



TR15RA SERIES

15W SWITCHING ADAPTER

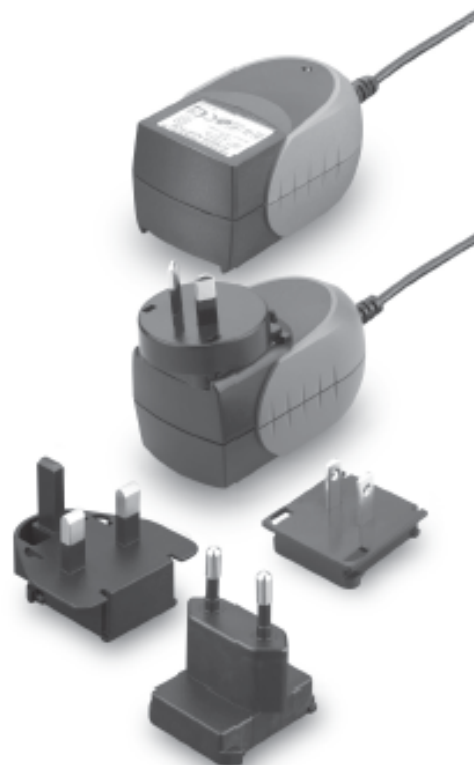


Features

- * Universal Input Range 90~264VAC
- * Two Color Case
- * Meets EN55022 Class "B"
- * Continuous Short Circuit Protection
- * Interchangeable AC Plugs
- * Over Voltage Protection
- * Meet CoC V5 Tier 2 & DoE Level VI
(Output Cable Length $\leq$ 1800mm)

Ordering information

TR15RAXXX	-	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		OE: 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. (AVG.)
TR15RA050	5 V	2.0 A	1%	$\pm 3\%$	$\pm 1\%$	$\pm 4\%$	79.01%
TR15RA059	5.9 V	1.7 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 3\%$	79.03%
TR15RA090	9 V	1.4 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	83.55%
TR15RA120	12 V	1.1 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	83.81%
TR15RA150	15 V	1.0 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	84.51%
TR15RA180	18 V	830 mA	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	84.49%
TR15RA240	24 V	625 mA	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	84.51%

Specifications

INPUT SPECIFICATIONS:

Voltage 90~264Vac
 Frequency 47 to 63Hz
 Inrush Current 90A max. @240Vac
 Leakage Current 0.25mA max.

OUTPUT SPECIFICATIONS:

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

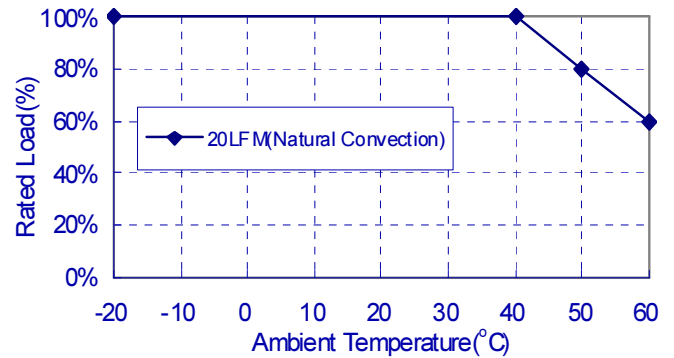
GENERAL SPECIFICATIONS:

Isolation Input to output = 4,242VDC
 Operating Temperature -20 ~ 60 $^{\circ}\text{C}$ (see derating curve)
 Storage Temperature -20~85 $^{\circ}\text{C}$
 Humidity 93% RH max. Non condensing
 Cooling Natural Convection
 Switching Frequency 65KHz Typical
 MTBF MIL-HDBK-217F, GB, at 25 $^{\circ}\text{C}$ /115VAC 200Khrs min.
 Altitude 2000m
 Dimensions 3.173x1.885x1.705 inches (80.60x47.90x43.30mm)
 Weight 150g(0.33 Pounds)

SAFETY AND EMC:

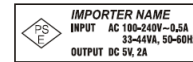
Emission and Immunity EN55022 Class B, EN61000-6-3
 EN61000-3-2, EN61000-3-3, EN55024, EN61204-3, EN61000-6-1
 Safety IEC60950-1, EN60950-1, UL60950-1

TR15RA Series Derating Curve



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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. "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".

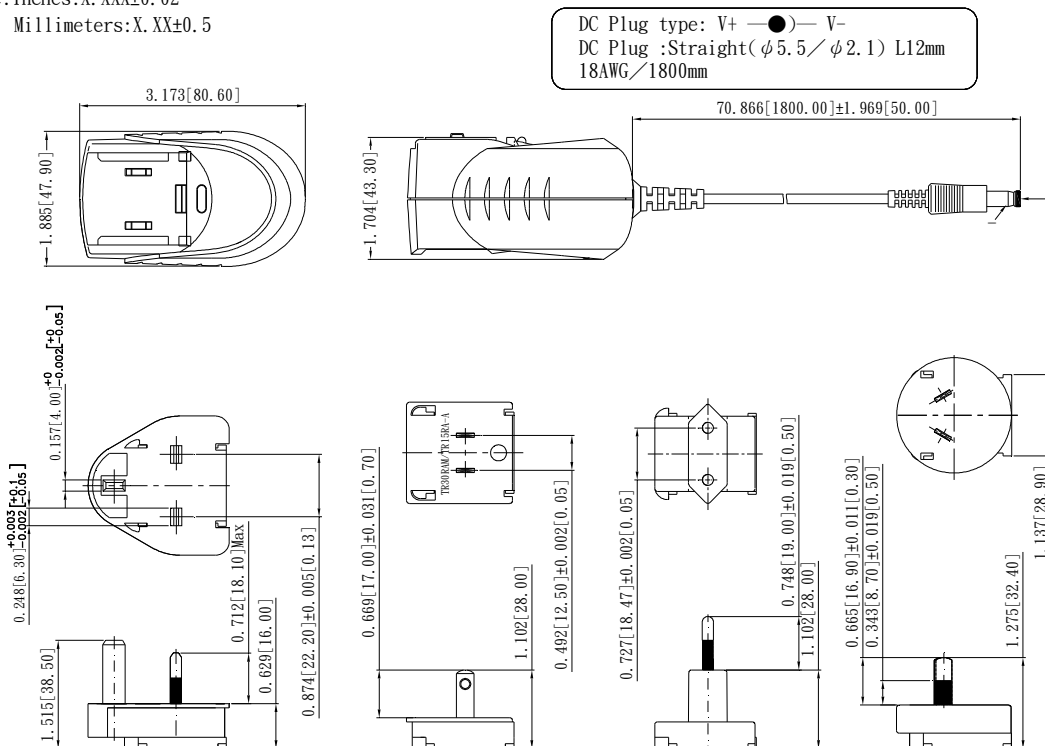


Mechanical Specification

All Dimensions are in inches(mm)

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

Millimeters: X.XX $\pm$ 0.5



Typical at 25 $^{\circ}\text{C}$, nominal line and 75% load, unless otherwise Specified

Mouser Electronics

Authorized Distributor

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Cincon:

<u>TR15RA120-11E03-GY-BK-Level-VI</u>	<u>TR15RA090-12E03-GY-BK-Level-VI</u>	<u>TR15RA150-01E03-GY-BK-Level-VI</u>
<u>TR15RA150-12E03-GY-BK-Level-VI</u>	<u>TR15RA090-11E03-GY-BK-Level-VI</u>	<u>TR15RA240-01E03-GY-BK-Level-VI</u>
<u>TR15RA240-12E13-GY-BK-Level-VI</u>	<u>TR15RA050-02E03-GY-BK-Level-VI</u>	<u>TR15RA240-36E03-GY-BK-Level-VI</u>
<u>TR15RA240-48E03-GY-BK-Level-VI</u>	<u>TR15RA180-01E03-GY-BK-Level-VI</u>	<u>TR15RA120-48E03-GY-BK-Level-VI</u>
<u>TR15RA150-02E03-GY-BK-Level-VI</u>	<u>TR15RA180-11E03-GY-BK-Level-VI</u>	<u>TR15RA180-12E03-GY-BK-Level-VI</u>
<u>TR15RA050-12E03-GY-BK-Level-VI</u>	<u>TR15RA240-49E03-GY-BK-Level-VI</u>	<u>TR15RA120-02E03-GY-BK-Level-VI</u>
<u>TR15RA180-02E03-GY-BK-Level-VI</u>	<u>TR15RA120-35E03-GY-BK-Level-VI</u>	<u>TR15RA120-12E03-GY-BK-Level-VI</u>
<u>TR15RA120-39E03-GY-BK-Level-VI</u>	<u>TR15RA240-11E03-GY-BK-Level-VI</u>	<u>TR15RA050-01E03-GY-BK-Level-VI</u>
<u>TR15RA120-01E03-GY-BK-Level-VI</u>	<u>TR15RA240-12E03-GY-BK-Level-VI</u>	<u>TR15RA240-40E03-GY-BK-Level-VI</u>
<u>TR15RA120-36E03-GY-BK-Level-VI</u>	<u>TR15RA120-49E03-GY-BK-Level-VI</u>	<u>TR15RA059-11E03-GY-BK-Level-VI</u>
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