



# TR30RDM SERIES

## 30W MEDICAL SWITCHING ADAPTER



### Features

- \* Universal Input Range 80~264VAC
- \* Interchangeable AC Plugs
- \* Approved EN55011, FCC CFR47 Part 18 Class B
- \* Meets EN60335-1
- \* Approved EN60601-1-11 for Home Care Applications
- \* Low Leakage Current <50uA
- \* Meets IP21
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* Meet CoC Tier 2 & DoE Level VI  
(Output Cable Length  $\leq$  1800mm)  
(TR30RDM050: Output Cable Length  $\leq$  1220mm)
- \* No Load Power Consumption <75mW
- \* 2MOPP Class II



### Ordering information

| TR30RDMXXX | -XX          | G               | XX                                              | -XX-BK              |
|------------|--------------|-----------------|-------------------------------------------------|---------------------|
| Model No.  | DC Plug Type | UL1571 WITH OVP | DC Cable Length and Type                        | Color of Top Case   |
|            |              |                 | 01: 720mm                                       | BK-BK : Black-Black |
|            |              |                 | 02: 1220mm                                      | BE-BK : Blue-Black  |
|            |              |                 | 03: 1800mm                                      | RD-BK : Red-Black   |
|            |              |                 | 11: 720mm with Ferrite Core                     |                     |
|            |              |                 | 12: 1220mm with Ferrite Core                    |                     |
|            |              |                 | 13: 1800mm with Ferrite Core                    |                     |
|            |              |                 | * 16AWG / UL1571 or Equivalent for Vo: 5V, 9V   |                     |
|            |              |                 | * 18AWG / UL1571 or Equivalent for Vo: 12V, 15V |                     |
|            |              |                 | * 22AWG / UL1571 or Equivalent for Vo: 18V, 24V |                     |

| 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 |
|------------|----------------|----------------|--------------------------|----------------------------|---------------------------|---------------------------|-------------------------|
| TR30RDM050 | 5V             | 5.0A           | 100mVp-p                 | $\pm 2\%$                  | $\pm 1\%$                 | $\pm 6\%$                 | 84%                     |
| TR30RDM090 | 9V             | 3.3A           | 100mVp-p                 | $\pm 2\%$                  | $\pm 1\%$                 | $\pm 3\%$                 | 88%                     |
| TR30RDM120 | 12V            | 2.5A           | 120mVp-p                 | $\pm 2\%$                  | $\pm 1\%$                 | $\pm 2\%$                 | 88%                     |
| TR30RDM150 | 15V            | 2.0A           | 120mVp-p                 | $\pm 2\%$                  | $\pm 1\%$                 | $\pm 2\%$                 | 88%                     |
| TR30RDM180 | 18V            | 1.67A          | 120mVp-p                 | $\pm 2\%$                  | $\pm 1\%$                 | $\pm 2\%$                 | 88%                     |
| TR30RDM240 | 24V            | 1.25A          | 120mVp-p                 | $\pm 2\%$                  | $\pm 1\%$                 | $\pm 2\%$                 | 88%                     |

Specifications are subject to change without notice.

## Specifications

### INPUT SPECIFICATIONS:

Voltage ..... 80~264Vac (see derating curve)  
 Frequency ..... 47 to 63Hz  
 Input Current ..... 0.8A max.  
 Inrush Current ..... Cold start@25°C ..... 85A max. @240Vac  
 Leakage Current ..... 50uA max.

### OUTPUT SPECIFICATIONS:

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

### GENERAL SPECIFICATIONS:

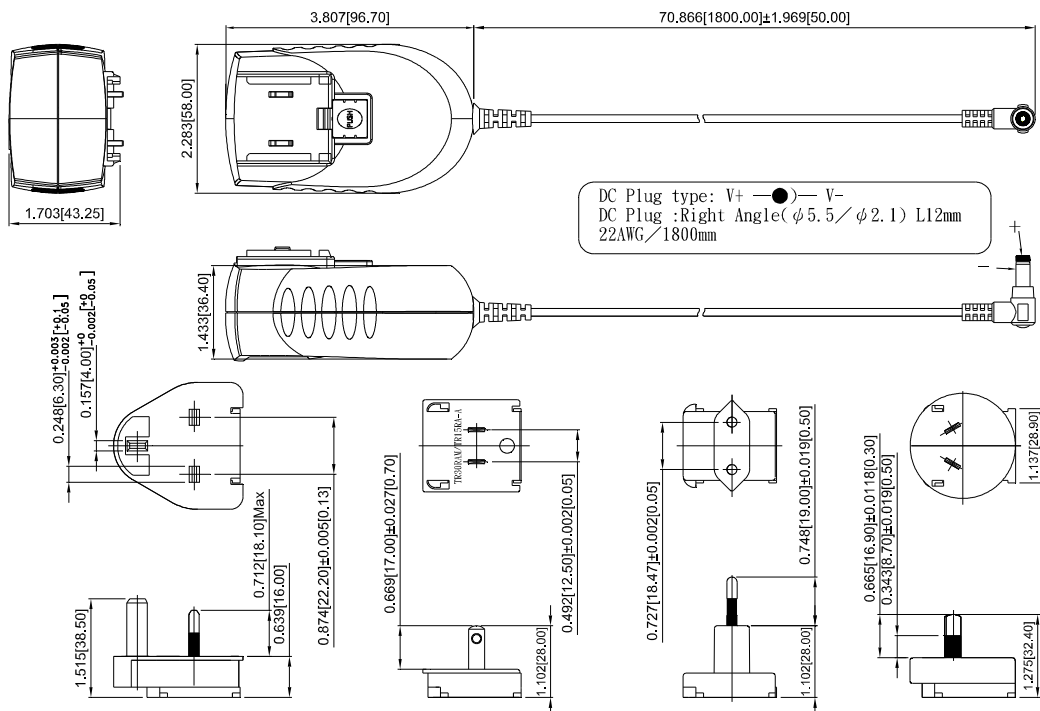
Isolation ..... Input to output 4000VAC  
 Operating Temperature ..... -20 ~ 60°C (see derating curve)  
 Storage Temperature ..... -20~85°C  
 Humidity ..... 93% RH max. Non condensing  
 Cooling ..... Natural Convection  
 Switching Frequency ..... 65KHz Typical  
 MTBF ..... MIL-HDBK-217F, GB, 25°C/115VAC ..... 380Khrs min.  
 Life time ..... 25800 hours min.@ 75% load, 40°C  
 Altitude ..... 5000m  
 Dimensions ..... 3.807x2.283x1.703 inches (96.70x58.00x43.25mm)  
 Weight ..... 200g(0.44 Pounds)

### SAFETY AND EMC:

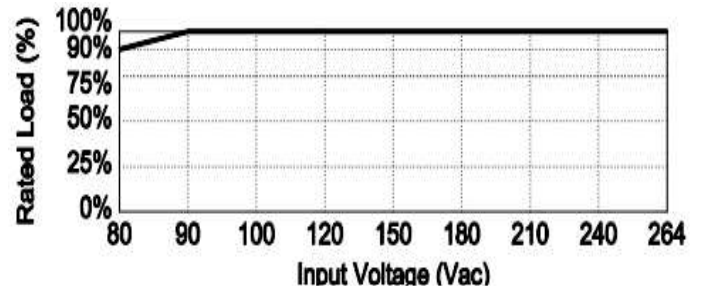
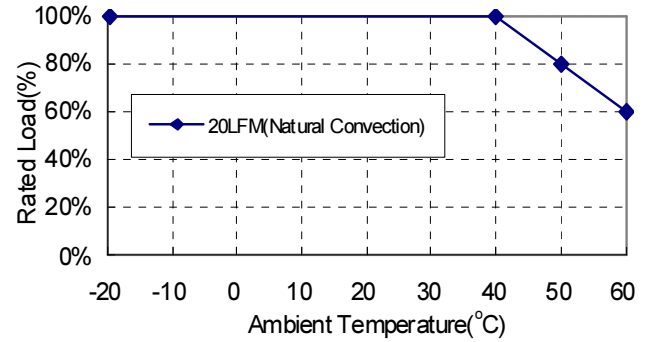
Emission and Immunity(Ed4.0) ..... EN55011, EN60601-1-2  
 EN61000-3-2, EN61000-3-3, IEC61000-4-2, 3, 4, 5, 6, 8, 11  
 FCC CFR47 Part 18 Class B  
 Safety (Ed3.1) ..... IEC60601-1:2005+A1, EN60601-1-11  
 EN60601-1:2006+A11:2011+A1+A12,  
 ANSI/AAMI ES60601-1:2005/A1:2012

### Mechanical Specification

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



## TR30RDM 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. Efficiency measured at 75% load and input voltage is 230Vac.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Cincon:

|                                                 |                                                 |                                                 |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| <a href="#">TR30RDM150-02G03-BK-BK-Level-VI</a> | <a href="#">TR30RDM050-48G11-BK-BK-Level-VI</a> | <a href="#">TR30RDM240-40G11-RD-BK-Level-VI</a> |
| <a href="#">TR30RDM240-02G13-RD-BK-Level-VI</a> | <a href="#">TR30RDM120-12G03-RD-BK-Level-VI</a> | <a href="#">TR30RDM240-11G11-RD-BK-Level-VI</a> |
| <a href="#">TR30RDM240-36G01-BE-BK-Level-VI</a> | <a href="#">TR30RDM180-11G11-BE-BK-Level-VI</a> | <a href="#">TR30RDM050-39G11-RD-BK-Level-VI</a> |
| <a href="#">TR30RDM240-11G02-BE-BK-Level-VI</a> | <a href="#">TR30RDM090-01G12-BE-BK-Level-VI</a> | <a href="#">TR30RDM240-39G11-BK-BK-Level-VI</a> |
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| <a href="#">TR30RDM050-35G12-BK-BK-Level-VI</a> | <a href="#">TR30RDM150-01G13-BE-BK-Level-VI</a> | <a href="#">TR30RDM240-49G02-BK-BK-Level-VI</a> |
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