



# TRH100A SERIES

## 100W SWITCHING

### ADAPTER WITH PFC



## Features

- \* Universal Input Range: 90~264VAC
- \* Active PFC Meets EN61000-3-2
- \* Conductive EMI Meets CISPR/FCC Class B
- \* No Load Power Consumption < 150mW
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* Meet CoC Tier 2 & DoE Level VI  
(Output Cable Length  $\leq$  1800mm)  
(TRH100A120~150: Output Cable Length  $\leq$  1220mm)  
(TRH100A180~480: Output Cable Length  $\leq$  1800mm)



## Ordering information

TRH100AXXX- XX	X	XX
Model No.	DC Plug Type	DC Cable Length and Type
	OVP	
	E: WITH OVP	11: 720mm with Ferrite Core
		12: 1220mm with Ferrite Core
		13: 1800mm with Ferrite Core
		14: 1000mm with Ferrite Core
		21: 720mm with two Ferrite Core
		22: 1220mm with two Ferrite Core
		23: 1800mm with two Ferrite Core
		*UL2464 for all Model

MODEL	OUTPUT VOLTAGE	MIN. LOAD	OUTPUT CURRENT	RIPPLE & NOISE (NOTE1)	VOLTAGE SETPOINT (NOTE2)	LINE REGULATION (NOTE3)	LOAD REGULATION (NOTE4)	%EFF (Typ) (NOTE5)
TRH100A120	12V	0 A	8.34A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$	89%
TRH100A135	13.5V	0 A	7.33A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$	89%
TRH100A150	15V	0 A	6.67A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$	89%
TRH100A180	18V	0 A	5.56A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH100A190	19V	0A	5.26A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH100A240	24V	0 A	4.17A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH100A280	28V	0 A	3.54A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH100A360	36V	0 A	2.78A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TRH100A480	48V	0 A	2.1A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%

## Specifications

### INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac  
 Frequency ..... 47 to 63Hz  
 Inrush Current ..... 120A max. @240Vac  
 Conducted EMI ..... CISPR/FCC Class B  
 Leakage Current ..... 3.5mA max.

### OUTPUT SPECIFICATIONS:

Holdup Time ..... 16ms typ. @115Vac  
 Short Circuit Protection ..... Continuous  
 Over Voltage Protection ..... Yes

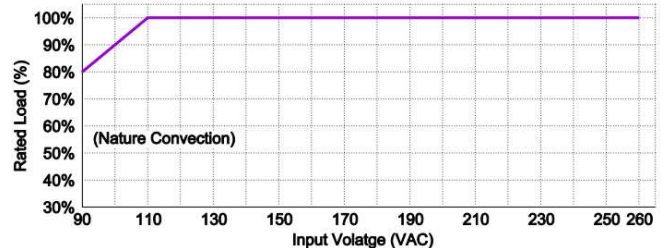
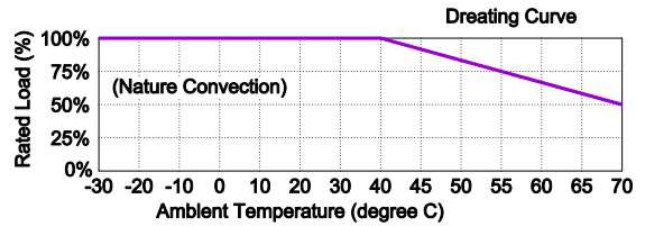
### GENERAL SPECIFICATIONS:

Isolation ..... Input to output = 4,242VDC  
 Operating Temperature ..... -30°C ~ 70°C, 40°C~70°C with -1.67%/  
 Storage Temperature ..... -40~85°C  
 Operating Humidity.....93%RH max. no condensing  
 Cooling ..... Natural Convection  
 Switching Frequency ..... 65KHz Typical  
 Operating Altitude.....Sea Level to 5000m  
 AC Inlet ..... IEC320/C14, C6  
 MTBF, MIL-HDBK-217F(25°C Ta) ..... 160K hrs min.  
 Dimensions .... 5.591x2.283x1.457 inches (142.00x58.00x37.00 mm)  
 Weight ..... 485g

### SAFETY AND EMC:

Emission and Immunity ..... EN55032 Class B, FCC Part 15 Class B  
 EN61000-3-2, EN61000-3-3, EN55024  
 EN61204-3  
 Safety ..... Class I, IEC/UL/EN62368-1, IEC/UL/EN60950-1

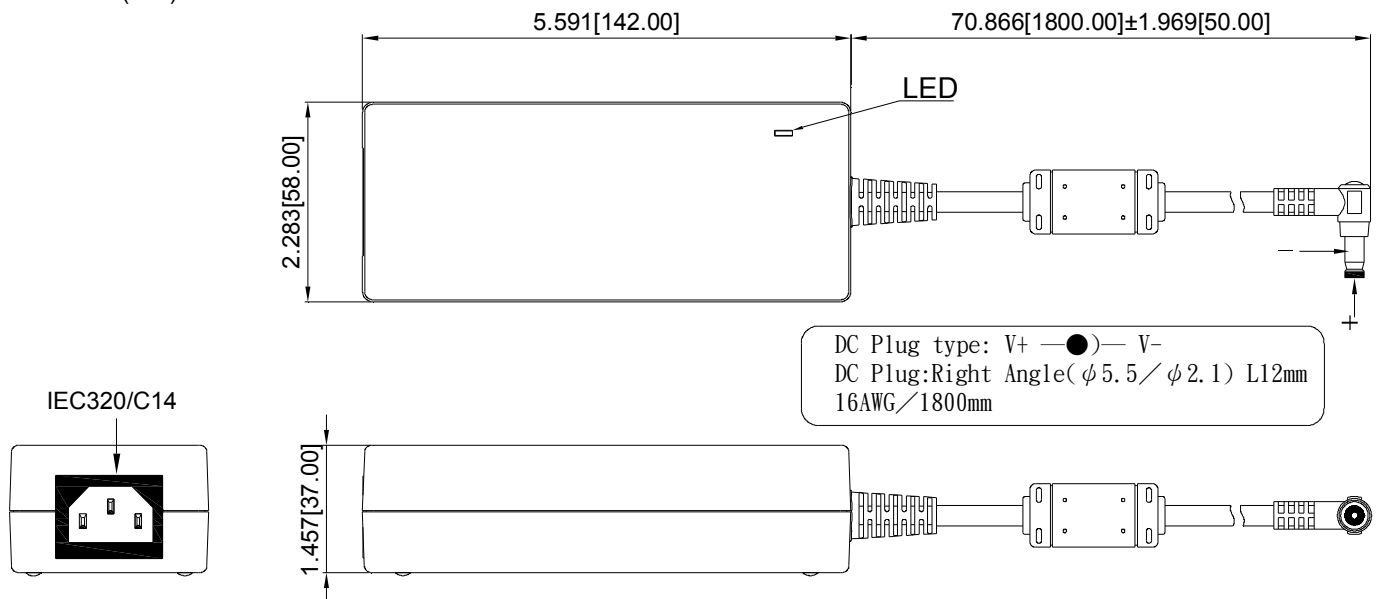
## TRH100A Series Derating Curve



### NOTE:

1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measurement @20MHz BW.
2. Voltage setpoint at 60% full load
3. Line regulation measured from 100Vac to 240Vac with full load.
4. Load regulation measured from 60% to 100% full load and from 60% to 20% full load (60% +/- 40% full load)
5. Average Efficiency measured at 25%,50%,75%,100% load, 230Vac Input voltage.
6. Inrush current at 120A Max./ 200us for AC turn on.

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



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