Single phase, primary switched mode power supply

PC-0124-100-0

Picture shows PC-0124-200-0

Advantages

- Stabilised and adjustable output voltage
- Fast tripping of standard bi-metal circuit breakers
- DC OK signal contact
- Parallel operation
- Push-in terminals
- Robust DIN rail mounting
- Resistant to transient overvoltages up to 4 kV

Applications

Power Compact combines the basic functionality of an economic switched mode power supply with key additional features to ensure high system availability. 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 and they really come into their own in industrial and building automation. The devices cover the average power requirement from 120 W to 480 W. Versions with 12 V, 24 V, and 48 V are available, which allow a range of applications. A version with 5 A rated current is available for a single or two-phase supply from 180 V to 550 V. The output voltage can be set easily using the rotary potentiometer on the front of the housing. The robust 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

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised, UL508 listed, Germanischer Lloyd

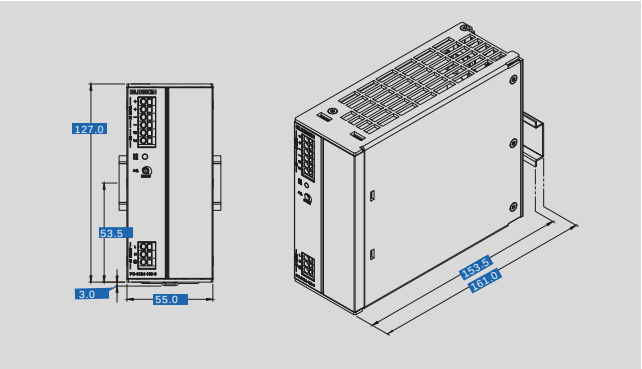
Single phase, primary switched mode power supply
PC-0124-100-0

Electrical data

Type	PC-0124-100-0
Input	
Input rated voltage	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 372 Vdc)
Input voltage derating	-2.5 %/Vac < 100 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	2.74 A (100 Vac) / 1.25 A (230 Vac)
Starting current limiter	< 30 A, NTC (active)
Switch-on time	1.3 s (100 Vac) / 0.25 s (230 Vac)
Mains buffering	15 ms (100 Vac) / 17 ms (230 Vac)
Power factor	0.92 (active PFC)
Input fuse internal	6.3 A
Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated voltage	24 Vdc
Output voltage range	23 – 28.5 Vdc
Output rated current	10 A
Output limited current	typ. 11 A (constant current)
Tripping of LS circuit breakers	max. B6, C2
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	6.6 / 24.4 W (230 Vac)
Max. power losses	31.3 W (100 Vac / 24 V / 10 A)
Efficiency	typ. 91 %
Ripple factor	typ. 50 mVss
Resistance to reverse feed max.	35 Vdc
Over-voltage-protection	max. 40 Vdc
Signaling	
Typ. switching threshold for LED and signal output (DC OK)	-
Status indicator	LED green
Signal output	Relay contact
Approvals	
Approvals	cURus, cULus, GL
Environment	
Cooling method	natural convection
Ambient temperature	-25°C ... +70°C
Storage temperature	-25° C ... +85° C
Derating	-5 %/K > +60° C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac
Required minimum spacing (left/right)	0 mm
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Order numbers	
Order Number	**PC-0124-100-0**

Mechanical data

Type	PC-0124-100-0
Input	
Connections input (direct plug-in technology Push-In)	max 2,5 mm²
Output	
Connections output (direct plug-in technology Push-In)	max 2,5 mm²
Signaling	
Connections signalling (direct plug-in technology Push-In)	max 2,5 mm²
Environment	
Mounting position	horizontal for standard rail DIN TH 35
Measures and weights	
Weight	0.93 kg
Dimensions W x H x D	55 x 127 x 161 mm



Subjects to change.