



TRH70A SERIES

70W SWITCHING ADAPTER



Features

- * Universal Input Range 90~264VAC
- * Meets EN55022 Class B and CISPR/FCC Class B
- * Continuous Short Circuit Protection
- * Over Voltage Protection
- * Meet CoC Tier 2 & DoE Level VI
(Output Cable Length \leq 1800mm)
(TRH70A120: Output Cable Length \leq 720mm)
(TRH70A150: Output Cable Length \leq 1220mm)
(TRH70A180, TRH70A190: Output Cable Length \leq 1800mm 16AWG)
- * No load Power Consumption < 150mW



Ordering information

TRH70XXX - .XX E XX
 Model No. DC Plug Type OVP DC Cable Length and Type
 01: 720mm
 02: 1220mm
 03: 1800mm
 11: 720mm with Ferrite Core
 12: 1220mm with Ferrite Core
 13: 1800mm with Ferrite Core
 * 16AWG / UL1185 FOR 12V,15V,18V,19V
 * 18AWG / UL1185 FOR 24V,28V,36V,48V

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	AVERAGE EFFICENCY min. NOTE 5
TRH70A120	12V	5.80A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$	89%
TRH70A150	15V	4.65A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 3\%$	89%
TRH70A180	18V	3.90A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH70A190	19V	3.70A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH70A240	24V	3.00A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH70A280	28V	2.50A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH70A360	36V	2.00A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH70A480	48V	1.50A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%

Specifications

INPUT SPECIFICATIONS:

Voltage 90~264Vac
 Frequency 47 to 63Hz
 Input Current 1.5A max.
 Inrush Current Cold Start @25°C 100A max. @ 240Vac
 Leakage Current 3.5mA max.

OUTPUT SPECIFICATIONS:

Hold-up Time 8ms typ. @115Vac
 Short Circuit Protection Continuous(Auto Recovery)
 Over Voltage Protection TVS Component to Clamp
 Temperature Coefficient ±0.05%/°C

GENERAL SPECIFICATIONS:

Isolation Input to output = 4,242VDC
 Operating Temperature -20 ~ 70°C (see derating curve)
 Storage Temperature -20 ~ 85°C
 Humidity 93% RH max. Non condensing
 Cooling Natural Convection
 Switching Frequency 65KHz Typical
 MTBF MIL-HDBK-217F, GB, at 25°C/115VAC 200Khrs min.
 Altitude 5000m
 Dimensions 4.724x2.047x1.220 inches (120.00x52.00x31.00mm)
 Weight 300g
 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 Class I, 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

TRH70A Series Derating Curve



NOTE:

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. Average Efficiency measured at 25%,50%,75%,100% load and input voltage is 115Vac / 230Vac



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