

FEATURES

- **Environmentally Sealed for Harsh Environments**
- **Convection Cooled**
- **90% Efficiency**
- **Parallelable for Scalable Applications**

AC INPUT

Voltage: 185-275VAC, 47-63Hz

Input Current: 18A rms maximum @ 176VAC

Peak Inrush Current: <45A

DC OUTPUT

Voltage: 27VDC (adjustable)

Power: 2,700W maximum

Efficiency: 89%, 50 to 100% load

Line Regulation: Less than $\pm 0.25\%$

Load Regulation: 0.50 volt Droop Current Sharing for N+1 Parallel, Redundant operation

Parallel use: May be paralleled with other like units for increased system output, redundant diode included

Current Sharing: Slope program current share, (droop)

Droop: 200mv. 0 to 100A

Dynamic Response: <5% for a 50% to 100% step load. Return to regulation in <500usec

Ripple & Noise: 1% V P-P Measured with 20Mhz Bandwidth

Temperature Coefficient: < $\pm 0.02\%$ per°C

Hold-Up Time: 8mS min.

Turn On Delay: <2 seconds

Turn On Overshoot: <1% nominal output voltage

ENVIRONMENTAL SPECIFICATIONS

Normal Operation: -20 to +50°C Ambient temperature

High Temperature Operation: de-rate 10% per °C, 50 to 75°C

Low Temperature Turn On: -40°C Minimum for warm up

Storage / Transportation: -40°C to +85°C

Humidity Operating & Storage: 0% to 100% RH condensing

Vibration, Operating: 14g-rms, random, tri-axial vibration for 1 hour

Vibration, Transportation: Packaged units withstand, without damage, two complete cycles from 5Hz to 100Hz to 5Hz: 0.5 g at 0.1 octaves/min.

From 100Hz to 500Hz to 100Hz: 1.6 at 0.25 octaves/min.

Shock, Transport: Packaged, drops, 6 faces, 8 corners

Salt Fog: MIL-STD 810C, Method 509.1

Audible Noise: None

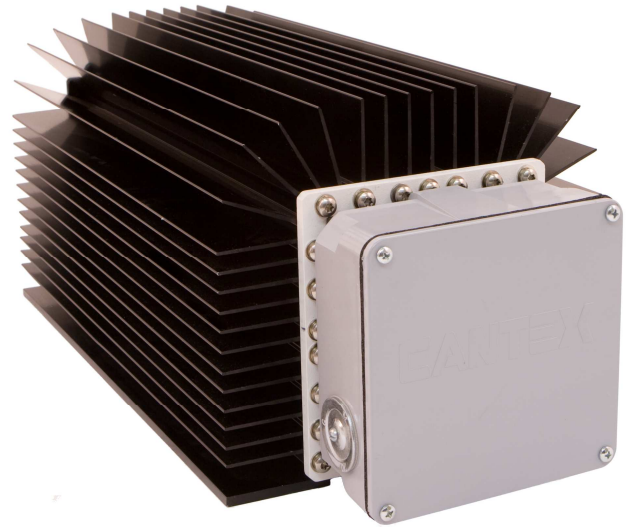
Cooling: Oil cooled. No fan required. Needs ventilation to maintain ambient temperature under load.

PHYSICAL DIMENSIONS

Dimensions: H19.56 x W21.84 x D41 cm (7.70 x 8.6 x 16")

Weight: 14.74 kg (32.5 lbs)

Input/Output: Terminal Blocks in permanently attached junction box.



PROTECTION

Output Over-Voltage: Shutdown at 120% Nominal Output Voltage, Recycle of input voltage required to reset OVP circuit.

Output Over current/Short Circuit Protection: Electronic with automatic recovery

Over-Temperature: Over temperature shutdown with auto recovery

Input Reverse Polarity: AC fused internally

EXTERNAL CONTROL

Power Plant Controller: Compatible with TDI system controllers.

AC Fail: AC OK, TTL compatible alarm

Output Good: Output Good, TTL compatible alarm

Output voltage may be programmed by 0-5V input

SAFETY AND REGULATORY AGENCY SPECIFICATIONS

Input Leakage Current to Safety Ground: <3.5mA @ 275VAC

Input to Ground Isolation Voltage: 1500VAC

Input to Output Isolation Voltage: 3000VAC

Output to Ground Isolation Voltage: 500VAC

RoHS: Compliant (Lead Solder Exemption Directive, RoHS 5))

ELECTRO-MAGNETIC COMPATIBILITY

Conducted and Radiated Emissions: FCC Part 15, Subpart j, Class A; and EN55022, Class A

Harmonics: EN61000-3-2

Static Discharge: EN61000-4-2, Class 3, stand-alone

RF Field Susceptibility: EN61000-4-3, Class 3

Fast Transient/Burst: EN61000-4-4, Class 3 (2kV)

Surge: EN61000-4-5, Class 4 (2kV L-L, 4kV L-EARTH)

(Units tested to 8kV surge L-L and L-EARTH)

OPTIONS: Solar Shield

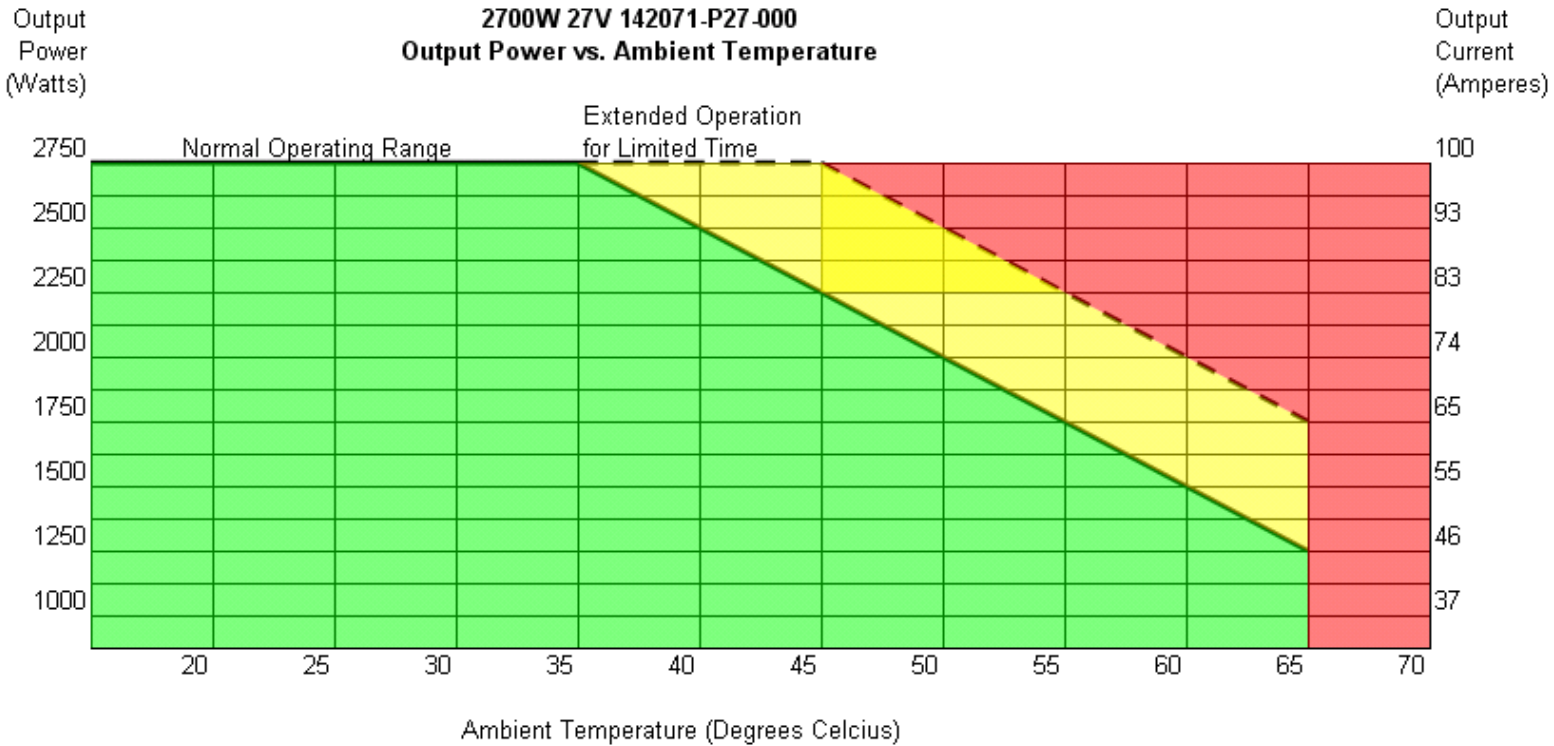
www.tdipower.com

DEMANDING APPLICATIONS DEMAND TDI POWER

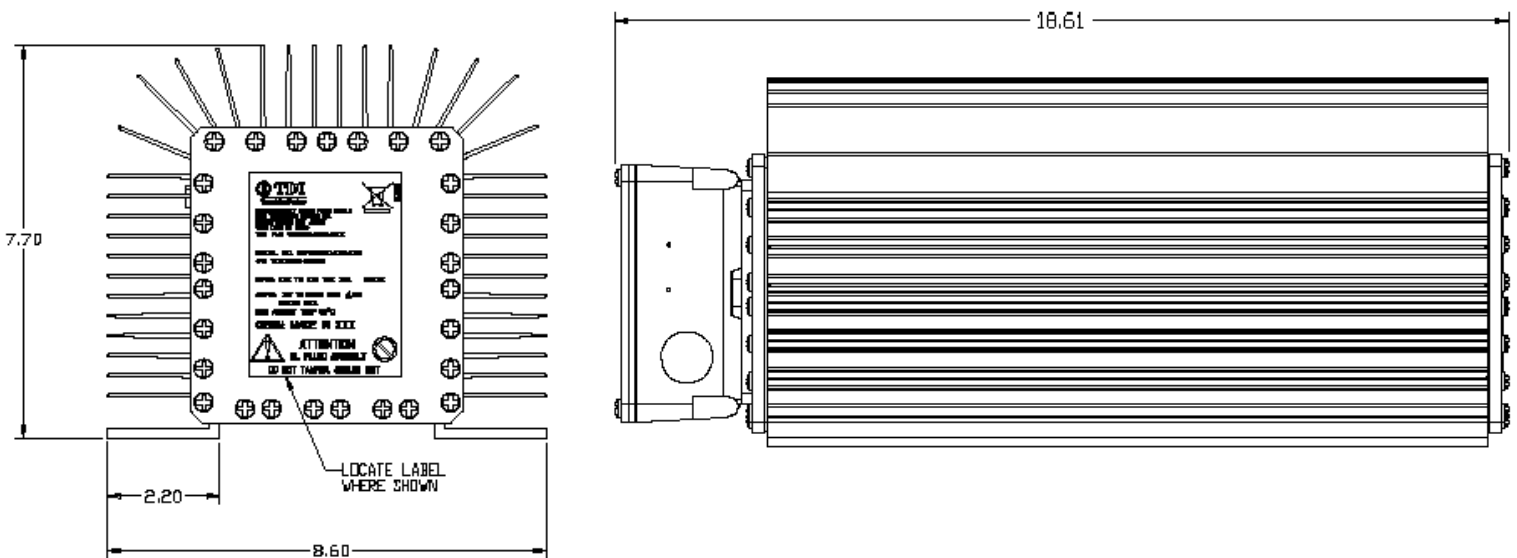
© Copyright 2007, Transistor Devices, Inc. 17501RSA

This document is believed to be correct at time of publication and TDI Power accepts no responsibility for consequences from printing errors or inaccuracies. Specifications are subject to change without notice.

OUTPUT POWER vs. TEMPERATURE



MECHANICAL INFORMATION



ORDERING INFORMATION

Part no.	Description
142071-P27-000	2700W, AC-DC ESPM, 27 Volt

www.tdipower.com

DEMANDING APPLICATIONS DEMAND TDI POWER