



## 18 Watt MEDICAL Switching Adapter Wall Mount, Series DVTR18RDM



### Features

- Universal Input Range: 80 – 264Vac
- Efficiency up to 87%
- Interchangeable AC Plugs
- Leakage Current <30μA
- Class II
- Over Voltage Protection
- Continuous Short Circuit Protection
- No Load Power Consumption <75mW
- Approved EN55011, FCC 47CFR Part 18 Class B
- Approved EN60601-1 2 MOPP
- Approved EN60601-1-11 for Home Healthcare Applications
- Approved IP22
- Meets IEC/EN60335-1
- Operating Altitude 5000m
- Meet CoC Tier 2 & DoE Level VI  
( Output Cable Length ≤1800mm )

MODEL NUMBER	OUTPUT VOLTAGE [ VDC ]	OUTPUT CURRENT MAX. [ A ]	RIPPLE & NOISE [ mVp-p ] Note 1	VOLTAGE ACCURACY [ % ] Note 2	LOAD CAPACITANCE [ μF ] Note 3	LOAD REGULATION [ % ] Note 4	EFF. [ % ] Note 5
TR18RDM050	5	3,0	100	±5	3000	±5	82
TR18RDM090	9	2,0	100	±3	2000	±3	86
TR18RDM120	12	1,5	120	±3	1500	±2	86
TR18RDM150	15	1,2	120	±3	1200	±2	86
TR18RDM180	18	1,0	120	±3	1000	±2	86
TR18RDM240	24	0,75	120	±3	750	±2	87

- Note:
1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
  2. Voltage accuracy at 60% full load.
  3. Vin=115Vac and 230Vac, Output is max. load
  4. Load regulation measured from 60% to 100% full load and from 60% to 20% load (60%±40% load).
  5. Typical Efficiency at 230Vac and 75% Load at 25°C
  6. All specifications are typical at nominal input, full load at 25°C unless otherwise noted.

Ordering Information						
Model	Output	AC Plug Type	DC Plug Type	Cable	DC Cable Length	Case Color
TR15RAM	XXX	-XXXX	-XX	X	XX	-XX-BK
18W Medical Adapter	050 : 5V	-ASUE : Include 4 Type Blank : Order Separately AC Adapter A: American type S: Australian type U: U.K. type E: European type	STANDARD OUTPUT DC PLUG	G: UL1571 with OVP	01: 720mm	BE-BK : Blue-Black BK-BK: Black-Black
	090 : 9V				02: 1220mm	
	120 : 12V				03: 1800mm	
	150 : 15V				11: 720mm with Ferrite Core	
	180 : 18V				12: 1220mm with Ferrite Core	
240 : 24V	13: 1800mm with Ferrite Core					

Technische Änderungen vorbehalten / Specifications are subject to change without notice

## INPUT SPECIFICATIONS:

Input Voltage Range.....	80-264Vac
Frequency.....	47 to 63Hz
Input Current.....	100% Full load, Vin=100Vac ..... 0,5A max.
Inrush Current.....	Vin 240Vac Cold Start at 25°C ..... 45A typ.
Leakage Current.....	..... 30µA max.

## OUTPUT SPECIFICATIONS:

Hold-up Time.....	Vin = 115Vac ..... 12mS typ.
Line Regulation.....	measured from 100Vac to 240Vac 100% full load ..... ±1% max.
Short Circuit Protection.....	.....Hiccup Mode Continuous (Auto Recovery)
Over Voltage Protection.....	.....TVS Component to Clamp
Over Current Protection.....	..... 110 min. / 180% max. (Auto Recovery)

## GENERAL SPECIFICATIONS:

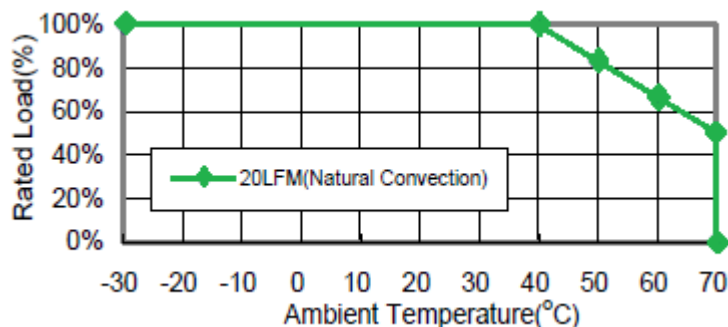
Isolation Input/Output.....	.....4000VAC max.
Isolation Resistance Input/Output.....	.....100 MΩ min.
Operating Temperature Range.....	.....-30°C to +70°C (see derating curve)
Storage Temperature Range.....	.....-30°C to +85°C
Humidity.....	..... 93% RH max. Non condensing

Cooling.....	..... Natural Convection
Switching Frequency.....	.....50KHz typ.
MTBF ( MIL-HDBK-217F, GB, at 25°C/115VAC.....	..... 750Khrs min.
Altitude.....	.....5000m max.
Shock.....	.....MIL-STD-810F Table 516.5 ..... 75g typ.
Vibration.....	.....MIL-STD-810F Table 514.5C-VIII ..... 4g typ.
Dimensions.....	..... 80,40 x 43,00 x 36,90 mm
Weight.....	.....115g typ.

## SAFETY & EMC:

Safety.....	..... Class II, IEC 60601-1:2005, COR1:2006, COR2:2007, AMD1:2012, EN 60601-1:2006+A11+A1+A12 ANSI/AAMI ES60601-1 (2005/(R)2012+A1:2012, C1:2009/(R)2012+A2:2010/(R)2012) IEC/EN 60601-1-11:2015 for Home Healthcare Applications
EMC Emission.....	..... EN 55011:2016+A1:2017, CISPR 11:2015+A1:2016, Class B, EN 61003-3:2013, FCC 47 CFR Part 18
Conducted Disturbance.....	..... EN 55011:2016+A1:2017, CISPR 11:2015+A1:2016, FCC 47 CFR Part 18 Class B
Radiated Disturbance.....	..... N 55011:2016+A1:2017, CISPR 11:2015+A1:2016, FCC 47 CFR Part 18 Class B
Voltage Fluctuations & Flicker.....	..... EN 61000-3-3
EMC Immunity.....	..... EN 60601-1-2:2015, IEC 61000-4-2, 3, 4, 5, 6, 8, 11
Electrostatic Discharge (ESD).....	..... IEC 61000-4-2:2008, Air Discharge: ±15kV, Contact Discharge: ±8kV
Radio-Frequency, Continuous, Radiated Disturbance.....	..... IEC 61000-4-3
Electrical Fast Transient (EFT).....	..... IEC 61000-4-4:2012, ±0.5kV, ±1kV, ±2kV
Surge.....	..... IEC 61000-4-5:2014/AMD1:2017, L-N: ±0.5kV, ±1kV
Conducted Disturbances, Induced by RF Fields.....	..... IEC 61000-4-6
Power Frequency Magnetic Field.....	..... IEC 61000-4-8
Voltage Dips.....	..... IEC 61000-4-11:2004/AMD1:2017, Dips: 30% Reduction, Dips: >95% Reduction
Voltage Interruptions.....	..... IEC 61000-4-11:2004/AMD1:2017, >95% reduction

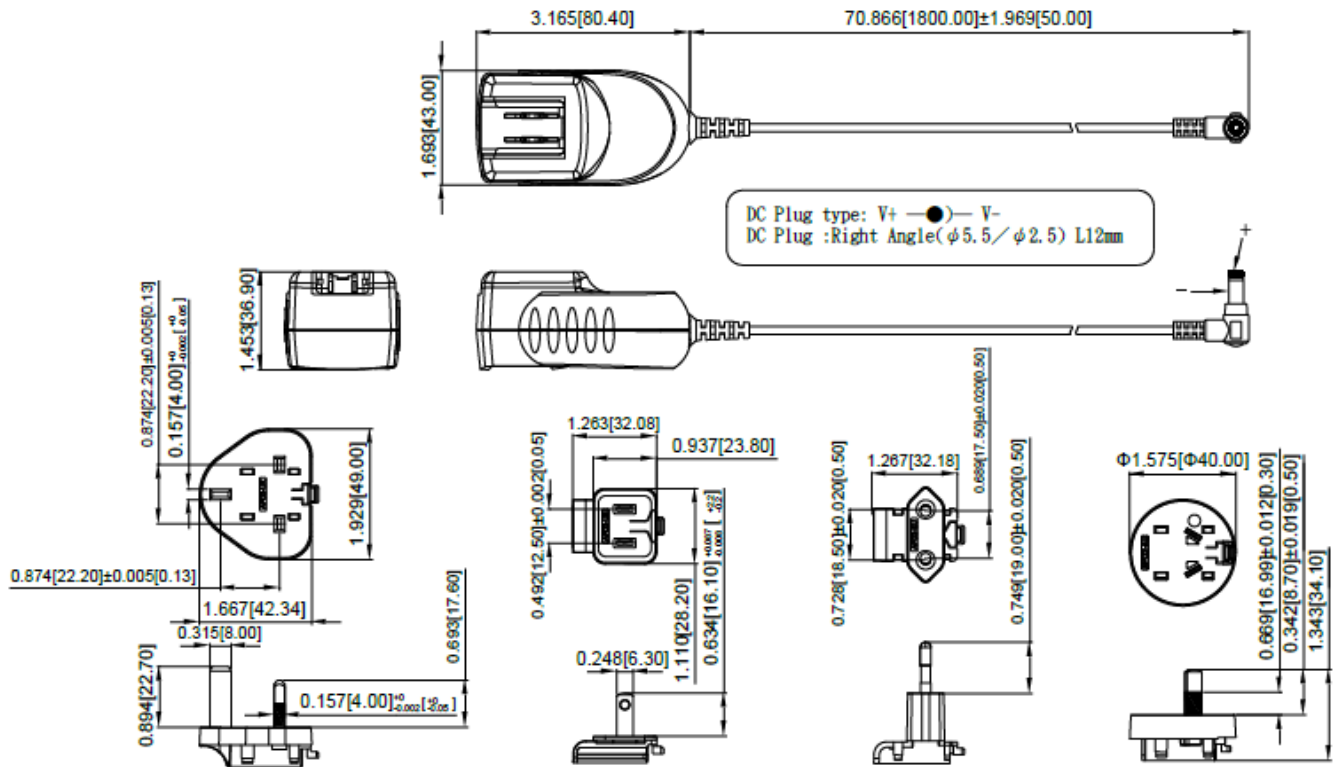
## Derating Curve



# Mechanical Specification

# Series DVTR18RDM

All Dimensions in Inches (mm); Tolerance: Inches: x.xxx=±0.02, mm: x.xx=±0.5



TYPE				
	U.K type (U)	American type (A)	European type (E)	Australian type (S)

DC Plug Type	Cable Number -XXXXX	A	B	C	Cable Type	Cable Length	Cable AWG
		OD (mm)	ID (mm)	L (mm)			
 Straight/Inner+Outer + (●) -	11G03	Φ5.5	Φ2.1	12	UL1571	1800mm without Core	18AWG for Vo: 5V, 9V 22AWG for Vo: 12V, 15V 18V, 24V
	12G03	Φ5.5	Φ2.5	12			
	23G03	Φ5.5	Φ2.1	9.5			
	26G03	Φ5.5	Φ2.5	9.5			
 Right Angle/Inner+Outer + (●) -	01G03	Φ5.5	Φ2.1	12			
	02G03	Φ5.5	Φ2.5	12			
	21G03	Φ5.5	Φ2.5	9.5			
	24G03	Φ5.5	Φ2.1	9.5			

Other DC Plug Type on request

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