

Single phase, primary switched mode power supply **PM-0148-020-0**



Picture shows PM-0124-040-0

Advantages

Stabilised and adjustable output voltage
Low stand-by consumption <1 W
Constant current characteristic
DC OK signalling
Parallel operation option
Push-in terminals
Panel installation on mounting rails
Conform to EN 60335-1

Applications

Efficient, primary switched mode power supply in slim plastic housing. A powerful and flexible option that's still light and compact. Our real all-rounders, these power supply units are suitable for a highly diverse range of applications in solar, measurement and control technology as well as industrial and building automation. The devices cover the lower and average power requirements from 25 W to 100 W. Versions with 12 V, 24 V, and 48 V are available, enabling a whole range of applications. A version with 3.8 A rated current is available for establishing NEC Class 2 circuits. All power supplies also comply with the EN 60335-1 standard for domestic appliances. The output voltage can be easily set using the rotary potentiometer on the front of the housing. The DIN rail fastening method and push-in connection terminals enable fast and secure mounting.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1, EN 60335-1

EMC:
EN 61204-3

Approvals



UL/CSA 60950 recognised, UL508 listed, Germanischer Lloyd



Single phase, primary switched mode power supply

PM-0148-020-0

Type	PM-0148-020-0	
Electrical data	Input	
	Input rated voltage	100 - 240 Vac
	Input voltage range	85 - 264 Vac (120 - 373 Vdc)
	Input voltage derating	-2.5 %/Vac < 95 Vac
	Rated frequency range	44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load)	1.79 A (100 Vac) / 0.9 A (240 Vac)
	Starting current limiter	< 30 A, NTC
	Switch-on time	0.5 s (100 Vac) / 0.3 s (230 Vac)
	Power factor	0.5
	Input fuse internal	4 A
	Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
	Mains buffering	15 ms (100 Vac) / 80 ms (230 Vac)
	Transient surge voltage protection	Varistor
	Output	
	Output rated voltage	48 Vdc
	Output voltage range	40 - 56 Vdc
	Output rated current	2 A
	Output limited current	2.2 ... 2.4 A (constant current)
	Class 2 output (UL Limited Power Source, LPS)	No
Parallel connection	Yes	
Serial operation	Yes	
Power dissipation, no load/rated load	< 1 W / 16.2 W (230 Vac)	
Max. power losses	19.8 W (100 Vac / 48 V / 2 A)	
Ripple factor	typ. 20 mVss	
Resistance to reverse feed max.	63 Vdc	
Over-voltage-protection	max. 60 Vdc	
Efficiency	86 %	
Signaling		
Typ. switching threshold for LED and signal output (DC OK)	-	
Status indicator	LED green Uout > typ. 39 Vdc LED lit permanently	
Signal output	Active high signal Uout > typ. 39 Vdc max. 10 mA@48 Vdc short circuit proof	
Approvals		
Approvals	cURus, cULus, GL	
Environment		
Storage temperature	-25° C ... +85° C	
Ambient temperature	-25° C ... +70° C	
Derating	-3 %/K > +50° C	
Mounting position	horizontal for standard rail DIN TH 35	
Cooling method	Natural convection	
Required minimum spacing (left/right)	0 mm	
Required minimum spacing (over/under)	50 mm	
Safety and protection		
Protection index	IP 20	
Safety class	II, without PE connection	
Order numbers		
Order Number	PM-0148-020-0	

Type	PM-0148-020-0	
Mechanical data	Input	
	Connections input (direct plug-in technology Push-In)	max 2,5 mm ²
	Output	
	Connections output (direct plug-in technology Push-In)	max 2,5 mm ²
Signaling		
Connections signalling (direct plug-in technology Push-In)	max 2,5 mm ²	
Measures and weights		
Weight	0.39 kg	
Dimension (W x H x D)	52 x 90 x 103.5 mm	

