

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 limiting without overload shutdown
DC OK signalling
Push-in terminals
Panel installation on mounting rails
In compliance with EN 60335-1
3 years warranty

Applications

Efficient, primary switched mode power supply in slim plastic enclosure. 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, 30.5 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 enclosure. The DIN rail fastening method and push-in connection terminals enable fast and secure mounting.

Versions for construction of AS-i circuits as well as for medical applications according to UL 60601 are available.

Standards

Primary switched mode power supply
to UL 60950, UL 508

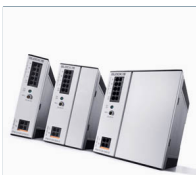
Safety:
EN 61558-2-16, EN 60950-1, EN 60335-1

EMC:
EN 61204-3

Approvals



UL/CSA 60950 recognised, UL508 listed, GL, EAC



Single-phase, primary switched mode power supply

PM-0148-020-0

Electrical data	
Type	PM-0148-020-0
Special features	
Characteristics	-
Input	
Input rated voltage	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 372 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 (rated load)	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. 20mVss
Resistance to reverse feed max.	63 Vdc
Over-voltage-protection	max. 60 Vdc
Efficiency	86 %
Signaling	
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, EAC
Environment	
Storage temperature	-25 °C to +85 °C
Ambient temperature	-25 °C to +70 °C
Derating	-3 %/K > +50 °C
Mounting position	horizontal for standard rail DIN TS35
Type of cooling	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

Mechanical data	
Type	PM-0148-020-0
Terminal and mounting	
Terminals input (direct plug-in technology Push-in)	max 2,5 mm²
Terminals output (direct plug-in technology Push-in)	max 2,5 mm²
Terminals signalling (direct plug-in technology Push-in)	max 2,5 mm²
Measures and weights	
Weight	0.39 kg

