

Montasjeanvisning xEnergy Basic BPM



Powering Business Worldwide

xEnergy Basic tavlesystem

xEnergy Basic tavlesystem er vegg- og gulvskap for elektriske fordelingsystemer på opp til 630 A, som hoved-, måler- og underfordelinger i både boliger og kommersielle bygg.

Mer info finner du på våre [nettsider](#)

Link til xEnergy Basic [hovedkatalog](#)

xEnergy konfiguratoren

Eatons xEnergy-konfigurator er en programvare for prising og prosjektering som gjør det mulig for tavlebyggere å designe og beregne kostnadene for lavspennetavler

Mer info finner du på våre [nettsider](#)

Innesalg

Eatons innesalgssystem er klar til å bistå deg med teknisk support, prosjektering og tilbud av xEnergy tavleløsninger.

Vi kan hjelpe deg med:

- Å gi et ferdigprosjektert tilbud til ditt prosjekt med pris, stykke liste og layout.
- Kort leveringstid hos grossisten som har delene lagerført, ved å bestille fra oss.
- Teknisk support på telefon eller mail ved montering eller andre spørsmål.
- Vi skreddersyr din levering for kortest mulig leveringstid!

For prisforespørsel send mail til: salesnorway@eaton.com

Gulvskap type BPM-F

- | | | |
|----|--------------------------|------------|
| 1. | Tekniske data | side 4-6 |
| 2. | Sokkel | side 7 |
| 3. | Frontplatestøtte | side 8 |
| 4. | Midtdeler/sprosse | side 9-13 |
| 5. | DIN-skiner, montasjesett | side 14-16 |
| 6. | Jordskinner | side 17-18 |
| 7. | Målerinnsats | side 19-21 |
| 8. | Frontplater | side 22-23 |
| 9. | F3A-flenser | side 24-26 |

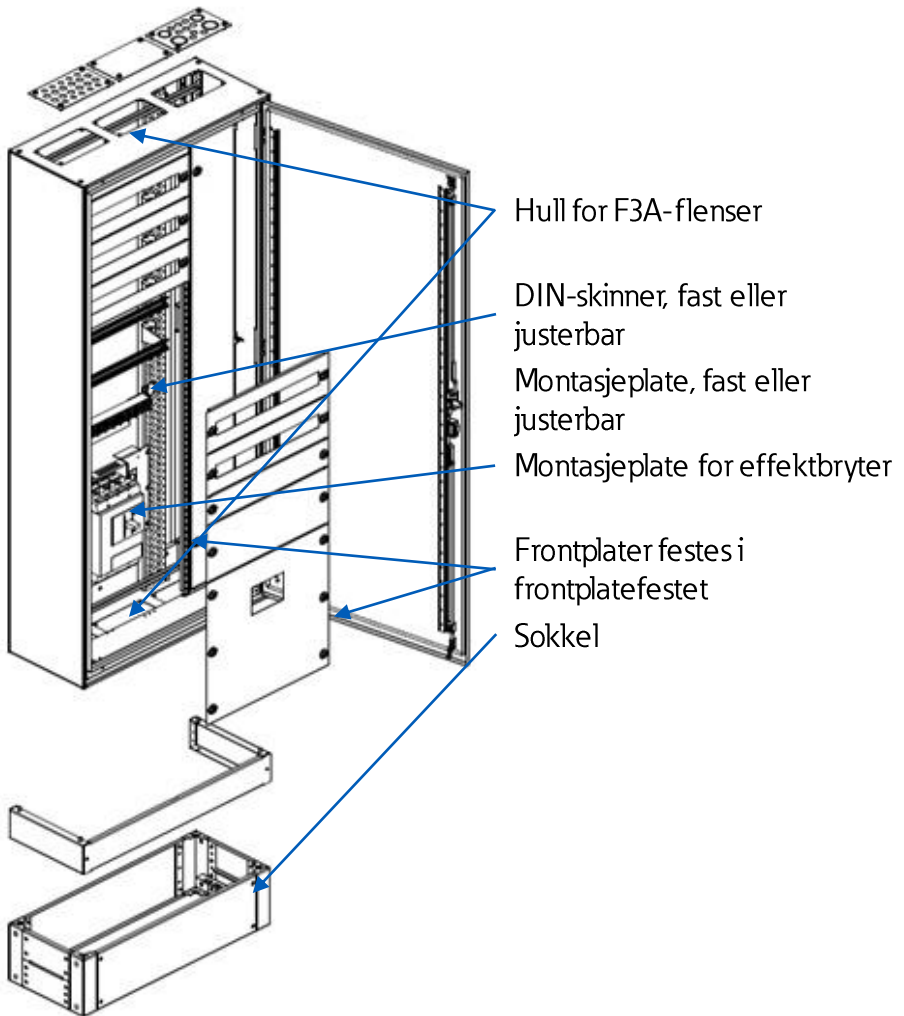
Veggskap type BPM-O

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|-----|---------------|------------|
| 10. | Tekniske data | side 27-29 |
|-----|---------------|------------|

1. Tekniske data - Gulvskap type BPM-F

Oppbygging gulvskap type BPM-F

BPM-F... IP55



1. Tekniske data - Gulvskap type BPM-F

Tekniske data:

Description

BPM-F-..., IP55, enclosure depth 320 / 400 mm

- Complete cabinets prepared for Profi+ installation system
- Degree of protection IP55
- Impact resistance IK10
- Protection class I (protective earth)
- Cable entry prepared for F3A flange
- Quick and easy change of the hinge direction, door opening angle $\sim 100^\circ$
- Two-way key bit or rotary lever
- Additional wall fixing to avoid tilting
- Enclosure made from powder-coated sheet steel, RAL 7035 / RAL 9016
- Add-on connection at depth 400 mm provided
- Variable interior fitting either with "Mounting base frame" or "Mounting side panel" (MSW)

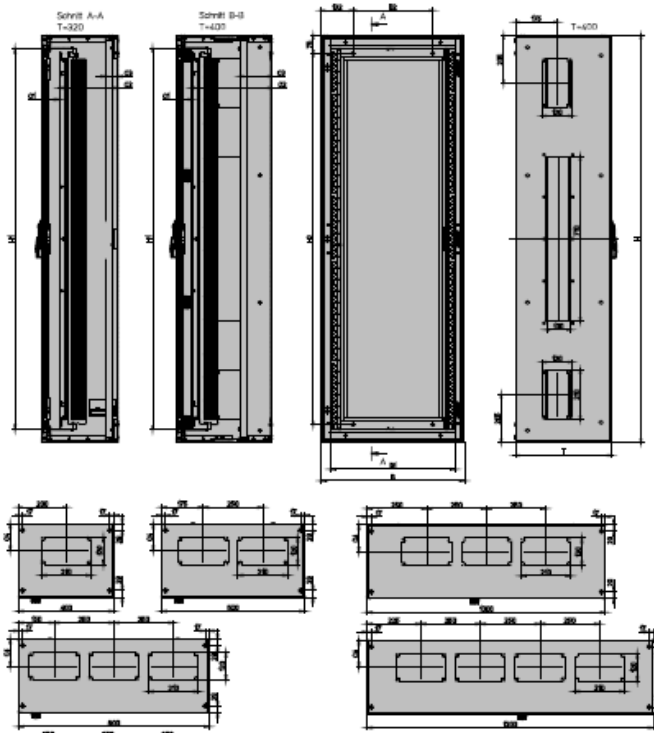
Technical data

BPM-F-...	
Electrical	
Type conforms to	IEC/EN 62208
Protection class	I (protective earth)
Degree of protection	IP55 (closed version with door/flange) IP2XC (door open, user access level has to be closed properly with front covers)
Impact resistance	IK10
Rated operational voltage	415 VAC / 50 Hz
Rated current	Max. 630 A (depending on the type of incoming circuit breaker or the busbar system being used)
Earthing concept for the enclosure	
Main earthing	By means of M8 welding bolts
Door earthing	By means of M8 welding bolts
The permissible temperature increases for switchgear assemblies with a rated current of up to 630 A can be evaluated in accordance with section 10.10.4.2 of IEC/EN 61439-1.	
For the maximum permissible heat dissipation for all devices inside the distribution board at an ambient temperature of 35° C and ΔT of 20 K / 35 K at an enclosure height of 75 %, please refer to the table on enclosure dimensions; (calculation method acc. to IEC/TR 60890).	
Mechanical	
Enclosure	Excellent stability thanks to the welded construction
Material	Sheet steel 1.25 mm, phosphated and polyester powder coated (structured) with corrosion protection
Colour	Traffic white, RAL 9016 / Light gray RAL 7035
Door	With encircling foamed sealing, hinges on the inside, door opening angle $\sim 100^\circ$ Doors with transparent window individually configurable, hinged either left or right width 1000 / 1200 mm in double-wing design
Type	Flexible interior fitting with installation units Profi+ on base frame or „mounting side panel“ (MSW) Mounting base frame: multi-layer construction, installation directly in the enclosure, robust and structured Mounting side panel (MSW): removable mounting insert, external installation, fast and reliable
Locking mechanism	Three-point standard locking with two-way key bit (metal) Three-point locking mechanism with rotary lever and rod drive (optional lock cylinder as accessory)
Cable entry	Open, prepared for F3A flanges on both sides (top+bottom) Lateral F3A cut-outs (top+bottom) for additional cable entry or cross-wiring at a depth of 400 mm
Busbar system	Prepared for incorporating a continuous busbar system over several sections with depth 400 mm Generous cut-outs left/right (closed with blind plates when delivered)
Ambient condition	Indoor installation (Assembly with/without plinth with additional fixing to a wall, „stand-alone“ not recommended) Max. ambient temperature $+40^\circ$ C Min. ambient temperature -5° C
Halogen-free, RoHS	< 1%, yes
Accessories	Several base versions or cable arrangement plinths with height 100 / 200mm, other locking mechanism for door closing, transparent doors, wall fixing brackets
Delivered as	Complete cabinet prepared for „Mounting base frame“ or „MSW“ (depending on interior fitting all corresponding parts for „Mounting base frame“ respectively „MSW“ have to be ordered separately)

1. Tekniske data - Gulvskap type BPM-F

Dimensions (mm)

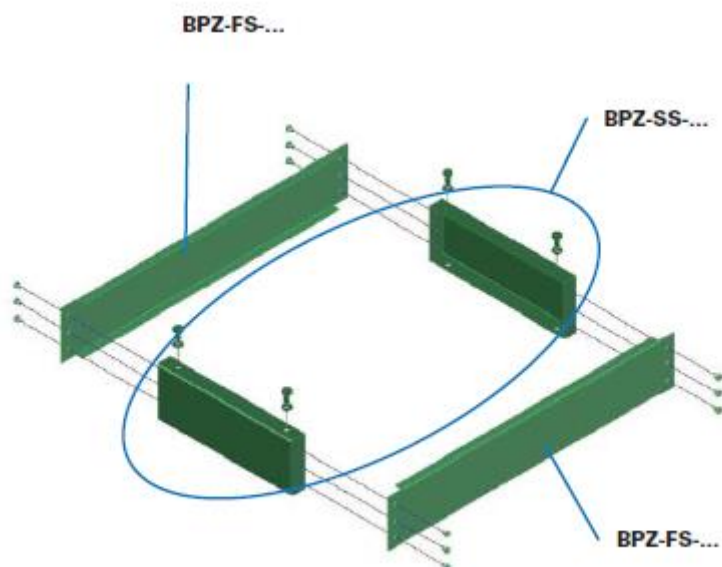
BPM-F-..., IP55, enclosure depth 320 / 400 mm



Type	Overall dimensions			Internal dimensions (front plate)		Wall mounting (Enclosure directly)		BPZ-MSW		BPZ-FPS			Pv [W] (ΔT 20K)	Pv [W] (ΔT 35K)	
	Width B	Height H	Depth T	Width B1	Height H1	Width B2	Height H2	C1	C2	C1	C2	C3			C4
BPM-F-400/17	400	1780	320	320	1650	138	1810	62-92	225-255	112	205	49	118	81	182
BPM-F-400/20	400	2060	320	320	1950	138	1910	62-92	225-255	112	205	49	118	106	213
BPM-F-800/17	800	1780	320	520	1650	338	1810	62-92	225-255	112	205	49	118	132	264
BPM-F-800/20	800	2060	320	520	1950	338	1910	62-92	225-255	112	205	49	118	155	311
BPM-F-800/17	800	1780	320	720	1650	538	1810	62-92	225-255	112	205	49	118	163	367
BPM-F-800/20	800	2060	320	720	1950	538	1910	62-92	225-255	112	205	49	118	195	391
BPM-F-1000/17	1000	1780	320	920	1650	738	1810	62-92	225-255	112	205	49	118	212	425
BPM-F-1000/20	1000	2060	320	920	1950	738	1910	62-92	225-255	112	205	49	118	229	459
BPM-F-1200/17	1200	1780	320	1120	1650	938	1810	62-92	225-255	112	205	49	118	244	489
BPM-F-1200/20	1200	2060	320	1120	1950	938	1910	62-92	225-255	112	205	49	118	269	539
BPM-F-400/17/4-P	400	1780	400	320	1650	138	1810	62-87	310-335	62-112	335-285	130-180	100	114	228
BPM-F-400/20/4-P	400	2060	400	320	1950	138	1910	62-87	310-335	62-112	335-285	130-180	100	128	258
BPM-F-800/17/4-P	800	1780	400	520	1650	338	1810	62-87	310-335	62-112	335-285	130-180	100	158	318
BPM-F-800/20/4-P	800	2060	400	520	1950	338	1910	62-87	310-335	62-112	335-285	130-180	100	183	367
BPM-F-800/17/4-P	800	1780	400	720	1650	538	1810	62-87	310-335	62-112	335-285	130-180	100	203	408
BPM-F-800/20/4-P	800	2060	400	720	1950	538	1910	62-87	310-335	62-112	335-285	130-180	100	217	435
BPM-F-1000/17/4-P	1000	1780	400	920	1650	738	1810	62-87	310-335	62-112	335-285	130-180	100	237	478
BPM-F-1000/20/4-P	1000	2060	400	920	1950	738	1910	62-87	310-335	62-112	335-285	130-180	100	257	515
BPM-F-1200/17/4-P	1200	1780	400	1120	1650	938	1810	62-87	310-335	62-112	335-285	130-180	100	278	554
BPM-F-1200/20/4-P	1200	2060	400	1120	1950	938	1910	62-87	310-335	62-112	335-285	130-180	100	292	585

2. Sokkel - Gulvskap type BPM-F

- BPZ-FS er front og bakplate. Det trengs to stykk per skap.
- BPZ-SS er sideplater. Det trengs ett sett per skap.
- Front og bakplate kan demonteres slik at det er mulig å trensportere skapet med jekketralle eller truck

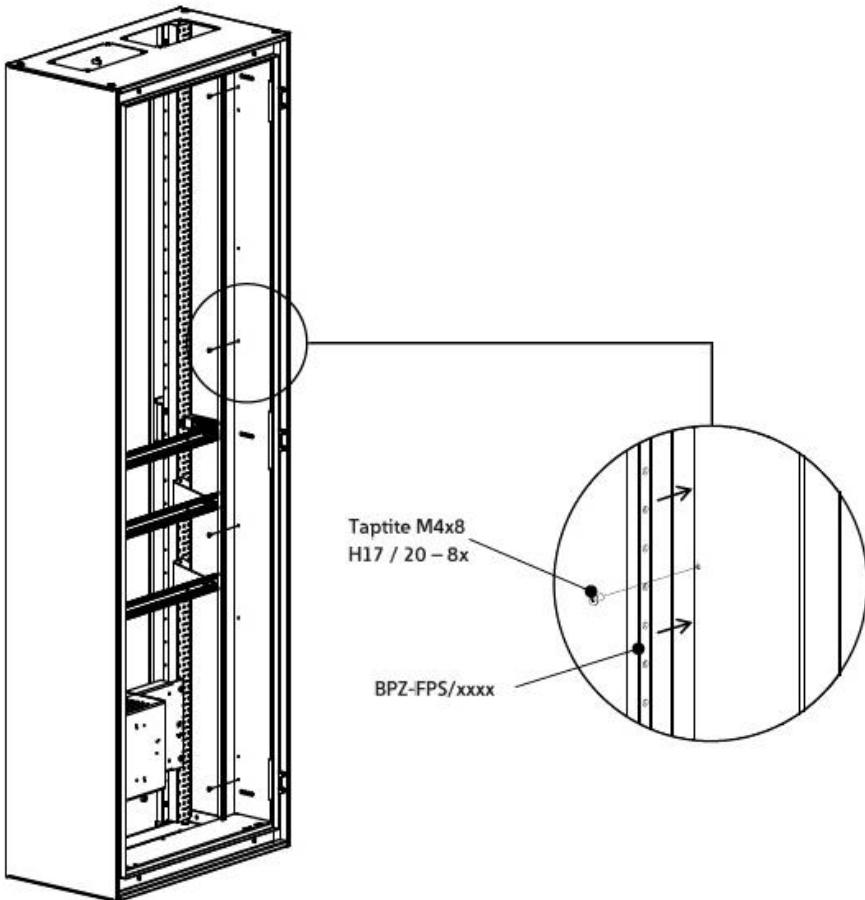


3. Frontplatestøtte - Gulvskap type BPM-F

- Frontplatestøtter (FPS) trengs for å montere frontplater og målerfelt
- Den korte siden med flest hull skal peke mot fronten av skapet. Den lengste siden, med færre hull skal festes med skruer i siden av skapet.

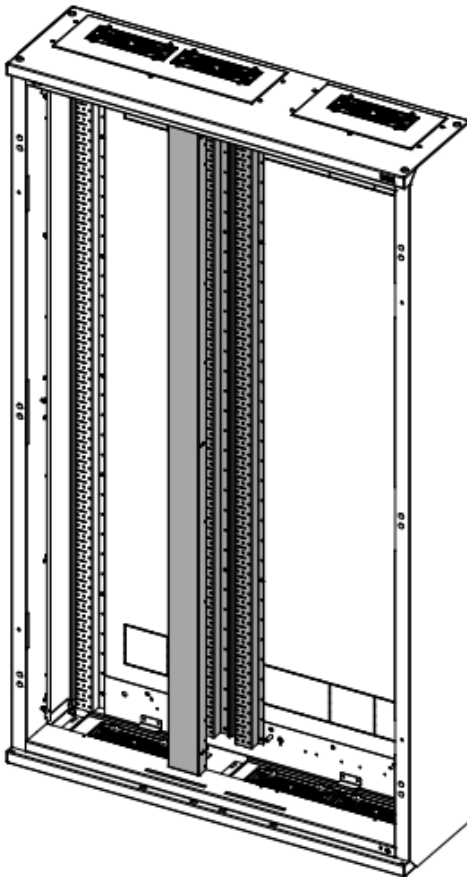
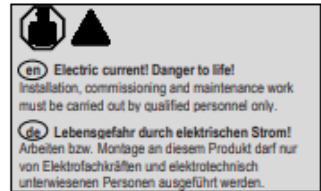


BPM-F



4. Midtdeler/sprosse - Gulvskap type BPM-F

- Ved seksjonert tavle må innvendig sprosse/middeler, BPZ-SF-xxx, monteres
- Middeler/sprosse kan kun brukes i 800, 1000 og 1200 mm skapbredde.
- NB! Ved skapbredde på 800 mm må også festeprofilen type BPZ-SFB-800 benyttes i tillegg til sprosse/middeler type BPZ-SF-xxx



description	art. no.
RAL 7035	
BPZ-SF-17	108374
BPZ-SF-20	108375
RAL 9016	
BPZ-SF-17-W	108376
BPZ-SF-20-W	108377

1		2x
2		1x
3		2x
4		M5x12 12x
5		4,2x9,5 8x
6		3x8 24x

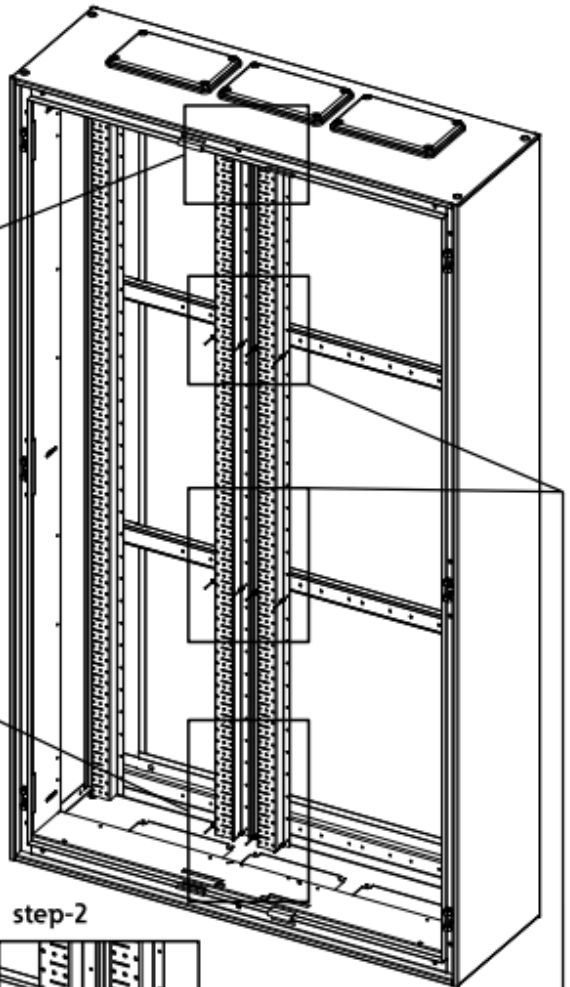
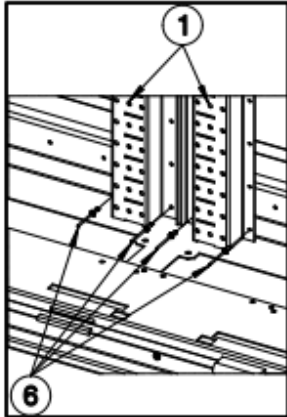
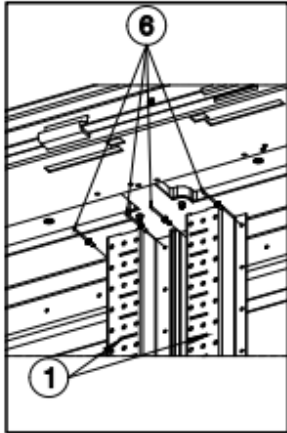
7	173633 - BPZ-SFB-800 (only needed for the section W800)	1x
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4. Midtdeler/sprosse - Gulvskap type BPM-F

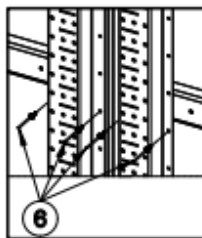
- For gulvskap på 1000 og 1200 mm er det montert inn horisontale profiler i bakveggen som bakveggprofilene kan festes i med popnagler eller skruer.

BPM-F (Floor – standing cabinet IP55) – W1000 / W1200

step-1



step-2



note:

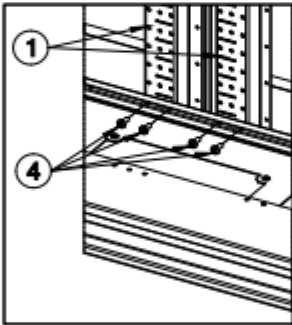
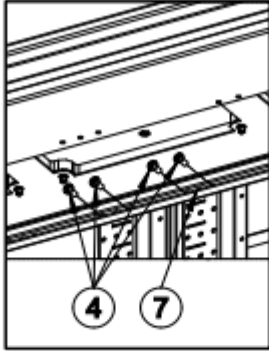
the blind plate (pos.3) is not needed for application BPM-F

4. Midtdeler/sprosse - Gulvskap type BPM-F

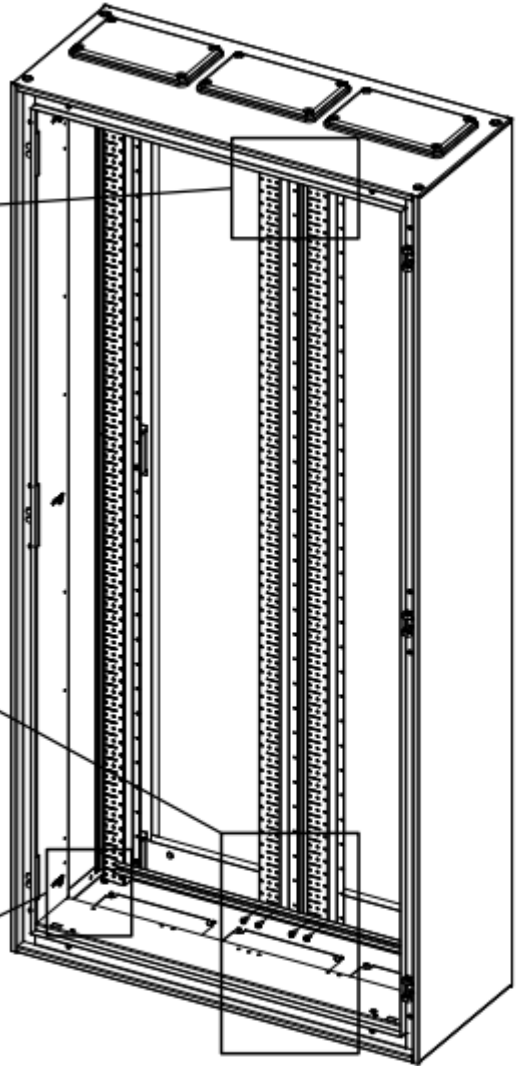
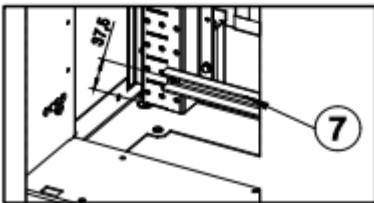
- For gulvskap på 800 mm må sett type BPZ-SFB-800 monteres i bakveggprofilene som allerede er montert inn i skapet

BPM-F (Floor – standing cabinet IP55) – W800

step-1



for the section – width 800,
we need 8 pcs. of the pos. 4 to mount the
pillars on the BPZ-SFB-800



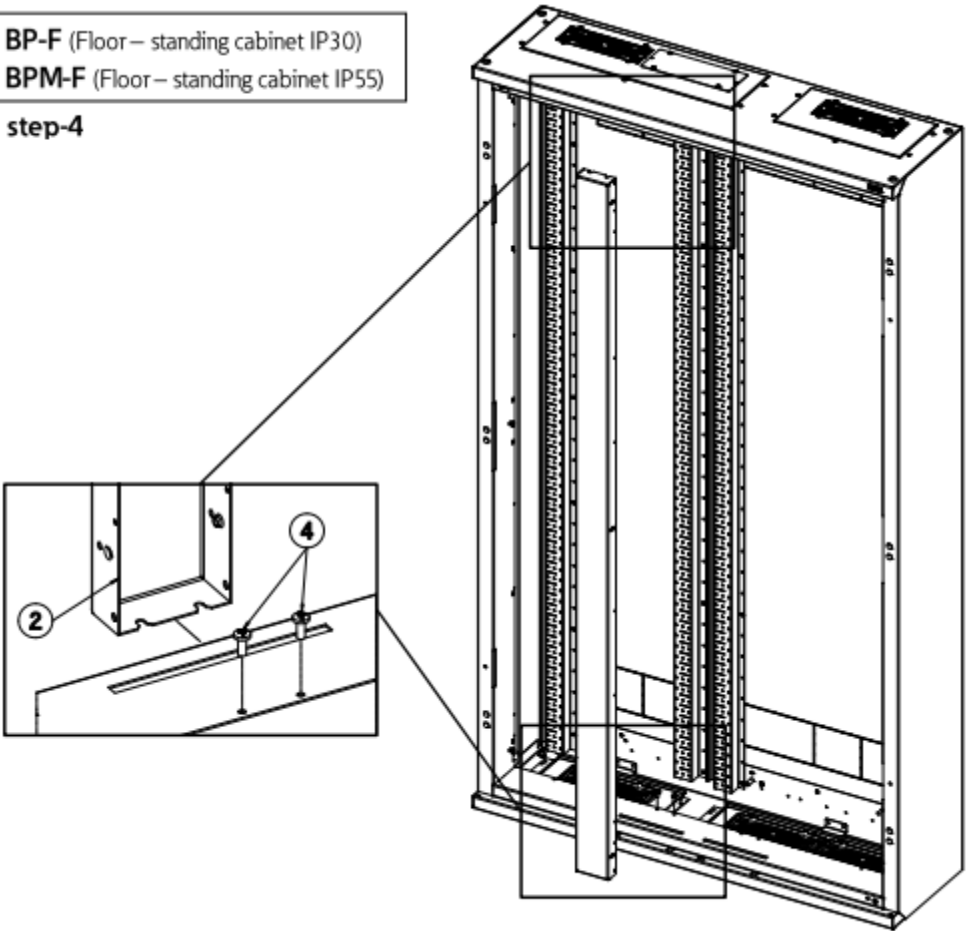
note:

the blind plate (pos.3) is not needed for application BPM-F

4. Midtdeler/sprosse - Gulvskap type BPM-F

- Til slutt monteres midtdeleren/sprossen

BP-F (Floor – standing cabinet IP30)
BPM-F (Floor – standing cabinet IP55)
step-4



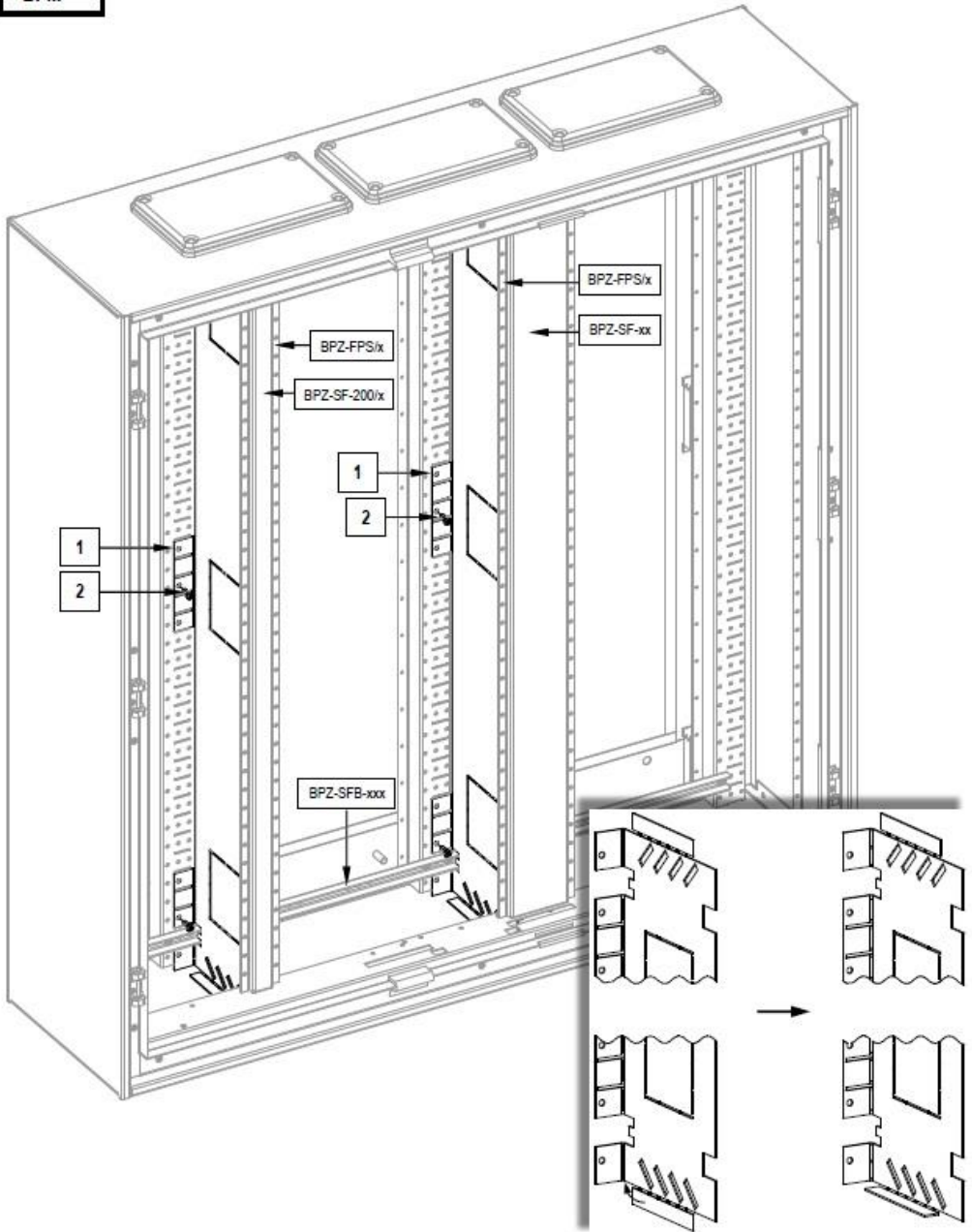
- Det er mulig med følgende seksjonering i gulvskapene

section width	Partition [mm]	
W800	400	400
W1000	600	400
W1000	400	600
W1200	600	600
W1200	800	400
W1200	400	800
W1200	400	400
	400	400

4. Midtdeler/sprosse - Gulvskap type BPM-F

- Vertikale skilleplater type BPZ-SF-DP kan monteres i bakveggprofilene for å separere feltene mekanisk

BPM



5. DIN-skinne- og montagesett - Gulvskap type BPM-F

- DIN-skinner og montagesett festes i bakveggprofilen, enten direkte eller med tårn

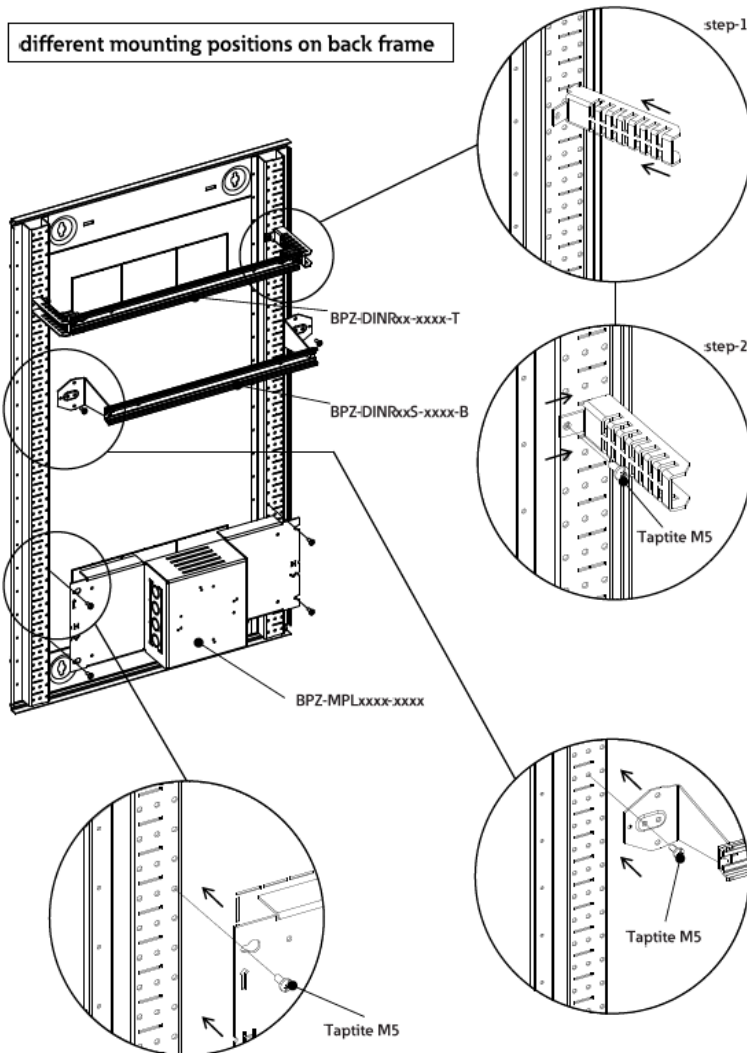
BPZ-DINR24-600-B
Fastmontert DIN-skinne



BPZ-DINR24-600-T
Justerbar DIN-skinne



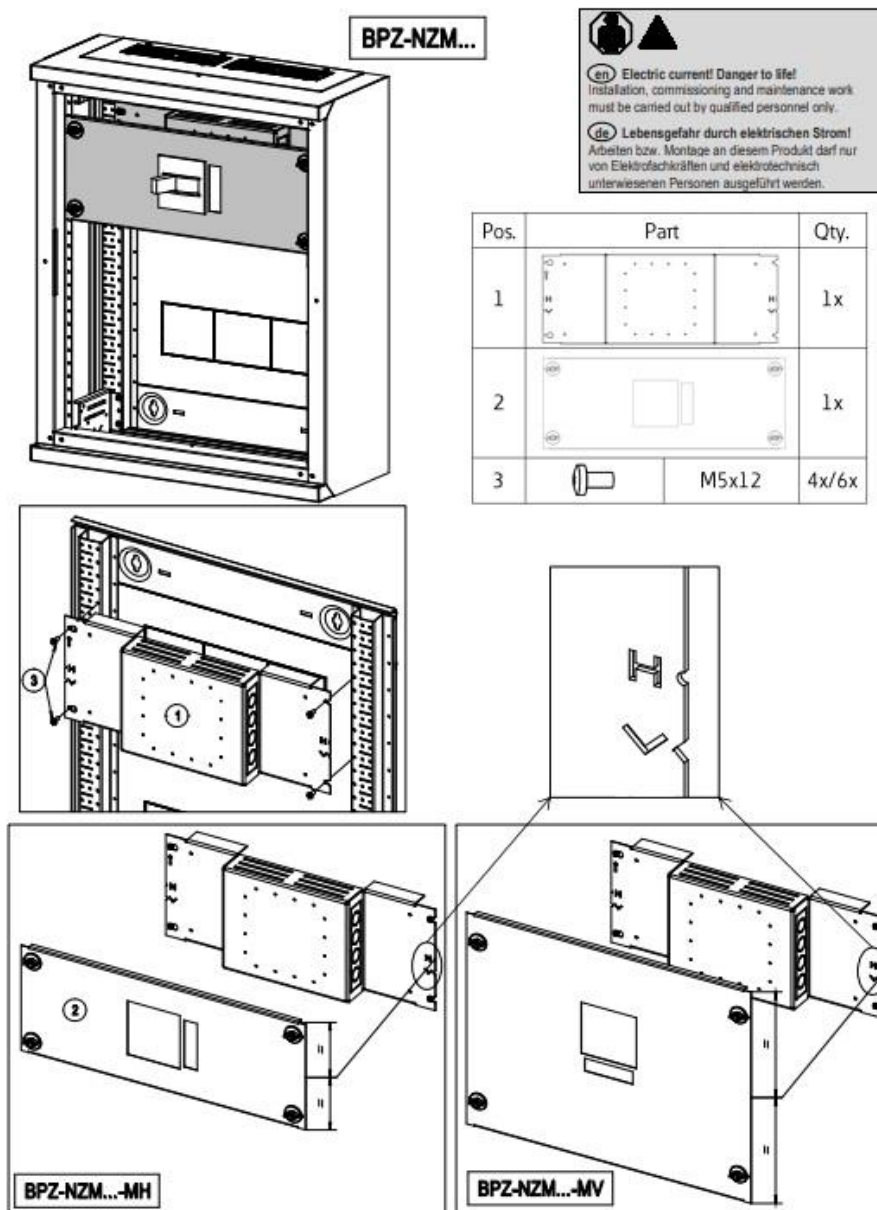
different mounting positions on back frame



5. DIN-skinne- og montasjesett - Gulvskap type BPM-F

- Montasjesett for NZM effektbrytere monteres direkte i bakveggprofilene.
- Senter på montasjesettet er merket med nedover pil. Settet monteres med pilen vendt ned.

BPZ-NZM_x-MH(-MV)



5. DIN-skinne- og montasjesett - Gulvskap type BPM-F

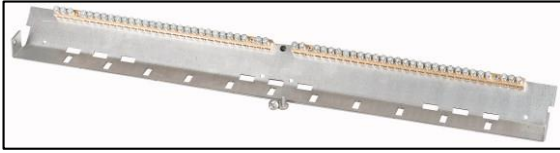
- Hullmønster for montasje av 3- og 4-polt NZM effektbryter

BPZ-NZMx-MH(-MV)

		NZM1	NZM2	NZM3
3-pole				
4-pole				

6. Jordskinner - Gulvskap type BPM-F

- Komplette jordskinne består av BPZ-CTS-x + BPZ-TSB-xxx
- Hjørnetårn type BPZ-CTS-x festes i bakveggprofilene.
- Jordskinne med påmonterte jordpunkter type BPZ-TSB-xxx festes på hjørnetårnene.

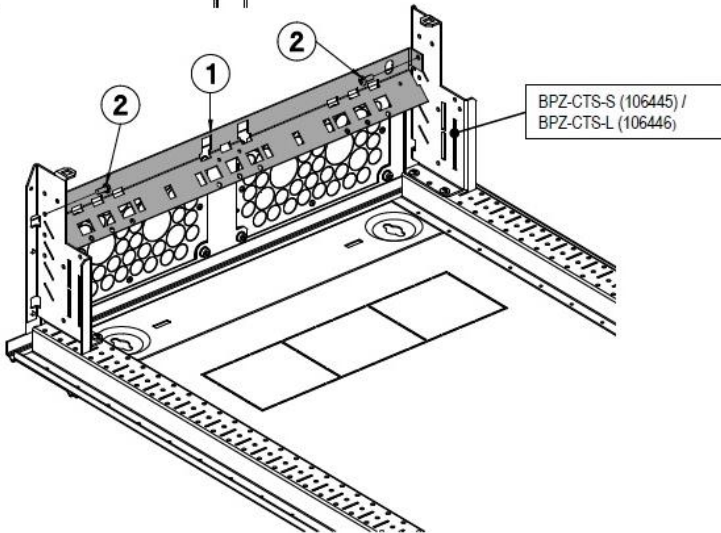
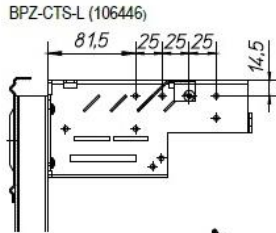
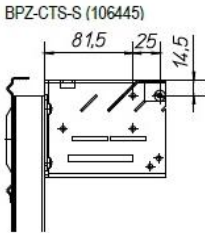


BPZ-TSB-xxxx

⚡ Lebensgefahr durch elektrischen Strom!
 Nur Elektrofachkräfte und elektrotechnisch unterwiesene Personen dürfen die im Folgenden beschriebenen Arbeiten ausführen.

Electric current! Danger to life!
 Only skilled or instructed persons may carry out the following operations.

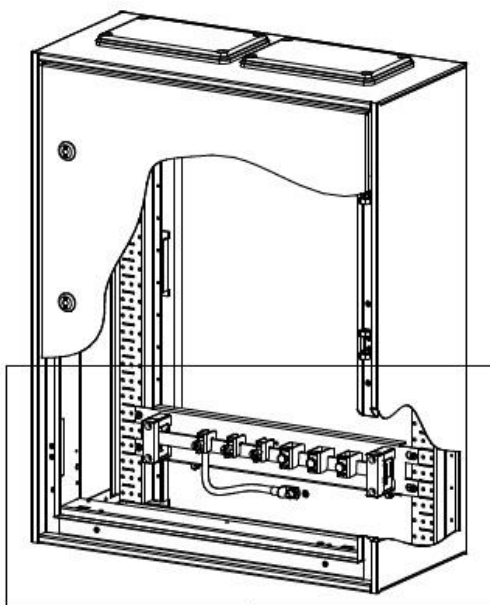
BOM			
1			1x
2		M5x12	2x



6. Jordskinner - Gulvskap type BPM-F

- Hovedjordskinne type BPZ-GND-xxx festes på montasjeplate og skinnholdere.

BPZ-GND



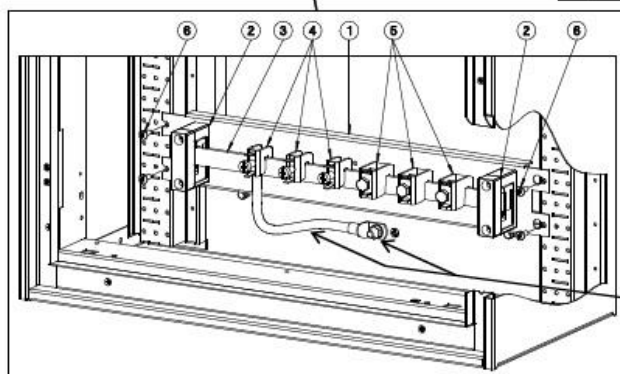
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Electric current! Danger to life!

Only skilled or instructed persons may carry out the following operations.

description	art. no.
BPZ-GND-400	187867
BPZ-GND-600	187868
BPZ-GND-800	187869
BPZ-GND-1000	187870
BPZ-GND-1200	187871

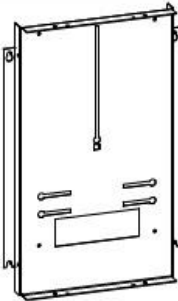









1		1x
2		2x
3	Cu - busbar EN 13601-Cu-ETP-R250-SH	1x
4		AKU35/5 3x
5		AKU70/5 3x
6		M5x12 4x



the dimension cable cross section for main earthing busbar connection to the main grounding point acc. to nominal current rating of low-voltage assembly

7. Målerinnsats - Gulvskap type BPM-F

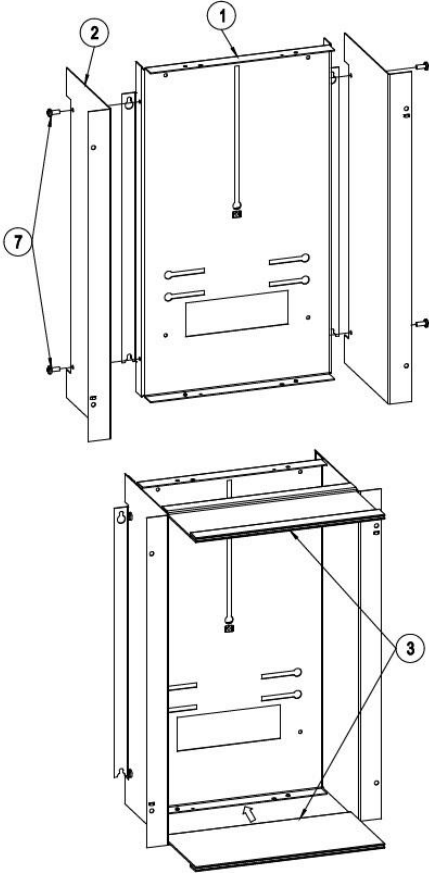
BPZ-MT

Art. No.	Name	No	Part	Qty.
		1		1x
		2		2x
		3		2x
	BPZ-MT-x	4		1x
		5	 M5	3x
		6	 M5x15	3x
		7	 M5x12	10x
		8	 M5x10	4x
		9	 M4x8	2x
		10	 M5	2x

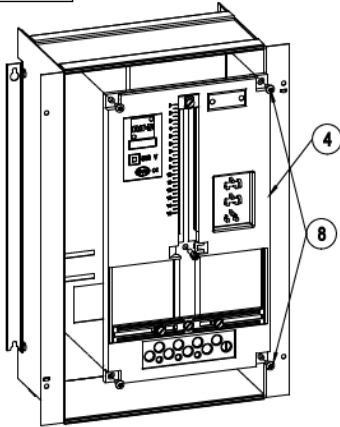
7. Målerinnsats - Gulvskap type BPM-F

- Først settes målerinnsatsen sammen

BPZ-MT



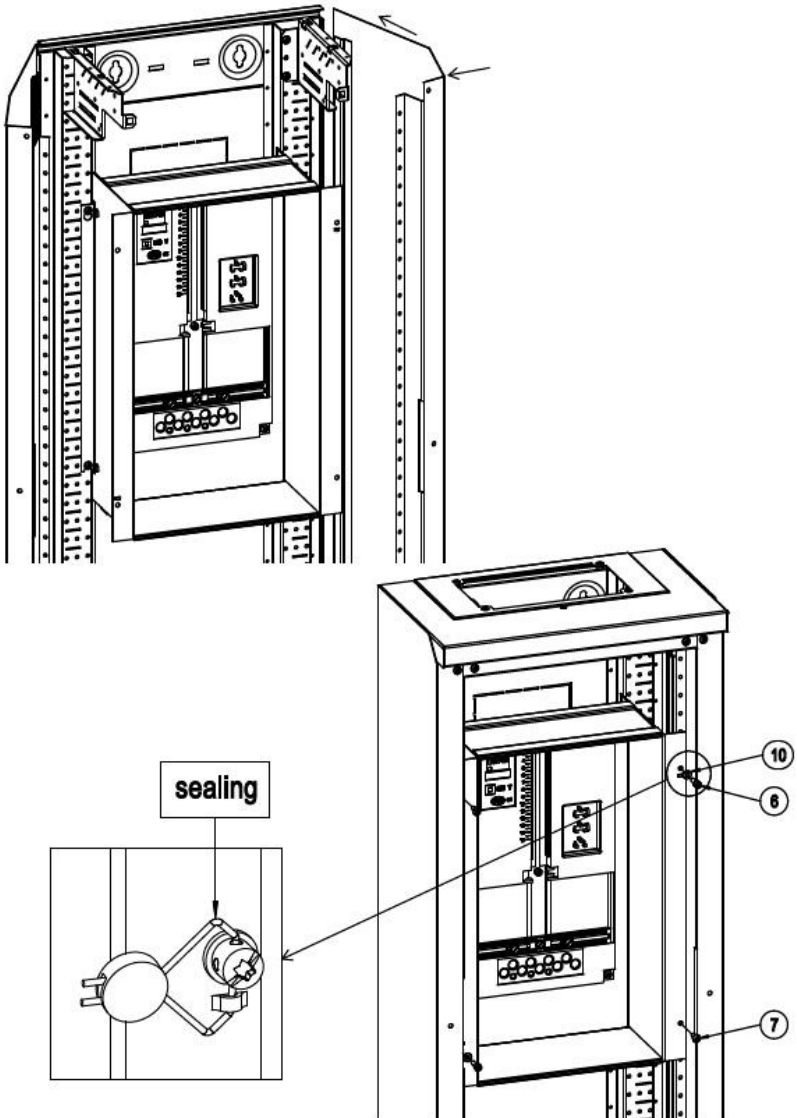
with Meter plate ZBR



7. Målerinnsats - Gulvskap type BPM-F

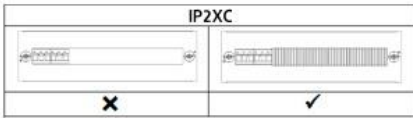
- Målerinnsatsen hektes på skruer som er delvis innskrudd i bakveggprofilen. Dette gjør det enkelt å hekte innsatsen inn og ut under montasje.
- Målerinnsatsen festes til slutt med skruer i frontplatestøtten. Det medfølger forseglingskruer.

BPZ-MT

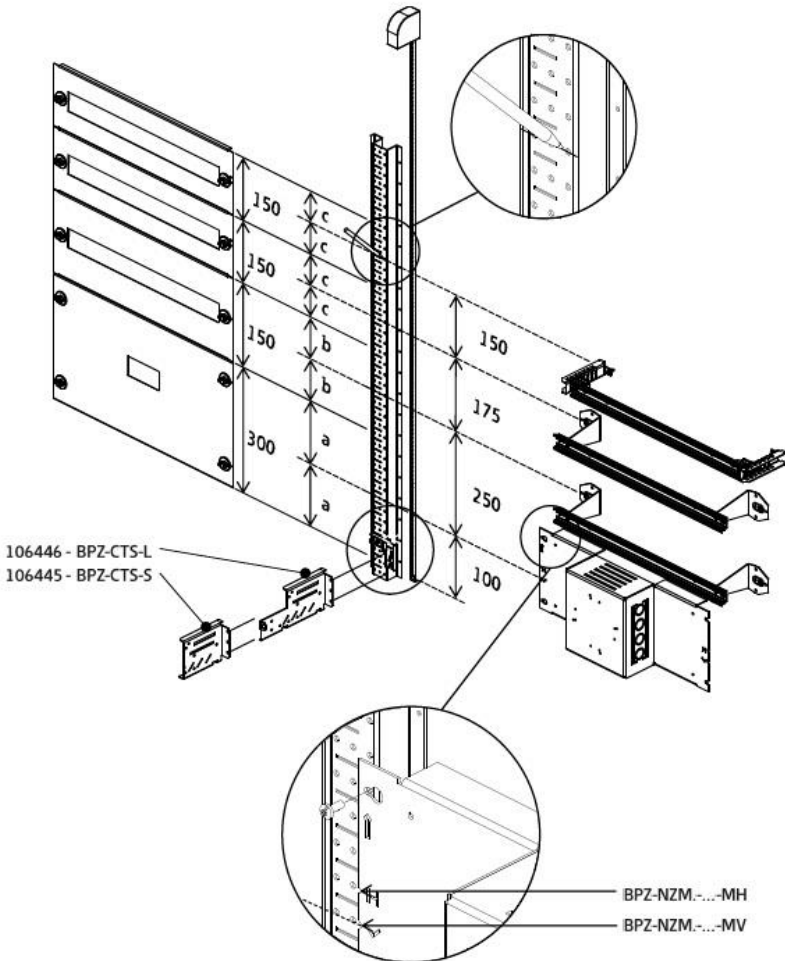


8. Frontplater - Gulvskap type BPM-F

- Frontplatene settes opp etter mål fra layouten.
- Hullmønsteret i bakveggprofilen har 2,5 cm mellom hvert hull.
- Profiler type BPZ-CTS-x brukes til jordskinnen



⚡ Electric current! Danger to life!
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Lebensgefahr durch elektrischen Strom!
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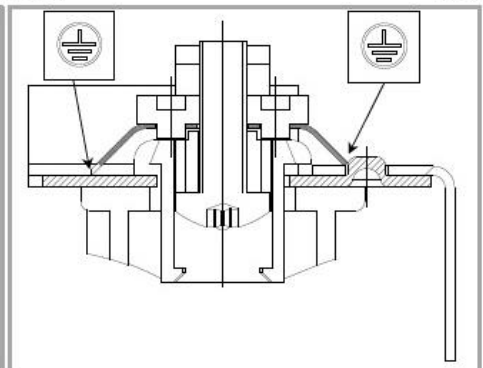
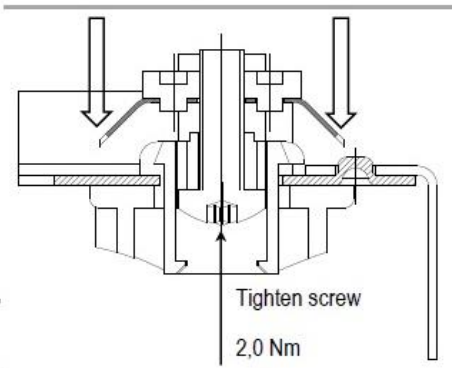
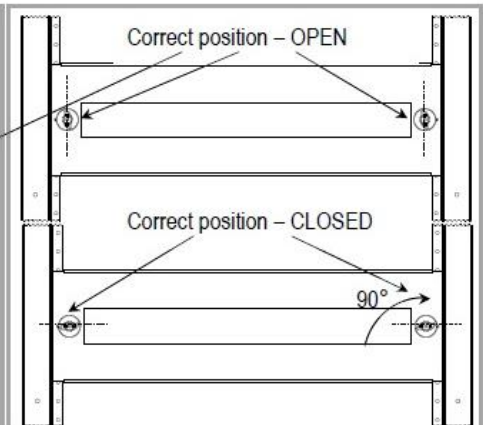
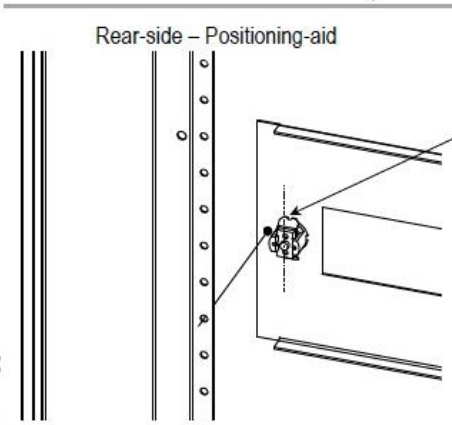
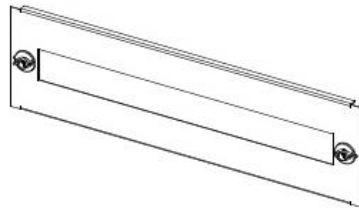
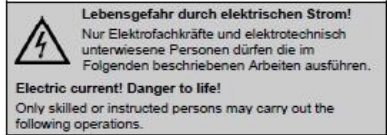
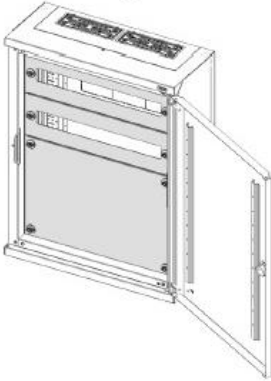


8. Frontplater- Gulvskap type BPM-F

- Låsemekanismen til frontplatene skrues til med 2 Nm for å jorde frontplaten.
- Se til at frontplatestøtten er riktig montert og at skapet står på rett underlag før låsemekanismen vrís på plass.

BPZ-FPV



Frontplate locking

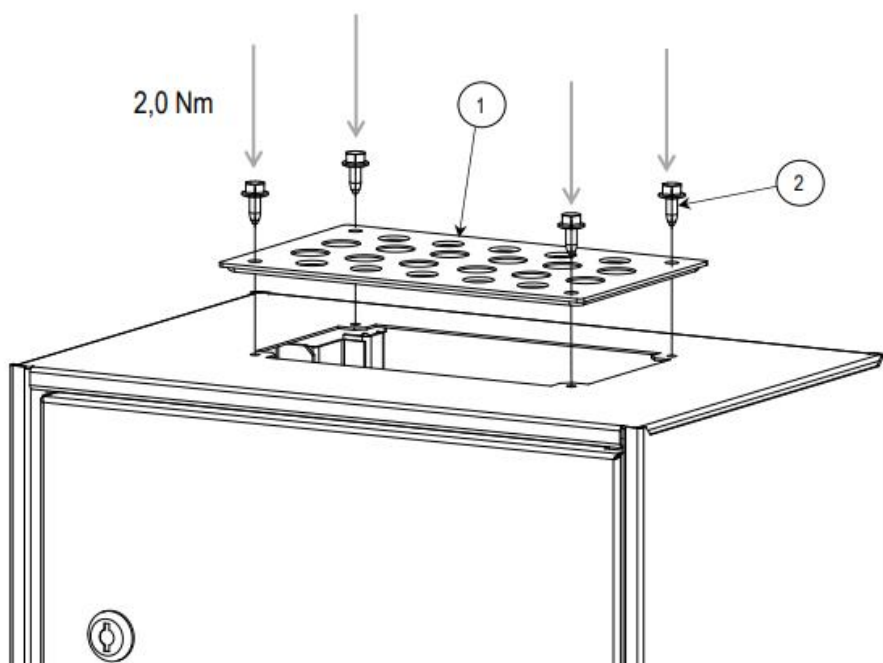


9. F3A-flenser - Gulvskap type BPM-F

- F3A-flenser festes med medfølgende skruer. Momenteres med 2 Nm

F3A

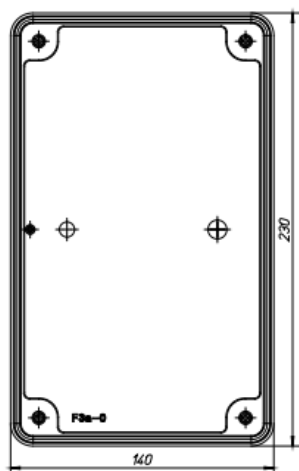
1		1x
2		4x



9. F3A-flenser - Gulvskap type BPM-F

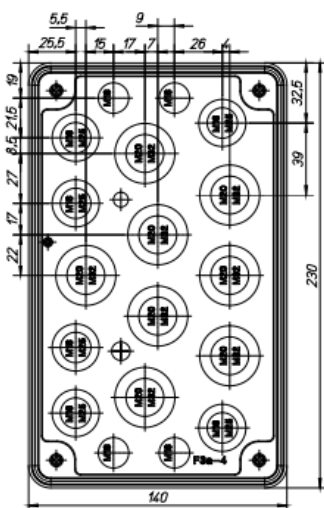
- Utslagsmønster på F3A-flenser i plast

F3A-0



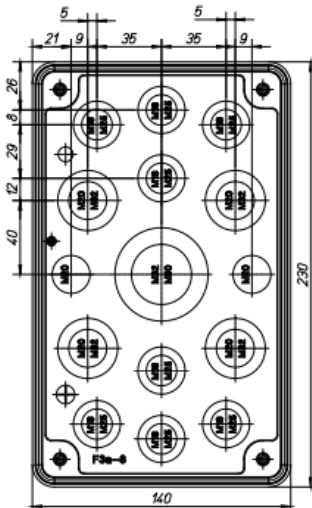
F3A-4

4xM16, 6xM25/16, 8xM32/20



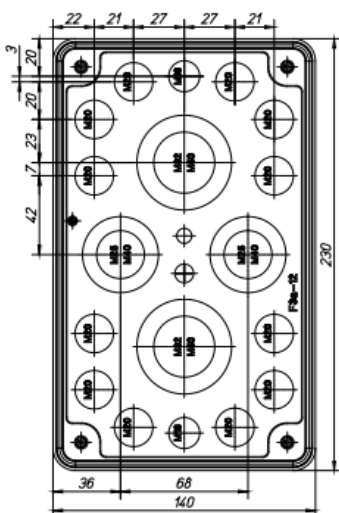
F3A-8

2xM20, 8xM25/16, 4xM32/20, 1xM50/32



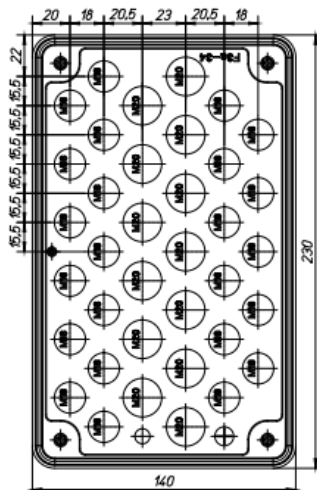
F3A-12

2xM16, 12xM20, 2xM40/25, 2xM50/32



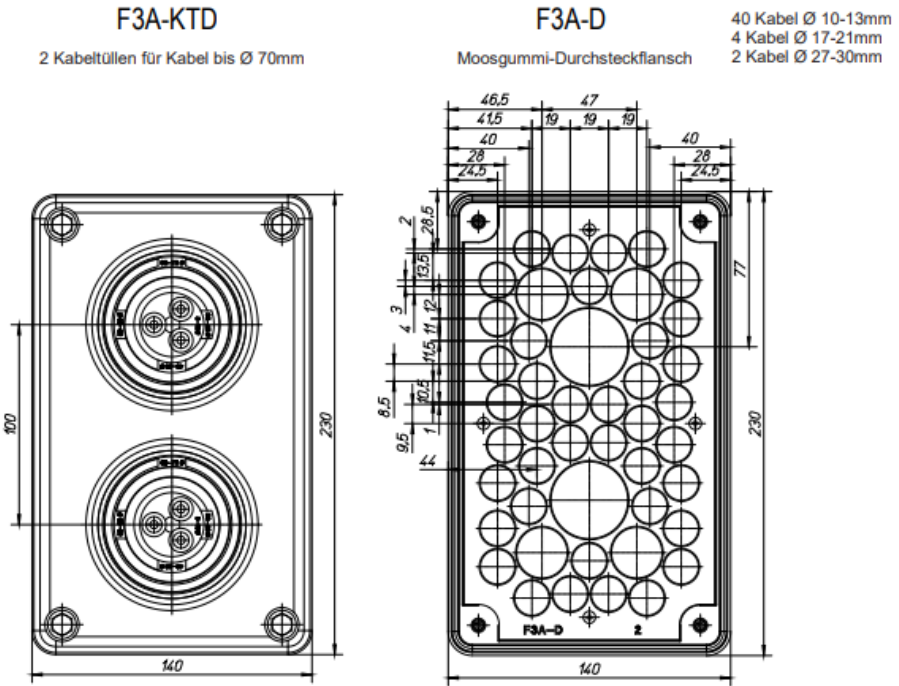
F3A-34

24xM16, 13xM20

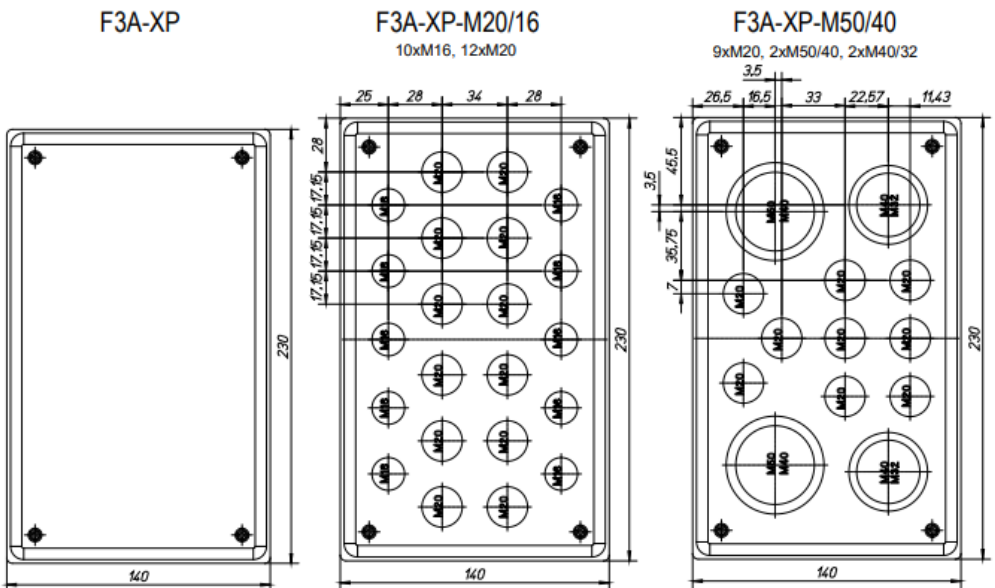


9. F3A-flenser - Gulvskap type BPM-F

- Utslagsmønster på F3A-flenser i mykplast



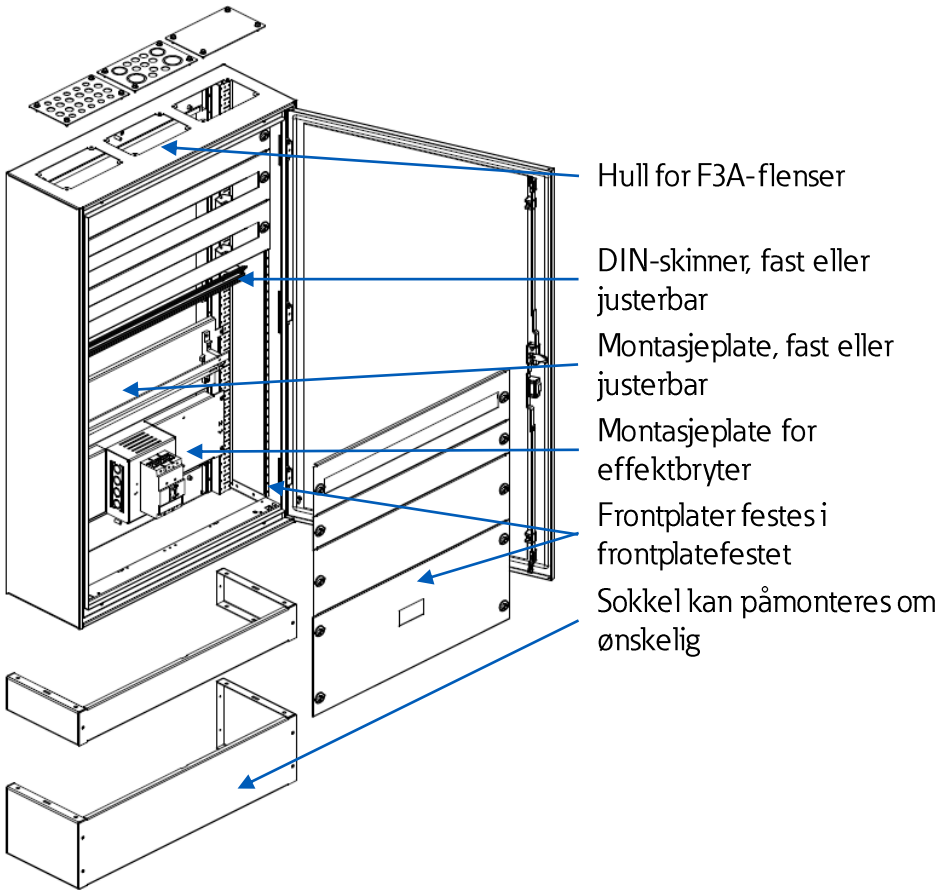
- Utslagsmønster F3A-stålflexer



10. Tekniske data - Veggskap type BPM-O

Oppbygging gulvskap type BPM-O

BPM-O..., IP55



10. Tekniske data - Gulvskap type BPM-O

Tekniske data:

Description

BPM-O..., IP55, enclosure depth 270 mm

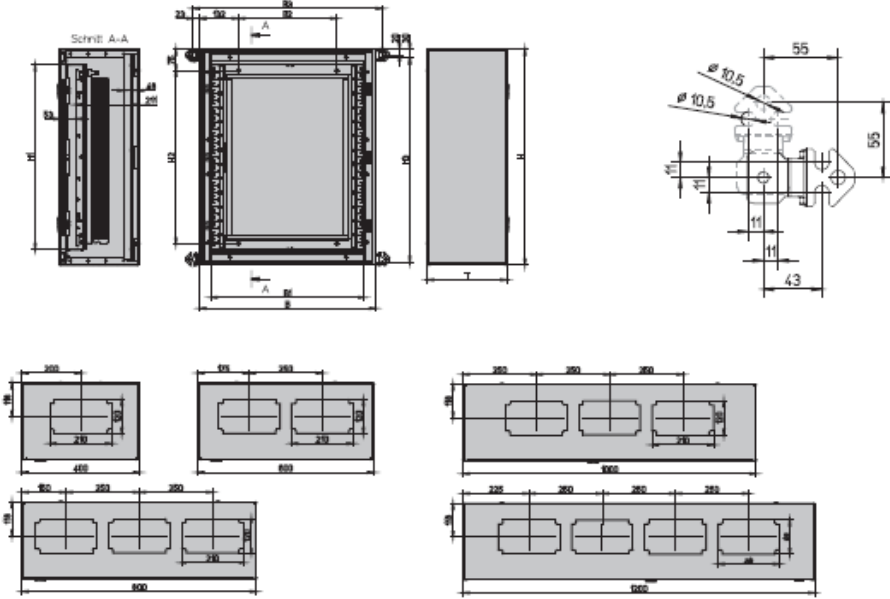
- Complete cabinets prepared for Profi+ installation system
- Degree of protection IP55
- Impact resistance IK10
- Protection class I (protective earth)
- Cable entry prepared for F3A flange
- The enclosure can be rotated by 180°
- Quick and easy change of the hinge direction, door opening angle 100°
- Two-way key bit or rotary lever
- Direct wall mounting possible, wall-fixing brackets optionally included in the accessories
- Enclosure made from powder-coated sheet steel, RAL 7035 / RAL 9016
- Variable interior installation either with "Mounting base frame" or "Mounting side panel" (MSW)

Technical data

BPM-O...	
Electrical	
Type conforms to	IEC/EN 62208
Protection class	I (protective earth)
Degree of protection	IP55 (closed version with door/flap) / IP2XC (open door, the installation level is properly protected with EP covers)
Impact resistance	IK10
Rated operational voltage	415 VAC / 50Hz
Rated current	Max. 630 A (depending on the type of incoming circuit breaker or the busbar system being used)
Earthing concept for the enclosure	
Main earthing	By means of M8 welding bolts
Door earthing	By means of M8 welding bolts
The permissible temperature increases for switchgear assemblies with a rated current of up to 630 A can be evaluated in accordance with section 10.10.4.2 of IEC/EN 61439-1.	
For the maximum permissible heat dissipation for all devices inside the distribution board at an ambient temperature of 35° C and ΔT of 20 K / 35 K at an enclosure height of 75 %, please refer to the table on enclosure dimensions; (calculation method acc.to IEC/TR 60690).	
Mechanical	
Enclosure	Excellent stability thanks to the welded construction
Material	Sheet steel 1.25 mm, phosphated and polyester powder coated (structured) with corrosion protection
Colour	Traffic white, RAL 9016 / Light grey RAL 7035
Door	With encircling foamed sealing, hinges on the inside, door opening angle ~100° Doors with transparent window individually configurable, hinged either left or right Width 1000 / 1200 mm in double-wing design
Type	Flexible interior fitting with installation units Profi+ on base frame or „mounting side panel“ (MSW) Mounting base frame: multi-layer construction, installation directly in the enclosure, robust and structured Mounting side panel (MSW): removable mounting insert, external installation, fast and reliable
Locking mechanism	Standard locking with two-way key bit (metal) respectively rotary lever (optional lock cylinder as accessory) Three-point locking mechanism from height 1080 mm (one-point respectively two-point at height 480 / 780 mm)
Cable entry	Open, prepared for F3A flanges on one side (top/bottom)
Ambient condition	Indoor installation (wall mounting) Max. ambient temperature +40° C Min. ambient temperature -5° C
Halogen-free, RoHS	< 1%, yes
Accessories	Wall-fixing brackets for wall mounting, a 100/200 mm base if used as a floor-standing cabinet, Lock cylinder as insert for rotary lever, several F3A flanges for cable entry
Delivered as	Complete cabinet prepared for „Mounting base frame“ or „MSW“ (depending on interior fitting all corresponding parts for „Mounting base frame“ respectively „MSW“ have to be ordered separately)

10. Tekniske data - Veggskap type BPM-O

BPM-O..., IP55, enclosure depth 270 mm



Type	Overall dimensions			Internal dimensions (front plate)		Wall mounting (Enclosure directly)		Wall mounting (via fixing bracket set)		Pv [W] (ΔT 20K)	Pv [W] (ΔT 35K)
	Width B	Height H	Depth T	Width B1	Height H1	Width B2	Height H2	B3	H3	[W]	[W]
BPM-O-400/4	400	480	270	320	350	136	310	446	420	40	79
BPM-O-400/7	400	780	270	320	650	136	610	446	720	54	109
BPM-O-400/10	400	1080	270	320	950	136	910	446	1020	54	109
BPM-O-400/12	400	1280	270	320	1150	136	1110	446	1220	58	117
BPM-O-400/15	400	1580	270	320	1450	136	1410	446	1520	67	135
BPM-O-800/4	800	480	270	520	350	336	310	646	420	54	108
BPM-O-800/7	800	780	270	520	650	336	610	646	720	71	143
BPM-O-800/10	800	1080	270	520	950	336	910	646	1020	71	143
BPM-O-800/12	800	1280	270	520	1150	336	1110	646	1220	82	165
BPM-O-800/15	800	1580	270	520	1450	336	1410	646	1520	109	219
BPM-O-800/4	800	480	270	720	350	536	310	846	420	68	137
BPM-O-800/7	800	780	270	720	650	536	610	846	720	76	153
BPM-O-800/10	800	1080	270	720	950	536	910	846	1020	86	186
BPM-O-800/12	800	1280	270	720	1150	536	1110	846	1220	122	244
BPM-O-800/15	800	1580	270	720	1450	536	1410	846	1520	141	283
BPM-O-1000/10	1000	1080	270	920	950	736	910	1046	1020	135	272
BPM-O-1000/12	1000	1280	270	920	1150	736	1110	1046	1220	151	304
BPM-O-1000/15	1000	1580	270	920	1450	736	1410	1046	1520	187	375
BPM-O-1200/12	1200	1280	270	1120	1150	936	1110	1246	1220	191	383
BPM-O-1200/15	1200	1580	270	1120	1450	936	1410	1246	1520	215	431