

LPS SAFEBOX II-4 / II-8 230-500

Low power safety supply system (LPS) - EN 50171

Central power supply system with 4 or 8 final circuits, in change-over mode with limitation of the output power to 500 W / 1 h, 250 W / 3 h or 100 W / 8 h (LPS II 230-500-S) and 500 W / 3 h or 200 W / 8 h (LPS II 230-500-M). The LPS II is designed to supply the safety lighting DIN EN 50172 (VDE 0108-100) in case of failure of the general power supply.

The VRLA battery has a life expectancy of 12 years plus (long-life).

Operation and display of the test results are carried out via a multi-touch display. Commissioning takes place automatically after activation. Circuit types of the circuits and operating modes of the emergency luminaires can be freely parameterisable.

The LPS II has a web server with a network connection that can be accessed via a web browser. Up to 200 building plans can be stored in the web server, on which the mounting locations of the emergency luminaires and their operating status can be displayed.



Technical specifications

	LPS II 230-500-S	LPS II 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 II 230-500-S: max. Power 500 W / 1 h, 250 W / 3 h or 100 W / 8 h
- LPS II 230-500-M: max. Power 500 W / 3 h or 200 W / 8 h
- 4 or 8 final circuits (1.0 A) with circuit and individual luminaire monitoring
- Luminaires freely programmable via the LPS II in BS / DS (luminaires with ELC 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 230 V 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 and control 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 timer freely programmable
- Function of direction-variable luminaires (RIVA / only with ELC address module)
- RJ-45 TCP-IP network connection
- Integrated web server with visualization of the mounting locations of the safety luminaires
- Web visualization of up to 125 LPS II devices

Explanation

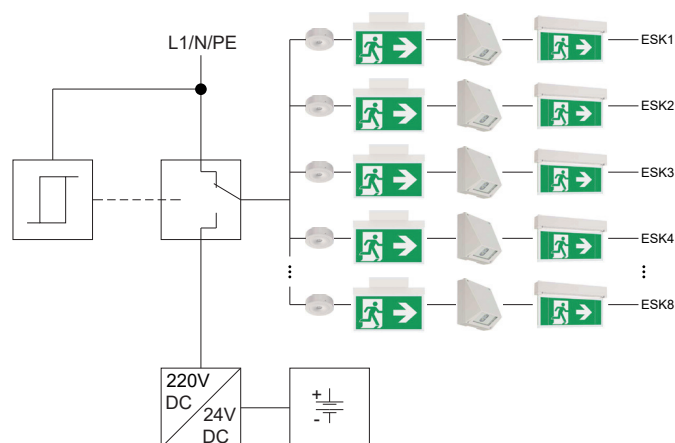


Fig. 1:
Schematic illustration of the LPS II unit

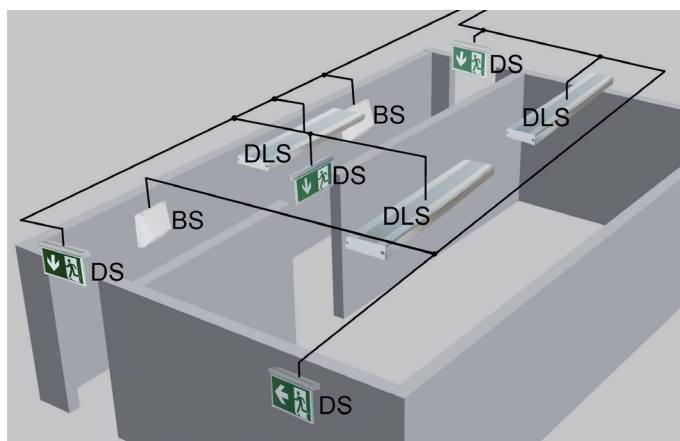


Fig. 2
Schematic illustration of the circuit types:
BS = Non maintained mode (NMM)
DS = Maintained mode (MM)
DLS = Switched maintained mode (SMM)

Each circuit can be operated in continuous or standby mode with circuit monitoring or in continuous mode for mixed operation mode with individual luminaire monitoring. For mixed operation mode, an ELC module is required in the safety luminaires.

Variants

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

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

For further variants see next page

Variants

LPS SAFEBOX II-4 230-500-M with 4 final circuits	Duration	Power	Battery	Housing	Weight	
					Battery	Housing
LPS SAFEBOX II-4 230-500-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 II-4 230-500-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 II-4 230-500-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 II-4 230-500-M / 3 h / 500 W ¹⁾	3 h	500 W	16 x 12 V / 12 Ah (96 Ah) Akku	M	60,8 kg	24,0 kg
LPS SAFEBOX II-4 230-500-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 II-4 230-500-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 II-4 230-500-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 II-4 230-500-M / 8 h / 200 W ¹⁾	8 h	200 W	16 x 12 V / 12 Ah (96 Ah) Akku	M	60,8 kg	24,0 kg
LPS SAFEBOX II-4 230-500-M / 3 h max. 500 W / 8 h max. 200 W	3 h 8 h	500 W 200 W	without battery	M	-	24,0 kg

LPS SAFEBOX II-8 230-500-M with 8 final circuits	Duration	Power	Battery	Housing	Weight	
					Battery	Housing
LPS SAFEBOX II-8 230-500-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 II-8 230-500-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 II-8 230-500-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 II-8 230-500-M / 3 h / 500 W ¹⁾	3 h	500 W	16 x 12 V / 12 Ah (96 Ah) Akku	M	60,8 kg	24,0 kg
LPS SAFEBOX II-8 230-500-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 II-8 230-500-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 II-8 230-500-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 II-8 230-500-M / 8 h / 200 W ¹⁾	8 h	200 W	16 x 12 V / 12 Ah (96 Ah) Akku	M	60,8 kg	24,0 kg
LPS SAFEBOX II-8 230-500-M / 3 h max. 500 W / 8 h max. 200 W	3 h 8 h	500 W 200 W	without battery	M	-	24,0 kg

¹⁾ Requires an electrical operating room, see M-EltBauVO 22.02.2022, Battery > 2 kWh