

**POWER CONVERSION PRODUCTS**  
**Ground Transport Series**

**Part No.: VTA00008-06**

**24VDC Power Supply Unit**

**FEATURES**

- ❑ Up to 400 Watts Output Power
- ❑ Wide DC Input Range / EMI Filtered
- ❑ European Norm EN50155 / RIA12, compliant
- ❑ Powers Wiper Systems on Rail Vehicles
- ❑ Transients Protection
- ❑ Continuous Short Circuit Protection
- ❑ Thermal Protection
- ❑ High Degree of Input/Output Isolation

This low voltage Power Supply Unit, used in Rolling Stock Equipment applications, features a low profile package of 14.1” W x 4.1” H x 5.1” D or 1.29Watt/in<sup>3</sup>. It has excellent load regulation, input filtering, and low output ripple as well as current limiting/thermal shutdown.

**Input Specifications:**

Steady State Input Voltage ..... 56 to 100 VDC  
 Voltage Surge ..... 252V, 20 mSec Max.  
 Inrush Current (72V in, Full Load) ..... 17 A peak maximum  
 Isolation (input/output to chassis) ..... Hi-Pot Tested @ 500 VDC

**Output Specifications:**

<u>Nominal</u> <u>Voltage</u>	<u>Maximum</u> <u>Current</u>	<u>DC</u> <u>Regulation</u>	<u>Ripple</u> <u>&amp; Noise</u>	<u>Maximum</u> <u>Power</u>
+ 24 VDC	16 A	±2%	< 150 mVp-p	384 W

Over-voltage Protection ..... 125% of nominal level  
 Current Limit ..... Set to between 105 & 125% of Full Load Current  
 Efficiency ..... > 80% @ 380 Watts  
 Voltage Stability (Long Term) ..... Typical ±0.1% from 0 to 100% Load Rate

**Physical Specifications:**

Weight ..... ≤ 7.14 lbs / 3.2 kgs  
Enclosure ..... Aluminum Alloy 5052-H32  
Finish ..... Allodyne Chemical film, Class 1, yellow  
Mounting Position ..... Any orientation  
Connections ..... Input: GTSL02R16-10P (J1)  
Output: GTSL02R16-10S (J2)

**Environmental Specifications:**

Temperature Operating ..... -40°C to +70°C with transient  
overtemperature +15°C for 10 minutes.  
Temperature Storage ..... -40°C to +85°C  
Cooling ..... Thermostatically Controlled Dual Fan  
Cooling, self contained in PSU  
Humidity ..... Designed to meet MIL-STD-810E, Method  
507, Procedure 1.  
Salt Fog ..... Designed to meet MIL-STD-810E, Method  
509.3  
Shock ..... 50m/(sec\*sec), 50 mSec, Half-sine pulse  
Vibration ..... 5 to 150Hz per EN50155

**Reliability:**

Reliability Prediction (MIL-HDBK-217F) ..... >100.000 Hours

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