



TR36M SERIES

36W MEDICAL SWITCHING ADAPTER



Features

- * Universal Input Range 80~264VAC
 - * Approved EN55011, FCC CFR47 Part15 Class B
 - * Meets EN60335
 - * Approved EN60601-1-11 for Home Healthcare Applications
 - * Low Leakage Current < 80uA
 - * Continuous Short Circuit Protection
 - * Over Voltage Protection
 - * No Load Power Consumption < 75mW
 - * 2 MOPP Class II
 - * Meet CoC Tier 2 & DoE Level VI
- (Output Cable Length $\leq$ 1800mm)
(TR36M050: Output Cable Length $\leq$ 1220mm)



Ordering Information

TR36MXXX -XX	X	XX
Model No.	DC Plug Type	DC Cable Length and Type
	G: UL1571 WITH OVP	
	E: UL1185 WITH OVP	
	* 16AWG / UL1571 or Equivalent for Vo: 5V	01: 720mm
	* 18AWG / UL1571 or Equivalent for Vo: 9V, 12V, 13.5V	02: 1220mm
	* 20AWG / UL1571 or Equivalent for Vo: 15V, 18V, 24V	03: 1800mm
	* 20AWG / UL1185 or Equivalent for Vo: 36V, 48V	11: 720mm with Ferrite Core
		12: 1220mm with Ferrite Core
		13: 1800mm with Ferrite Core

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	% EFF. (Typ.) NOTE 5
TR36M050	5V	5.0A	100mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 6\%$	85%
TR36M090	9V	3.3A	120mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$	88%
TR36M120	12V	2.5A	120mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TR36M135	13.5V	2.4A	130mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TR36M150	15V	2.4A	150mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TR36M180	18V	2.0A	180mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TR36M240	24V	1.5A	240mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TR36M360	36V	1.0A	360mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TR36M480	48V	0.75A	480mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%

Specifications

INPUT SPECIFICATIONS:

Voltage 80~264Vac(see Derating Curve)
 120~370Vdc
 Frequency 47 to 63Hz
 Input Current 0.9A max.
 Inrush Current Cold start@25°C 100A max. @240Vac
 Leakage Current 80uA max.

OUTPUT SPECIFICATIONS:

Hold-up Time 10ms typ. @115Vac
 Short Circuit Protection Hiccup Mode Continuous(Auto Recovery)
 Over Voltage Protection IC Component to Clamp(Auto Recovery)
 Temperature Coefficient $\pm 0.05\%/^{\circ}\text{C}$

GENERAL SPECIFICATIONS:

Isolation Input to output 4,000VAC
 Operating Temperature -30 ~ 60°C (see derating curve)
 Storage Temperature -30~85°C
 Humidity 93% RH max. Non condensing
 Cooling Natural Convection
 Switching Frequency 65KHz Typical
 MTBF MIL-HDBK-217F, GB, 25°C/115VAC 1000Khrs max.
 Altitude 5000m
 Dimensions 3.937x1.771x0.886 inches (100.00x45.00x22.50mm)
 Weight 150g(0.33 Pounds)

SAFETY AND EMC:

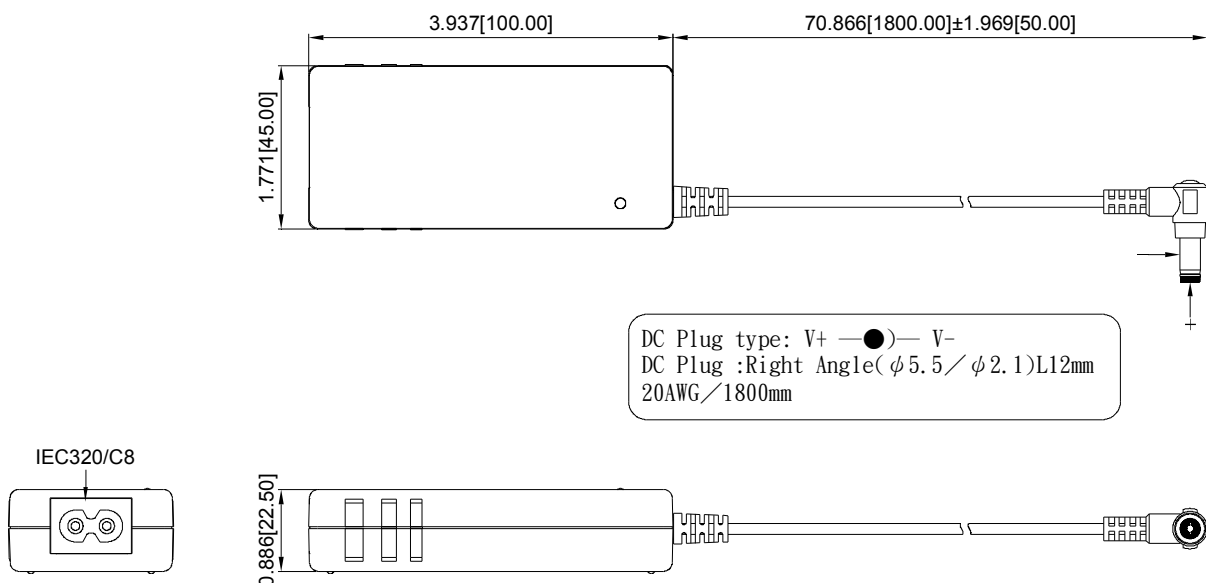
Emission and Immunity (Ed4.0) EN55011, EN60601-1-2
 EN61000-3-2, EN61000-3-3, IEC61000-4-2, 3, 4, 5, 6, 8, 11
 FCC CFR47 Part 15 Class B
 Safety Approved (Ed.3.1) IEC60601-1:2005+A1, EN60601-1-11
 EN60601-1:2006+A11:2011+A1+A12
 ANSI/AAMI ES60601-1:2005/A1:2012

Mechanical Specification

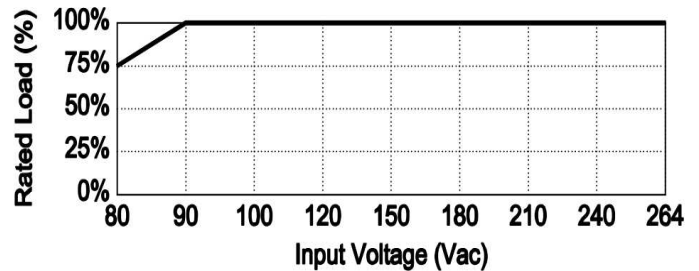
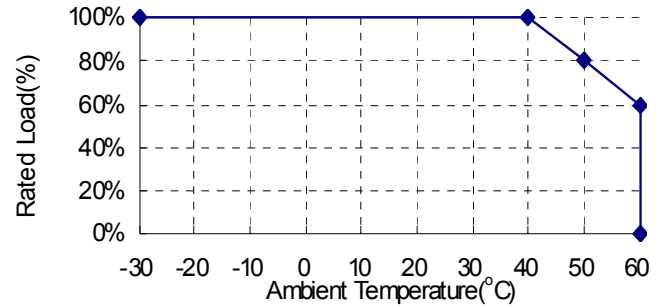
All Dimensions are in inches[mm]

Tolerance:Inches:X.XXX $\pm$ 0.02

Millimeters:X.XX $\pm$ 0.5



TR36M Series Derating Curve



NOTE:

1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple & noise measuring @20MHz BW.
2. Voltage setpoint at 60% full load.
3. Line regulation is measured from 100Vac to 240Vac full load.
4. Load regulation is measured from 60% to full load and from 60% to 20% load (60% $\pm$ 40% load).
5. Efficiency measured at 75% load and input voltage is 230Vac.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cincon:

TR36M480-36G01-Level-VI	TR36M120-01G02-Level-VI	TR36M135-39E03-Level-VI	TR36M240-48G01-Level-VI
TR36M050-36E02-Level-VI	TR36M240-48E02-Level-VI	TR36M180-12E01-Level-VI	TR36M135-48G01-Level-VI
TR36M480-35E02-Level-VI	TR36M090-11G12-Level-VI	TR36M360-36E13-Level-VI	TR36M240-02E12-Level-VI
TR36M050-40E11-Level-VI	TR36M120-40G13-Level-VI	TR36M240-48E11-Level-VI	TR36M120-01G11-Level-VI
TR36M240-02G13-Level-VI	TR36M050-01E11-Level-VI	TR36M050-36E12-Level-VI	TR36M480-11G11-Level-VI
TR36M150-02G11-Level-VI	TR36M120-40E02-Level-VI	TR36M240-01G11-Level-VI	TR36M480-35G02-Level-VI
TR36M050-35G11-Level-VI	TR36M120-02E01-Level-VI	TR36M240-49G13-Level-VI	TR36M135-35E01-Level-VI
TR36M120-40E12-Level-VI	TR36M135-36G03-Level-VI	TR36M180-01G03-Level-VI	TR36M480-35E12-Level-VI
TR36M120-02E12-Level-VI	TR36M135-12E11-Level-VI	TR36M135-02G02-Level-VI	TR36M135-01E11-Level-VI
TR36M180-11E03-Level-VI	TR36M360-36G02-Level-VI	TR36M135-40E03-Level-VI	TR36M240-48G13-Level-VI
TR36M135-48E02-Level-VI	TR36M240-40E11-Level-VI	TR36M120-02E13-Level-VI	TR36M180-12G12-Level-VI
TR36M135-36E11-Level-VI	TR36M240-36G02-Level-VI	TR36M180-11G03-Level-VI	TR36M050-11G12-Level-VI
TR36M135-48E11-Level-VI	TR36M120-12E01-Level-VI	TR36M135-02E12-Level-VI	TR36M240-40E01-Level-VI
TR36M050-01G11-Level-VI	TR36M090-12E12-Level-VI	TR36M120-12E12-Level-VI	TR36M120-48E02-Level-VI
TR36M090-12G03-Level-VI	TR36M180-01E13-Level-VI	TR36M360-02G13-Level-VI	TR36M150-12E01-Level-VI
TR36M240-48E03-Level-VI	TR36M120-01G03-Level-VI	TR36M120-49G11-Level-VI	TR36M180-01E11-Level-VI
TR36M135-01G11-Level-VI	TR36M240-49G03-Level-VI	TR36M480-36E03-Level-VI	TR36M120-12G12-Level-VI
TR36M120-36G13-Level-VI	TR36M360-35G12-Level-VI	TR36M480-01E02-Level-VI	TR36M240-36E01-Level-VI
TR36M050-48E02-Level-VI	TR36M240-12E13-Level-VI	TR36M240-11E01-Level-VI	TR36M150-11E13-Level-VI
TR36M480-49E11-Level-VI	TR36M150-01G01-Level-VI	TR36M050-11G02-Level-VI	TR36M120-48G02-Level-VI
TR36M360-40G01-Level-VI	TR36M480-35E13-Level-VI	TR36M050-36G11-Level-VI	TR36M120-02G03-Level-VI
TR36M135-01E01-Level-VI	TR36M050-40G12-Level-VI	TR36M135-36G01-Level-VI	TR36M480-01E12-Level-VI
TR36M090-11E03-Level-VI	TR36M480-48E12-Level-VI	TR36M090-01G13-Level-VI	TR36M360-01G13-Level-VI
TR36M150-12E13-Level-VI	TR36M360-36G03-Level-VI	TR36M240-39G12-Level-VI	TR36M135-35G12-Level-VI
TR36M150-02E11-Level-VI	TR36M090-01G12-Level-VI	TR36M150-02E03-Level-VI	TR36M360-48E13-Level-VI