



TRH70A SERIES

70W SWITCHING ADAPTER



Features

- * Universal Input Range 90~264VAC
- * Meets EN55032 Class B and CISPR/FCC Class B
- * Continuous Short Circuit Protection
- * Over Voltage Protection
- * Meet CoC Tier 2 & DoE Level VI
- * No load Power Consumption < 150mW
- * Approved IEC62368-1, UL62368-1, EN62368-1
(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)



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 NOTE2	LINE REGULATION NOTE3	LOAD REGULATION NOTE4	AVERAGE EFFICIENCY min. NOTE5
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

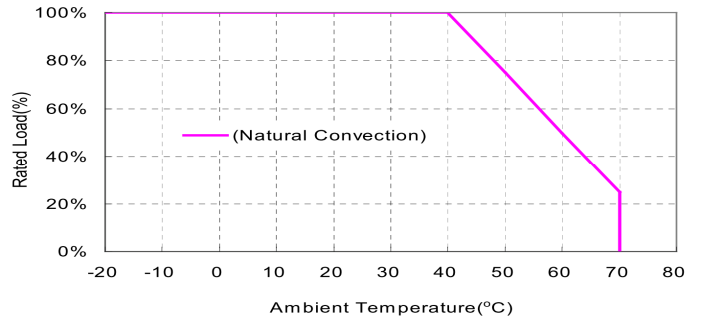
GENERAL SPECIFICATIONS:

Isolation Input to output = 3000VAC
 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 EN55032 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, IEC62368-1/60950-1, UL62368-1/60950-1
 EN62368-1/60950-1

TRH70A Series Derating Curve

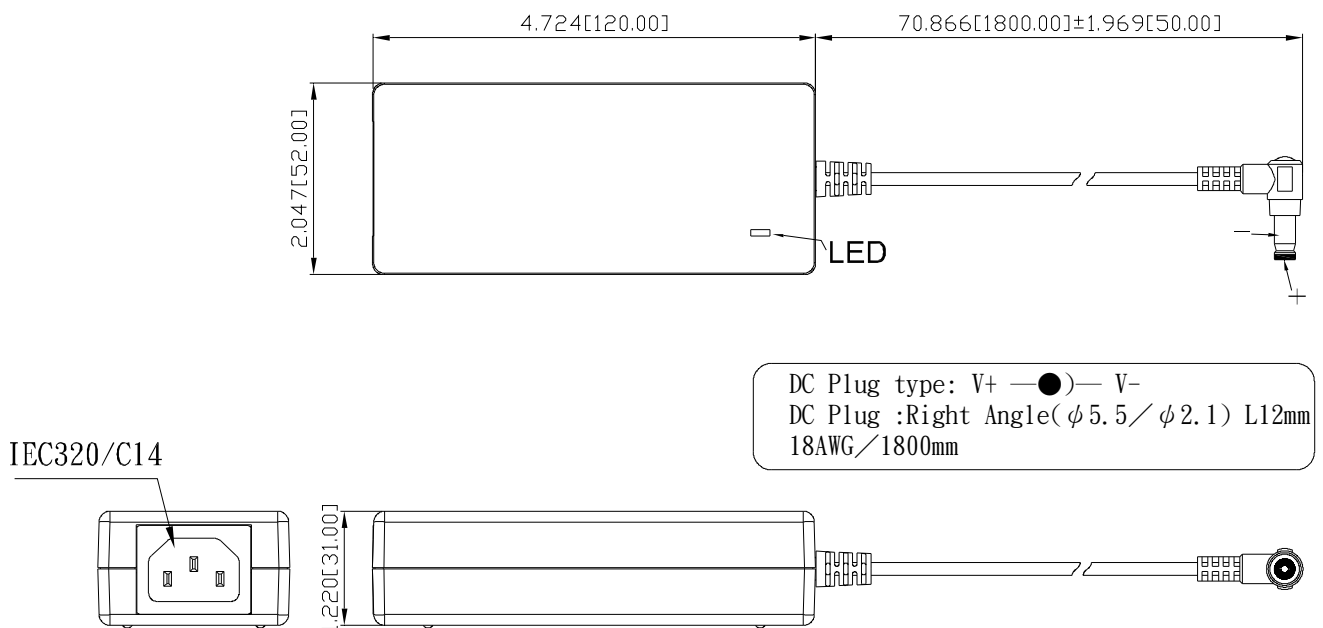


NOTE:

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

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cincon:

TRH70A120-23E11-Level-VI	TRH70A180-39E03-Level-VI	TRH70A240-36E03-Level-VI	TRH70A240-35E03-Level-VI
TRH70A480-12E03-Level-VI	TRH70A150-11E02-Level-VI	TRH70A240-12E03-Level-VI	TRH70A480-11E03-Level-VI
TRH70A180-11E03-Level-VI	TRH70A190-11E03-Level-VI	TRH70A240-40E03-Level-VI	TRH70A120-40E01-Level-VI
TRH70A180-12E13-Level-VI	TRH70A180-36E03-Level-VI	TRH70A240-39E03-Level-VI	TRH70A180-48E03-Level-VI
TRH70A120-35E01-Level-VI	TRH70A150-02E02-Level-VI	TRH70A180-49E03-Level-VI	TRH70A240-11E03-Level-VI
TRH70A150-12E02-Level-VI	TRH70A120-02E01-Level-VI	TRH70A480-01E03-Level-VI	TRH70A180-01E03-Level-VI
TRH70A240-48E03-Level-VI	TRH70A190-02E03-Level-VI	TRH70A190-01E03-Level-VI	TRH70A190-12E03-Level-VI
TRH70A240-02E03-Level-VI	TRH70A120-11E01-Level-VI	TRH70A120-48E01-Level-VI	TRH70A180-12E03-Level-VI
TRH70A180-35E03-Level-VI	TRH70A120-49E01-Level-VI	TRH70A240-49E03-Level-VI	TRH70A120-39E01-Level-VI
TRH70A480-02E03-Level-VI	TRH70A180-40E03-Level-VI	TRH70A240-01E03-Level-VI	TRH70A150-01E02-Level-VI
TRH70A180-02E03-Level-VI	TRH70A120-12E01-Level-VI	TRH70A120-36E01-Level-VI	TRH70A120-01E01-Level-VI
TRH70A240-11E11-Level-VI	TRH70A280-49E01-Level-VI	TRH70A280-36E01-Level-VI	TRH70A280-01E01-Level-VI
TRH70A360-36E01-Level-VI	TRH70A280-02E01-Level-VI	TRH70A280-02E02-Level-VI	TRH70A360-48E01-Level-VI
TRH70A360-40E01-Level-VI	TRH70A280-12E01-Level-VI	TRH70A280-12E02-Level-VI	TRH70A360-35E01-Level-VI
TRH70A360-49E01-Level-VI	TRH70A360-11E01-Level-VI	TRH70A360-23E11-Level-VI	TRH70A280-39E01-Level-VI
TRH70A360-12E03-Level-VI	TRH70A360-39E01-Level-VI	TRH70A280-11E01-Level-VI	TRH70A280-48E01-Level-VI
TRH70A280-23E11-Level-VI	TRH70A280-40E01-Level-VI	TRH70A360-12E01-Level-VI	TRH70A360-12E02-Level-VI
TRH70A280-35E01-Level-VI	TRH70A360-01E01-Level-VI	TRH70A360-02E01-Level-VI	TRH70A360-02E02-Level-VI
TRH70A150-11E02 VI	TRH70A120-11E01 VI		