

ENSTO

Panel building system

Ensto Cubo P



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Easy to use thermoplastic
panel building system
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Panel Building System

Ensto Cubo

Ensto Cubo P Panel Building System is designed in response to our customers' wishes. The system includes several unique and innovative solutions. This catalogue shows how to build a complete panel of Ensto Cubo P enclosures, step by step. In the picture of the assembly you see each phase or step and the parts needed, as well as the way of mounting; the table shows you the part numbers for the products needed in each assembly stage.

Open construction in the assembly stage

The base part is totally open in all four directions and enables fast and efficient mounting of the panel parts. All conductors, busbars etc. are installed without any threading sideways, plates and locking device are fitted at the final stage.

Quick assembly and mounting

All parts of the panel building system are assembled quickly and easily thanks to the locking pins.

Tight construction

The Ensto Cubo P system is tested and approved (EN 60529) to IP65. All plates and covers are provided with gaskets, which ensure a high degree of protection.

Wide range of accessories

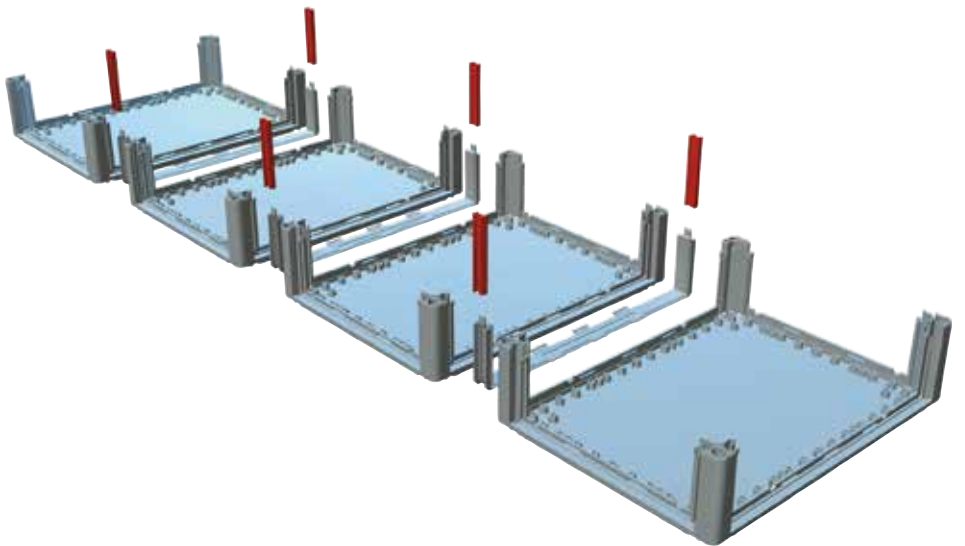
The panel building system is designed on one base part available in four sizes. For this basic base part there is a wide range of accessories available: cable entries and flanges, adaptor for SFS plates, extension frames, hinged front panels, DIN rails etc.

Flexible and easy-to-use busbar supports

The busbar support designed for the Ensto Cubo P system is suitable for 5 or 10 mm wide busbars (Cu/Al).

Modular covers

The Ensto Cubo P system also includes lockable and sealable modular covers, with several front panel alternatives.

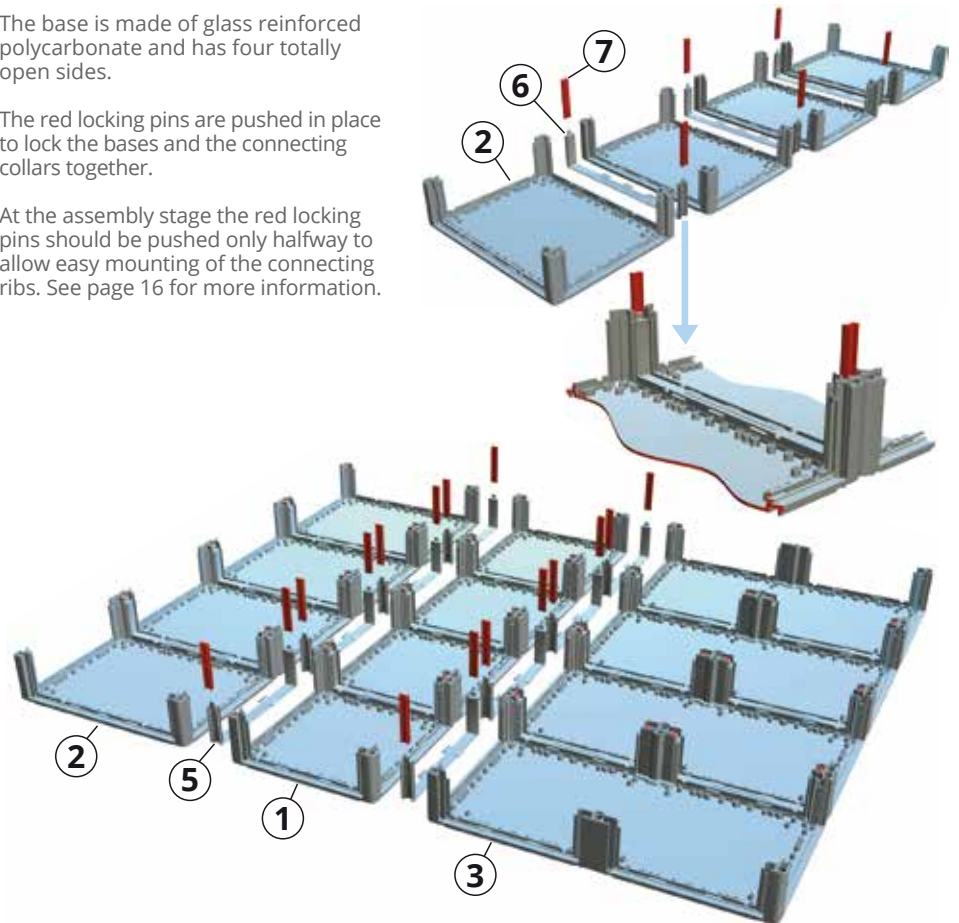
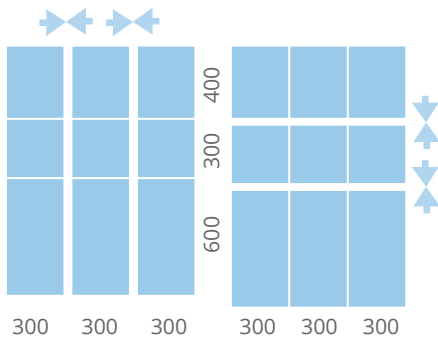


The assembly of the bases

The base is made of glass reinforced polycarbonate and has four totally open sides.

The red locking pins are pushed in place to lock the bases and the connecting collars together.

At the assembly stage the red locking pins should be pushed only halfway to allow easy mounting of the connecting ribs. See page 16 for more information.

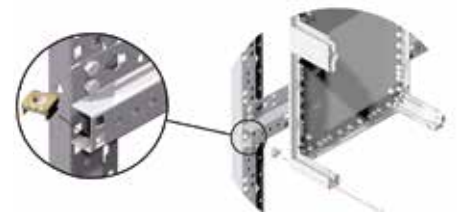
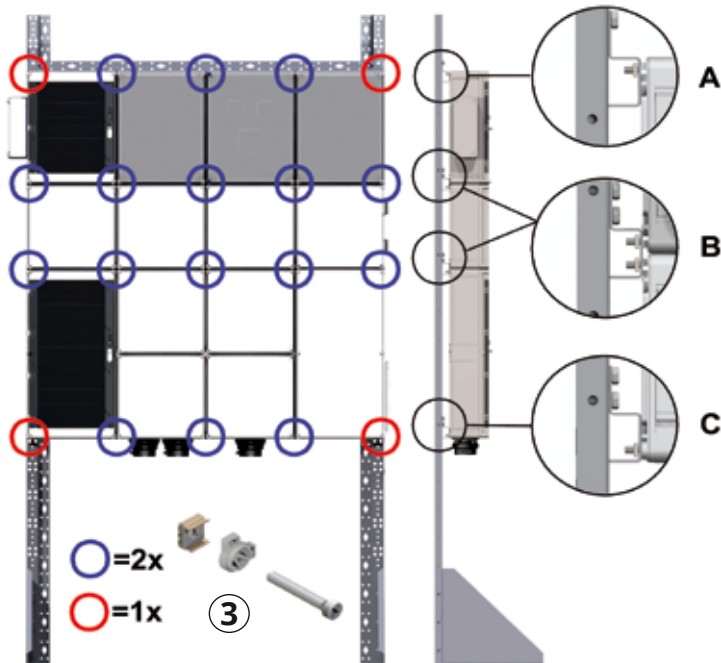
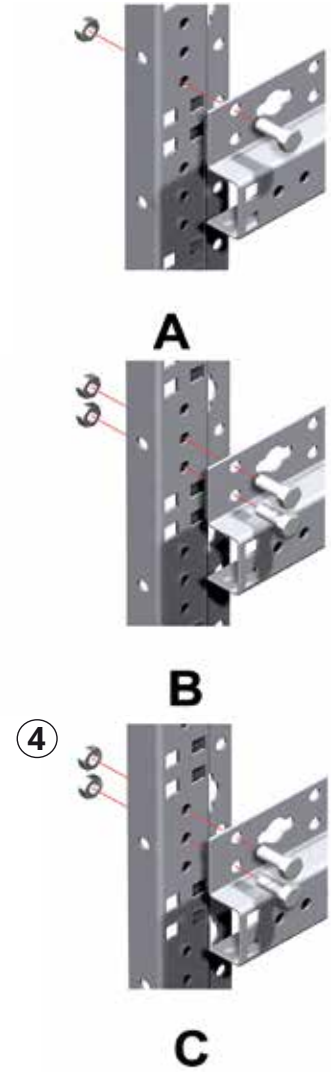
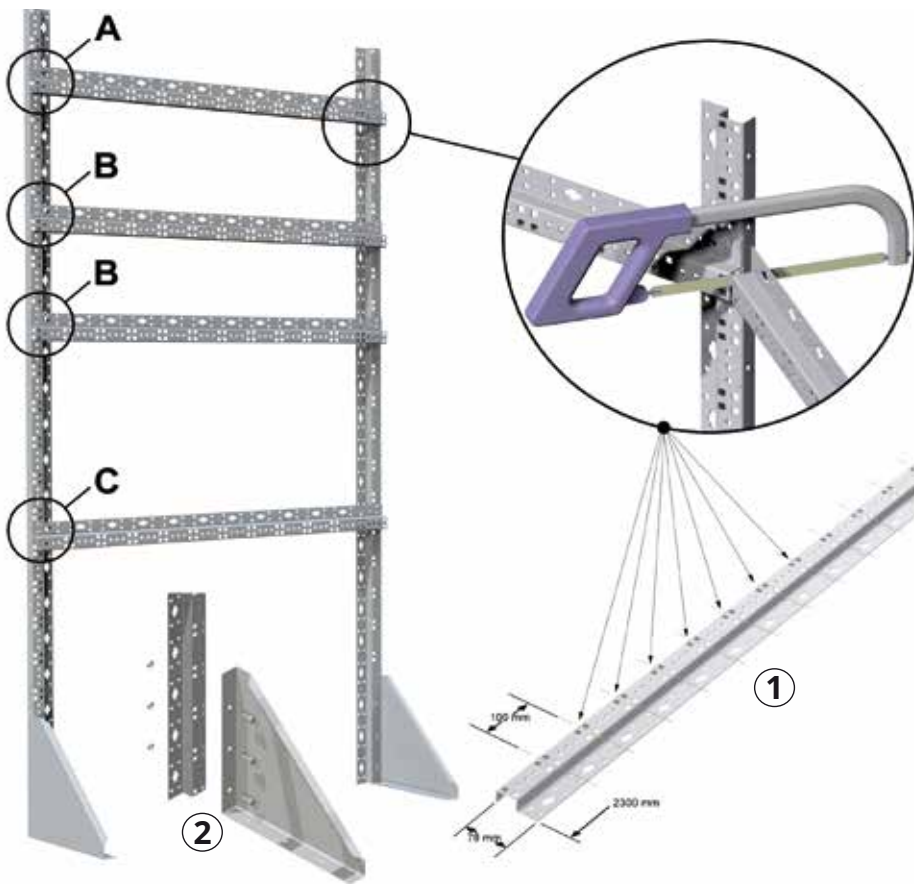


The bases are first joined together either vertically or horizontally after which the "rows" are connected together.

The connecting collars are provided with PUR gaskets and quick-snap hooks. The collar connects the bases together.

No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Bases, glass reinforced polycarbonate, with four totally open sides						
1	PPCF303010B4	4 plate openings, 4 mounting screws	300 x 300 x 102	0.705	8	6418677166228
2	PPCF304010B4	4 plate openings, 4 mounting screws	300 x 400 x 102	0.911	6	6418677166242
3	PPCF306010B6	6 plate openings, 8 mounting screws	300 x 600 x 102	1.308	4	6418677166266
	PPCF406010B6	6 plate openings, 8 mounting screws	400 x 600 x 102	1.546	3	6418677166303
Assembly sets with connecting collar, connection rib and two locking pins						
5 + 7	PCSC3	For 300 mm side 2	251 x 90 x 36	0.120	1	6418677172571
6 + 7	PCSD4	For 400 mm side 2	351 x 90 x 36	0.158	1	6418677172588
Connecting collars						
5	PCC1843	For 300 mm side 2	251 x 90 x 36	0.042	25	6418677172632
6	PCD1844	For 400 mm side 2	351 x 90 x 36	0.054	25	6418677172649
7	PBLP1849	Red locking pin	15 x 90	0.008	50	6418677172670

Panel support



No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Panel support accessories						
1	PVR1.1	Support rail, U profile	78 x 25 x 2300		1	6418677184277
2	PSF1.1	Triangle support plate, set	Δ 340 W40 mm	1.600	1	6418677184284
3	PBB1	Bolts + cage nut for mounting bases to rail, set of 4 pcs	M6 x 40	0.055	10	6418677173424
4	PBB2	Bolts for assembly of rails, set of 4 pcs	M8 x 16		1	6418677184291

Supports for Al/Cu busbars

Busbar supports

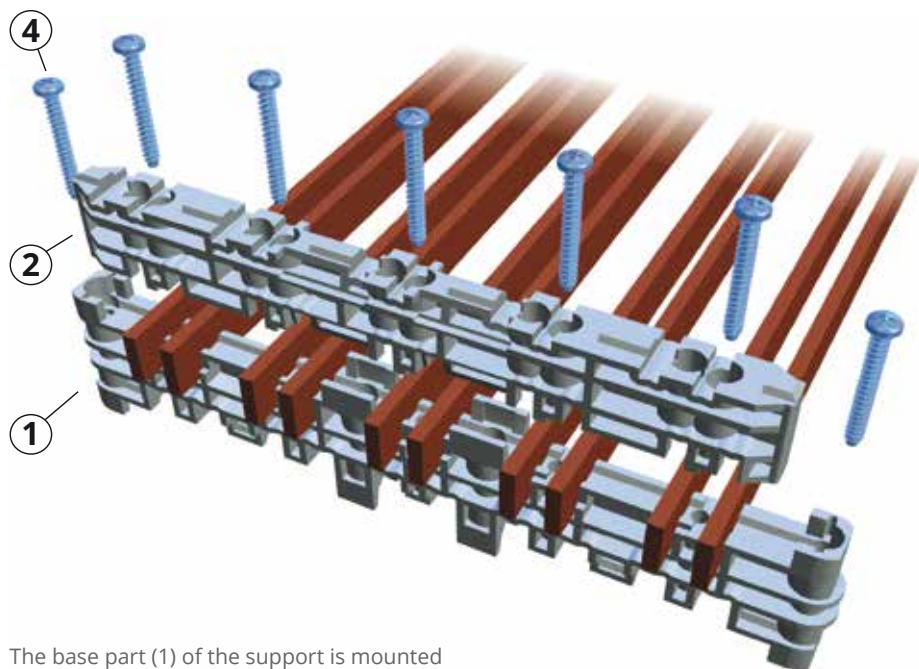
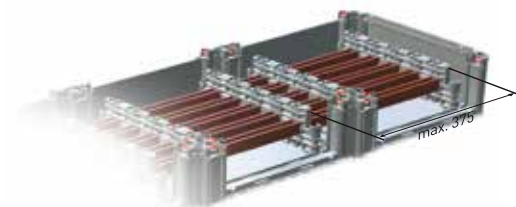
The base part of the support is always mounted first. Choose the right busbar width: 5 or 10 mm.

The upper part can be placed in four different positions by moving it sideways or turning it upside down.

The Ensto Cubo P supports are tested to 630 A, EN 61439-1.

Heights for 5 mm wide busbar: 10, 12, 15 or 20 mm

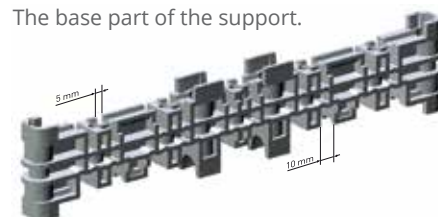
Heights for 10 mm wide busbar: 10, 12, 20 or 30 mm



The base part (1) of the support is mounted first with two screws (4)

①

The base part of the support.



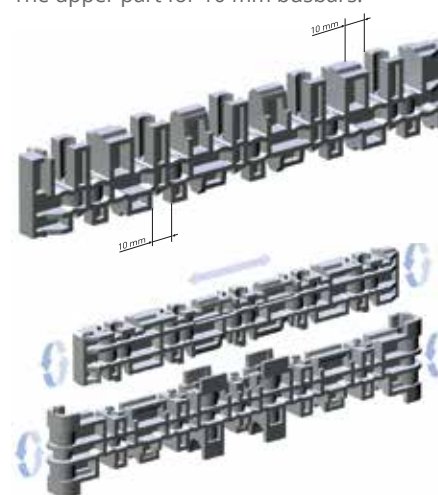
②

The upper part for 5 mm busbars.



③

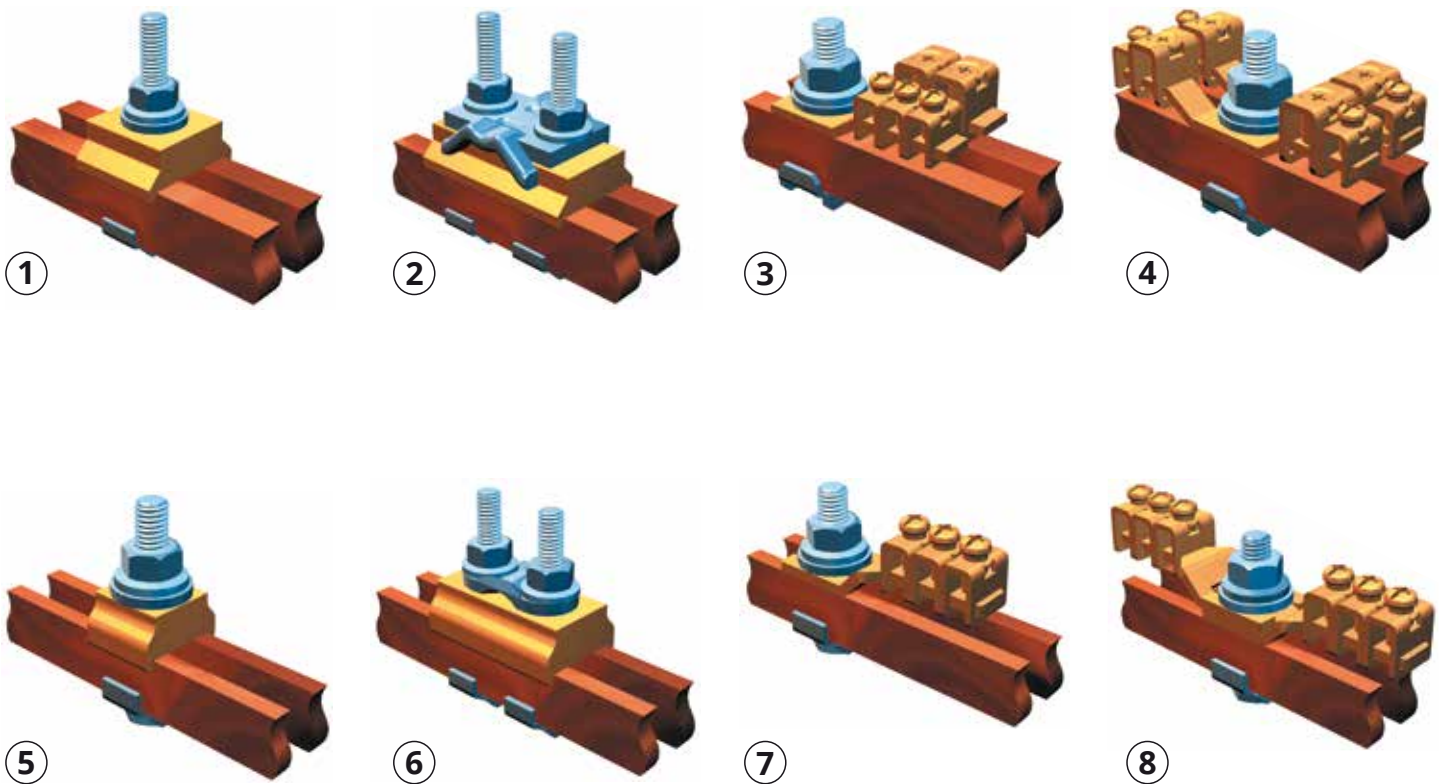
The upper part for 10 mm busbars.



No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Busbar support sets, incl. base part upper part and 7 mounting screws						
1 + 3	KGH1.10	For 10 mm busbars	266 x 78 x 18	0.205	1	6418677172373
1 + 2	KGH1.05	For 5 mm busbars	266 x 78 x 18	0.205	1	6418677172380



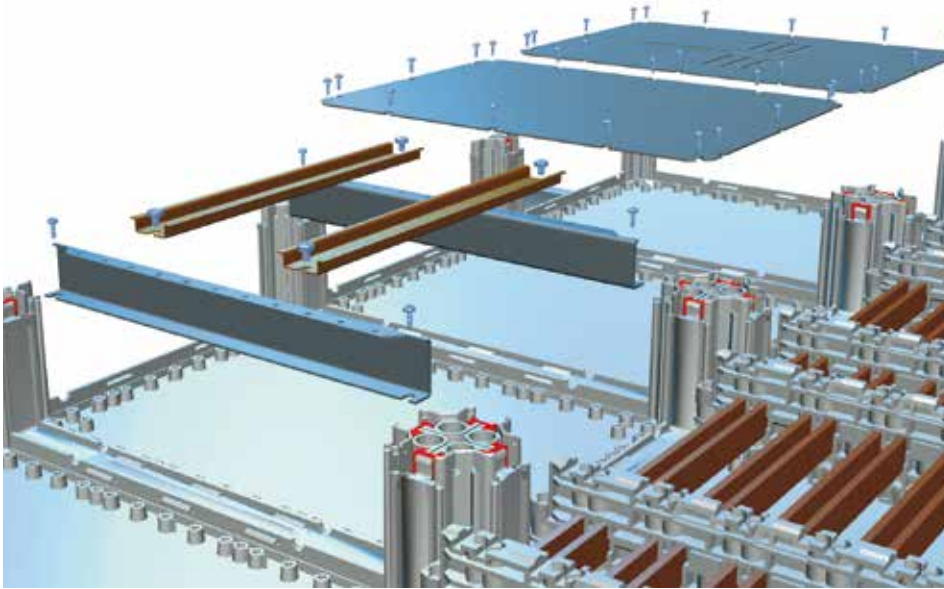
Terminals for Al/Cu busbars



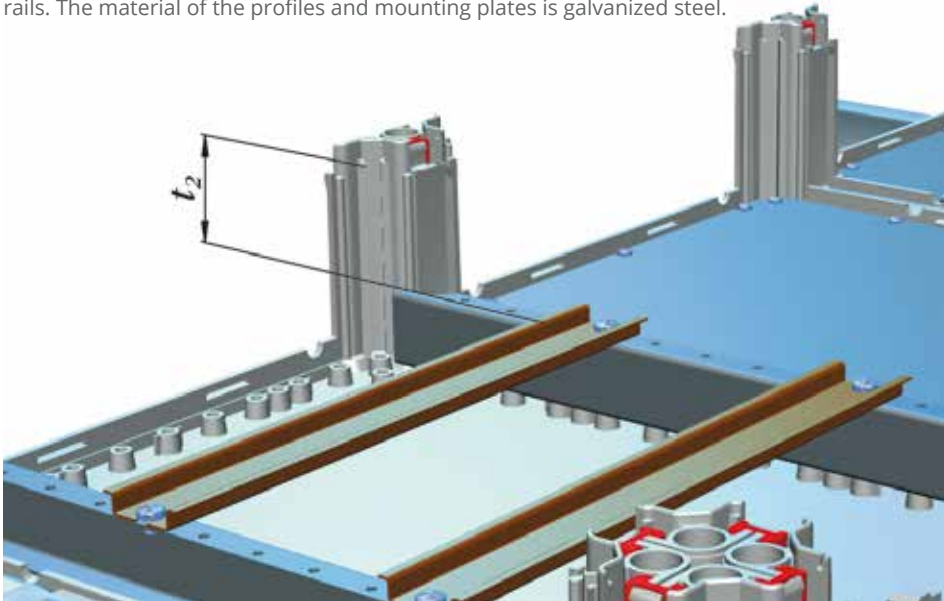
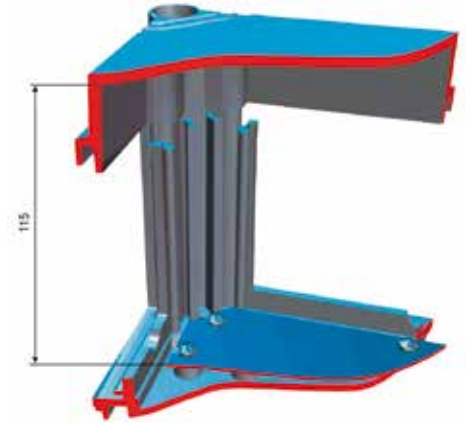
No.	Product code	Description	for busbar	Weight (kg)	Package size (pcs)	GTIN-13
Terminals for Al/Cu busbars						
1	KG81	For 25 - 70 mm ² cable	10 mm Al/Cu	0.077	1	6418677163739
2	KG83	For 16 - 185 mm ² cable	10 mm Al/Cu	0.210	1	6418677163746
3	KG85	For 2 x 35 + 3 x 16 mm ² cable	10 mm Al/Cu	0.154	1	6418677163753
4	KG87	For 4 x 35 + 4 x 16 mm ² cable	10 mm Al/Cu	0.214	1	6418677163760
5	KG80	For 25 - 70 mm ² cable	5 mm Al/Cu	0.054	1	6418677163852
6	KG82	For 6 - 70 mm ² cable	5 mm Al/Cu	0.074	1	6418677163869
7	KG84	For 3 x 16 mm ² cable	5 mm Al/Cu	0.083	1	6418677163876
8	KG86	For 6 x 16 mm ² cable	5 mm Al/Cu	0.125	1	6418677163883

Mounting plates and DIN rails

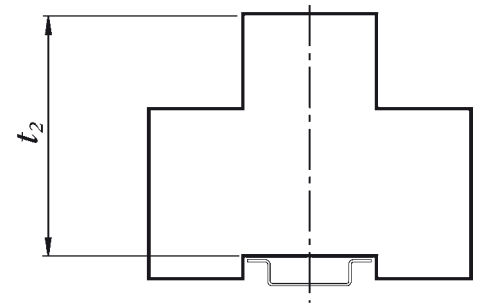




The components assembled in the enclosure define the required height of the profiles for DIN rails. The material of the profiles and mounting plates is galvanized steel.

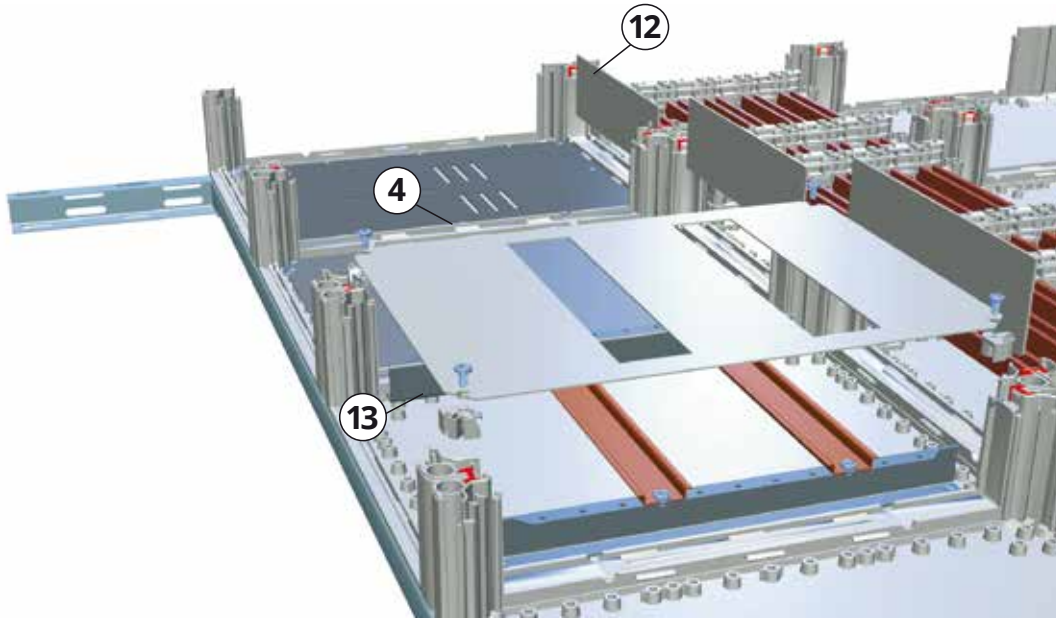


t_2 max	92.5 mm normal steering 70 mm direct steering
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No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Mounting plates, FeZn						
1	OMP3030	For 300 x 300 mm base	260 x 260 x 1.5	0.760	10	6418677164705
2	OMP3040	For 300 x 400 mm base	260 x 360 x 1.5	1.058	5	6418677164712
	KWHP3040	For kWh meter for 300 x 400 mm base	260 x 360 x 1.5	1.010	5	6418677173110
3	OMP3060	For 300 x 600 mm base	260 x 360 x 1.5	1.470	5	6418677164729
	KWHP3060	For kWh meter for 300 x 600 mm base	260 x 360 x 1.5	1.440	5	6418677173097
	OMP4060	For 400 x 600 mm base	360 x 560 x 1.5	2.300	5	6418677164736
	KWHP4060	For kWh meter for 400 x 600 mm base	360 x 560 x 1.5	2.23 7	5	6418677173127
Profiles for DIN rails, 32.5 mm high, pair						
	PRE2.32	For 200 mm side	115 x 14 x 32	0.155	1	6418677173189
5	PRE3.32	For 300 mm side	215 x 14 x 32	0.299	1	6418677172687
	PRE4.32	For 400 mm side	315 x 14 x 32	0.432	1	6418677172694
7	PRE75.32	For 600 mm side/center	75 x 14 x 32	0.970	1	6418677173165
Profiles for DIN rails, 14.5 mm high, pair						
	PRE2.14	For 200 mm side	115 x 14 x 14	0.106	1	6418677173172
	PRE3.14	For 300 mm side	215 x 14 x 14	0.207	1	6418677173134
9	PRE4.14	For 400 mm side	315 x 14 x 14	0.306	1	6418677173141
	PRE75.14	For 600 mm side/center	75 x 14 x 14	0.640	1	6418677173158
DIN 35 rails						
11	DR35240.5	For the middle of 300 x 600 mm base	35 x 150	0.008	10	6418677176647
11	DR35250.5	For 300 mm side	35 x 260	0.083	10	6418677164750
11	DR35340.5	For the middle of 400 x 600 mm base	35 x 350	0.110	10	6418677176654
11	DR35350.5	For 400 mm side	35 x 360	0.115	10	6418677164767

Front panels and drop-stops



Thanks to the corner elevators (13), the depth of the front panels is easily adjustable.

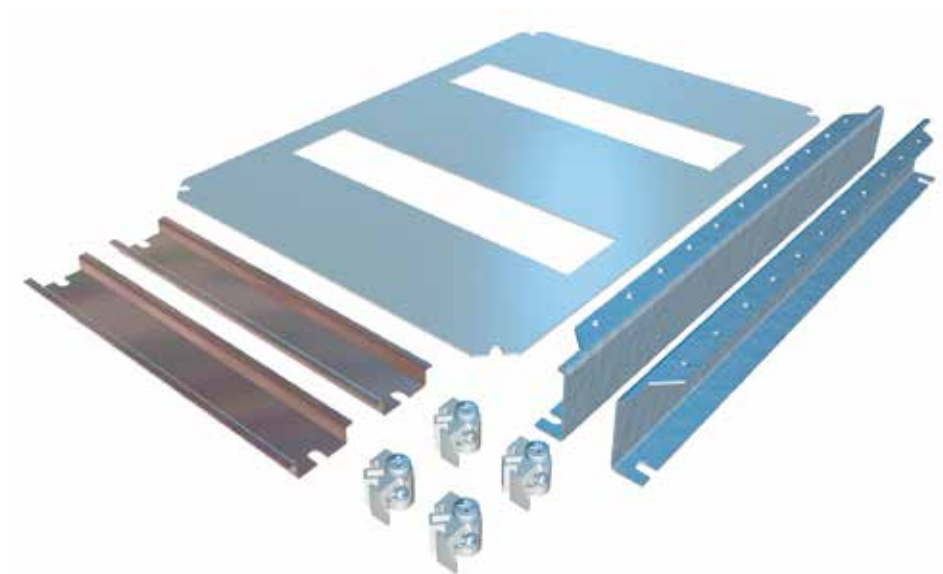
The drop-stops (12), made of 2 mm polypropylene, are easy to customise.



No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Front panels, rail to rail 125 mm, incl. corner elevator set						
	PPF33 .125.1	For 300 x 300 base, 1 DIN opening for 12 modules	266 x 266 x 2	0.150	1	6418677172830
2	PPF33 .125.2	For 300 x 300 base, 2 DIN openings for 12 modules	266 x 266 x 2	0.132	1	6418677172878
	PPF43.125.1	For 300 x 400 base, 1 DIN opening for 17 modules	266 x 366 x 2	0.196	1	6418677172885
4	PPF43.125.2	For 300 x 400 base, 2 DIN openings for 17 modules	266 x 366 x 2	0.167	1	6418677172847
	PPF34.125.3	For 300 x 400 base, 3 DIN openings for 12 modules	266 x 366 x 2	0.166	1	6418677172892
	PPF36.125.4	For 300 x 600 base, 4 DIN openings for 12 modules	366 x 566 x 2	0.250	1	6418677172854
	PPF46.125.4	For 400 x 600 base, 4 DIN openings for 17 modules	366 x 566 x 2	0.320	1	6418677172861
Front panels, rail to rail 150 mm, incl. corner elevator set						
8	PPF34.150.2	For 300 x 400 base, 2 DIN openings for 12 modules	266 x 366 x 2	0.183	1	6418677172908
	PPF36.150.3	For 300 x 600 base, 3 DIN openings for 12 modules	266 x 566 x 2	0.268	1	6418677172915
	PPF46.150.3	For 400 x 600 base, 3 DIN openings for 17 modules	366 x 566 x 2	0.346	1	6418677173011
14	PMR1387	Plug for front panel (Ø 9 mm hole) 2	20 x 26 x 9.5	0.002	50	6418677166730
Drop-stops						
11	PEE6	For 300 mm side 2	250 x 80 x 2	0.034	10	6418677172540
12	PEE7	For 400 mm side 3	360 x 80 x 2	0.049	5	6418677172557

Complete front panel sets including profiles for DIN rails, corner elevators and DIN rails are shown on page 9.

Complete front panel sets

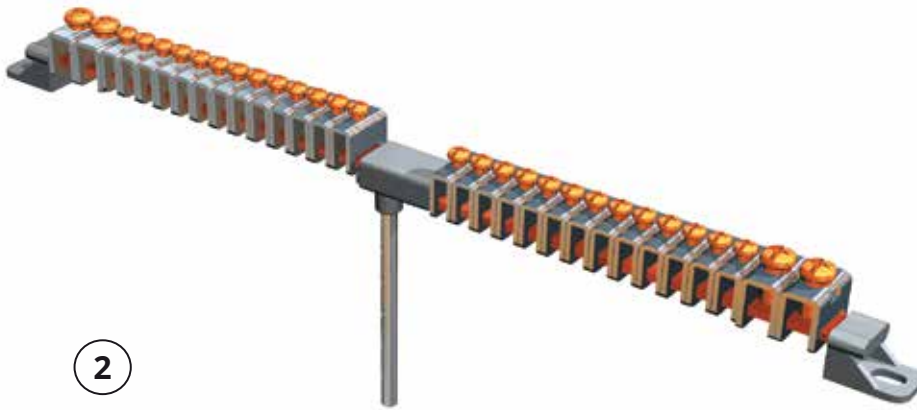


Complete front panel sets include two profiles for DIN rails, a set of corner elevators including four corner elevators, DIN rail(s) and a front panel of polypropylene, a support construction for 600 mm panels, mounting screws and instructions.

No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Complete front panel sets, 14.5 mm high profile, rail to rail 125 mm						
1	PPF33A114	For 300 x 300 base, 1 DIN opening for 12 modules	266 x 266 x 2	0.440	1	6418677185007
1	PPF33A214	For 300 x 300 base, 2 DIN openings for 12 modules	266 x 266 x 2	0.505	1	6418677185021
1	PPF43A114	For 300 x 400 base, 1 DIN opening for 17 modules	266 x 366 x 2	0.518	1	6418677185045
1	PPF43A214	For 300 x 400 base, 2 DIN openings for 17 modules	266 x 366 x 2	0.604	1	6418677185069
1	PPF34A314	For 300 x 400 base, 3 DIN openings for 12 modules	266 x 366 x 2	0.725	1	6418677185106
1	PPF36A414	For 300 x 600 base, 4 DIN openings for 12 modules	266 x 566 x 2	1.032	1	6418677185120
1	PPF46A414	For 400 x 600 base, 4 DIN openings for 17 modules	266 x 566 x 2	1.230	1	6418677185168
Complete front panel sets, 14.5 mm high profile, rail to rail 150 mm						
1	PPF34B214	For 300 x 400 base, 2 DIN openings for 12 modules	266 x 366 x 2	0.655	1	6418677185083
1	PPF36B314	For 300 x 600 base, 3 DIN openings for 12 modules	266 x 566 x 2	1.043	1	6418677185144
1	PPF46B314	For 400 x 600 base, 3 DIN openings for 17 modules	366 x 566 x 2	1.210	1	6418677185182
Complete front panel sets, 32.5 mm high profile, rail to rail 125 mm						
1	PPF33A132	For 300 x 300 base, 1 DIN opening for 12 modules	266 x 266 x 2	0.532	1	6418677185014
1	PPF33A232	For 300 x 300 base, 2 DIN openings for 12 modules	266 x 266 x 2	0.597	1	6418677185038
1	PPF43A132	For 300 x 400 base, 1 DIN opening for 16 modules	266 x 366 x 2	0.610	1	6418677185052
1	PPF43A232	For 300 x 400 base, 2 DIN openings for 16 modules	266 x 366 x 2	0.696	1	6418677185076
1	PPF34A332	For 300 x 400 base, 3 DIN openings for 12 modules	266 x 366 x 2	0.860	1	6418677185113
1	PPF36A432	For 300 x 600 base, 4 DIN openings for 12 modules	266 x 566 x 2	1.224	1	6418677185137
1	PPF46A432	For 400 x 600 base, 4 DIN openings for 17 modules	266 x 566 x 2	1.422	1	6418677185175
Complete front panel sets, 32.5 mm high profile, rail to rail 150 mm						
1	PPF34B232	For 300 x 400 base, 2 DIN openings for 12 modules	266 x 366 x 2	0.790	1	6418677185090
1	PPF36B332	For 300 x 600 base, 3 DIN openings for 12 modules	266 x 566 x 2	1.318	1	6418677185151
1	PPF46B332	For 400 x 600 base, 3 DIN openings for 17 modules	366 x 566 x 2	1.485	1	6418677185199

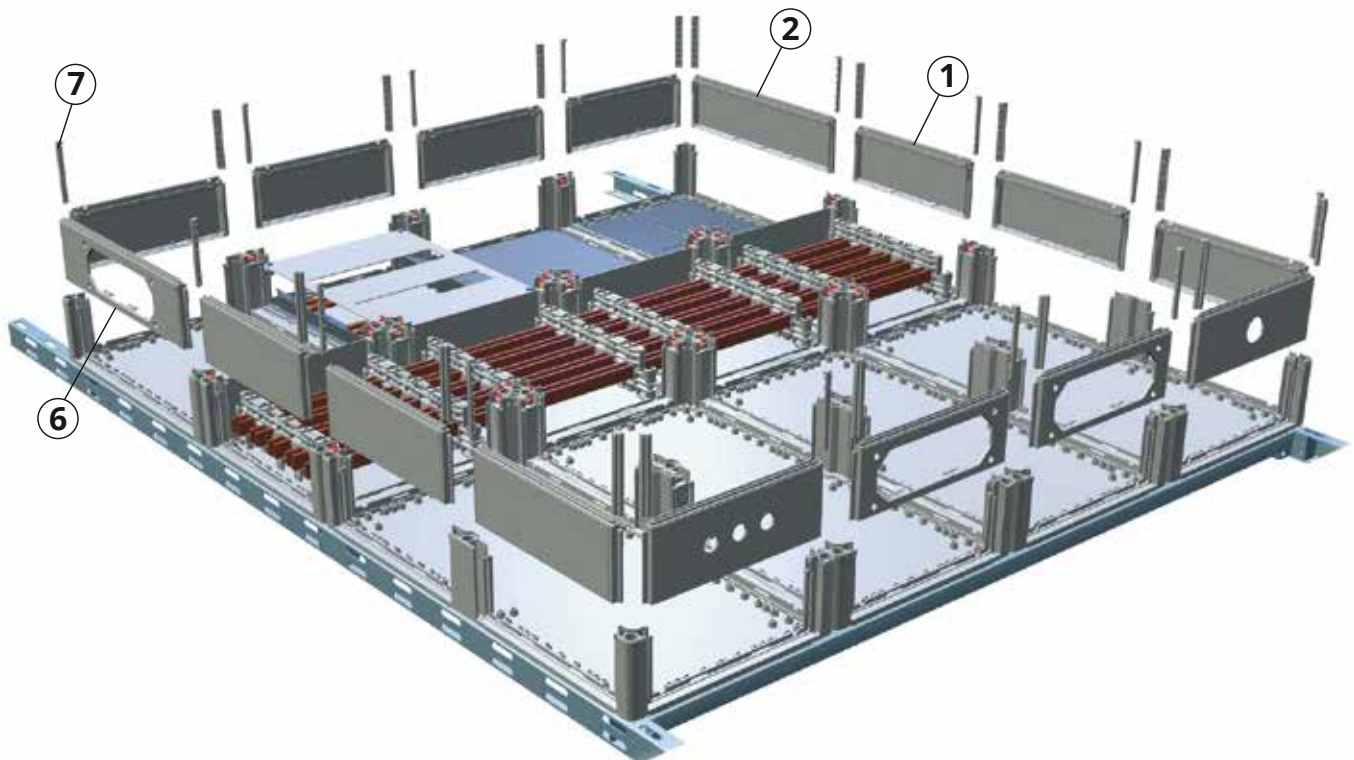


N and PE busbars



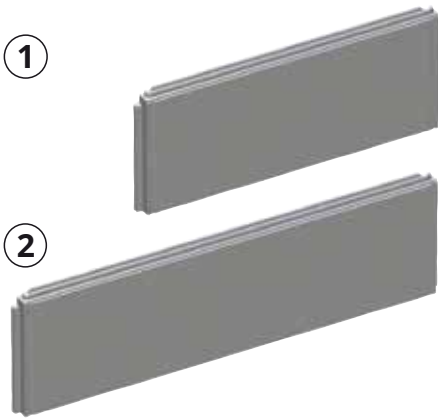
No.	Product code	Description	Length (mm)	Weight (kg)	Package size (pcs)	GTIN-13
N and PE busbars, for 300 mm side						
2	KN15.315	N + PE, Cu 2 x (2 x 16 / 13 x 6 mm ²)	250 mm	0.176	1	6418677153020
2	KN16.330	N, Cu 4 x 16 / 26 x 6 mm ²	250 mm	0.172	1	6418677153037
2	KN17.332	PE, Cu 4 x 16 / 28 x 6 mm ²	250 mm	0.184	1	6418677153044
N and PE busbars, for 400 mm side						
2	KN15.423	N+PE, Cu 2 x (2 x 16 / 21 x 6 mm ²)	350 mm	0.260	1	6418677153051
2	KN16.436	N, Cu 4 x 16 / 32 x 6 mm ²	350 mm	0.254	1	6418677153068
2	KN17.436	PE, Cu 4 x 16 / 32 x 6 mm ²	350 mm	0.272	1	6418677153075

Cubo P plates



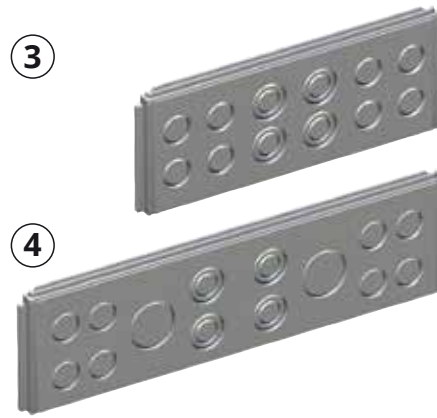


All Ensto Cubo P plates are mounted with locking pins. No screws - the plates are mounted easily without any special tools only by pushing the locking pin in its place. The joint is tight; the Ensto Cubo P series is tested to IP65 degree of protection. If needed, the plates can also be removed without any special tools. The material of the plates is glass-reinforced polycarbonate. The plates are provided with a gasket.



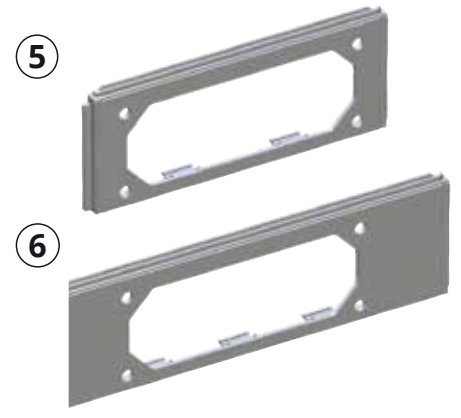
Cover plate

The cover plate can easily be drilled according to your own requirements.



Knockout plate

The knockout plates are provided with the most common Pg or metric knockouts. Knockouts on the 300 mm wide plates: Pg 11, Pg 16 and Pg 21, or M16, M20 and M25. Knockouts on the 400 mm wide plates: Pg 11, Pg 16, Pg 21 and Pg 29, or M16, M20, M25 and M40.



SFS/F2 adaptor plate

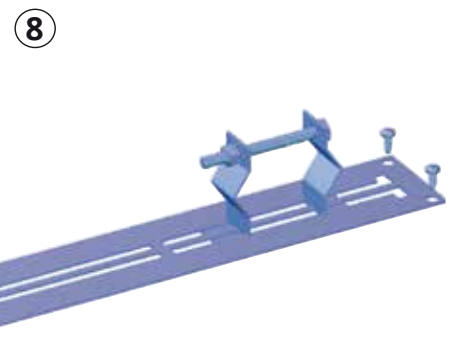
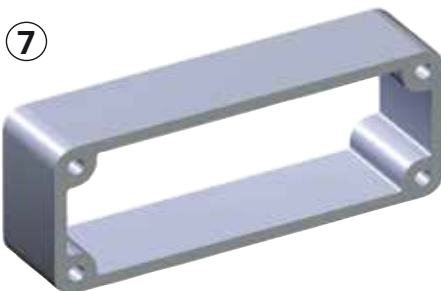
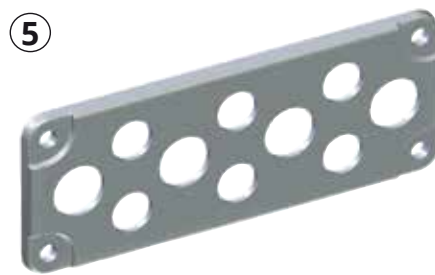
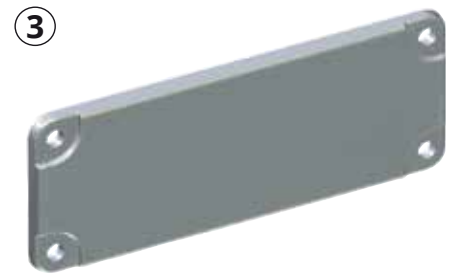
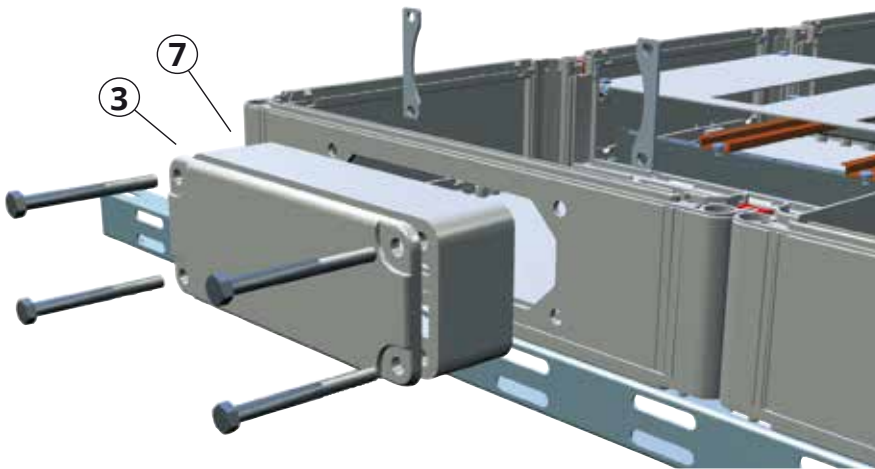
This plate is specially designed to fit the so called Scandinavian plate types.



The locking pin provides a quick and secure mounting of the plate.

No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Cover plates, polycarbonate						
1	PCP3	For 300 mm side	227 x 95 x 11	0.140	1	6418677172427
2	PCP4	For 400 mm side	351 x 95 x 11	0.210	1	6418677172434
Knockout plates, polycarbonate						
3	PKOP3.1	For 300 mm side, 8 x Pg16 + 4 x Pg11/21	227 x 95 x 11	0.130	1	6418677172458
4	PKOP4.1	For 400 mm side, 8 x Pg16 + 4 x Pg11/21 + 2 x Pg29	351 x 95 x 11	0.190	1	6418677172489
3	PMP3.1	For 300 mm side, 4 x M16/25 + 8 x M20	227 x 95 x 11	0.130	1	6418677172472
4	PMP4.1	For 400 mm side, 4 x M16/25 + 8 x M20 + 2 x M40	351 x 95 x 11	0.190	1	6418677172496
SFS/F2 adapter plates, polycarbonate						
5	PSFS3	For 300 mm side	227 x 95 x 11	0.085	1	6418677172441
6	PSFS4	For 400 mm side	351 x 95 x 11	0.155	1	6418677172465
Locking pins for Cubo P flanges						
7	PFPL1848	Locking pings, grey polycarbonate	12 x 90	0.004	100	6418677172663
	POT1	Pull-out tool for locking pins	Ø 50 x 175	0.892	1	6418677172533

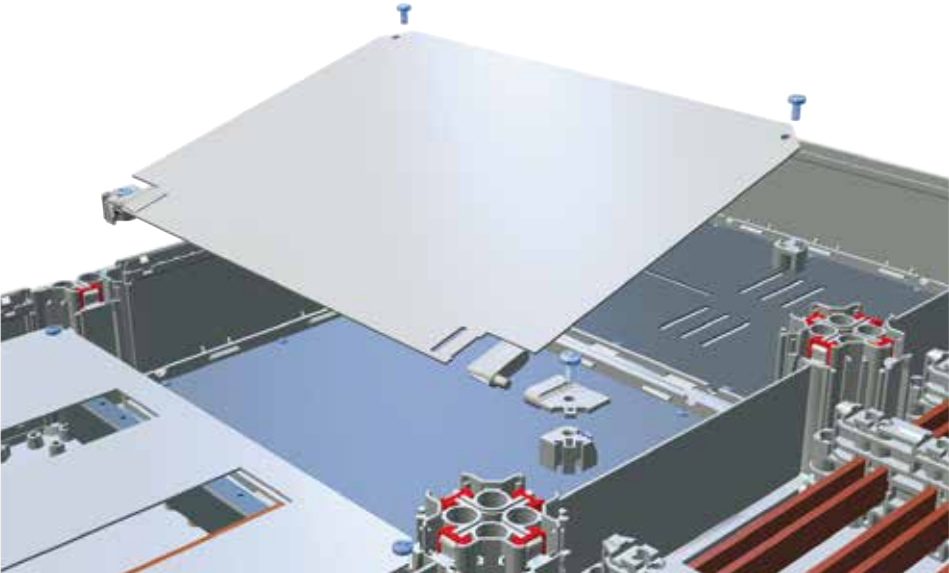
SFS plates, cable entries and strain-relief



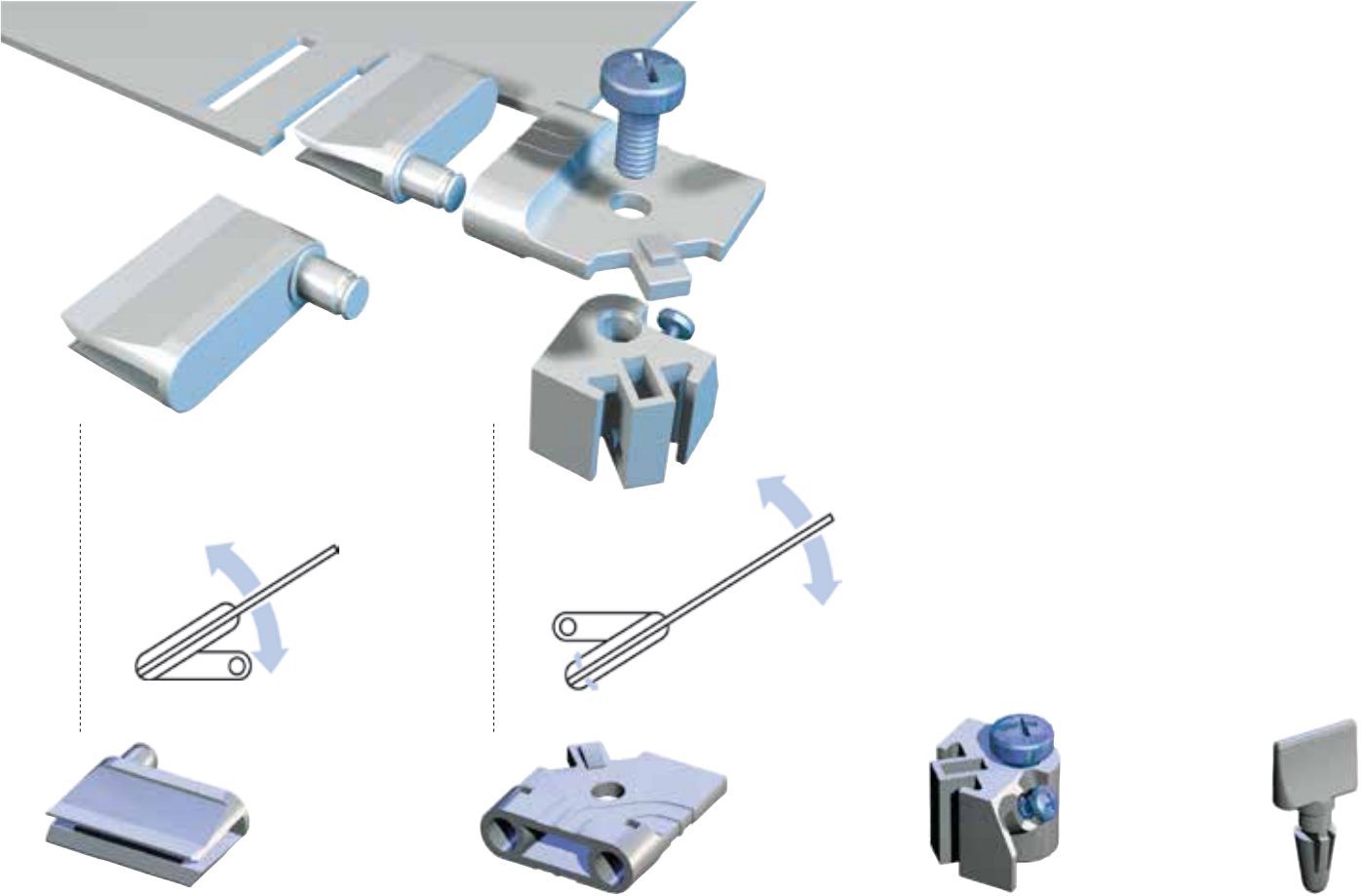
No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Cable entries						
1	PCE3	For 300 mm side, set for 1 cable Ø 27-66 mm	227 x 95 x 71	0.405	1	6418677172717
2	PCE3.2	For 300 mm side, set for 2 cables Ø 27-66 mm	227 x 95 x 71	0.645	1	6418677174834
1	PCE4	For 400 mm side, set for 1 cable Ø 27-66 mm	351 x 95 x 71	0.442	1	6418677172724
2	PCE4.2	For 400 mm side, set for 2 cables Ø 27-66 mm	351 x 95 x 71	0.682	1	6418677163777
	PK69	Separate rubber grommet for cable Ø 27-66 mm	100 x 86 x 60	0.107	1	6418677172748
	PK69T	Cable grommet, set, Ø 27-66 mm	108 x 89 x 60	0.265	1	6418677173585
Cover plate, F2 size incl. PUR gasket						
3	F2251	PC	216 x 86	0.092	1	6418677171949
Knockout flange, F2 size incl. PUR gasket						
4	F2252	7 x Pk11 + 7 x Pk9/16, PC 2	216 x 86	0.083	1	6418677172113
4	F2253	2 x Pk21/29/36 + 2 x Pk9/16 + 1 x Pk11, 2 PC	216 x 86	0.088	1	6418677172397
4	F2254	5 x Pk16/21 + 2 x Pk11, PC	216 x 86	0.085	1	6418677172403
4	F2255	7 x M16 + 7 x M12/20, PC 2	216 x 86	0.083	1	6418677172595
4	F2256	2 x M20/32 /50 + 2 x M12/20 + 2 x M16, PC	216 x 86	0.088	1	6418677172625
4	F2257	5 x M20/32 + 2 x M16 + 1 x M12/20, PC	216 x 86	0.085	1	6418677172700
Gland flange, F2 size incl. PUR gasket						
5	F2157	x Pg21 + 4 x Pg16, PC	216 x 86	0.073	1	6418677171956
5	F2158	x Pg29 + 6 x Pg16, PC	216 x 86	0.074	1	6418677171963
5	F2159	x Pg36 + 4 x Pg16, PC	216 x 86	0.074	1	6418677171970
5	F2160	8 x Pg16, PC	216 x 86	0.073	1	6418677171987
5	F2161	10 x Pg11, PC	216 x 86	0.076	1	6418677171994
5	F2168	4 x M20 + 1 x M25 + 2 x M32 , PC	216 x 86	0.073	1	6418677152672
5	F2169	6 x M20 + 1 x M32 + 1 x M40, PC	216 x 86	0.072	1	6418677152689
5	F2170	4 x M20 + 2 x M40, PC	216 x 86	0.072	1	6418677152696
5	F2171	8 x M20, PC	216 x 86	0.070	1	6418677152702
5	F2172	10 x M16, PC	216 x 86	0.072	1	6418677152719
Membrane flange, F2 size						
6	F2202	For 25 x Ø 5-26 mm cables, EPDM	216 x 86	0.250	1	6418677172007
6	F2203	For 35 x Ø 5-26 mm cables, EPDM	216 x 86	0.265	1	6418677172014
6	F2204	For 3 x Ø 24-60 mm cables, EPDM	216 x 86	0.228	1	6418677172021
Membrane flange, F2 size without gasket						
	F2162	3 x Ø30 + 6 x Ø18 + 16 x Ø14 mm, TPE	226 x 87	0.177	1	6418677172038
	F2163	9 x Ø18 + 24 x Ø14 mm, TPE	226 x 87	0.194	1	6418677172045
Extension frames, incl. PUR gasket						
7	F2C50E	50 mm for F2 flange, PC	216 x 86 x 50	0.493	1	6418677173448
7	PSFSC3.50	For F2 flange incl. PSF53 adapter plate, 50 mm deep, set for 300 mm side	216 x 86 x 50	0.578	1	6418677172526
Other flange accessories						
	F2G	Self-adhesive flange gasket, F2 size	216 x 84		1	6418677172076
	F2SS20	Flange bolt set, F2 size, steel bolt with plastic head	M8 x 20		1	6418677181689
	F2SS20L	Flange bolt set, F2 size, steel bolt with plastic head + steel connector	M8 x 20		1	6418677173080
	PMR1857	Flange/base support for size F2, PA	216 x 22		1	6418677172106
	PMR1858	Isolating cup for support PMR1857, PA	Ø 18 mm		1	6418677171796
Strain-relief, galvanized steel						
8	KJ8.13	For 300 mm side, for 1 cable	265 x 65 x 85		1	6418677172755
8	KJ8.23	For 300 mm side, for 2 cables	265 x 65 x 85		1	6418677173271
8	KJ8.14	For 400 mm side, for 1 cable	365 x 65 x 85		1	6418677173288
8	KJ8.24	For 400 mm side, for 2 cables	365 x 65 x 85		1	6418677173295

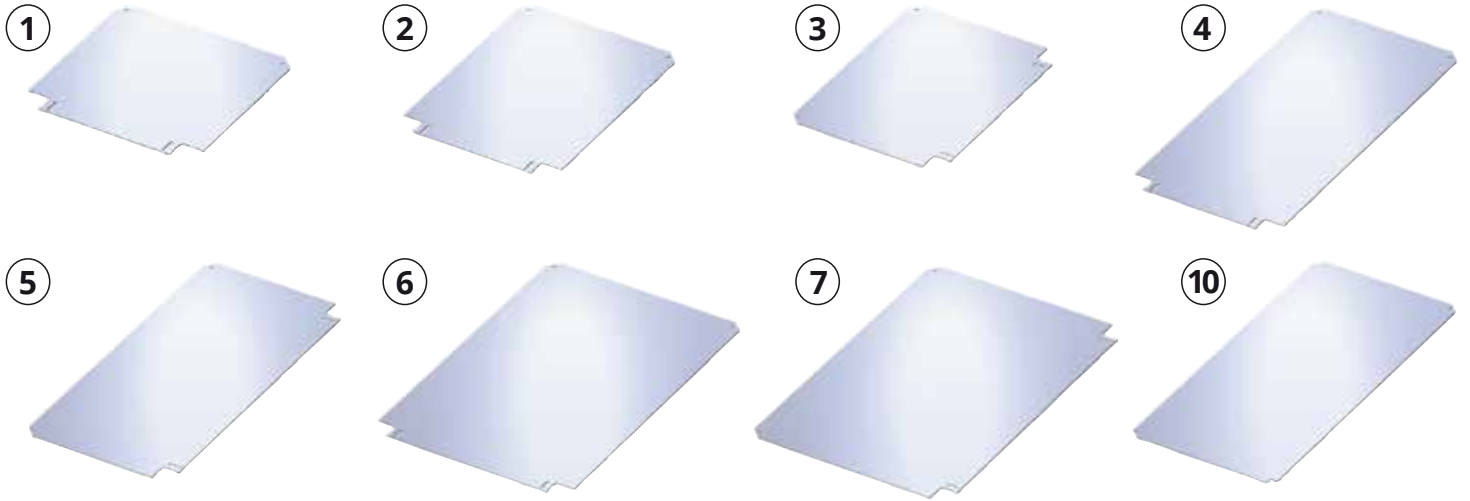


Front panels



The hinge component can be mounted in two different ways, thus changing the distance between the panel and the inner base wall. Several front panels can be mounted one on another.

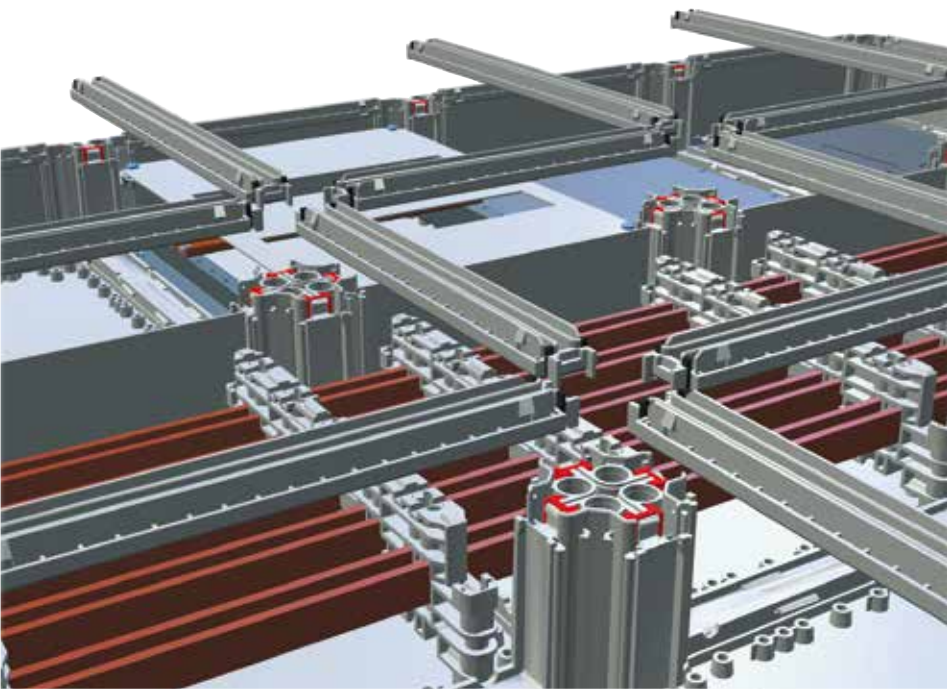




No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Hinged front panels, incl. corner elevator set, polypropylene, grey RAL 7035						
1	PHFP33	For 300 x 300 base	266 x 266 x 2	0.174	1	6418677173028
2	PHFP34	For 300 x 400 base, hinged side: 300 mm	266 x 366 x 2	0.226	1	6418677173035
3	PHFP43	For 300 x 400 base, hinged side: 400 mm	266 x 366 x 2	0.225	1	6418677173202
4	PHFP36	For 300 x 600 base, hinged side: 300 mm	266 x 566 x 2	0.373	1	6418677173042
5	PHFP63	For 300 x 600 base, hinged side: 600 mm	266 x 566 x 2	0.351	1	6418677173219
6	PHFP46	For 400 x 600 base, hinged side: 400 mm	366 x 566 x 2	0.484	1	6418677173059
7	PHFP64	For 400 x 600 base, hinged side: 600 mm	366 x 566 x 2	0.464	1	6418677173226
Hinged front panels, incl. corner elevator set, aluminium						
1	PHFP33A	For 300 x 300 base	266 x 266 x 1.5	0.314	1	6418677173608
2	PHFP34A	For 300 x 400 base, hinged side: 300 mm	266 x 366 x 1.5	0.419	1	6418677173615
3	PHFP43A	For 300 x 400 base, hinged side: 400 mm	266 x 366 x 1.5	0.418	1	6418677173622
4	PHFP36A	For 300 x 600 base, hinged side: 300 mm	266 x 566 x 1.5	0.678	1	6418677173639
5	PHFP63A	For 300 x 600 base, hinged side: 600 mm	266 x 566 x 1.5	0.660	1	6418677173646
6	PHFP46A	For 400 x 600 base, hinged side: 400 mm	366 x 566 x 1.5	0.888	1	6418677173653
7	PHFP64A	For 400 x 600 base, hinged side: 600 mm	366 x 566 x 1.5	0.860	1	6418677173660
Front panels, closed, incl. corner elevator set, polypropylene, grey RAL 7035						
10	PFP33	For 300 x 300 base	266 x 266 x 2	0.167	1	6418677172793
10	PFP34	For 300 x 400 base	266 x 366 x 2	0.218	1	6418677172809
10	PFP36	For 300 x 600 base	266 x 566 x 2	0.366	1	6418677172816
10	PFP46	For 400 x 600 base	366 x 566 x 2	0.473	1	6418677172823
Front panels, closed, incl. corner elevator set, aluminium						
10	PFP33A	For 300 x 300 base	266 x 266 x 1.5	0.309	1	6418677173691
10	PFP43A	For 300 x 400 base	266 x 366 x 1.5	0.424	1	6418677173707
10	PFP63A	For 300 x 600 base	266 x 566 x 1.5	0.681	1	6418677173714
10	PFP64A	For 400 x 600 base	366 x 566 x 1.5	0.965	1	6418677173721
Accessories for front panels (included in complete sets)						
	PPH787	Support, with 14.5 mm profile	65 mm	0.014	10	6418677173554
	PPH789	Support, with 32.5 mm profile	85 mm	0.017	10	6418677173561
	PTK4.50	Spacer, 600 mm/middle	50 mm	0.021	10	6418677173578



Connecting ribs



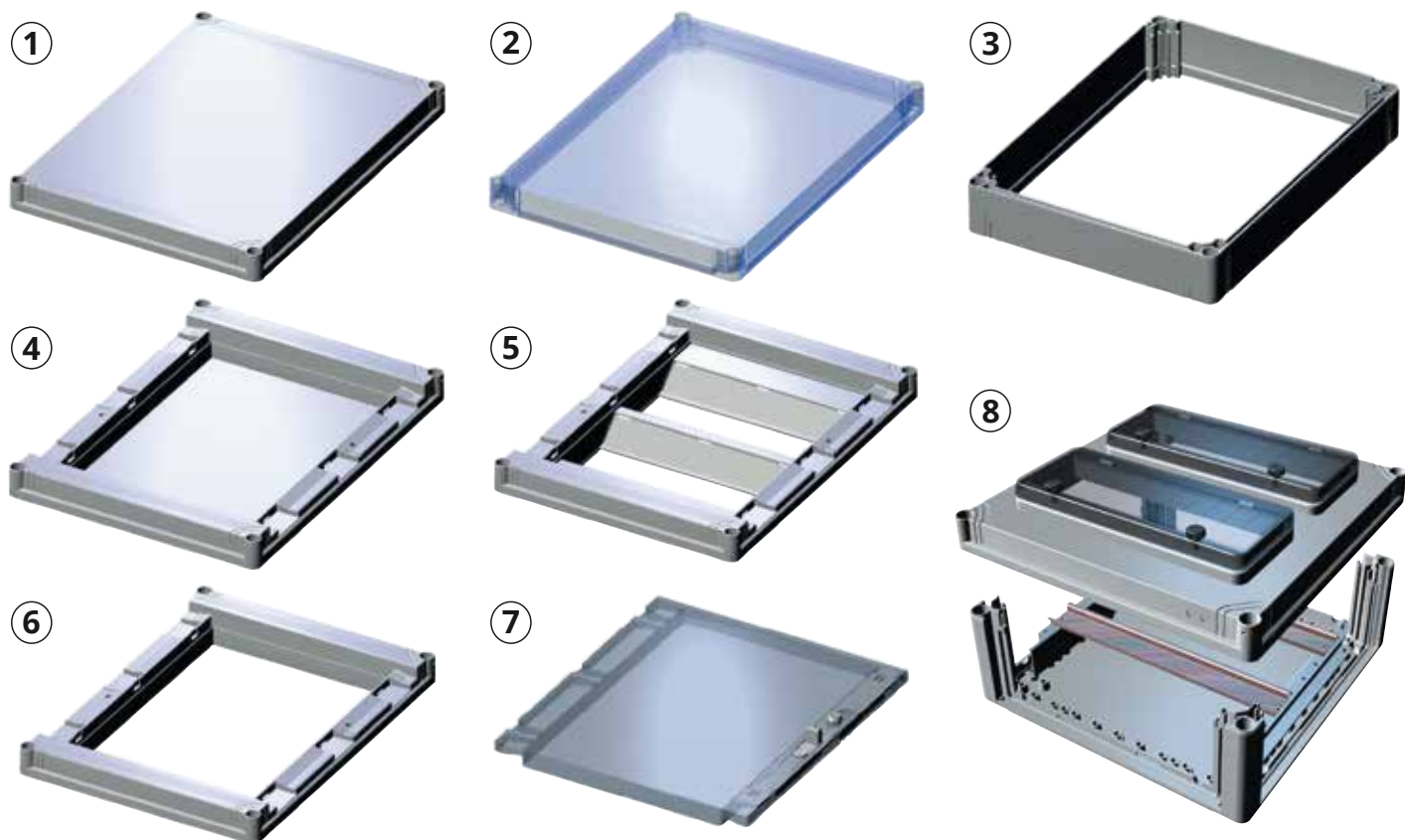
The connecting collars, locking pins and connecting ribs all contribute to a tight jointing of the bases. If needed, the connecting ribs and locking pins can be removed afterwards without any special tools. The connecting rib is provided with a slot, which finally locks the drop-stop in its place. Please note that the connecting rib is mounted in its place before the locking pins are pushed down. See page 3.

No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Connecting ribs						
1	PRC1846	For 300 mm side	251 x 16 x 30	0.061	25	6418677172601
2	PRD1847	For 400 mm side	351 x 16 x 30	0.087	25	6418677172618

Extensions frames and covers



The modular cover can easily be changed from left- to right-handed, thanks to the detachable hinge (8) and locking parts (9).



No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Covers, polycarbonate, incl. gasket, without cover screws (screws on page 28)						
1	OPCG303003L	Grey cover	300 x 300 x 30	0.460	6	6418677164484
1	OPCG304003L	Grey cover	300 x 400 x 30	0.602	6	6418677164491
1	OPCG306003L	Grey cover	300 x 600 x 30	0.930	12	6418677164507
1	OPCG406003L	Grey cover	400 x 600 x 30	1.267	9	6418677164514
2	OPCT303003L	Transparent cover	300 x 300 x 30	0.460	6	6418677164415
2	OPCT304003L	Transparent cover	300 x 400 x 30	0.602	6	6418677164422
2	OPCT306003L	Transparent cover	300 x 600 x 30	0.930	12	6418677164439
2	OPCT406003L	Transparent cover	400 x 600 x 30	1.267	9	6418677164446
Cover with window for kWh-meter, polycarbonate						
	OPCG36KWH	Incl. cover screws and inspection window 113 x 153 mm	300 x 600 x 37	0.920	12	6418677174186
Extension frames, 55 mm deep, polycarbonate						
3	OPCP303006E	Incl. mounting screws and gasket	300 x 300 x 55	0.450		6418677164637
3	OPCP304006E	Incl. mounting screws and gasket	300 x 400 x 55	0.480		6418677164644
3	OPCP306006E	Incl. mounting screws and gasket	300 x 600 x 55	0.667		6418677164651
3	OPCP406006E	Incl. mounting screws and gasket	400 x 600 x 55	0.766		6418677164668
Modular covers, smoke grey window IP65, PC						
4+7	OPCG33CS	Closed front	300 x 300 x 30	0.889	1	6418677172922
4+7	OPCG34CS	Closed front	300 x 400 x 30	1.235	1	6418677172939
4+7	OPCG36CS	Closed front	300 x 600 x 30	1.760	1	6418677172946
5+7	OPCG33.125.1DS	Front: 1 DIN slit for 12 modules (12)	300 x 300 x 30	0.824	1	6418677172953
5+7	OPCG34.125.2DS	Front: 2 DIN slits for 12 modules (24)	300 x 400 x 30	1.114	1	6418677172960
5+7	OPCG36.150.3DS	Front: 3 DIN slits for 12 modules (36)	300 x 600 x 30	1.620	1	6418677172977
6+7	OPCG33OS	Open front	300 x 300 x 30	0.725	1	6418677172984
6+7	OPCG34OS	Open front	300 x 400 x 30	0.954	1	6418677172991
6+7	OPCG36OS	Open front	300 x 600 x 30	1.360	1	6418677173004
8	KOT20228	Cover with window, 2 x 12 mod. incl. DIN rails	300 x 300 x 45	1.160	1	6418677163944
Modular covers, smoke grey window IP65, PC incl. DIN rails and 14.5 mm profiles						
	OPCG33.125.1DSC	Front: 1 DIN slit for 12 modules (12)	300 x 300 x 30	1.114	1	6418677166150
	OPCG34.125.2DSC	Front: 2 DIN slits for 12 modules (24)	300 x 400 x 30	1.586	1	6418677166167
	OPCG36.150.3DSC	Front: 3 DIN slits for 12 modules (36)	300 x 600 x 30 2	2.920	1	6418677166174
Accessories for modular covers						
	CP220	Cover strip for DS version/slits	220 x 50	0.024	10	6418677176661
	PEM222	Marker for DS version	216 x 34 x 0.1	0.002	20	6418677176678
	KY6	Lock (for all versions)		0.022	1	6418677173431



1



2



3



4

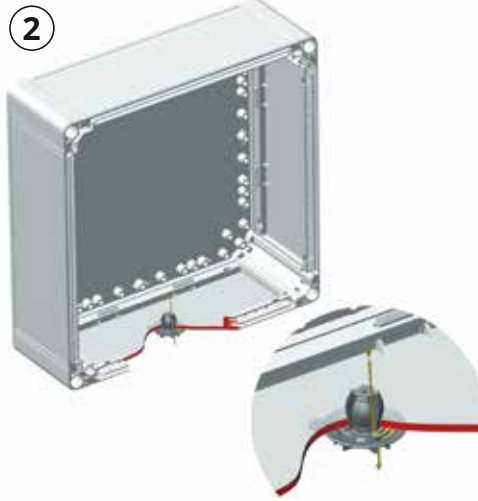
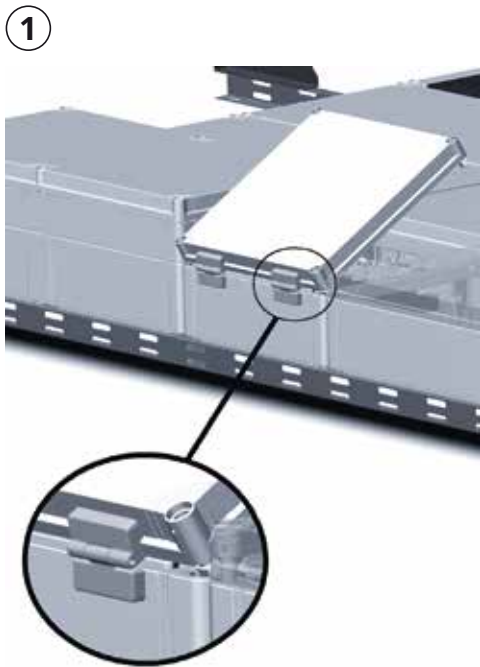


5



6

No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Cover screws						
1	OLS42	Slotted/cross head, sealable	14 x 42	0.003	100	6418677164590
1	OLSA42.4	4 x OLS42	"	0.013	1	6418677174704
1	OLSA42.6	6 x OLS42	"	0.019	1	6418677174711
1	OLSA42.04	4 x OLS42 + 4 x OMS1	"	0.015	1	6418677172267
1	OLSA42.06	6 x OLS42 + 8 x OMS1	"	0.025	1	6418677172274
	OLS42N	Slotted/cross head, dark grey Noryl	"	0.003	12	6418677174728
	OLS32	Slotted/cross head for 600 mm	14 x 32	0.003	12	6418677174360
4	PLS63	Springloaded, slotted/cross head	14 x 62	0.008	12	6418677173073
	OLSH1	Hinged cover screw, slot/cross head, Blue PA	14 x 96	0.007	10	6418677174247
	OLWH1	Hinged cover screw, wing head, Blue PA	14 x 113	0.009	10	6418677174254
2	OLW55	Wing head	14 x 55	0.005	100	6418677171765
2	OLWA55.4	4 x OLW55	"	0.012	1	6418677174735
2	OLWA55.6	6 x OLW55	"	0.029	1	6418677174742
2	OLWA55.04	4 x OLW55 + 4 x OMS1	"	0.017	1	6418677172281
2	OLWA55.06	6 x OLW55 + 8 x OMS1	"	0.026	1	6418677174759
3	OLT42	DIN 3 head	14 x 42	0.004	12	6418677171772
3	OLTA42.4	4 x OLT42	"	0.012	1	6418677174766
3	OLTA42.6	6 x OLT42	"	0.024	1	6418677174773
3	OLTA42.04	4 x OLT42 + 4 x OMS1	"	0.016	1	6418677172298
3	OLTA42.06	6 x OLT42 + 8 x OMS1	"	0.015	1	6418677174780
3	OLTA42.041	1 x OLTA42.04 + key	"	0.065	1	6418677174797
	OLT42KEY	Key for DIN head screw OLT42	50 x 50	0.042	10	6418677172410
Other accessories						
5	OES1	Extension frame screw	Ø 17 x 67	0.006	12	6418677174803
	OFL1	Fastening lug, set of 4 pcs	19 x 40 x 35.5	0.026	1	6418677164781
6	OEL1	Corner elevator incl. M5 bolt	19/19 x 14	0.008	1	6418677164798
6	OELA1.04	Corner elevator, set of 4 OEL1	20/26 x 14	0.033	1	6418677181696
	OTS1	Threaded bushing for cover screw when cover mounted on the back	18/30 Ø 16	0.003	12	6418677171789
	OTSA1.04	4 x OTS1 + 4 x OLS42	17 x 30/18	0.022	1	6418677181702
	OMS1	Mounting screw for rails and plates	5 x 10	0.002	100	6418677164804
	OBI1	Brass insert for mounting pod	M3	0.001	50	6418677172328
	OBI1.04	Brass insert, set of 4 OBI1	M3	0.002	1	6418677172335
	OCP1	Cover plug, PE	11 x Ø 15/17	0.001	12	6418677164811
	OKL1	Cover lock incl. 2 keys and mounting instruction	Ø 15.7/Ø 14.3	0.064	1	6418677172311
	OKL442	Key separately for OKL1	49 x 20	0.008	1	6418677174827
	OBS15	15 mm spacer incl. M5 screw, steel	15 x 8	0.008	12	6418677171802
	OBS15.04	15 mm spacer, set of 4 OBS15	15 x 8	0.032	1	6418677172342
	OBS20 2	20 mm spacer incl. M5 screw, steel	20 x 8	0.011	12	6418677171819
	OBS20.04 2	20 mm spacer, set of 4 OBS20	20 x 8	0.042	1	6418677172359
	OBS30 3	30 mm spacer incl. M5 screw, steel	30 x 8	0.015	12	6418677171826
	OBS30.04 3	30 mm spacer, set of 4 OBS30 3	30 x 8	0.058	1	6418677172366



No.	Product code	Description	Dimensions (mm)	Weight (kg)	Package size (pcs)	GTIN-13
1	PHI1	Hinge pair	40 x 65 x 16.5	0.065	1	6418677184987
2	DWP1	Drain water plug, black IP44, rubber	Ø 33 mm	0.003	10	6418677172731

Technical data for Ensto Cubo P system:

Degree of Protection	IP65	(EN 60529)	
Mechanical strength	IK08	(EN 50102)	+35°...-25°C
	6J	(EN 60439-4)	+35°...-50°C
Rated current	In 10-630 A		
Rated voltage	Ue 690 V (max)		
Rated frequency	f 50 Hz		
Rated isolation voltage	Ui ≥ Ue		
Busbar system	Max. 375 mm spacing		
	250 A	16 kA/1 s	32 kA dyn
	400-630 A	20 kA/1 s	40 kA dyn
Number of poles	3/N/PE		
Protection class against electric shock	I and II		
Operating temperature	Polycarbonate		+100°...-40°C
Material			
Bases	Glass fibre reinforced polycarbonate		
Flanges	Glass fibre reinforced polycarbonate		
Covers	Polycarbonate, grey and transparent		
Extension frames	Glass fibre reinforced polycarbonate		
Environmental data	Halogen free (DIN 0472 Part 815) Recyclable thermoplastics (PC)		
Openings	Knockout flanges and/or open walls		
Construction	Open construction in the assembly stage Four basic modules; 300 x 300...400 x 600 mm Screwless base and flange assembly		
Standard	EN 62208		

Temperature rise Model			With extension frame	
	W	Δt/K	W	Δt/K
Ensto Cubo P 303013 2	20	19.9	30	24.2
	50	40.0	60	43.5
	80	56.3	90	57.8
	110	69.4	120	70.5
Ensto Cubo P 304013 3	30	20.6	40	19.7
	70	37.1	80	34.2
	120	57.3	140	53.9
	170	70.1	200	69.5
Ensto Cubo P 306013	50	22.5	50	19.8
	130	48.8	130	43.0
	180	63.4	210	59.8
	210	69.9	270	71.0
Ensto Cubo P 406013	70	22.0	70	21.0
	130	39.5	150	38.2
	200	52.8	250	58.7
	300	73.9	340	72.2



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