TRUST™ AUTOMATION, INC.

Motion & Motor Control Solutions

TA115 LINEAR DRIVE

FOR BRUSH SERVO MOTORS

BENEFITS

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

APPLICATIONS

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

TECHNICAL SPECIFICATIONS

ELECTRICAL

SUPPLY VOLTAGE
24V to 48V (20V abs min, 52V abs max)

EQUIVALENT MOTOR VOLTAGE
Up to ±43V*

MAXIMUM OUTPUT CURRENT
See SOA chart

FAULT
TTL Level 0 or 1

/ENABLE
TTL Level 0

COMMAND INPUT
±10V (±12V max)

TORQUE GAIN
0.2 A/V to 0.8 A/V

BANDWIDTH
5.0 kHz **

*dependent upon motor load
**into a 2.5mH load

MECHANICAL

LENGTH
9.00 in (22.86 cm)

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

COMMAND SIGNALS (J1)
10-Pin Terminal block, plug

MOTOR POWER, SIGNAL (J2)
5-Pin Terminal block, plug

(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
See SOA chart

AIRFLOW
Internal fan

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

POLLUTION DEGREE 2

DECEMBER 2014

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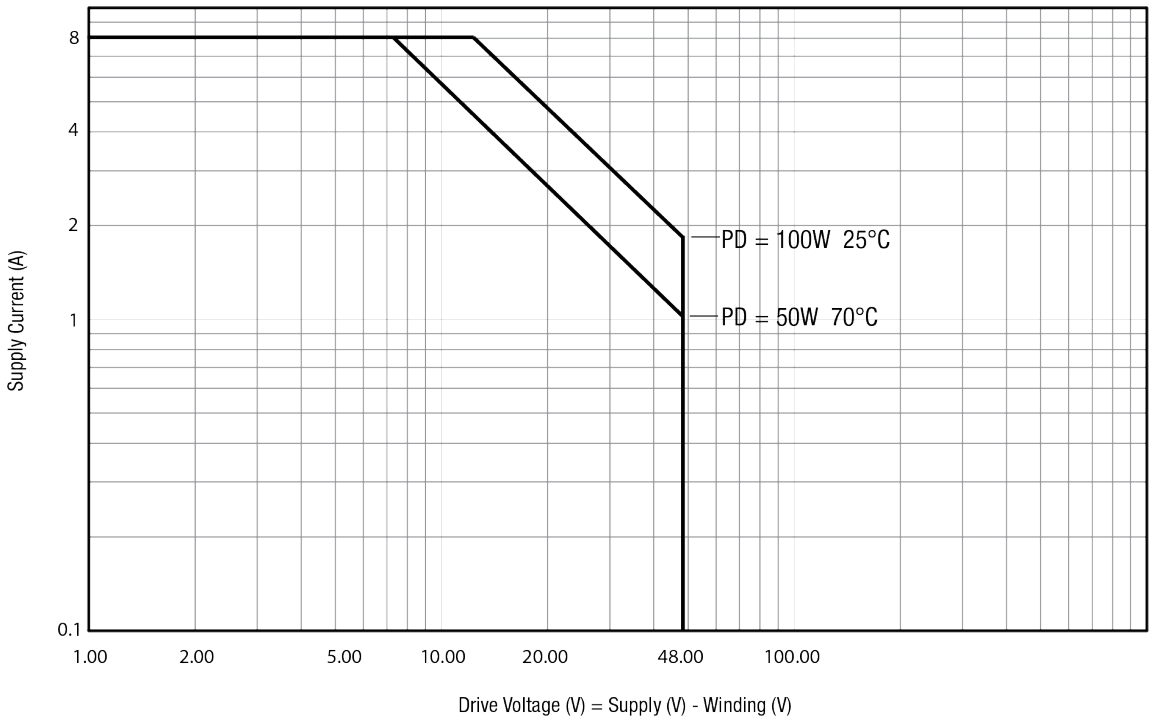
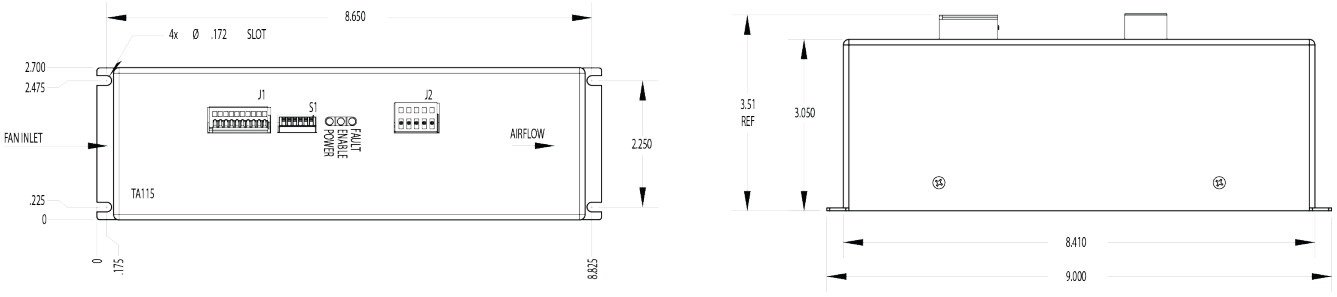
ROBUST LINEAR AMPLIFIER, PROVIDING QUIET AND SMOOTH POWER TO BRUSH MOTORS

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 user accessible DIP switch. Fault logic level is also selectable via DIP switch.

SAFE OPERATING AREA



MECHANICAL DRAWING



Note: All measurements are in inches