



# TR70 SERIES 70W SWITCHING ADAPTER



\* Not CE certified for the EU"

## Features

- \* Universal Input Range: 90-264VAC
- \* Meets EN55022 Class B and CISPR/FCC Class B
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection (Option)
- \* PSE is Option without TR70A48

## Ordering information

TR70AXXX- XX	X	XX
Model No.	DC Plug Type	OVP Option
	*Please see Page235 for more detailed descriptions	A: Without OVP Option E: With OVP Option
		DC Cable Length and Type
		01: 720mm
		02: 1200mm
		03: 1800mm
		11: 720mm with Ferrite Core
		12: 1200mm with Ferrite Core
		13: 1800mm with Ferrite Core
		*18AWG/UL1185



MODEL	OUTPUT VOLTAGE	MIN. LOAD	OUTPUT CURRENT	RIPPLE & NOISE	VOLTAGE SETPOINT	LINE REGULATION	LOAD REGULATION	%EFF.. (Typ.)
TR70A12	12V	0A	5.5A	1%	±2%	±1%	±5%	80%
TR70A15	15V	0A	4.6A	1%	±2%	±1%	±3%	82%
TR70A18	18V	0A	3.9A	1%	±2%	±1%	±2%	83%
TR70A19	19V	0A	3.7A	1%	±2%	±1%	±2%	83%
TR70A24	24V	0A	3.0A	1%	±2%	±1%	±2%	84%
TR70A48	48V	0A	1.5A	1%	±2%	±1%	±2%	84%

## Specifications

### INPUT SPECIFICATIONS:

Voltage .....	90~264Vac
Frequency .....	50 to 60Hz
Inrush Current .....	60A max. @240Vac
Conducted EMI .....	CISPR/FCC Class B
Leakage Current .....	3.5mA max.

### OUTPUT SPECIFICATIONS:

Holdup Time .....	8ms typ. @115Vac
Short Circuit Protection .....	Continuous
Over Voltage Protection .....	Option
Temperature Coefficient .....	±0.05%/°C

### GENERAL SPECIFICATIONS:

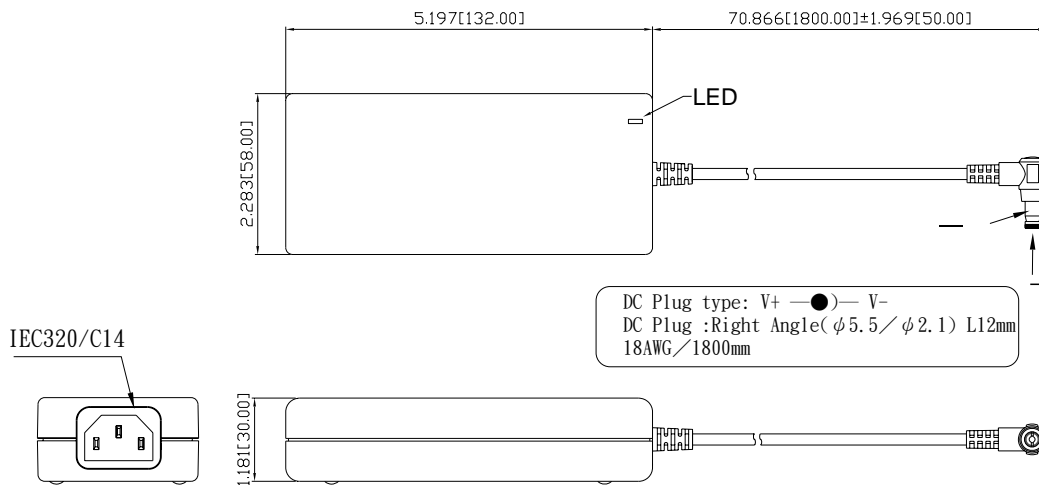
Isolation .....	Input to output = 4,242VDC
Operating Temperature .....	0 ~ 60°C (see derating curve)
Storage Temperature .....	-20~85°C
Humidity .....	93% RH max. Non condensing
Cooling .....	Natural Convection
Switching Frequency .....	60KHz Typical
MTBF .....	MIL-HDBK-217F, GB, at 25°C/115VAC ..... 200K hrs min.
Altitude .....	2000m
Dimensions .....	5.197x2.283x1.181 inches (132.00x58.00x30.00 mm)
Weight .....	345g(0.76 Pounds)
AC Inlet .....	IEC320/C14

### SAFETY AND EMC:

Emission and Immunity .....	EN55022 Class B, FCC Part 15 Class B EN61000-6-3, EN61000-3-2, EN61000-3-3 EN55024, EN61204-3, EN61000-6-1
Safety .....	IEC60950-1, EN60950-1, UL60950-1

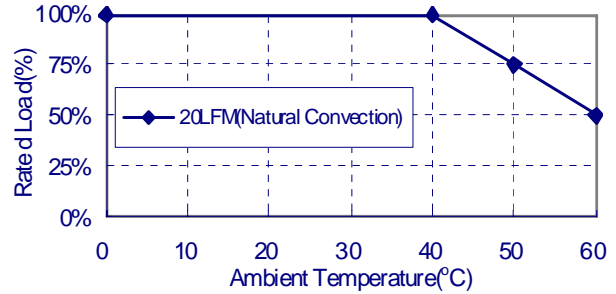
### Mechanical Specification

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



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

## TR70 Series Derating Curve



### NOTE:

- Voltage setpoint at 60% full load
- Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measurement @20MHz BW.
- Line regulation measured from 100Vac to 240Vac, full load.
- Load regulation measured from 60% to 100% full load and from 60% to 20% load (60% +/- 40% full load)
- "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"

