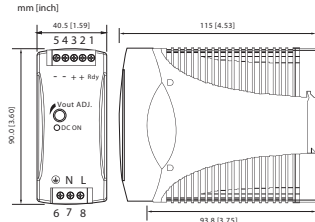


Power supply · regulated, 60 W

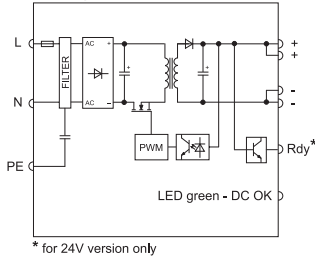
Switchmode power supply, Single-phase, Class 2
Input: wide-range input AC 85–264 V, DC 90–375 V
Output: 12 V / 24 V / 48 V, adjustable



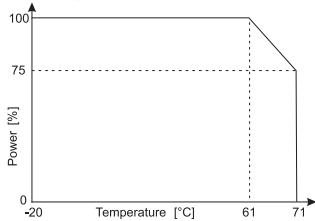
Dimensions



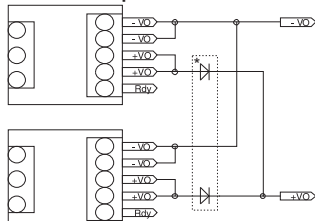
PIN assignment



Derating



Redundant operation



* Redundant Module 722987
 Only use together with 24 V version!

Description	Part-No.	Type	PU	
Screw terminal				
Output voltage/current	DC 12 V / 5 A	722769	DRA60-12A	1
	DC 24 V / 2.5 A	722754	DRA60-24A	1
	DC 48 V / 1,25 A	722776	DRA60-48A	1

Input	DRA60-12A	DRA60-24A	DRA60-48A
Nominal voltage	AC 100–240 V		
Operation voltage range	AC 85–264 V / DC 90–375 V		
Line frequency	47 – 63 Hz		
Rated current	U _i = AC 115 V: 690 mA / U _i = AC 230 V: 360 mA		
Inrush current	U _i = AC 115 V: 20 A / U _i = AC 230 V: 40 A		
Internal fuse	T2 A / AC 250 V		
External fuse	Mini-circuit breaker: B 6 A		
Power Factor Correction P.F.C.	–		

Output	DRA60-12A	DRA60-24A	DRA60-48A
Rated voltage output	DC 12 V	DC 24 V	DC 48 V
Rated current output	5 A	2.5 A	1.25 A
Max. output current	–		
Short-circuit current	–		
Voltage trim range	12/14 V	24/28 V	48/55 V
Accuracy	±1 %		
Line regulation	±0.5 %		
Load regulation	±0.5 %		
Rise time	1 s		
Temperature coefficient	±0.03 % / °C		
Ripple & Noise	50 mV		
Hold up time	V _{in} = 115 V: 20 ms / V _{in} = 230 V: 30 ms		
Status indication DC ON LED green	≥9.6 V	≥19.2 V	≥37 V
Status indication DC LOW LED red	–		
Parallel/redundant operation	max. 2 devices / via external diodes		
Efficiency	86 %	89 %	89 %
Low power loss	9.0 W (AC 230 V)	8.8 W (AC 230 V)	7.8 W (AC 230 V)
Rated over load protection	110–150 %		
Over voltage protection	125–138 %		
Short circuit characteristics	Hiccup-mode		

General	DRA60-12A	DRA60-24A	DRA60-48A
Switching frequency	approx. 80 kHz		
Insulation voltage input/output	AC 3.0 kV _{eff}		
Insulation voltage input / ground	AC 1.5 kV _{eff}		
Insulation voltage output / ground	–		
Insulation resistance at DC 500 V	100 MΩ		
Operation temperature range	-25 °C – 70 °C (derating)		
Derating	-2.5% / °C starting at 60 °C		
Storage temperature range	-25 °C – 85 °C		
M.T.B.F.	504000 h	520000 h	531000 h
Relative humidity	20–90% RH, non-condensing		
Dimensions (w × h × d) in mm	40.5 × 90.0 × 115.0		
Cooling	Natural air cooling, 25 mm distance on all sides		
Housing material	Plastic		
Shock resistance	–		
Vibration resistance	–		
Field installation	rail TS 35 (EN 50022)		
Application height	2000 m		
Installation position	vertical		
Protection class	IP 20		
IP rating	II (SELV, PELV)		
Overvoltage category	II		
Pollution degree	2		
Weight (kg/piece)	0.340		
Termination	Screw terminal: 0.2–2.5 mm ² , max. 0.56 Nm		
Approvals	UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2 (not 12 V) recognised; TÜV: EN 60950-1, EN 61558-1, EN 61558-2-17 CE: EN 61000-6-3 / EN 55022 Class B; EN 61000-3-2 EN 61000-3-3; EN 55024; EN 61000-6-2; EN 61000-4-2; EN 61000-4-3 EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11		

Monitoring	DRA60-12A	DRA60-24A	DRA60-48A
DC ON Control (Rdy)	–	Open Collector	–
Switching voltage	–	DC 24 V	–
Switching current	–	≤ 35 mA	–
Switching capacity	–		
Insulation voltage	–	none	–