

Central battery system ZB-S with STAR technology

Ordering details



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Type	Scope of supply	Order No.
Central battery system ZB-S/26	Central battery system type ZB-S/26 incl. CU CG-S, BCM and DC/DC.2, 26 free module slots* ¹	40071362905
Central battery system ZB-S/18	Central battery system type ZB-S/18 incl. CU CG-S, BCM and DC/DC.2, 18 free module slots* ¹	40071362906
Central battery system ZB-S/LAD	Central battery system type ZB-S/LAD incl. CU CG-S, BCM and DC/DC.2, (2 free module slots possible)	40071347099
Central battery system ZB-S/10 C	Central battery system type ZB-S/10 C, incl. CU CG-S, BCM and DC/DC.2, 10 free module slots* ¹	40071362900
Central battery system ZB-S/26 C6	Central battery system type ZB-S/26 C6 incl. CU CG-S, BCM and DC/DC.2, 26 free module slots* ¹	40071689064
Central battery system ZB-S/18 C6	Central battery system type ZB-S/18 C6 incl. CU CG-S, BCM and DC/DC.2, 18 free module slots* ¹	40071362904
Central battery system ZB-S/10 C6	Central battery system type ZB-S/10 C6 incl. CU CG-S, BCM and DC/DC.2, 10 free module slots* ¹	40071362903
Central battery system ZB-S/18 C3	Central battery system type ZB-S/18 C3, incl. CU CG-S, BCM and DC/DC.2, 19 free module slots	40071362902
Central battery system ZB-S/10 C3	Central battery system type ZB-S/10 C3, incl. CU CG-S, BCM and DC/DC.2, 11 free module slots	40071362901
Central battery system ZB-S/2 C3	Central battery system type ZB-S/2 C3, incl. CU CG-S, BCM and DC/DC.2, 3 free module slots	40071360201
Substation US-S/36	Substation type US-S/36 incl. CU CG-S and DC/DC.2, 36 free module slots	40071362907
Substation US-S/28	Substation type US-S/28 incl. CU CG-S and DC/DC.2, 28 free module slots	40071362908
Substation US-S/21	Substation type US-S/21 incl. CU CG-S and DC/DC.2, 21 free module slots	40071347088
Substation US-S/13	Substation type US-S/13 incl. CU CG-S and DC/DC.2, 13 free module slots	40071347089
Substation US-S/5	Substation type US-S/5 incl. CU CG-S and DC/DC.2, 5 free module slots	40071347090
Substation US-S/ SOU2	Substation type US-S/ SOU2 incl. 2 x SOU CG-S 2 x 4 A	40071360510
Substation US-S/ SOU1	Substation type US-S/ SOU1 incl. 1 x SOU CG-S 2 x 4 A	40071360511
E30 junction box ESF-RVS30-1	For small cabinets type US-S/SOU with 2 NEOZED fuses inside	40036071032
Substation ESF-E30/13-S	Substation type ESF-E30/13-S, equipped with control module CU CG-S, DC/DC 2-converter, with space reserve for expansion to max. 40 final circuits, but max. 13 variable circuit modules	40071362912
Substation ESF-E30/28-S	Substation type ESF-E30/28-S, equipped with control module CU CG-S, DC/DC 2-converter, with space reserve for expansion to max. 60 final circuits, but max. 28 variable circuit modules	40071362913
Substation US-S ESF30 28-P	Substation type US-S ESF30 28-P incl. control module CU CG-S and DC/DC.2, with space reserve for final assembly up to max. 60 final circuits, however accepts max. 28 variable change-over modules	40071360738
Substation US-S ESF30 13-P	Substation type US-S ESF30 13-P incl. control module CU CG-S and DC/DC.2, with space reserve for final assembly up to max. 40 final circuits, however accepts max. 13 variable change-over modules	40071360737

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



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Type	Scope of supply	Order No.
Substation US-S ESF30 SOU5	Small distribution board US-S ESF30 SOU5, incl. 5 switching over units SOU CG-S 2 x 4 A	40071360734
Substation US-S ESF30 SOU3	Small distribution board US-S ESF30 SOU3, incl. 3 switching over units SOU CG-S 2 x 4 A	40071360732
Substation US-S ESF30 SOU2	Small distribution board US-S ESF30 SOU2, incl. 2 switching over units SOU CG-S 2 x 4 A	40071360729
Substation US-S ESF30 SOU1	Small distribution board US-S ESF30 SOU1, incl. 1 switching over unit SOU CG-S 2 x 4 A	40071360726
ESF-RVS30	E30 junction box ESF-RVS30 for ESF-E30 with 4 Neozed fuse inside	40071347920
Reduction	Reduction M32 to M20 cable glands for E30 junction boxes incl. M20 cable gland	40071071033
4 pcs. DIN-mounting rail	incl. mounting accessories	40071347125
3 pcs. C-section rail	incl. mounting accessories	40071347126
Base 200 mm	for ZB-S, depth 400 mm	40071361216
Base 100 mm	for ZB-S, depth 400 mm	40071361215
Base 200 mm	for ZB-S/18C3 and 10C3, depth 330 mm	40071360049
Base 800 x 600 x 200 mm	for ZB-S/10C6-18C6 and 26C6	40071361219
3-piece baseplate	for ZB-S, depth 400 mm, mouse-proof	40071347124
Cable support rail		40071347123
Metal flange plate	undrilled for battery cabinet ZB-S	40071346225
Flange plate	for foam rubber for battery cabinet ZB-S	40036070164
Fireproof dowel M10	for E30 substation, Set of = 12 pcs., for installation in concrete walls	40036070298
Optional wall mounting plate for wall mounting for ESF-E30/13-S		40071347726
Door with left hinge for ZB-S/18 and ZB-S/26		40071689081
Door with left hinge for ZB-S/10C3		40071361325
Door with left hinge for ZB-S/10C and ZB-10C6		40071361326
Door with left hinge for battery cabinet		40071689085

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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
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	35
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	23.3-195.4 Ah	23.3-195.4 Ah	23.3-308 Ah	–
Battery rack	23.3-195.4 Ah	23.3-195.4 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-converter are operated on the same module assembly frame next to each other.

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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
2	2	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
50	50	50	25	25	15
14.5	14.5	14.5	5.8	5.8	3.5
50	50	50	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	3 mm	3 mm	3 mm	3 mm	3 mm
Two-way	Two-way	Two-way	Two-way	Two-way	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.