

LPS SAFEBOX 230-500

Safety power supply system with power limitation (LPS system, Low Safety Power Supply System) DIN EN 50171

Central power supply system in switching operation with limitation of the output power to 500 W / 1 h, 250 W / 3 h or 100 W / 8 h (LPS 230-500-S) and 500 W / 3 h or 200 W / 8 h (LPS 230-500-M) to supply the safety lighting in case of failure of the general lighting. The LPS is designed to supply the safety lighting DIN EN 50172 (VDE 0108-100) in case of failure of the general power supply.

The operation and display of the test / monitoring equipment is carried out via multi-touch screen. Commissioning is automatic after activation. Switching / operating modes of the final circuit and emergency luminaires can be freely parameterised in the LPS.

Batteries including ageing factor of 1.25 DIN EN IEC 62485-1 (VDE 0510-485-1).

The LPS has a network port via which the device status can be called up using the built-in web server. The possibility of remote control of the LPS via the web server and the storage of building plans is integrated in the LPS.



Technical specifications

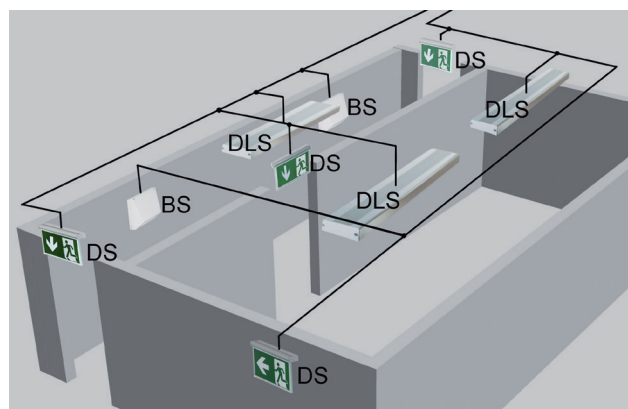
| | LPS 230-500-S | LPS 230-500-M |
|--------------------------------|--|--|
| Power supply | 1 / N / PE AC 50 Hz 230 V | 1 / N / PE AC 50 Hz 230 V |
| External back-up fuse | 16 A | 16 A |
| System voltage | 24 V / 230 V AC / DC | 24 V / 230 V AC / DC |
| Output terminals | 1.5 mm ² to 2.5 mm ² | 1.5 mm ² to 2.5 mm ² |
| Housing | Steel plate, RAL 7016 | Steel plate, RAL 7016 |
| Weight not including batteries | 17.6 kg | 24 kg |
| Ambient temperature | 5° C to 30° C | 5° C to 30° C |
| Safety class | I | I |
| Protection class | IP20 | IP20 |
| Dimensions W x H x D | 454 x 675 x 172 mm | 454 x 959 x 172 mm |
| Cable entry | from the top and the back | from the top and the back |

Equipment

- LPS 230-500-S: max. output 500 W / 1 h, 250 W / 3 h or 100 W / 8 h
- LPS 230-500-M: max. output 500 W / 3 h or 200 W / 8 h
- 4 final circuits (0.6 A) with circuit and individual luminaire monitoring
- Luminaires freely programmable via the LPS and / or the luminaire module in BS / DS (only with optional ELC- / SET010¹⁾-address module)
- 5" multi-touch-capable colour display including a USB port for connecting external storage, a USB printer, a keyboard or a mouse
- Automatic commissioning
- 4 non-floating 230V inputs for querying light switch positions (freely programmable)
- 4 floating control inputs (freely programmable)
- 4 relay outputs for messages (freely programmable)
- 1 connection for MFT4 status panel
- 1 connection as monitored current loop for external phase monitor
- 1 contact for safety light blocking during idle times
- 24 groups freely programmable
- 24 timers freely programmable
- Function of direction-variable lights (RIVA / only with ELC address module)
- RJ-45 TCP-IP network connection
- Integrated web server with visualization of the mounting locations of the emergency luminaires
- Web visualization of up to 125 LPS devices

Explanation

The emergency luminaires can be operated in each final circuit in DS or BS, with electric circuit monitoring, or in Maintained mode with mixed operation mode and individual luminaire monitoring. The switching and operating modes can be changed on the LPS. An ELC / SET010¹⁾ in the emergency luminaires is required for mixed operation mode with individual luminaire monitoring. The emergency luminaires connected to the LPS are tested DIN EN 62034 (VDE 0711-400).



BS = Non maintained mode (NMM)
DS = Maintained mode (MM)
DLS = Switched maintained mode (SMM)

Battery

Valve regulated lead acid battery VRLA with a service life expectancy of 12 years plus (long-life).

Variants

| LPS 230-500-S | Duration | Power | Battery | Housing | Weight | |
|---|----------|-------|-----------------------------|---------|---------|---------|
| | | | | | Battery | Housing |
| LPS SAFEBOX 230-500-S/1h/250W | 1 h | 250 W | 4 x 12 V/12 Ah (24 Ah) Akku | S | 15,2 kg | 17,6 kg |
| LPS SAFEBOX 230-500-S/1h/375 W | 1 h | 375 W | 6 x 12 V/12 Ah (36 Ah) Akku | S | 22,8 kg | 17,6 kg |
| LPS SAFEBOX 230-500-S/1h/500 W | 1 h | 500 W | 8 x 12 V/12 Ah (48 Ah) Akku | S | 30,4 kg | 17,6 kg |
| LPS SAFEBOX 230-500-S/3h/250 W | 3 h | 250 W | 8 x 12 V/12 Ah (48 Ah) Akku | S | 30,4 kg | 17,6 kg |
| LPS SAFEBOX 230-500-S/8h/100 W | 8 h | 100 W | 8 x 12 V/12 Ah (48 Ah) Akku | S | 30,4 kg | 17,6 kg |
| LPS SAFEBOX 230-500-S/1h max. 500 W/ 3h max. 250 W/8h max. 100 W | 1 h | 500 W | without battery | S | - | 17,6 kg |
| | 3 h | 250 W | | | | |
| | 8 h | 100 W | | | | |

| LPS 230-500-M | Duration | Power | Battery | Housing | Weight | |
|---|----------|-------|------------------------------|---------|---------|---------|
| | | | | | Battery | Housing |
| LPS SAFEBOX 230-500-M/3 h/315 W | 3 h | 315 W | 10 x 12 V/12 Ah (60 Ah) Akku | M | 38,0 kg | 24,0 kg |
| LPS SAFEBOX 230-500-M/3 h/375 W | 3 h | 375 W | 12 x 12 V/12 Ah (72 Ah) Akku | M | 45,6 kg | 24,0 kg |
| LPS SAFEBOX 230-500-M/3 h/440 W | 3 h | 440 W | 14 x 12 V/12 Ah (84 Ah) Akku | M | 53,2 kg | 24,0 kg |
| LPS SAFEBOX 230-500-M/3 h/500 W | 3 h | 500 W | 16 x 12 V/12 Ah (96 Ah) Akku | M | 60,8 kg | 24,0 kg |
| LPS SAFEBOX 230-500-M/8 h/125 W | 8 h | 125 W | 10 x 12 V/12 Ah (60 Ah) Akku | M | 38,0 kg | 24,0 kg |
| LPS SAFEBOX 230-500-M/8 h/150 W | 8 h | 150 W | 12 x 12 V/12 Ah (72 Ah) Akku | M | 45,6 kg | 24,0 kg |
| LPS SAFEBOX 230-500-M/8 h/175 W | 8 h | 175 W | 14 x 12 V/12 Ah (84 Ah) Akku | M | 53,2 kg | 24,0 kg |
| LPS SAFEBOX 230-500-M/8 h/200 W | 8 h | 200 W | 16 x 12 V/12 Ah (96 Ah) Akku | M | 60,8 kg | 24,0 kg |
| LPS SAFEBOX 230-500-M/3 h max. 500 W/ 8 h max. 200 W | 3 h | 500 W | without battery | M | - | 24,0 kg |
| | 8 h | 200 W | | | | |

¹⁾ ELC / SET010 - **Attention:** For individual luminaire monitoring only luminaires with ELC module or luminaires with SET010 module may be connected. The LPS can only detect one variant for individual luminaire monitoring. Mixing ELC and SET010 modules on one LPS is not permitted.