



# TRH25 SERIES

## 25W SWITCHING ADAPTER



### Features

- \* Miniature Size
- \* Universal Input: 90~264Vac
- \* EMI Meets EN55022 Class B and CISPR/FCC Class B
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* Meet CoC V5 Tier 2 & DoE Level VI  
(Output Cable Length  $\leq$  1800mm)  
(TRH25033: Output Cable Length  $\leq$  720mm)  
(TRH25050: Output Cable Length  $\leq$  1220mm)
- \* No Load Power Consumption < 75mW



### Ordering information

TRH25	XXX	-	X	XX	X	XX
Model No.	AC Plug Type		DC Plug Type	OVP		DC Cable Length and Type
	A: USA 2 Pin			E: With OVP		01: 720mm
	E: Europe 2 Pin					02: 1220mm
	U: British 3 Pin					03: 1800mm
	S: Australia 2 Pin					11: 720mm with Ferrite Core
						12: 1220mm with Ferrite Core
						13: 1800mm with Ferrite Core
						* 16AWG / UL1185 for Vo: 5V, 3.3V
						* 18AWG / UL1185 for Vo: 12V
						* 20AWG / UL1185 for Vo: 15V
						* 22AWG / UL1185 for Vo: 18V
						* 24AWG / UL1185 for 24V

XMODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	AVG. EFF.
TRH25033	3.3V	4.0A	50mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 6\%$	80.97%
TRH25050	5V	4.0A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 6\%$	83.69%
TRH25120	12V	2.1A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 5\%$	87.02%
TRH25150	15V	1.67A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 3\%$	86.99%
TRH25180	18V	1.4A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	87.02%
TRH25240	24V	1.05A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	87.02%

Specifications are subject to change without notice.

## Specifications

### INPUT SPECIFICATIONS:

Voltage .....	90~264Vac
Frequency .....	47 to 63Hz
Inrush Current .....	0.7A max.
Inrush Current .....	60A max. @240Vac
Conducted EMI .....	CISPR/FCC Class B
Leakage Current .....	0.25mA max.

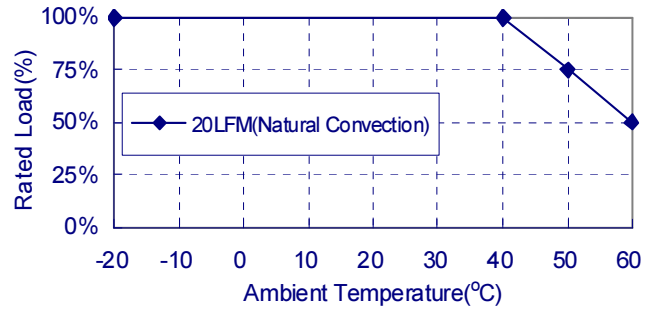
### OUTPUT SPECIFICATIONS:

Holdup Time .....	10ms 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 .....	-20~60°C (see derating curve)
Storage Temperature .....	-20~85°C
Humidity .....	93% RH max. Non condensing
Cooling .....	Natural Convection
Switching Frequency .....	67KHz typ.
MTBF .....	MIL-HDBK-217F, GB, 25°C/115VAC .....
Altitude .....	2000m
Dimensions .....	2.835x2.047x1.378Inches (72.00x52.00x35.00mm)
Weight .....	140g(0.31 Pounds)

## TRH25 Series Derating Curve



### SAFETY AND EMC:

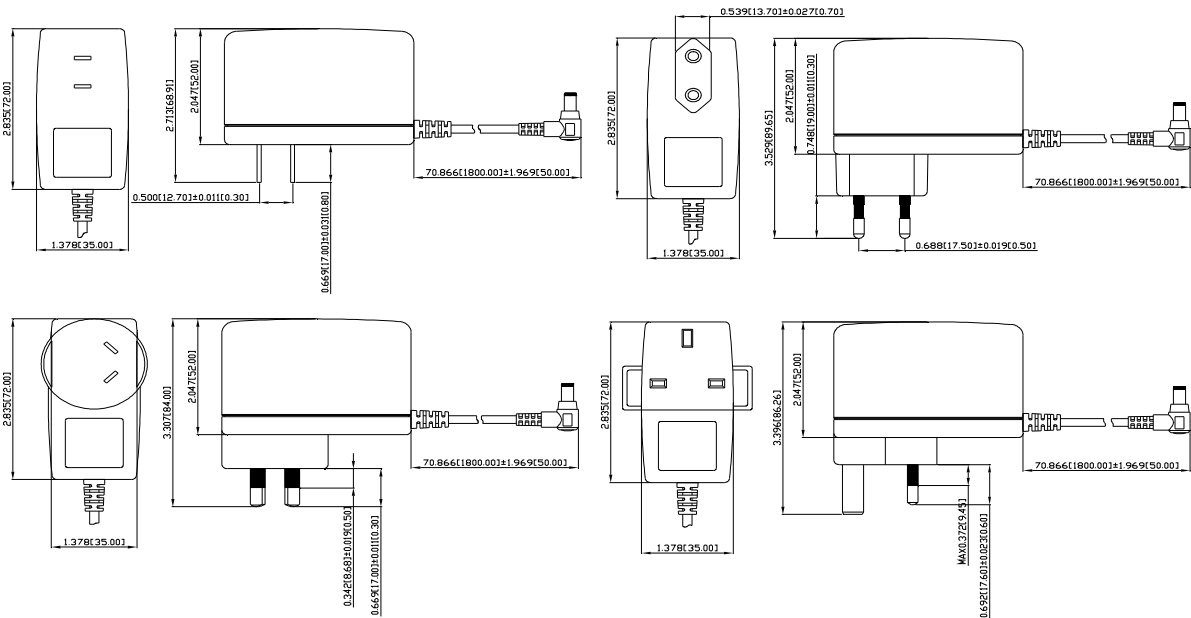
Emission and Immunity .....	EN55022 Class B, FCC Part 15 Class B EN61000-6-3, EN61000-3-2, EN61000-3-3 EN55024, EN61204-3, EN61000-6-1
Safety .....	Class II, IEC60950-1, EN60950-1, UL60950-1

### NOTE:

1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
2. Voltage setpoint 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).

## 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