

# Uninterruptible power supply PC-1024-050-0



Picture shows PC-1024-050-0

## Advantages

|  |
|--|
| Combined power supply with charging and controlling unit                                     |
| Fast tripping of conventional circuit breakers   |
| Battery modules get detected automatically   |
| Reliable signalling when there is low remaining life expectancy of connected battery modules |
| Extended life expectancy through temperature controlled battery management                   |
| Interface to visualise and adjust relevant data  |
| Reliable supply of industrial PC's   |
| 3 years warranty   |

## Applications

The uninterruptible power supply Power Compact contains an economic DC 24V/5A power supply with basic specifications for industrial computer and also a loading and controlling unit for an ideal battery management.

## Standards

Uninterruptible power supply  
to UL 60950, UL 508

Safety:  
EN 60950, EN 60950 (SELV), EN 60204 (PELV)

EMC:  
EN 61000-6-3 (Interference emissions), EN 61000-6-2 (Interference immunity)

## Approvals



UL/CSA 60950 recognised, UL508 listed, Germanischer Lloyd



# Uninterruptible power supply

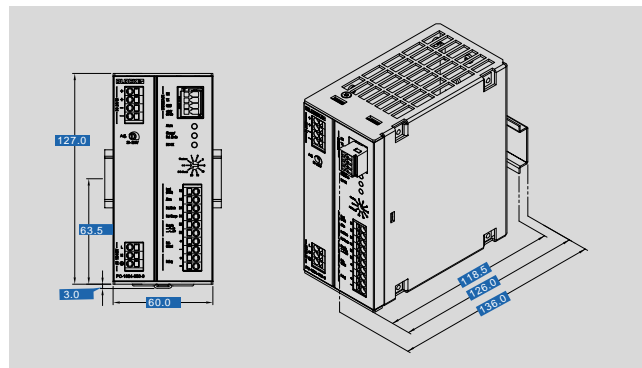
## PC-1024-050-0

### Electrical data

| Type  | PC-1024-050-0   |
|---|---|
| <b>Input</b>  |   |
| Input rated voltage   | 100 - 240 Vac   |
| Input voltage range   | 95 - 264 Vac<br>(120 - 372 Vdc)                                       |
| AC input derating   | -1.5 % / Vac < 110 Vac  |
| DC input derating   | -1 % / Vdc < 150 Vdc  |
| Rated frequency range   | 47 Hz - 63 Hz / 0 Hz  |
| Input rated current (rated load)                                | 1.96 A / 0.95 A (100 / 230 Vac)                                       |
| Starting current limiter  | < 30 A, NTC   |
| Switch-on time  | < 200 ms  |
| Input fuse internal   | 4 A (time-lag)  |
| Recommended back-up fuse (circuit breaker)                      | 6 A, 10 A, 16 A, characteristic B, C                                  |
| Transient surge voltage protection                              | Varistor  |
| <b>Output</b>   |   |
| Output rated current  | 5.00 A  |
| Tripping of LS circuit breakers                                 | max. B4   |
| Parallel connection   | Only with redundancy module, max. 5 A output current                  |
| Serial operation  | Yes   |
| Ripple factor   | typ. 50 mVss  |
| Output rated voltage  | 24 Vdc  |
| Over-voltage-protection   | typ. 38 Vdc   |
| Rated output voltage (normal mode)                              | 24 Vdc  |
| Rated output voltage (buffer mode)                              | 24 Vdc  |
| Output voltage range (mains operation)                          | 23 - 28.5 Vdc   |
| Output voltage range (battery operation)                        | Battery voltage - 0.5 V (27.5 - 19 Vdc)                               |
| Output voltage limiting (mains operation)                       | typ. 6.5 A, constant current  |
| Output voltage limiting (battery operation)                     | typ. 5.5 A  |
| Power losses in mains operation (nominal load, battery charged) | 22 W (100 Vac)<br>17W (230 Vac)                                       |
| Max. power losses in battery operation (stand-by/nominal load)  | 3.2 W / 5.2 W   |
| <b>Storage medium</b>   |   |
| Remote shutdown   | Yes   |
| Buffer period   | 1, 2, 3, 5, 10, 15, 20 Min, PC-Mode, Maximum, Individual              |
| Type of the storage medium                                      | Accumulator, external   |
| Reverse connection protection                                   | Yes, (fuse in battery module trips)                                   |
| Charging characteristic   | 3-stage charging process (UoU charging characteristic)                |
| Charging current  | max. 0.6 A  |
| End-of-charge voltage   | 26...29.5 V temperature-controlled, adjustable via interface          |
| Check for presence of battery                                   | 1 per minute  |
| Check remaining battery life                                    | 6 per hour  |
| Deep discharge protection                                       | 19 Vdc  |
| Warning threshold, battery almost flat                          | 20.4 Vdc  |
| Recommended battery modules                                     | 1.2 - 12 Ah   |
| Parallel connection of battery modules                          | Yes, max. 3   |
| <b>Signaling</b>  |   |
| Status indicator  | 3 LED green/yellow/red  |
| Isolated group input  | max. 30 V / 200 mA current limiting (in 3 separate signal outputs)    |
| Alarm/Bat.Mode/Bat.Charge signal output                         | Relay, kill switch type, max. 30 V, function adjustable via interface |
| <b>Approvals</b>  |   |
| Approvals   | cURus, cULus, GL  |
| <b>Environment</b>  |   |
| Ambient temperature   | -25 °C to +70 °C  |
| Storage temperature   | -25 °C to +85 °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   |
| <b>Safety and protection</b>                                    |   |
| Protection index  | IP 20   |
| Safety class  | I, with PE connection   |
| Resistance to reverse feed max.                                 | 35 Vdc  |
| <b>Order numbers</b>  |   |
| Order Number  | PC-1024-050-0   |

### Mechanical data

| Type   | PC-1024-050-0            |
|--|--------------------------|
| <b>Terminal and mounting</b>                               |                          |
| Terminals signalling (direct plug-in technology Push-in)   | max 2,5 mm <sup>2</sup>  |
| Terminals input (direct plug-in technology Push-in)        | max 2,5 mm <sup>2</sup>  |
| Terminals output (direct plug-in technology Push-in)       | max 2,5 mm <sup>2</sup>  |
| Terminals storage medium direct plug-in technology Push-in | max. 2,5 mm <sup>2</sup> |
| <b>Measures and weights</b>                                |                          |
| Weight   | 0.8 kg                   |



Subject to change.