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As well as providing a dependable supply of power (230V AC/220 V DC) to safety and exit luminaires, the central battery system ZB-S tests itself automatically and individually monitors each CG-S luminaire (up to 20 per circuit), and it does all this using the power supply cable alone.

The new type of STAR technology allows the switching mode of every connected CG-S luminaire to be freely programmed within a 50 or 60 Hz supply network using the central battery system's controller. This means that maintained light, switched maintained light and non-maintained light modes can be combined in one and the same circuit – there is no need for separate data cables!

The control module with its nonvolatile program memory and large graphic display monitors and controls the central battery system. It automatically tests all functions of the devices and emergency luminaires connected to it, and reports any faults that occur.

An integral search function automatically detects all system-dependent luminaires and modules that are assigned an address during installation. A central monitoring device can be connected via an interface.

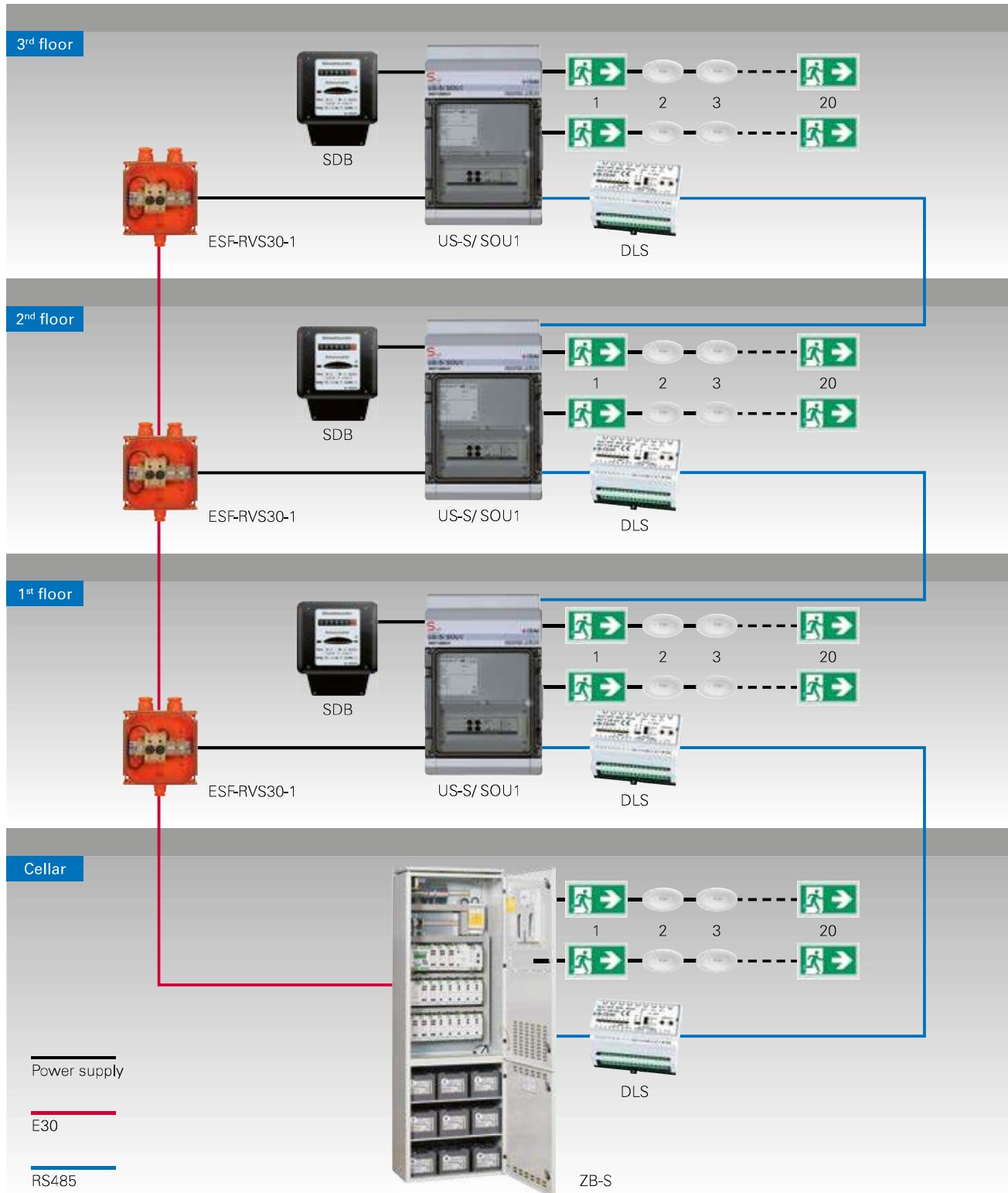
Properties:

- Shortened inspection effort due to CEWA GUARD technology; automatic function monitoring of up to 20 luminaires per circuit
- Reduced installation expenditures by STAR-technology; freely programmable mixed operation of the switching modes per luminaire in one circuit
- Less installation costs as no data line is required to the luminaires
- Automatic luminaire search function
- Plain text display on the control module down to the last luminaire
- Flexible data storage for test log and system configuration with memory card
- Modular charging technology in the range of 5.5 to 1,000 Ah
- Energy-saving and increased service life via alternating switching of the charging modules and optimised efficiency

Central battery system ZB-S with STAR technology

Distribution board US-S/ SOU1

Installation example Emergency lighting system ZB-S with distribution board US-S/ SOU1.
Please note the country-specific regulations and guidelines for planning and realisation.



Central battery system ZB-S with STAR technology

Table of covers, technical data ZB-S

Type	ZB-S/26	ZB-S/18	ZB-S/LAD	ZB-S/10 C
Modules:				
Control module: CU CG-S	1	1	1	1
DC/DC-2-converter (DCM)* ⁵	1	1	1	1
BCM	1	1	1	1
Circuit module SKU CG-S* ⁵	0-26* ⁸	0-18* ⁸	0-2* ²	0-10* ⁸
Maximum number of SWR 150 due to 100% luminous flux and max. rated power	7	7	2	7
2 Charging module 1,7 A	0-2	0-2	0-2	0-2
Charging module 3,4 A	0-6* ¹	0-6* ¹	0-8	0-1* ³
Electrical cabinet construction:				
Rated voltage	400/230 V	400/230 V	400/230 V	230 V
Rated frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Conductor order and system of earthing in mains power operation/battery operation	TN-C-S / IT	TN-C-S / IT	TN-C-S / IT	TN-C-S / IT
Max. ambient temperature* ⁹	-5 °C to +35 °C	-5 °C to +35 °C	-5 °C to +35 °C	-5 °C to +35 °C
Insulation class	1	1	1	1
Degree of protection	IP20	IP20	IP20	IP20
Max. current rating mains [Σ L1, L2, L3] [A]	80	80	100	60
Max. rated power mains [KW]	18,4	18,4	23	13,8
Max. current rating battery [A]	80	80	100	35
Max. rated power battery [KW]	17,3	17,3	21,6	7,6
Three-phase distribution	yes	yes	yes	no
Conductor size for mains and battery supply	50 mm ²	50 mm ²	50 mm ²	16 mm ²
Outgoing circuits	0- 6 Feeders	0-6 Feeders	0- 15 Feeders	1 Feeder
Conductor size	16 mm ²	16 mm ²	16 mm ²	35 mm ²
Max. conductor size final circuits	4 mm ²	4 mm ²	4 mm ²	4 mm ²
Max. number of final circuit terminals	80	68	8	40
Mechanical cabinet construction:				
Dimensions H x W x D (mm)	2050 x 800 x 400	2050 x 800 x 400	2050 x 800 x 400	2050 x 800 x 400
Material / Design	Sheet steel / Cabinet	Sheet steel / Cabinet	Sheet steel / Cabinet	Sheet steel / Compact cabinet
Door stop	right	right	right	right
Outer coating	Textured powder paint	Textured powder paint	Textured powder paint	Textured powder paint
Colour	RAL 7035	RAL 7035	RAL 7035	RAL 7035
Partial viewing door	Yes	Yes	No	Yes
Lock	3 mm Two-way	3 mm Two-way	3 mm Two-way	3 mm Two-way
Cable entry from above	yes	yes	yes* ⁷	yes
Cable entry from below	yes	yes	yes* ⁷	no
Base (optional)	100/200	100/200	100/200	200
Weight (without batteries)	approx. 180 kg	approx. 170 kg	approx. 170 kg	approx. 155 kg
Battery capacity, installed in:				
Compact cabinet	–	–	–	23.3-53.7 Ah
Battery cabinet	23.3-245 Ah	23.3-245 Ah	23.3-308 Ah	–
Battery rack	23.3-245 Ah	23.3-245 Ah	23.3-308 Ah	–

Other battery sizes on application

*1 When 6 charging modules CM 3,4 A are fitted an additional charging module rack 2-way is necessary.

*2 Max. 8 charging modules are possible when 2 SKUs are fitted.

*3 When 1 charging module CM 3,4 A is fitted an additional charging module rack 1-way is necessary.

*4 When 2 charging modules CM 3,4 A are fitted an additional charging module rack 2-way is necessary. (>240 Ah Special design)

*5 After more than 13 SKU CG-S 4 x 1.5 A or 26 SKU CG-S 2 x 3 A / 1 x 6 A a second DC/DC converter is needed.
Please observe that all DC/DC-converters are operated on the same module assembly frame next to each other.

Central battery system ZB-S with STAR technology

Table of covers, technical data ZB-S



ZB-S/26 C6	ZB-S/18 C6	ZB-S/10 C6	ZB-S/18 C3	ZB-S/10 C3	ZB-S/2 C3
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1
0-26* ⁸	0-18* ⁸	0-10* ⁸	0-19	0-11	0-3
7	7	7	7	7	2
0-2	0-2	0-2	0-2	0-2	1
0-2* ^{3,4}	0-2* ^{3,4}	0-2* ^{3,4}	—	—	—
400/230 V	400/230 V	230 V	230 V	230 V	230 V
50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
TN-C-S / IT	TN-C-S / IT	TN-C-S / IT	TN-C-S / IT	TN-C-S / IT	TN-C-S / IT
-5 °C to +35 °C	-5 °C to +35 °C	-5 °C to +35 °C	-5 °C to +35 °C	-5 °C to +35 °C	-5 °C to +35 °C
1	1	1	1	1	1
IP20	IP20	IP20	IP20	IP20	IP20
63	63	63	25	25	15
14.5	14.5	14.5	5.8	5.8	3.5
63	63	63	25	25	12
13.6	13.6	13.6	5.4	5.4	2.6
yes	yes	no	no	no	no
35 mm ²	35 mm ²	16 mm ²	16 mm ²	16 mm ²	16 mm ²
2 Feeders	2 Feeders	1 Feeder	1 Feeder	1 Feeder	—
35 mm ²	35 mm ²	35 mm ²	16 mm ²	16 mm ²	—
4 mm ²	4 mm ²	4 mm ²	4 mm ²	4 mm ²	4 mm ²
60	60	40	50	40	12
2250 x 800 x 600	2050 x 800 x 600	2050 x 800 x 600	1800 x 600 x 350	1800 x 600 x 350	1000 x 600 x 300
Sheet steel / Compact cabinet	Sheet steel / Compact cabinet	Sheet steel / Compact cabinet	Sheet steel / Compact cabinet	Sheet steel / Compact cabinet	Sheet steel / Compact cabinet
right	right	right	right	right	right
Textured powder paint	Textured powder paint	Textured powder paint	Textured powder paint	Textured powder paint	Textured powder paint
RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035
Yes	Yes	Yes	Yes	Yes	No
3 mm Two-way	3 mm Two-way	3 mm Two-way	3 mm Two-way	3 mm Two-way	3 mm Two-way
yes	yes	yes	yes	yes	yes
no	no	no	no	no	no
—	—	—	200	200	—
approx. 250 kg	approx. 205 kg	approx. 206 kg	approx. 120 kg	approx. 115 kg	approx. 50 kg
5.5-89.4 Ah	5.5-89.4 Ah	5.5-89.4 Ah	5.5-23.3 Ah	5.5-23.3 Ah	5.5-14 Ah
—	—	—	—	—	—
—	—	—	—	—	—

*6 Higher battery capacities =>118 Ah are achieved by connecting several battery sets in parallel.

*7 Please indicate the cable entry when planning the system.

*8 Plus max. two additional slots in correlation of CM 1.7 A and CM 3.4 A placement.

*9 Optimal ambient battery temperature +20 °C.