



# TR30RA SERIES

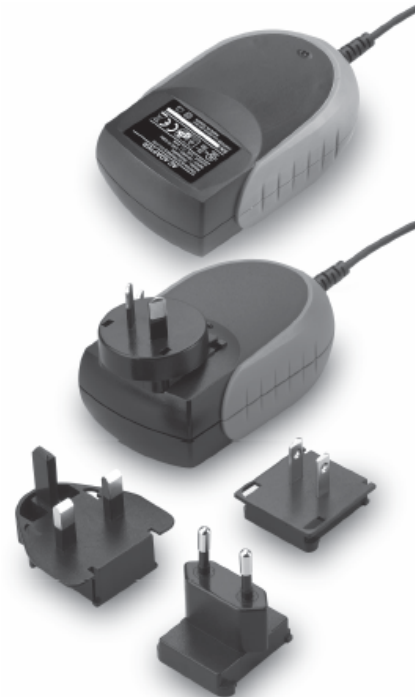
## 30W SWITCHING ADAPTER



\* Not CE certified for the EU"

### Features

- \* Universal Input Range 90-264VAC
- \* Interchangeable AC Plugs
- \* Meets EN61204-3 Class B and CISPR/FCC Class B
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* Provide PSE Mark (Option)



### Ordering information

TR30RAXXX	- XX	E XX	-	XX	-BK
Model No.	DC Plug Type	DC Cable Length and Type		Color of Overmold Case	
	* Please see Page 213 for more detailed descriptions	01: 720mm		BE: Blue	
		02: 1200mm		GY: Gray	
		03: 1800mm		RD: Red	
		11: 7200mm with Ferrite Core		PE: Purple	
		12: 1200mm with Ferrite Core		OR: Orange	
		13: 1800mm with Ferrite Core			

MODEL	OUTPUT VOLTAGE	MAX. LOAD	MIN. LOAD	RIPPLE & NOISE	VOLTAGE ACCURACY	LINE REGULATION	LOAD REGULATION	%EFF.
TR30RA050	5.0V	5.0A	0A	1%	±4%	±1%	±6%	68% Typ.
TR30RA090	9.0V	3.3A	0A	1%	±2%	±1%	±3%	77% Typ.
TR30RA120	12V	2.5A	0A	1%	±2%	±1%	±2%	78% Typ.
TR30RA150	15V	2.0A	0A	1%	±2%	±1%	±2%	80% Typ.
TR30RA180	18V	1.65A	0A	1%	±2%	±1%	±2%	80% Typ.
TR30RA240	24V	1.25A	0A	1%	±2%	±1%	±2%	83% Typ.

# Specifications

## INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac  
 Frequency ..... 47 to 63Hz  
 Input Current ..... 100Vac/0.8A max., 240Vac/0.5A max.  
 Inrush Current ..... 50A max. @240Vac  
 Leakage Current ..... 0.25mA max.

## OUTPUT SPECIFICATIONS:

Holdup Time ..... 10ms typ. @115Vac  
 Short Circuit Protection ..... Hiccup Mode Continuous(Auto Recovery)  
 Over Voltage Protection ..... TVS Component to Clamp

## GENERAL SPECIFICATIONS:

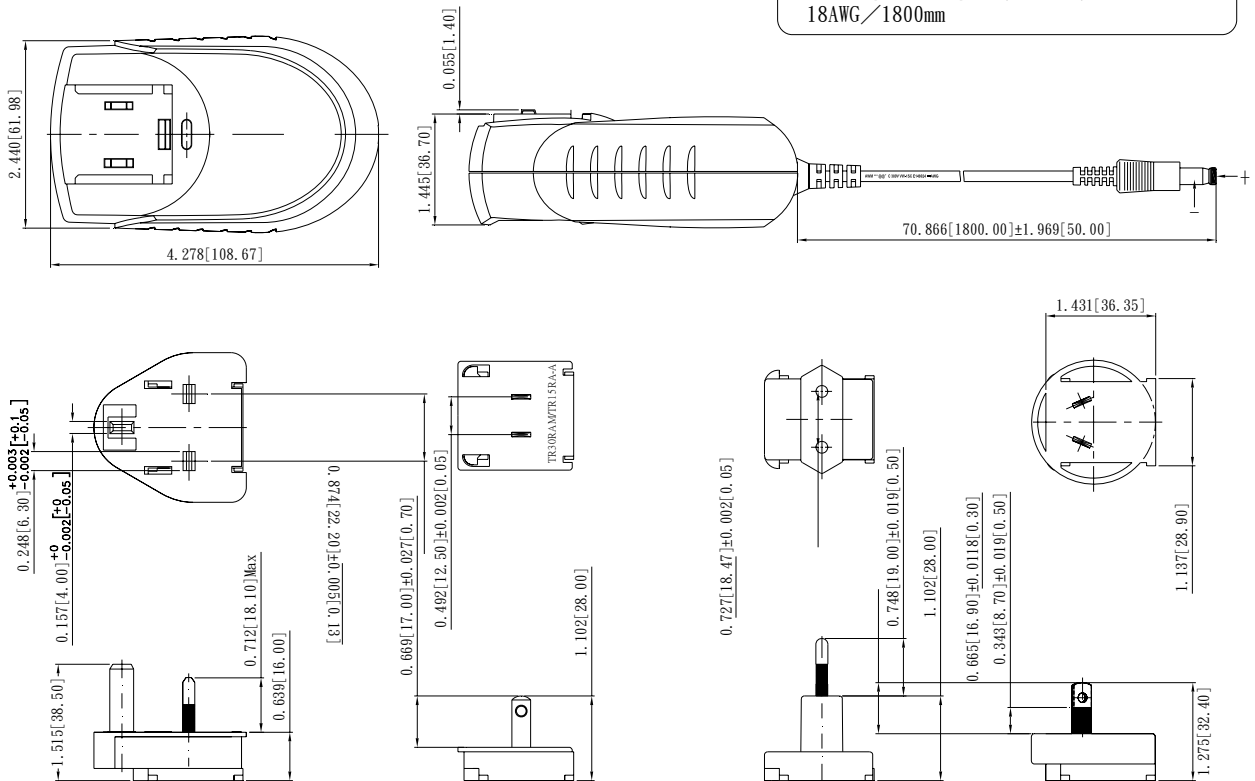
Isolation ..... Input to output = 4,242VDC  
 Operating Temperature ..... 0 ~ 60°C (see Drating Curve)  
 Storage Temperature ..... -20~85°C  
 Humidity ..... 93% RH max. Non condensing  
 Cooling ..... Natural Convection  
 Switching Frequency ..... 60KHz Typical  
 MTBF ..... MIL-HDBK-217F, GB, 25°C /115VAC ..... 200K hrs min.  
 Altitude ..... 2000m  
 Dimensions ..... 4.278x2.440x1.445Inches (108.67x61.98x36.70mm)  
 Weight ..... 300g(0.66 Pounds)

## SAFETY AND EMC:

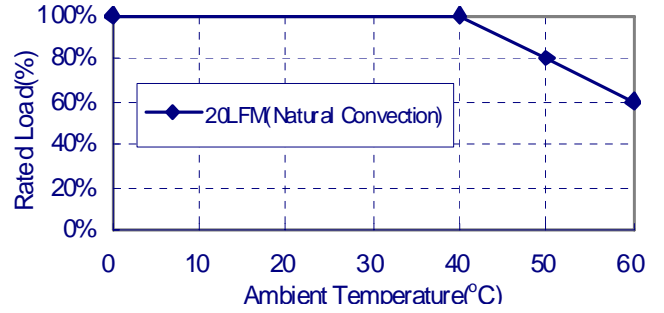
Emission and Immunity ..... EN61204-3, EN61000-3-2, EN61000-3-3  
 FCC CFR Title 47 Part 15 Subpart B  
 Safety ..... IEC60950-1, UL60950-1, EN60950-1

## Mechanical Specification

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



# TR30RA Series Derating Curve



## NOTE:

1. Voltage setpoint at 60% full load
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
3. Line regulation is measured from 100Vac to 240Vac with full load.
4. Load regulation is 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"



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