

Switch-mode Power Supply MDR

- ◆ Universal full-range AC input
- ◆ Short-circuit, over-load, and over-voltage protections
- ◆ Cooling by free air convection
- ◆ Built-in DC OK output signal
- ◆ 100% full load burn-in test
- ◆ 3 years warranty



Technical specifications

Input

Voltage	85...264 VAC, 120...370 VDC
Frequency	47...63 Hz
Leakage current	< 1 mA at 240 VAC

Output

DC voltage	see table below
DC OK signal:	
- 10...20 W	± 15...25% output voltage, 40 mA
- over 20 W	relay 30V/1A w/ NO contact
Setup time	500 ms
Isolation	3 kVAC, 100 MΩ at 500 VDC
Protection	
Over load	105...150% rated power
Over voltage	115...135% output voltage

(¹) Not available for variants '10' and '20'

Operating conditions

Operating temperature	-20...70 °C
Operating humidity	20...90 %RH
Temperature drift	max. 0.03% for 1 °C within 0...50 °C
Vibrations	10...500 Hz, 2 G, 10 min/cycle, x/y/z
Indication and controls	
Front-panel trimmer ⁽¹⁾	for voltage adjustment, ± 10%
LEDs	LED for DC OK
Design and materials	
Case material	plastic
Wiring	screw terminals
Mounting	on 35 mm DIN rail
Protection class	IP20
Safety approvals	CE, UL

Variant	10	20	40	60	100
Specifications					
Output voltage [VDC]					
5 / 12 / 15 / 24	5 / 12 / 15 / 24	5 / 12 / 24 / 48	5 / 12 / 24 / 48	12 / 24 / 48	
Rated current [A]	2.0 / 0.8 / 0.7 / 0.4	3.0 / 1.7 / 1.3 / 1	6.0 / 3.3 / 1.7 / 0.8	10.0 / 5.0 / 2.5 / 1.3	7.5 / 4.0 / 2.0
Rated power [W]	10 / 10 / 10 / 10	15 / 20 / 20 / 24	30 / 40 / 41 / 40	50 / 60 / 60 / 60	90 / 96 / 96
Voltage tolerance [$\pm\%$]	5 / 3 / 3 / 2	2 / 1 / 1 / 1	2 / 1 / 1 / 1	2 / 1 / 1 / 1	1
Line regulation [$\pm\%$]	1	1	1	1	1
Load regulation [$\pm\%$]	5 / 3 / 3 / 2	1	1	1.5 / 1 / 1 / 1	1
AC voltage ripple [mVp-p]	80 / 120 / 120 / 150	80 / 120 / 120 / 150	80 / 120 / 150 / 200	80 / 120 / 150 / 200	120 / 150 / 200
AC input current [A]	0.3/115V, 0.2/230V	0.6/115V, 0.4/230V	1.1/115V, 0.7/230V	1.8/115V, 1.0/230V	1.3/115V, 0.8/230V
Efficiency [%]	77 / 81 / 81 / 84	76 / 80 / 81 / 84	78 / 86 / 88 / 88	78 / 86 / 88 / 87	85 / 86 / 88
Inrush current [A]	35/115V, 70/230V	20/115V, 40/230V	30/115V, 60/230V	30/115V, 60/230V	
Hold-up time [ms]	25/115V, 120/230V	20/115V, 50/230V	20/115V, 50/230V	20/115V, 50/230V	
Dimensions	22.5x90x100 mm		40x90x100 mm		55x90x100 mm
Weight	170 g	190 g	300 g	330 g	420 g

Ordering code MDR★ - G11

Code	Feature or option	Code values
*	Variant	10, 20, 40, 60, 100
G11	Output voltage ⁽¹⁾	05 - 5 VDC, 12 - 5 VDC, 15 - 5 VDC, 24 - 24 VDC, 48 - 48 VDC, Z - other (specify!)

(¹) Applicable for the selected variant