also selectable via DIP switch.

### FEATURES

- Very low electrical noise
- 170W continuous/340W peak
- 5.0 kHz bandwidth
- Integral forced-air cooling
- Digital on-the-fly gain control (DTS)
- Over-temperature protection
- Selectable current limit



### APPLICATIONS

- Voice coil motors
- Small DC motors
- X-Y micro stages
- Optics Positioning

### TECHNICAL SPECIFICATIONS

#### Electrical

##### Supply Voltage

Unipolar: 15V to 48V, Absolute Max: 52V

##### Equivalent Motor Voltage

Up to  $\pm 43V^*$

##### Maximum Output Current

See SOA chart

##### Fault

TTL Level 0 or 1

##### /Enable

TTL Level 0

##### Command Input

$\pm 10V$  ( $\pm 12V$  Max)

##### Torque Gain

0.2 A/V to 0.8 A/V

##### Bandwidth

5.0 kHz\*\*

\*dependent upon motor load

\*\*into a 2.5 mH load

#### Mechanical

##### Length

9.00 in (22.86cm)

##### Width

2.70 in (6.86 cm)

##### Height

3.05 in (7.75 cm)

##### Weight

2.63 lbs. (1.19 kg)

##### Mounting

(4) 6-32 screws

#### Connections

J1 (Command Signals)  
10-pin Terminal Block, Plug

J2 (Motor Power, Signal)  
5-pin Terminal Block, Plug

(J1 and J2 mating connectors supplied) with drive)

#### Environmental

##### Maximum Altitude

6,560ft (2000M)

##### Temperature (ambient)

Normal operation: 0° C to +40° C

Storage: -40° C to +70° C

Heatsink: +75° C Maximum

##### Heat Dissipation (@ 25° C)

See SOA Chart

##### Airflow

Internal fan

##### Humidity

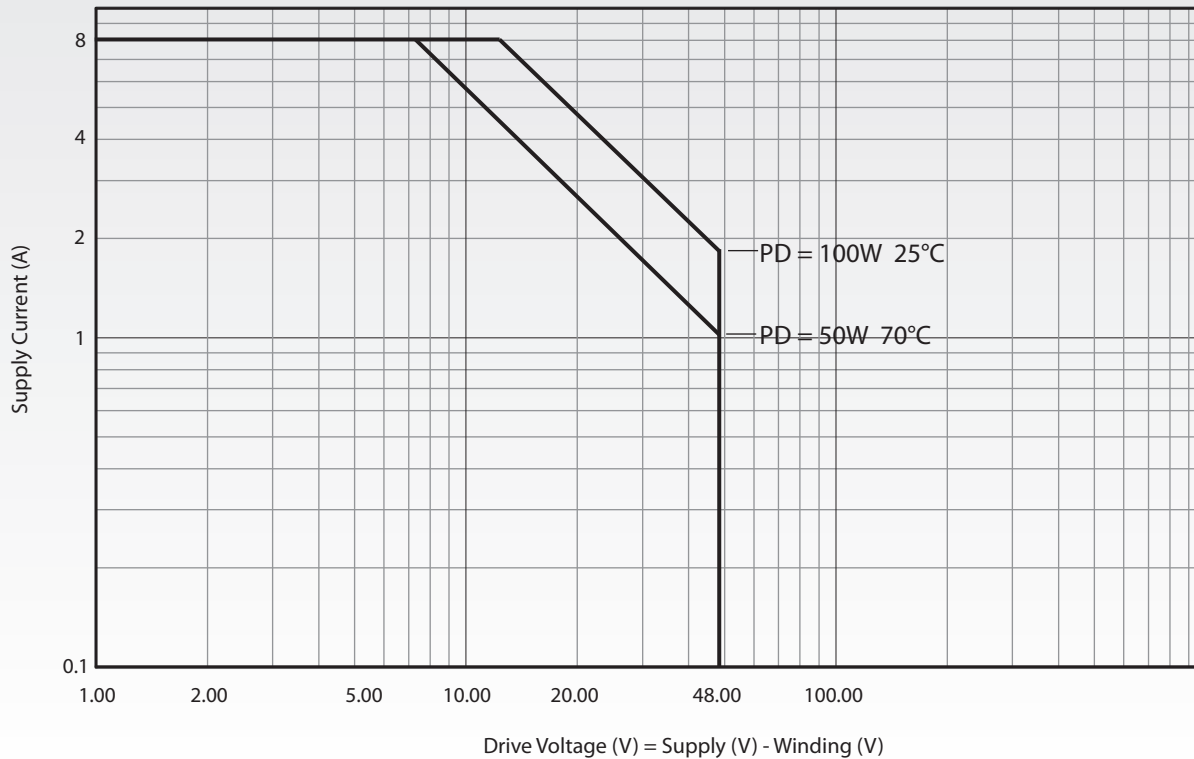
Operating: 10% to 70%, non-condensing

Storage: 10% to 95%, non-condensing

##### Pollution Degree 2



## SAFE OPERATING AREA



## MECHANICAL DRAWING

