

# TRG30RA V

S E R I E S

## 30W SWITCHING ADAPTER



- 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 CEC & ErP Level V (Output Cable Length  $\leq$  1800mm)  
(TRG30RA050V, TRG30RA090V: Output Cable Length  $\leq$  1220mm)

### Ordering information

| TRG30RAXXX | XX  | E  | XX   | XX | BK |
|------------|---|--|--|----|----|
| Model No.  | DC Plug Type  | DC Cable Length and Type   | Color of Overmold Case   |    |    |
|            | * Please see Page215 for more detailed descriptions | 01 : 720mm<br>02 : 1220mm<br>03 : 1800mm<br>11 : 720mm with Ferrite Core<br>12 : 1220mm with Ferrite Core<br>13 : 1800mm with Ferrite Core | BE : Blue<br>GY : Gray<br>RD : Red<br>PE : Purple<br>OR : Orange |    |    |
|            |   | * 18AWG / UL1185<br>* 16AWG / UL1185 for 5V, 9V  |  |    |    |

| MODEL       | OUTPUT VOLTAGE | MAX. LOAD | MIN. LOAD | RIPPLE & NOISE | VOLTAGE ACCURACY | LINE REGULATION | LOAD REGULATION | %EFF. (Typ.) |
|-------------|----------------|-----------|-----------|----------------|------------------|-----------------|-----------------|--------------|
| TRG30RA050V | 5V             | 4.0A      | 0A        | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 6%        | 80%          |
| TRG30RA090V | 9V             | 3.0A      | 0A        | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 3%        | 84%          |
| TRG30RA120V | 12V            | 2.5A      | 0A        | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 2%        | 84%          |
| TRG30RA150V | 15V            | 2.0A      | 0A        | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 2%        | 85%          |
| TRG30RA180V | 18V            | 1.67A     | 0A        | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 2%        | 85%          |
| TRG30RA240V | 24V            | 1.25A     | 0A        | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 2%        | 86%          |

## Specifications

### INPUT SPECIFICATIONS:

|                       |                                    |
|-----------------------|------------------------------------|
| Voltage .....         | 90~264Vac                          |
| Frequency .....       | 47 to 63Hz                         |
| Input Current .....   | 100Vac/0.8A max., 240Vac/0.5A max. |
| Inrush Current .....  | Cold start@25°C 100A max. @240Vac  |
| Leakage Current ..... | 0.25mA max                         |

### OUTPUT SPECIFICATIONS:

|                                |                                       |
|--------------------------------|---------------------------------------|
| Holdup Time .....              | 10ms typ. @115Vac                     |
| Short Circuit Protection ..... | Hiccup Mode Continuous(Auto Recovery) |
| Over Voltage Protection .....  | TVS Component to Clamp                |

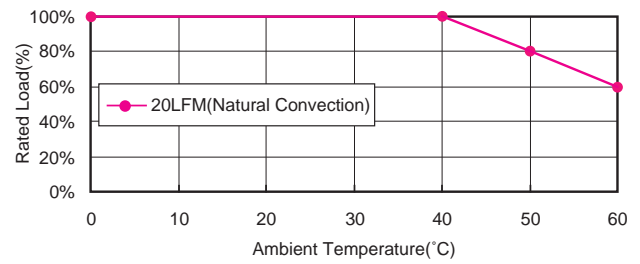
### GENERAL SPECIFICATIONS:

|                             |   |
|-----------------------------|---|
| Isolation .....             | Input to output = 4,242VDC                            |
| Operating Temperature ..... | 0 - 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, at 25°C/115VAC ..... 200K hrs min. |
| Altitude .....              | 2000m   |
| Dimensions .....            | 4.278x2.440x1.445Inches (108.67x61.98x36.70mm)        |
| Weight .....                | 300g(0.66 Pounds)                                     |

### SAFETY AND EMC:

|                             |   |
|-----------------------------|---|
| Emission and Immunity ..... | EN61204-3, EN61000-3-2, EN61000-3-3<br>FCC CFR Title 47 Part 15 Subpart B |
| Safety .....                | IEC60950-1, UL60950-1, EN60950-1  |

## TRG30RA V Series Derating Curve



### NOTE:

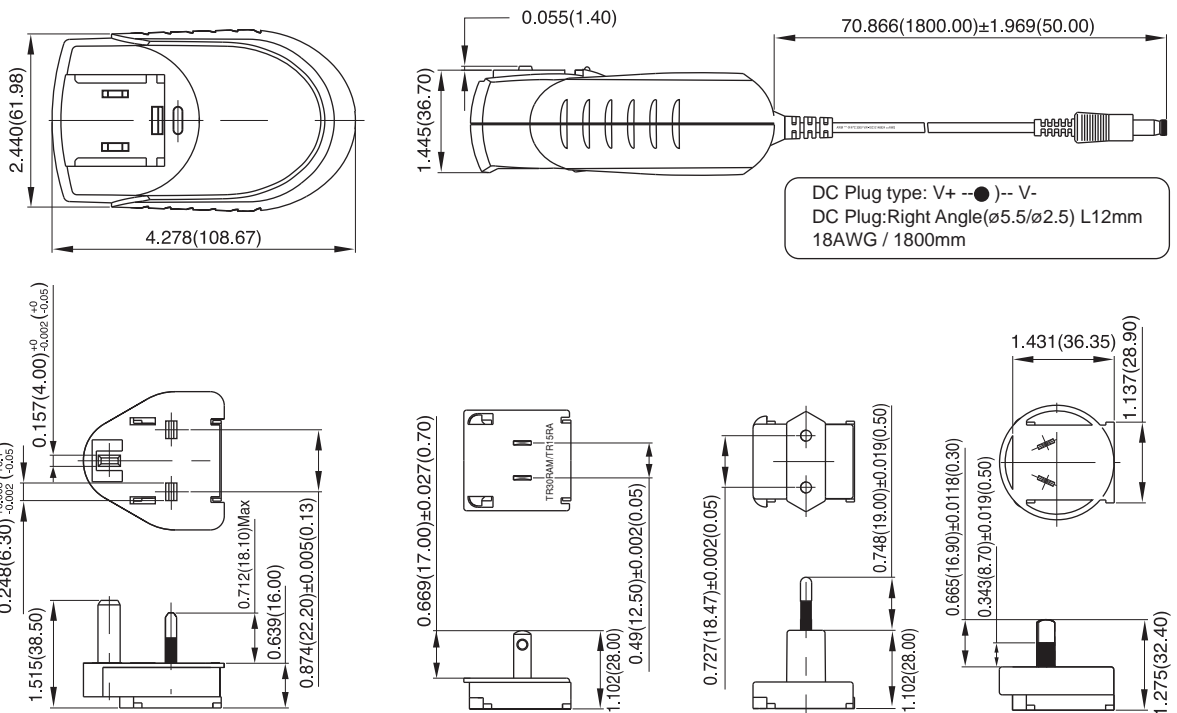
1. Voltage setpoint at 60% load.
2. Add a 0.1µF ceramic capacitor and a 10µF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW
3. Line regulation measured from 100Vac to 240Vac, full load
4. Load regulation measured from 60% to full load and from 60% to 20% load (60% +/- 40% load)
5. "Various TR Series adapters are PSE certified. PSE certification alone is not sufficient for importation into Japan. A valid PSE mark must contain the name of the importer as shown in the example below. If PSE mark is required, the name of the registered importer must be supplied to Cincon on order placement. Product labels will not contain PSE mark if importer name is not supplied. Consult factory or local representative for details"



TRG30RA V

## Mechanical Specification

All Dimensions 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