



- Step-up DC-DC conversion
- 3000W of output power
- Wide input range 11 - 36Vdc
- 24 - 48Vdc standard output voltages
- High Efficiency - typically 86%
- Designed to protect the electronics from the ingress of dust
- Reduced system heat dissipation
- Comprehensive protection features
- I²C temperature sensor



LVD2014/35/EU
ROHS2011/65/EU



TVR3001 SERIES

POWER SUPPLY DESIGN EXCELLENCE

The TVR3001 is a 3000W DC-DC power conversion rack that has been developed specifically for harsh environmental conditions.

In a highly efficient configuration, each of the three individual modules within the rack contains two of Powerstax's versatile F501 full brick DC-DC converters, coupled with a two phase boost converter to provide a standalone power solution.

The three individual modules plug into a 19", 2U rack which can be used in a 19" cabinet of various heights (typically 1620mm, 1798mm and 2020mm).

High system efficiency provides a low level of heat dissipation allowing the unit to be forced air cooled with the cooling air separated from the electronics.

The TVR3001 is ideal for use in vehicle or remote applications. The units are designed to protect the electronics from the ingress of dust.

STANDARD MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	INPUT VOLTAGE
TVR3001-012-240	24V	125.00A	3000W	11-36VDC
TVR3001-012-280	28V	107.14A	3000W	11-36VDC
TVR3001-012-480	48V	62.50A	3000W	11-36VDC



SPECIFICATIONS

INPUT	
Voltage Range	11-36VDC (Suitable for MIL-STD-1275)
Current	325A for low range, recommended breaker rating 360A
Protection	Automatic input reverse polarity protection

OUTPUT	
Voltage	See model table
Current	see model table
Setting tolerance	±2%
Overcurrent protection	Electronic limiting
Output power	See model table
Efficiency	Typically 86%
Output ripple	<2% p-p

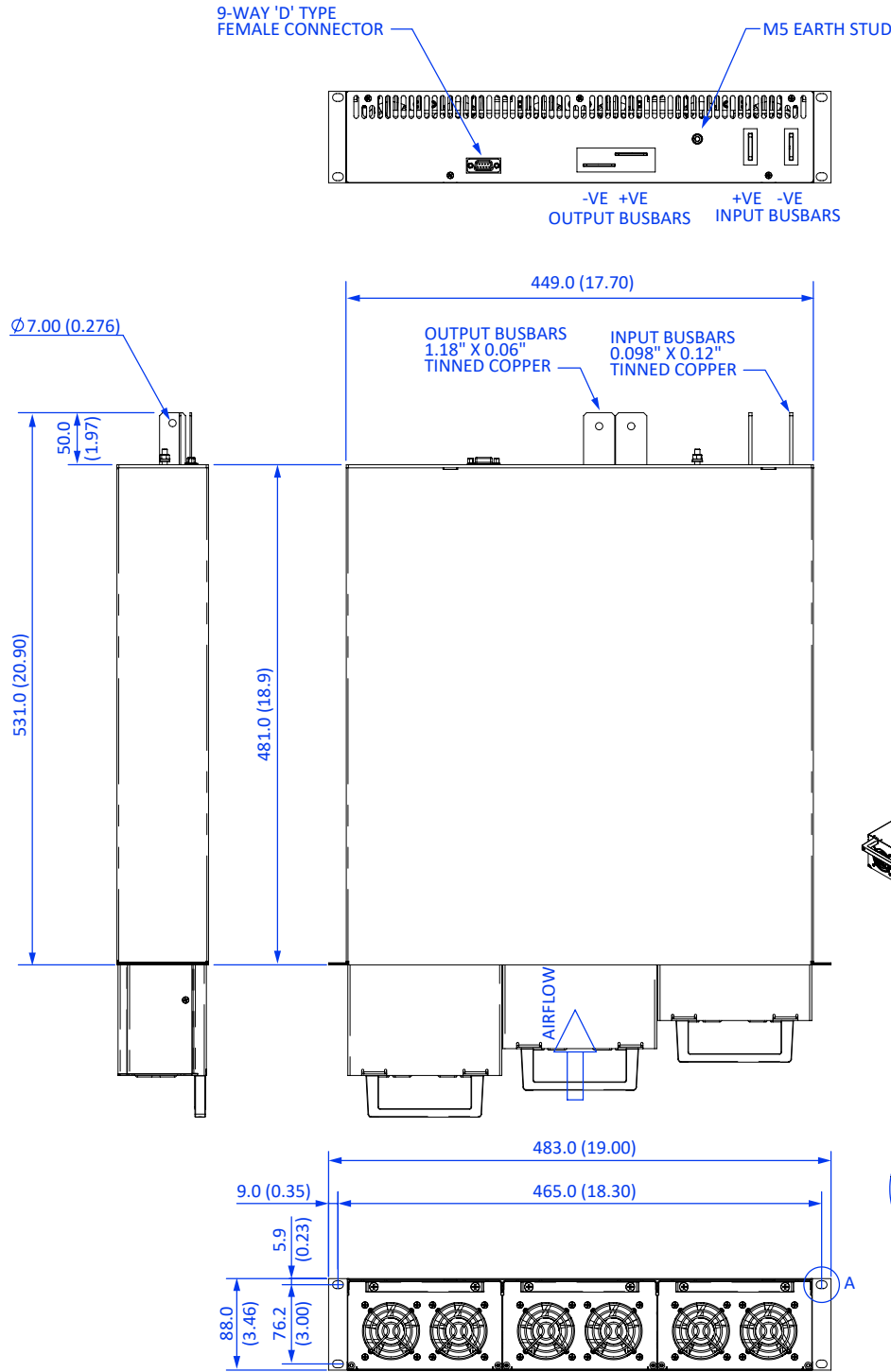
FEATURES	
Remote On/Off	Unit draws less than 15mA per module in the OFF condition (up to 28V input)
Temperature monitor	Output from an I ² C temperature sensor (TC74A) is available

SAFETY	
Standards	Complies with EN60950
Earthing	Chassis to be grounded
Isolation	Input to ground - 2200VDC Input to output/ground - 2200VDC Output to ground - 500VDC

ENVIRONMENTAL	
Cooling	Force cooled via integral fans
Operating Temperature	-25°C to +60°C, derating linearly to 50% from +50°C to +60°C
EMC	Designed to meet MIL-STD-461E tests CE102, RE101 & RE102
Bump & vibration	Designed to meet MIL-STD-810F Method 516.5 Procedure IV & Method 514.5 Procedure 1, Annex A, Category 20
Environment	Designed to meet MIL-STD-810F Method 506.4 Procedure 1 for rain & Method 510.4 Procedure II (blowing sand)

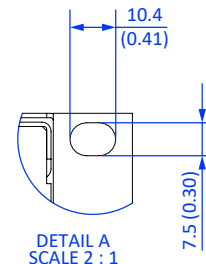
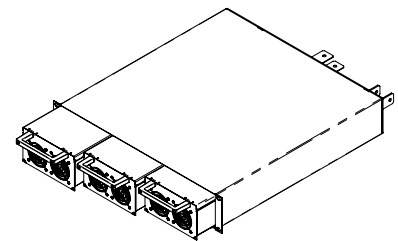


MECHANICALS



RACK SHOWN POPULATED WITH 3-OFF RTVS MODULES

TVR3001 SERIES



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