



# TRG30RA V SERIES

## 30W SWITCHING ADAPTER



### Features

- \* Universal Input Range 90~264VAC
- \* Interchangeable AC Plugs
- \* Meets EN61204-3 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)
- \* No Load Power Consumption < 75mW



### Ordering information

| TRG30RAXXXV - XX | E            | XX                              | - | XX                     | -BK |
|------------------|--------------|---------------------------------|---|------------------------|-----|
| Model No.        | DC Plug Type | DC Cable Length and Type        |   | Color of Overmold Case |     |
|                  |              | 01: 720mm                       |   | BE: Blue               |     |
|                  |              | 02: 1220mm                      |   | GY: Gray               |     |
|                  |              | 03: 1800mm                      |   | RD: Red                |     |
|                  |              | 11: 720mm with Ferrite Core     |   | PE: Purple             |     |
|                  |              | 12: 1220mm with Ferrite Core    |   | OE: Orange             |     |
|                  |              | 13: 1800mm with Ferrite Core    |   |                        |     |
|                  |              | * 18AWG / UL1185                |   |                        |     |
|                  |              | * 16AWG / UL1185 for Vo: 5V, 9V |   |                        |     |

| MODEL       | OUTPUT VOLTAGE | OUTPUT CURRENT | RIPPLE & NOISE<br>NOTE 1 | VOLTAGE ACCURACY<br>NOTE 2 | LINE REGULATION<br>NOTE 3 | LOAD REGULATION<br>NOTE 4 | % EFF. (Typ.)<br>NOTE 5 |
|-------------|----------------|----------------|--------------------------|----------------------------|---------------------------|---------------------------|-------------------------|
| TRG30RA050V | 5 V            | 4.0 A          | 50mVp-p                  | ±2%                        | ±1%                       | ±6%                       | 83.69%                  |
| TRG30RA090V | 9 V            | 3.0 A          | 90mVp-p                  | ±2%                        | ±1%                       | ±3%                       | 87.30%                  |
| TRG30RA120V | 12 V           | 2.5 A          | 100mVp-p                 | ±2%                        | ±1%                       | ±2%                       | 87.70%                  |
| TRG30RA150V | 15 V           | 2.0 A          | 100mVp-p                 | ±2%                        | ±1%                       | ±2%                       | 87.70%                  |
| TRG30RA180V | 18 V           | 1.67 A         | 100mVp-p                 | ±2%                        | ±1%                       | ±2%                       | 87.70%                  |
| TRG30RA240V | 24 V           | 1.25 A         | 100mVp-p                 | ±2%                        | ±1%                       | ±2%                       | 87.70%                  |

## Specifications

### INPUT SPECIFICATIONS:

|                       |                                   |
|-----------------------|-----------------------------------|
| Voltage .....         | 90~264Vac                         |
| Frequency .....       | 47 to 63Hz                        |
| Input Current .....   | 0.8A max.                         |
| Inrush Current .....  | Cold start@25°C 100A max. @240Vac |
| Leakage Current ..... | 0.25mA max                        |

### OUTPUT SPECIFICATIONS:

|                                |                                       |
|--------------------------------|---------------------------------------|
| Hold-up Time .....             | 10ms typ. @115Vac                     |
| Short Circuit Protection ..... | Hiccup Mode Continuous(Auto Recovery) |
| Over Voltage Protection .....  | Latch                                 |

### GENERAL SPECIFICATIONS:

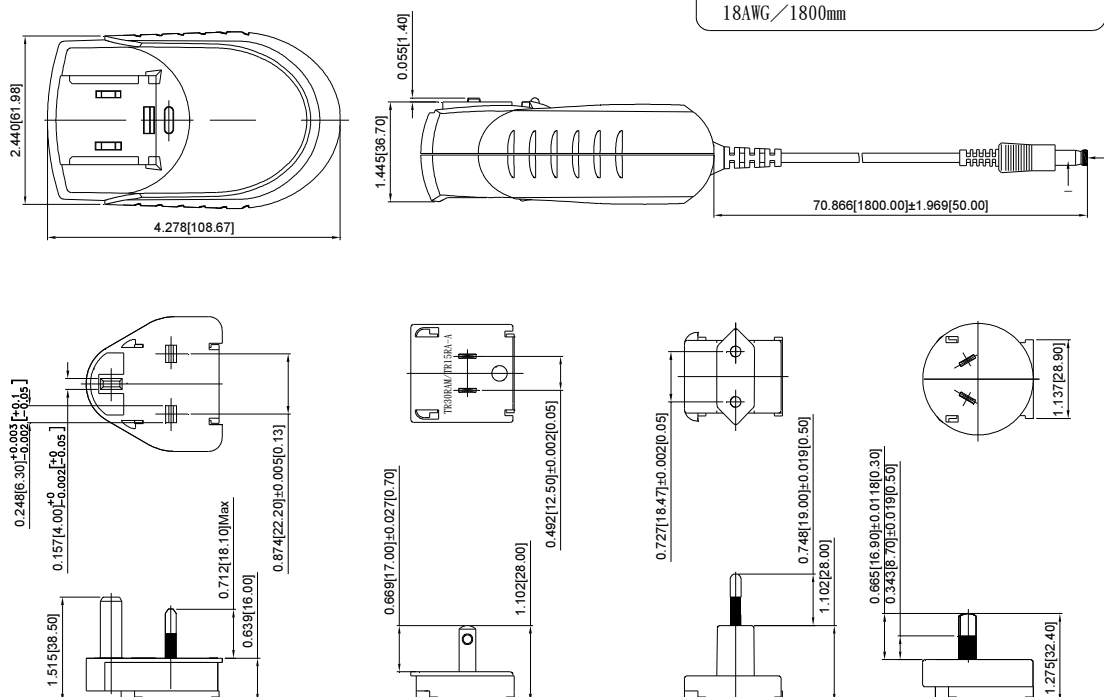
|                             |   |
|-----------------------------|---|
| Isolation .....             | Input to output (4,242VDC)                        |
| Operating Temperature ..... | -20 ~ 60°C (see derating curve)                   |
| Storage Temperature .....   | -20~85°C  |
| Humidity .....              | 93% RH max. Non condensing                        |
| Cooling .....               | Natural Convection                                |
| Switching Frequency .....   | 70KHz Typical                                     |
| MTBF .....                  | MIL-HDBK-217F, GB, 25°C/115VAC ..... 200Khrs min. |
| Altitude .....              | 5000m   |
| Dimensions .....            | 4.278x2.440x1.445 inches (108.67x61.98x36.70mm)   |
| Weight .....                | 300g(0.66 Pounds)                                 |

### SAFETY AND EMC:

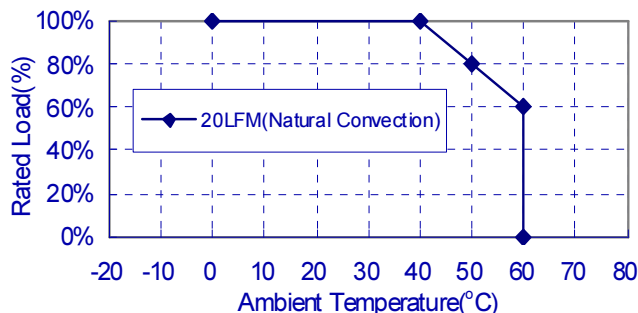
|                             |   |
|-----------------------------|---|
| Emission and Immunity ..... | EN61204-3, EN 61000-3-2, EN 61000-3-3<br>FCC CFR Title 47 Part 15 Subpart B |
| Safety .....                | Class II, IEC60950-1, UL60950-1, EN60950-1                                  |

### Mechanical Specification

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



## TRG30RA-V 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 is measured from 100Vac to 240Vac full load.
4. Load regulation is 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