



TRH160A SERIES

160W SWITCHING ADAPTER



Features

- * IEC320/C14 Compact Size
- * Universal Input: 90~264Vac
- * Over Voltage Protection
- * Continuous Short Circuit Protection
- * No Load Power Consumption < 150mW
- * Very Low Leakage Current < 90uA
- * Meet IEC/EN 60335-1
- * Approved IEC/EN/UL62368-1
- * Meets CoC Tier 2 & DoE Level VI
- * CE EN55032 Class B & CISPR/FCC Class B
 (12V: Output Cable Length ≤ 950mm, DIN Power Plug)
 (24V: Output Cable Length ≤ 1220mm, DC Jack)
 (28V~56V: Output Cable Length ≤ 1800mm, DC Jack)



Ordering information

TRH160AXXX	-XX	X	XX
Model No.	DC Plug Type	OVP	DC Cable Length and Type
		E: with OVP	471:950mm with Ferrite Core 12:1220mm with Ferrite Core 13:1800mm with Ferrite Core *UL2464 Cable For all models

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	EFFICENTY TYP. NOTE 5
TRH160A120	12V	12.5A	1%	±2%	±1%	±4%	91%
TRH160A240	24V	6.66A	1%	±2%	±1%	±4%	92%
TRH160A280	28V	5.7A	1%	±2%	±1%	±4%	92%
TRH160A300	30V	5.31A	1%	±2%	±1%	±4%	92%
TRH160A360	36V	4.44A	1%	±2%	±1%	±4%	92%
TRH160A480	48V	3.33A	1%	±2%	±1%	±4%	93%
TRH160A560	56V	2.85A	1%	±2%	±1%	±4%	93%

Specifications are subject to change without notice.

Specifications

TRH160A Series Derating Curve

INPUT SPECIFICATIONS:

Voltage 90~264Vac
 Frequency 47 to 63Hz
 Input Current 100Vac/2.0 max.& 240Vac/1.0 max
 Inrush Current 120A max. @240Vac
 Conducted EMI CISPR/FCC Class B
 Leakage Current 90uA max.

OUTPUT SPECIFICATIONS:

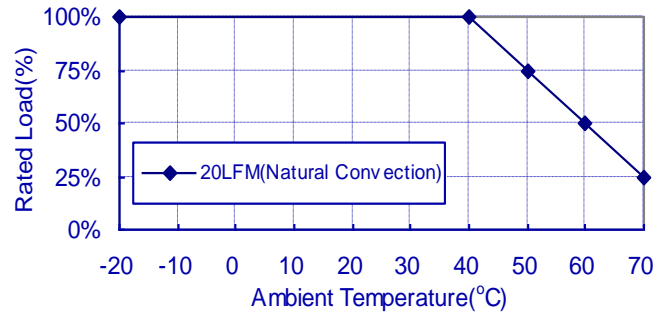
Holdup Time 25ms typ. @115Vac
 Short Circuit Protection Continuous(Auto Recovery)
 Over Voltage Protection IC Component to Clamp
 Temperature Coefficient $\pm 0.05\%/^{\circ}\text{C}$ max.

GENERAL SPECIFICATIONS:

Isolation Input to output = 3,000VAC
 Operating Temperature -20~70°C (see derating curve)

-30°C Can be Start-Up

Storage Temperature -40~85°C
 Humidity 93% RH max. Non Condensing
 Cooling Natural Convection
 Switching Frequency 110KHz typ.
 MTBF MIL-HDBK-217F, GB, 25°C/115VAC 300Khrs typ.
 Altitude 5000m
 Life time Ambient 40°C 75% Load 26Khrs min.
 Dimensions 5.906x2.756x1.497Inches (150x70x38mm)
 Weight 575g



SAFETY AND EMC:

Emissions and Immunity EN55032 Class B, FCC Part 15 Class B
 EN61000-3-2, EN61000-3-3, EN55024, EN61204-3
 Safety Class I, IEC/EN/UL62368-1

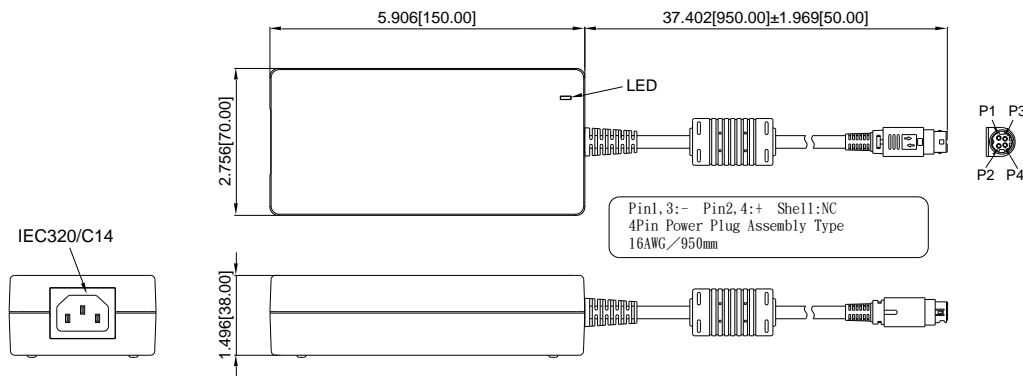
NOTE:

1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple&noise measuring @20MHz BW.
2. Voltage set point at 60% full load.
3. Line regulation measured from 100Vac to 240Vac, full load.
4. Load regulation measured from 60% to 100% full load and from 60% to 20% load (60% +/- 40% full load).
5. Efficiency measured 75% load at 230Vac.

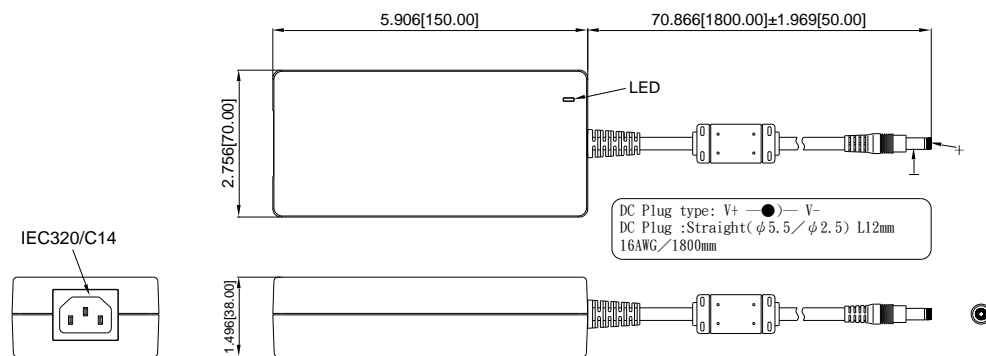
Mechanical Specification

All Dimensions are in inches[mm]
 Tolerance:Inches:X.XXX±0.02
 Millimeters:X.XX±0.5
 UNIT:inches[mm]

Din Power Plug



DC Jack



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