

TR30M

S E R I E S

30W MEDICAL SWITCHING ADAPTER



Features

- Universal Input Range 90~264VAC
- Meets EN60601-1 and EN55011 Class B
- Continuous Short Circuit Protection
- Over Voltage Protection
- CEC Level IV except TR30M050 Meets CEC Level III
(Output Cable Length \leq 1800mm)
(TR30M050: Output Cable Length \leq 720mm)
- Efficiency & Standby Power Meet Level V
(Output Cable Length \leq 1800mm)
(TR30M050: Output Cable Length \leq 720mm)
(TR30M090: Output Cable Length \leq 1220mm)
- Meets 2 MOPP

Ordering information

TR30MXXX -	XX	E	XX
Model No.	DC Plug Type		DC Cable Length and Type
	* Please see Page 243 for more detailed descriptions		01 : 720mm 02 : 1220mm 03 : 1800mm 11 : 720mm with Ferrite Core 12 : 1220mm with Ferrite Core 13 : 1800mm with Ferrite Core * 18AWG / SPT1

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 1	VOLTAGE SETPOINT NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	%EFF. (Typ.) NOTE 5
TR30M050	5 V	4 A	50 mVp-p	\pm 2%	\pm 1%	\pm 6%	76%
TR30M090	9 V	3 A	90 mVp-p	\pm 2%	\pm 1%	\pm 4%	82%
TR30M120	12 V	2.5 A	120 mVp-p	\pm 2%	\pm 1%	\pm 3%	82%
TR30M150	15 V	2 A	150 mVp-p	\pm 2%	\pm 1%	\pm 3%	85%
TR30M180	18 V	1.65 A	180 mVp-p	\pm 2%	\pm 1%	\pm 2%	85%
TR30M240	24 V	1.25 A	240 mVp-p	\pm 2%	\pm 1%	\pm 2%	84%

Specifications

INPUT SPECIFICATIONS:

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

OUTPUT SPECIFICATIONS:

Holdup Time 16ms typ. @115Vac
 Short Circuit Protection Continuous(Auto Recovery)
 Over Voltage Protection TVS Component to Clamp
 Temperature Coefficient $\pm 0.05\%/^{\circ}\text{C}$

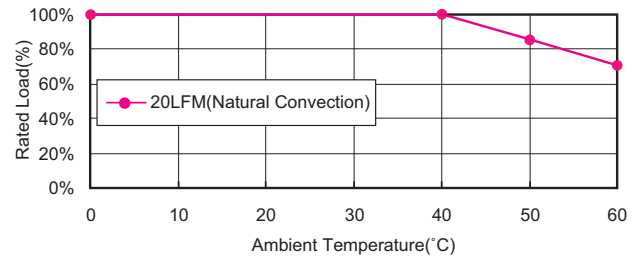
GENERAL SPECIFICATIONS:

Isolation Input to output = 5,656VDC
 Operating Temperature $0^{\circ}\text{C}\sim 60^{\circ}\text{C}$ (see derating curve)
 Storage Temperature $-20\sim 85^{\circ}\text{C}$
 Humidity 93% RH max. Non condensing
 Cooling Natural Convection
 Switching Frequency 70KHz
 MTBF MIL-HDBK-217F, GB, at $25^{\circ}\text{C}/115\text{VAC}$ 300K hrs min.
 Altitude 3000m
 Dimensions 4.331x1.969x1.181 inches (110.00x50.00x30.00 mm)
 Weight 220g (0.49 Pounds)

SAFETY AND EMC:

Emission and Immunity EN55011, EN60601-1-2
 EN61000-3-2, EN61000-3-3
 Safety IEC60601-1:2005, EN60601-1:2006,
 ANSI/AAMI ES60601-1:2005

TR30M Series Derating Curve



NOTE:

1. Add a 0.1 μF ceramic capacitor and a 10 μF E.L. capacitor to output for Ripple & Noise measurement @20MHz BW.
2. Voltage setpoint at 60% rated load and 25°C .Ta.
3. Line regulation measured from High Line to Low Line with full load.
4. Load regulation measured from 60% to 100% full load and from 60% to 20% load (60% +/- 40% full load).
5. Typical efficiency at 230 VAC 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 In Inches(mm)
 Tolerance Inches: x.xxx= ± 0.02
 Millimeters: x.xx= ± 0.5

