



# TRG100A 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
  - \* Continuous Short Circuit Protection
  - \* Over Voltage Protection
- Meet CEC & Erp Level V  
 (Output Cable Length  $\leq$  1800mm)  
 (TRG100A120-150: Output Cable Length  $\leq$  1220mm)  
 (TRG100A180-540: Output Cable Length  $\leq$  1800mm)



### Ordering information

| TRG100Axxx- xx | X            | XX                               |
|----------------|--------------|----------------------------------|
| Model No.      | DC Plug Type | DC Cable Length and Type         |
|                | OVP          | 11: 720mm with Ferrite Core      |
|                | E: WITH OVP  | 12: 1200mm with Ferrite Core     |
|                |              | 13: 1800mm with Ferrite Core     |
|                |              | 21: 720mm with two Ferrite Core  |
|                |              | 22: 1200mm with two Ferrite Core |
|                |              | 23: 1800mm with two Ferrite Core |
|                |              | *16AWG/UL2464                    |

| MODEL      | OUTPUT VOLTAGE | MIN. LOAD | OUTPUT CURRENT | RIPPLE & NOISE | VOLTAGE SETPOINT | LINE REGULATION | LOAD REGULATION | % EFF.. (Typ) |
|------------|----------------|-----------|----------------|----------------|------------------|-----------------|-----------------|---------------|
| TRG100A120 | 12V            | 0 A       | 8.34A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 4\%$       | 87%           |
| TRG100A125 | 12.5V          | 0 A       | 8.00A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 4\%$       | 87%           |
| TRG100A135 | 13.5V          | 0 A       | 7.33A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 4\%$       | 87%           |
| TRG100A150 | 15V            | 0 A       | 6.67A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 4\%$       | 87%           |
| TRG100A180 | 18V            | 0 A       | 5.56A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A190 | 19V            | 0 A       | 5.21A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A200 | 20V            | 0 A       | 5.00A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A240 | 24V            | 0 A       | 4.17A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A280 | 28V            | 0 A       | 3.54A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A290 | 29V            | 0 A       | 3.41A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A300 | 30V            | 0 A       | 3.30A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A360 | 36V            | 0 A       | 2.78A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A480 | 48V            | 0 A       | 2.08A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |
| TRG100A540 | 54V            | 0 A       | 1.85A          | 1%             | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 87%           |

## 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              | 20ms typ. @115Vac |
| Short Circuit Protection | Continuous        |
| Over Voltage Protection  | Yes               |

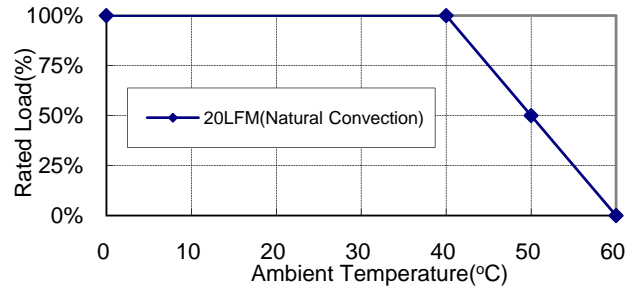
### GENERAL SPECIFICATIONS:

|                       |  |
|-----------------------|--|
| Isolation             | Input to output = 4,242VDC                       |
| Operating Temperature | 0 ~ 40°C   |
| Storage Temperature   | -20~85°C   |
| Cooling               | Natural Convection                               |
| Switching Frequency   | 45KHz Typical                                    |
| Dimensions            | 5.906x2.756x1.378 inches (150.00x70.00x35.00 mm) |
| Weight                | 600g(1.36 Pounds)                                |
| AC Inlet              | IEC320/C14                                       |

### SAFETY AND EMC:

|                       |  |
|-----------------------|--|
| Emission and Immunity | EN55022 Class B, FCC Part 15 Class B<br>EN61000-3-2, EN61000-3-3, EN55024<br>EN61204-3 |
| Safety                | IEC60950-1, EN60950-1, UL60950-1   |

## TRG100A Series Derating Curve



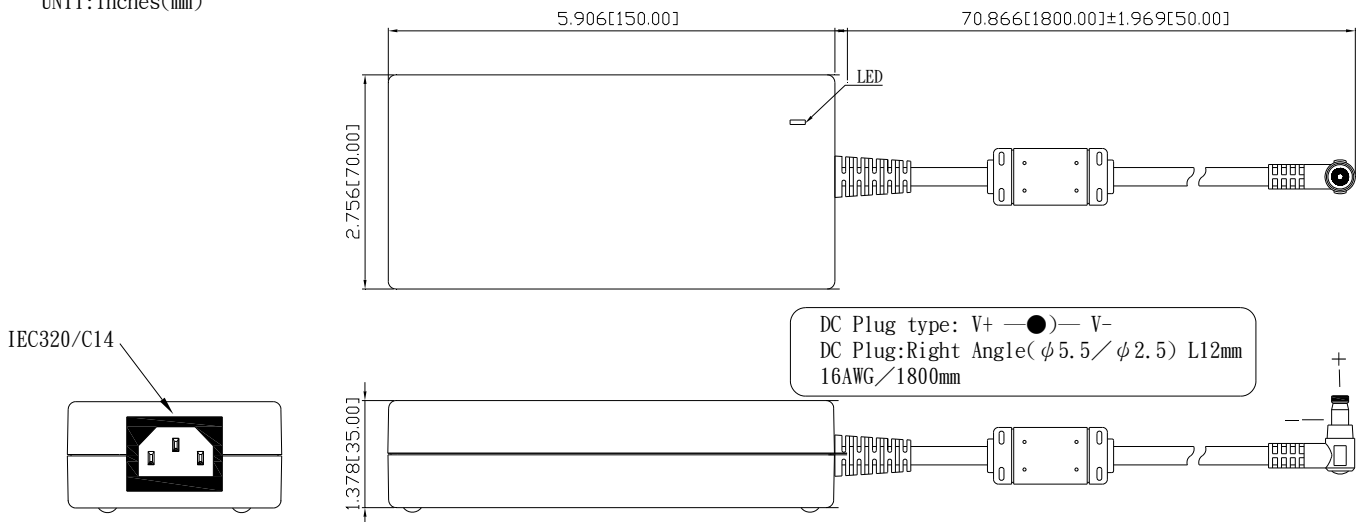
### NOTE:

1. Voltage setpoint at 60% full load
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measurement @20MHz BW.
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. "Various TRG 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"



## Mechanical Specification

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 60% load, unless otherwise Specified