TRUMPower

TWM180 Series

180W Medical Grade AC/DC Power Supplies

FEATURES

- 90~264 VAC Universal Input
- 180W in 3" X 5" Footprint
- 0.9 to 0.95 Power Factor
- Body Floating (BF) Rated, MOOP Type
- IEC/EN//UL 60601-1 3rd Edition Approvals



ELECTRICAL SPECIFICATIONS

Input Voltage ..... 90~264 VAC
Input Frequency ..... 47~63 Hz
Input Current ..... 3A (rms) max. @ 115 VAC, 1.5A (rms) max. @ 230 VAC
Inrush Current ..... 50A max. @ 115 VAC, 100A max. @ 230 VAC at cold start +25°C
Earth Leakage Current ..... 100 µA max. @ 264 VAC
Power Factor ..... >0.95 @115 VAC, >0.9 @230 VAC
Output Power Ratings ..... See table
Output Voltage Regulation .. ±3%
Ripple and Noise* 240mV

* R&N are measured at 20 MHz bandwidth with a 10µF electrolytic capacitor and with a 0.1µF ceramic capacitor in parallel.

GENERAL SPECIFICATIONS

Efficiency ..... >87% at full load, 115 VAC
Switching Frequency ..... 45~75KHz
Hold-up Time ..... >20 ms at 115 VAC, 180W load
Operating Temperature ..... 0°C to +60°C
Derating ..... Derate linearly 2.5%/°C from +41°C to +60°C @ convection and +51°C to +60°C @15 CFM
Storage Temperature ..... -40°C to +85°C
Operating Humidity ..... 5% to 95% non-condensing
Short-Circuit Protection ..... Auto-recovery
Overload Protection ..... Set at 110% to 150% of the maximum rating, Auto-recovery
Overvoltage Protection ..... Shutdown and latch off, AC recycle
Withstand Voltage ..... 4,000 VAC from input to output, 1,500 VAC from input to ground, 500 VAC from output to ground
MTBF ..... 123K hours at full load and 25°C ambient temperature calculated per MIL-HDBK-217F

STANDARDS & COMPLIANCES

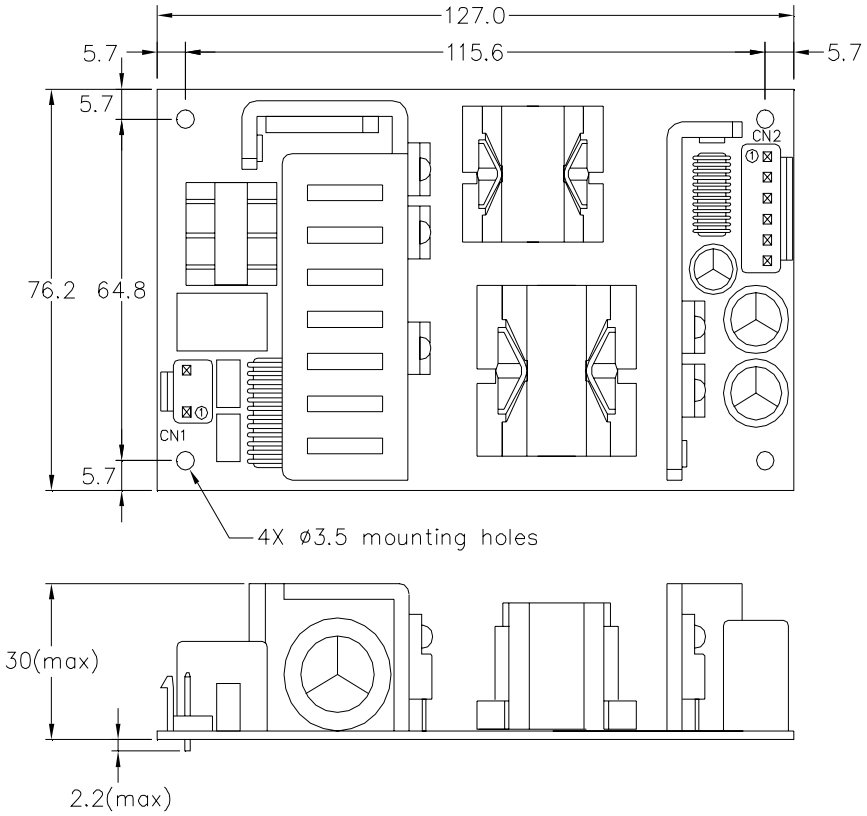
EMC Standards ..... EN 60601-1-2, EN 55011 Class B, FCC Part 18 Class B
Safety Standards ..... IEC/EN/UL 60601-1 3rd Edition, ANSI/AAMI ES 60601-1: 2005, CAN/CSA C22.2 No. 60601-1:08
Agency Approvals ..... CSA, CUS, TUV, CE, CB, FCC
Other Compliance ..... RoHS

MODELS LIST

Product No.	Output Voltage	Maximum Load		Regulation	Max. Output
		@ Convection	@ 15 CFM		
TWM180-12	12V	10A	15A	±3%	180W
TWM180-15	15V	8A	12A	±3%	180W
TWM180-19	19V	6.32A	9.48A	±2%	180W
TWM180-24	24V	5A	7.5A	±2%	180W
TWM180-28	28V	4.29A	6.43A	±2%	180W
TWM180-48	48V	2.5A	3.75A	±2%	180W

Tumbler Technologies + TRUMPower
3350 Scott Blvd., Building 13 • Santa Clara, California 95054, USA • 408-988-6616 • sales@trumpower.com • www.TRUMPower.com

MECHANICAL SPECIFICATIONS



Notes:
1. Dimensions in mm
2. Tolerance: ±0.5mm

INPUT & OUTPUT CONNECTORS

CN1: Input Connector

JST B3P-VH-B (3.96mm pitch) or equivalent; mates with JST VHR-3N or equivalent.

Pin #	Function
1	AC Neutral
2	AC Line

CN2: Output Connector

JST B6P-VH-B (3.96mm pitch) or equivalent; mates with JST VHR-6N or equivalent.

Pin #	Function
1, 2, 3	RTN
4, 5, 6	+Vo

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