

Central Battery System EURO ZB.1 with Circuit Monitoring



- **Compact design of components and substations**
- **Individual circuit switching**
- **Freely programmable switching modes of the circuits**
- **Maximum safety due to distributed system design**
- **Service-friendly modular units**

With central battery system EURO ZB.1, CEAG offers a solution for all applications where luminaires need not be monitored. EURO ZB.1 has a reliable charging system, is of modular design and distributed configuration. Relevant information about cover status, functioning of luminaire circuits as well as logging of the prescribed tests are collected via the compact control module of the EURO ZB.1 and stored in an log book as required by the respective regulations. Luminaire circuit faults are detected and indicated as faults of the electrical circuits. The results can be printed out by means of the optional event printer PD2.

Central Battery System EURO ZB.1 with Circuit Monitoring



Ordering details

Type	Scope of supply	Order No.
Central battery system EURO-ZB.1/52	Central battery system incl. ST20 E, BCM and DC/DC.2 26 free module slots *1	40071346070
Central battery system EURO-ZB.1/20K	Central battery system incl. ST20 E, BCM and DC/DC.2 10 free module slots *1	40071346071
Central battery system EURO-ZB.1/204K	Central battery system incl. ST20 E, BCM and DC/DC.2 14 free module slots *1	40071346854
Central battery system EURO-ZB.1/26K	Central battery system incl. ST20 E, BCM and DC/DC.2 10 free module slots *1	40071346615
Central battery system EURO-ZB.1/264K	Central battery system incl. ST20 E, BCM and DC/DC.2 14 free module slots *1	40071346855
Central battery system EURO-ZB.1/18K	Central battery system incl. ST20 E, BCM and DC/DC.2 10 free module slots	40071346180
Central battery system EURO-ZB.1/188K	Central battery system incl. ST20 E, BCM and DC/DC.2 18 free module slots	40071346853
Central battery system ZB 96/LAD	Central battery system incl. ST20 E, BCM and DC/DC.2 (2 free module slots possible)	40071347400
Substation EURO-US.1/72	Substation incl. ST20 E and DC/DC.2 36 free module slots	40071346335
Substation EURO-US.1/42	Substation incl. ST20 E and DC/DC.2 21 free module slots	40071347561
Substation EURO-US.1/26	Substation incl. ST20 E and DC/DC.2 13 free module slots	40071347560
Substation EURO-US.1/10	Substation incl. ST20 E and DC/DC.2 5 free module slots	40071346247
Substation EURO ESF-E30/17	Cabinet for substation EURO ESF-E30/17, with control module ST20E, DC/DC-converter, 2 x module rack 8 units and 1 x module rack 4 units	40071347806
Substation EURO ESF-E30/28	Cabinet for substation EURO ESF-E30/28, with control module ST20E, DC/DC-converter, 4 x module rack	40071347808

*1 Plus maximal two additional slots in correlation of CM 1.7 A and CM 3.4 A placement.

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Ordering details

Type	Order No.
4 pcs. DIN mounting rail incl. mounting accessories	40071347125
3 pcs. C-section rail incl. mounting accessories	40071347126
Socket 200 mm for ZB-S, depth 400 mm	40071347121
Socket 100 mm for ZB-S, depth 400 mm	40071347120
Socket 200 mm for ZB-S/18C3 and 10C3, depth 330 mm	40071360049
3-piece baseplate for ZB-S, depth 400 mm, mouse-proof	40071347124
Cable support rail	40071347123
Metal flange plate undrilled for battery cabinet	40071346225
Flange plate with foam rubber for battery cabinet	40036070164
Fireproof dowel M10 for E30 sub-distribution board, Set of = 12 pcs., for mounting in concrete walls	40036070298
Optional wall mounting plate for wall mounting for EURO ESF-E30/17	40071347726

Table of Covers

Technical data EURO ZB.1

Type	EURO ZB.1-52	EURO ZB.1/20K	EURO ZB.1/204K	EURO ZB.1/26K	EURO ZB.1/264K	
Modules:						
Control module: ST20E	1	1	1	1	1	
DC/DC.2-converter (DCM) ⁵	1	1	1	1	1	
BCM	1	1	1	1	1	
Circuit module SKU ⁵	0-26 ⁸	0-10 ³	0-14 ⁸	0-10 ⁸	0-14 ⁸	
Charging module 1.7 A	0-2 ¹	0-2 ³	0-2 ³	0-2 ⁴	0-2 ⁴	
Charging module 3.4 A	0-6 ¹	0-1 ³	0-1 ³	0-2 ⁴	0-2 ⁴	
Electrical cabinet construction:						
Rated voltage	400/230 V	230 V	230 V	230 V	230 V	
Rated frequency	50/60 Hz	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	TN-C-S / IT	
Insulation class	1	1	1			
Degree of protection	IP21	IP21	IP21	IP21	IP21	
Max. current rating mains [Σ L1, L2, L3] [A]	80	60	60	63	63	
Max. rated power mains [kW]	18.4	13.8	13.8	14.5	14.5	
Max. current rating battery [A]	80	35	35	63	63	
Max. rated power battery [kW]	17.3	7.6	7.6	13.6	13.6	
Three-phase distribution	No	No	No	No	No	
Conductor size for mains and battery supply	50 mm ²	16 mm ²	16 mm ²	16 mm ²	16 mm ²	
Outgoing circuits	0 - 6 Feeders	1 Feeder	–	2 Feeders	–	
Conductor size	16 mm ²	35 mm ²	–	35 mm ²	–	
Max. conductor size final circuits	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	
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 600	2050 x 800 x 600	
Material / Design	Sheet steel / Stand alone cabinet	Sheet steel / Compact cabinet	Sheet steel / Compact cabinet	Sheet steel / Compact cabinet	Sheet steel / Compact cabinet	
Door stop	right	right	right	right	right	
Outer coating	Textured powder paint	Textured powder paint	Textured powder paint	Textured powder paint	Textured powder paint	
Colour	RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035	
Partial viewing door	Yes	Yes	Yes	Yes	Yes	
Lock	3 mm Two-way	3 mm Two-way	3 mm Two-way	3 mm Two-way	3 mm Two-way	
Cable entry from above	Yes	Yes	Yes	Yes	Yes	
Cable entry from below	Yes	No	No	No	No	
Socket (optional)	100/200	200	200	–	–	
Battery capacity, installed in:						
Compact cabinet	–	5.5-53.7 Ah	5.5-53.7 Ah	5.5-89.4 Ah	5.5-89.4 Ah	
Battery cabinet	23.3-245 Ah ⁶	–	–	–	–	
Battery rack	23.3-245 Ah ⁶	–	–	–	–	

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 Up to 8 charging modules are possible when 2 SKUs are fitted.

*3 When 1 charging module is fitted a single booster adapter 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.

Table of Covers

Technical data EURO ZB.1

	EURO ZB.1/18K	EURO ZB.1/188K	EURO US.1/72	EURO US.1/42	EURO US.1/42	EURO US.1/10	EURO-ESF- E30/17	EURO-ESF- E30/28
	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1
	1	1	–	–	–	–	–	–
	0-10	0-18	0-36	0-21	0-13	0-5	0-13	0-28
	1	1	–	–	–	–	–	–
	–	–	–	–	–	–	–	–
	230 V	230 V	400/230 V	230 V	230 V	230 V	230 V	400/230 V
	50/60 Hz	50/60 Hz	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	TN-C-S / IT	TN-C-S / IT
	IP21	IP21	IP54	IP54	IP54	IP54	IP54	IP54
	25	25	80	50	50	30	35	50
	5.8	5.8	18.4	11.5	11.5	6.9	8.1	11.5
	25	25	80	50	50	30	35	50
	5.4	5.4	17.3	10.8	10.8	6.5	7.6	10.8
	No	No	Yes	No	No	No	No	Yes
	16 mm ²	16 mm ²	35 mm ²	35 mm ²	16 mm ²	16 mm ²	16 mm ²	16 mm ²
	1 Feeder	1 Feeder	–	–	–	–	–	–
	16 mm ²	16 mm ²	–	–	–	–	–	–
	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	4 mm ²	4 mm ²
	1800 x 600 x 350	1800 x 600 x 350	2050 x 800 x 400	1200 x 600 x 300	800 x 600 x 250	600 x 400 x 250	1150 x 885 x 405	2190 x 885 x 405
	Sheet steel / Compact cabinet	Sheet steel / Compact cabinet	Sheet steel / Stand alone cabinet	Sheet steel / Wall cabinet	Sheet steel / Wall cabinet	Sheet steel / Wall cabinet	Sheet steel / func. endurance 30 min. / Wall cabinet	Sheet steel / func. endurance 30 min. / Wall cabinet
	right	right	right	right	right	right	right	right
	Textured powder paint	Textured powder paint	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	RAL 7035	RAL 7035
	Yes	Yes	Yes	No	No	No	No	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	3 mm Two-way	3 mm Two-way
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	No	No	Yes	No	No	No	No	No
	200	200	100/200	300	–	–	–	–
	5.5-23.3 Ah	5.5-23.3 Ah	–	–	–	–	–	–
	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–

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

After 8 h discharge the maximum battery capacity will be 195.4 Ah.

*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.