

# Single phase, primary switched mode power supply **PM-0124-038-0**



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 for NEC Class 2 applications 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-0124-038-0

| Type   |   | PM-0124-038-0  |
|--|---|--|
| <b>Electrical data</b>                                     | <b>Input</b>                                  |  |
|  | 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)              | 1.5 A (100 Vac, 91 W) / 0.6 A (240 Vac, 91 W)  |
|  | Starting current limiter                      | < 30 A, NTC  |
|  | Switch-on time                                | <0.5 s (100 Vac) / <0.2 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                                      |  |
| <b>Output</b>  | <b>Output</b>                                 |  |
|  | 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) | Yes  |
|  | Parallel connection                           | Yes  |
|  | Serial operation                              | Yes  |
|  | Power dissipation, no load/rated load         | 2.8 W / 14 W (230 Vac)   |
|  | Max. power losses                             | <20 W (100 Vac / 91 W)   |
|  | Ripple factor                                 | typ. 20 mVss   |
|  | Resistance to reverse feed max.               | 35 Vdc   |
|  | Over-voltage-protection                       | max. 40 Vdc  |
|  | Efficiency                                    | 87 %   |
|  | <b>Signaling</b>                              | <b>Signaling</b>   |
| Typ. switching threshold for LED and signal output (DC OK) |   | -  |
| Status indicator   |   | LED green<br>Uout > typ. 21.5 Vdc<br>LED lit permanently                               |
| Signal output  |   | Active high signal<br>Uout > typ. 21.5 Vdc<br>max. 20 mA@24 Vdc<br>short circuit proof |
| <b>Approvals</b>   | <b>Approvals</b>                              | cURus, cULus, GL   |
|  | <b>Environment</b>                            |  |
| 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   |  |
| <b>Safety and protection</b>                               | <b>Safety and protection</b>                  |  |
|  | Protection index                              | IP 20  |
| Safety class   | II, without PE connection                     |  |
| <b>Order numbers</b>                                       | <b>Order numbers</b>                          |  |
|  | Order Number                                  | PM-0124-038-0  |

| Type   |  | PM-0124-038-0           |
|--|--|-------------------------|
| <b>Mechanical data</b>                                     | <b>Input</b>   |                         |
|  | Connections input (direct plug-in technology Push-In)  | max 2,5 mm <sup>2</sup> |
|  | <b>Output</b>  |                         |
|  | Connections output (direct plug-in technology Push-In) | max 2,5 mm <sup>2</sup> |
| <b>Signaling</b>   |  |                         |
| Connections signalling (direct plug-in technology Push-In) | max 2,5 mm <sup>2</sup>                                |                         |
| <b>Measures and weights</b>                                | <b>Measures and weights</b>                            |                         |
|  | Weight   | 0.39 kg                 |
|  | Dimension (W x H x D)                                  | 52 x 90 x 103.5 mm      |

