



TR15RAM SERIES

15W Medical SWITCHING ADAPTER

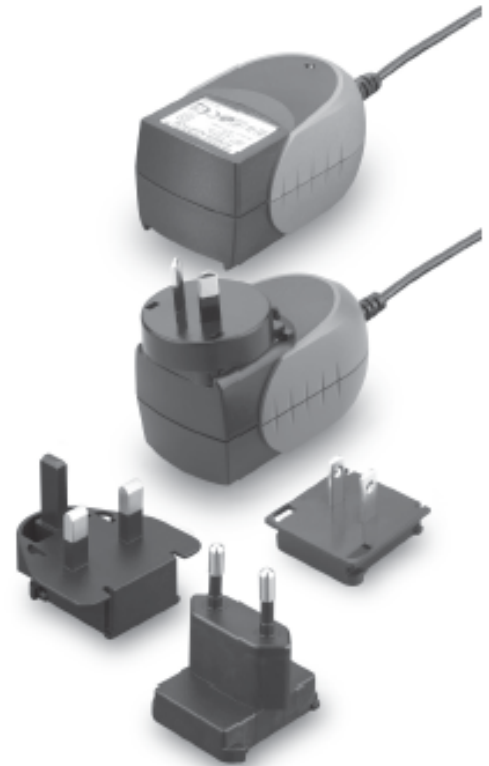


Features

- * Universal Input Range 90~264VAC
- * Meets EN60601-1 and EN55011 Class "B"
- * Continuous Short Circuit Protection
- * Interchangeable AC Plugs
- * Over Voltage Protection
- * Efficiency & Standby Power Meet Level V (Output Cable Length \leq 1800mm)
- * Meets 2MOPP

Ordering information

TR15RAMXXX - XX	E XX	-	XX	-BK
Model No.	DC Plug Type	DC Cable Length and Type	Color of Overmold Case	
		01: 720mm	BE: Blue	
		02: 1220mm	GY: Gray	
		03: 1800mm	RD: Red	
		11: 720mm with Ferrite Core	PE: Purple	
		12: 1220mm with Ferrite Core	OR: Orange	
		13: 1800mm with Ferrite Core		
		* 18AWG / UL1185		



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
TR15RAM050	5 V	2.0 A	1%	$\pm 3\%$	$\pm 1\%$	$\pm 4\%$	73%
TR15RAM120	12 V	1.1 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	82%
TR15RAM150	15 V	1.0 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	81%
TR15RAM240	24 V	625 mA	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	82%

Specifications are subject to change without notice.

Specifications

INPUT SPECIFICATIONS:

Voltage	90~264Vac
Frequency	47 to 63Hz
Inrush Current	50A max. @ 240Vac
Leakage Current	0.1mA max.

OUTPUT SPECIFICATIONS:

Hold-up Time	10ms typ. @115Vac
Temperature Coefficient	±0.05%/°C
Short Circuit Protection	Continuous (Auto Recovery)
Over Voltage Protection	TVS Component to Clamp

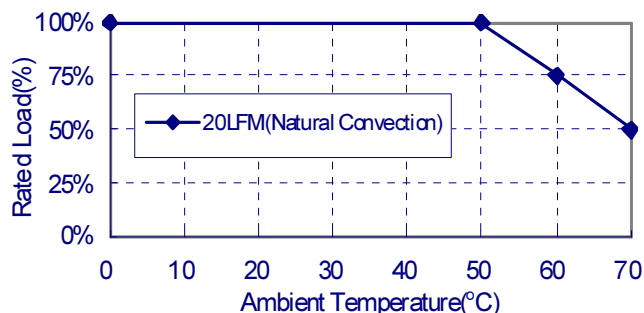
GENERAL CHARACTERISTICS:

Isolation	Input to output = 5,656VDC
Switching Frequency	95KHz typical
Operating Temperature	0 - 70°C (see derating curve)
Storage Temperature	-20 - 85°C
Cooling	Natural Convection
MTBF	MIL-HDBK-217F, GB, at 25°C/115VAC 200Khrs min.
Humidity	93% RH max. Non condensing
Altitude	3000m
Dimensions	3.173x1.885x1.704 inches (80.60x47.90x43.30mm)
Weight	130g(0.29 Pounds)

SAFETY AND EMC:

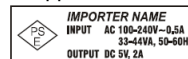
Emission and Immunity (Ed. 4.0)	EN55011 Class B, FCC47 CFR Part 15 EN60601-1-2, EN61000-3-2, 3, IEC61000-4-2, 3, 4, 5, 6, 8, 11
Safety (Ed. 3.1)	IEC60601-1:2005+A1 EN60601-1:2006+A11:2011+A1+A12, UL ANSI/AAMI ES60601-1: 2005

TR15RAM Series Derating Curve



NOTE:

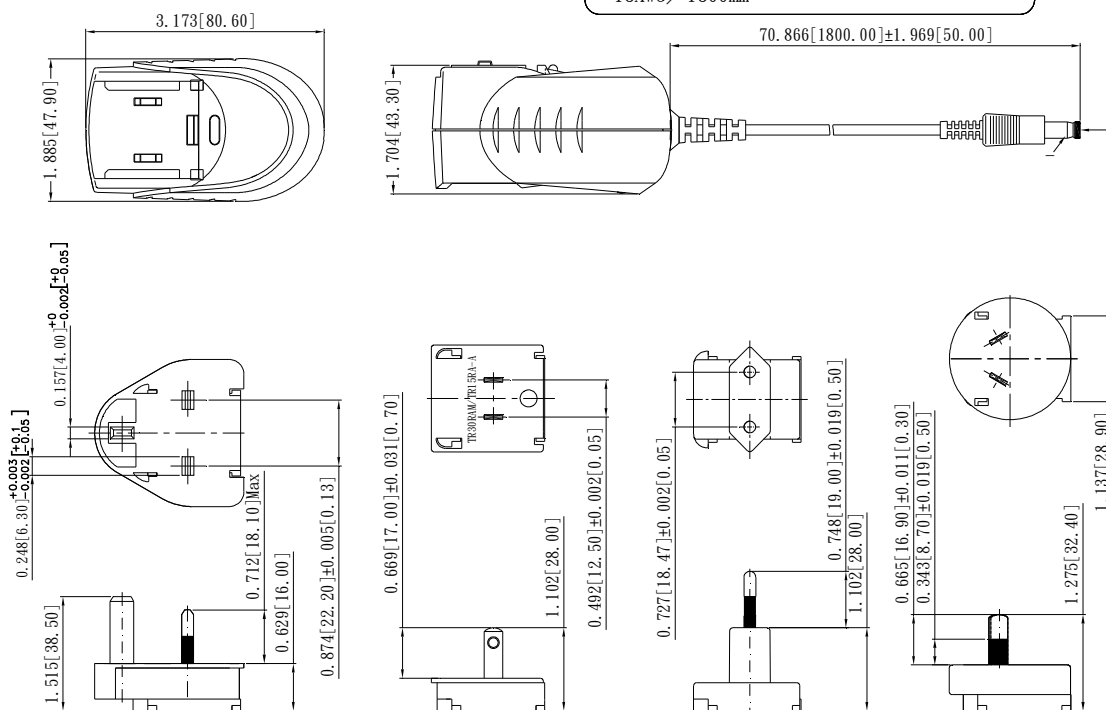
1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
2. Voltage setpoint at 60% full load.
3. Line regulation measured from 100Vac to 240Vac full load.
4. Load regulation measured from 60% to full load and from 60% to 20% load (60% +/- 40% load).
5. Typical efficiency at 230VAC and full load at 25°C.
6. "Various TR Series adapters are PSE certified. PSE certification alone is not sufficient for importation into Japan. A valid PSE mark must contain the name of the importer as shown in the example below. If PSE mark is required, the name of the registered importer must be supplied to Cincon on order placement. Product labels will not contain PSE mark if importer name is not supplied. Consult factory or local representative for details".



Mechanical Specification

All Dimensions are in inches(mm)
Tolerance: Inches: X.XXX±0.02
Millimeters: X.XX±0.5

DC Plug type: V+ —●— V-
DC Plug :Straight(φ5.5/φ2.1) L12mm
18AWG/1800mm



Typical at 25°C, nominal line and 75% load, unless otherwise Specified