

# TRG70

S E R I E S

## 70W SWITCHING ADAPTER



### Features

- Universal Input Range 90-264VAC
- Meets EN55022 Class B and CISPR/FCC Class B
- Continuous Short Circuit Protection
- Over Voltage Protection
- Meet CEC & ErP Level V (Output Cable Length  $\leq$  1800mm)  
(TRG70A120: Output Cable Length  $\leq$  720mm 16AWG)  
(TRG70A150: Output Cable Length  $\leq$  1220mm 16AWG)

### Ordering information

| TRG70AXX - XX | XX  | E                  | XX   |
|---------------|---|--------------------|--|
| Model No.     | DC Plug Type<br>* Please see Page215 for more detailed descriptions | OVP<br>E: With OVP | DC Cable Length and Type<br>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<br>* 18AWG / UL1185 |

| MODEL     | OUTPUT VOLTAGE | MIN. LOAD | OUTPUT CURRENT | RIPPLE & NOISE | VOLTAGE SETPOINT | LINE REGULATION | LOAD REGULATION | %EFF. (Typ.) |
|-----------|----------------|-----------|----------------|----------------|------------------|-----------------|-----------------|--------------|
| TRG70A120 | 12V            | 0 A       | 5.5 A          | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 5%        | 85%          |
| TRG70A150 | 15V            | 0 A       | 4.6 A          | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 3%        | 85%          |
| TRG70A180 | 18V            | 0 A       | 3.9 A          | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 2%        | 85%          |
| TRG70A190 | 19V            | 0 A       | 3.7 A          | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 2%        | 85%          |
| TRG70A240 | 24V            | 0 A       | 3.0 A          | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 2%        | 86%          |
| TRG70A480 | 48V            | 0 A       | 1.5 A          | 1%             | $\pm$ 2%         | $\pm$ 1%        | $\pm$ 2%        | 87%          |

## Specifications

### INPUT SPECIFICATIONS:

Voltage ..... 90-264Vac  
 Frequency ..... 50 to 60Hz  
 Inrush Current ..... 80A max. @240Vac  
 Conducted EMI ..... CISPR/FCC Class B  
 Leakage Current ..... 3.5mA max.

### OUTPUT SPECIFICATIONS:

Holdup Time ..... 8ms typ. @115Vac  
 Short Circuit Protection ..... Continuous  
 Over Voltage Protection ..... Yes  
 Temperature Coefficient .....  $\pm 0.05\%/^{\circ}\text{C}$

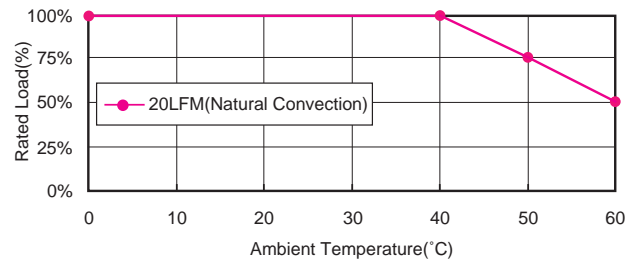
### GENERAL SPECIFICATIONS:

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 ..... 60KHz Typical  
 MTBF ..... MIL-HDBK-217F, GB, at 25°C/115VAC ..... 200K hrs min.  
 Altitude ..... 2000m  
 Dimensions ..... 5.197x2.283x1.201 inches (132.00x58.00x30.50 mm)  
 Weight ..... 345g(0.76 Pounds)  
 AC Inlet ..... IEC320/C14

### SAFETY AND EMC:

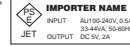
Emission and Immunity ..... EN55022 Class B, FCC Part15 Class B  
 EN61000-6-3, EN61000-3-2, EN61000-3-3  
 EN55024, EN61204-3, EN61000-6-1  
 Safety ..... IEC60950-1, EN60950-1, UL60950-1

## TRG70 Series Derating Curve



### NOTE:

- Voltage setpoint at 60% full load.
- Add a 0.1µF ceramic capacitor and a 10µF E.L. capacitor to output for Ripple & Noise measurement @20MHz BW.
- Line regulation measured from 100Vac to 240Vac with full load.
- Load regulation measured from 60% to 100% full load and from 60% to 20% full load (60% +/- 40% full load)
- \*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\*



TRG70

## Mechanical Specification

All Dimensions In Inches(mm)  
 Tolerance Inches: x.xxx= ±0.02  
 Millimeters: x.xx= ±0.5

