

Two-phase, primary switched mode power supply

PM 2AC



General Data

Input voltage range 200 - 500 Vac
Nominal output voltage: DC 24 V
Nominal output current: 3.8 A
Ambient temperature: -25 °C ... +70 °C
Protection index IP 20
Plastic housing

Advantages

Stabilised and adjustable output voltage
Low stand-by consumption <1 W
Constant current limiting without overload shutdown
DC OK signalling
Parallel operation option
Push-in terminals
Panel installation on mounting rails

Applications

Efficient, primary switched mode power supply in slim plastic housing. A powerful and flexible option that's still light and compact. This power supply is suitable for a highly diverse range of applications in solar, measurement and control technology as well as industrial and building automation. It delivers an output current of 3.8 A and is suitable for establishing NEC Class 2 circuits. 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 for NEC Class 2 applications to UL 60950, UL 508, UL 1310

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

EMC:
EN 61204-3

Approvals



UL/CSA 60950 recognised (pending), UL 508 listed (pending), UL 1310



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Electrical data	Typ	PM-0224-038-0
	Special features	
	Characteristics	For establishing NEC Class 2 circuits
	Input	
	Input rated voltage	200 - 500 Vac
	Input voltage range	180 - 575 Vac (254 - 800 Vdc)
	Input voltage derating	-0.1 %/Vac < 320 Vac
	Rated frequency range	44 Hz - 66 Hz / 0 Hz
	Input rated current (rated load)	0.82 A / 0.52 A (200 Vac / 500 Vac)
	Starting current limiter	< 30 A, NTC
	Switch-on time	<1.2 s (230 Vac) / <0.8 s (400 Vac)
	Power factor	0.66
	Input fuse internal	3.15 A
	Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
	Mains buffering (rated load)	>15 ms (230 Vac) / >60 ms (400 Vac)
	Transient surge voltage protection	Varistor
	Output	
	Output rated voltage	24 Vdc
	Output voltage range	23 - 28.5 Vdc (> 24 Vdc constant capacity)
	Output rated current	3.8 A / NEC Class 2
	Output limited current	3.8 ... 3.2 A (constant current, Class 2)
	Class 2 output (UL Limited Power Source, LPS)	✓
	Parallel connection	Yes
	Serial operation	Yes
	Power dissipation, no load/rated load	2.8 W / 14 W (230 Vac)
	Max. power losses	<15 W (180 Vac / 72 W)
	Ripple factor	typ. 30 mVss
	Resistance to reverse feed max.	35 Vdc
	Over-voltage-protection	max. 40 Vdc
	Efficiency	89 %
	Signaling	
	Status indicator	LED green U _{out} > typ. 21.5 Vdc LED lit permanently
	Signal output	Active high signal U _{out} > typ. 21.5 Vdc max. 20 mA@24 Vdc short circuit proof
	Approvals	
	Approvals	cURus, cULus (in preparation)
	Environment	
	Storage temperature	-25 °C to +85 °C
	Ambient temperature	-25 °C to +70 °C
	Derating	-2.5 %/K > +55 °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-0224-038-0



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Mechanical data															30
Typ		Terminals input (direct plug-in technology Push-in)	Terminals output (direct plug-in technology Push-in)	Terminals signalling (direct plug-in technology Push-in)	Weight	Dimension picture (in mm)									
PM-0224-038-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.39 kg	1	90	45	3	52	3.5	103.5	111			

Dimension pictures

