



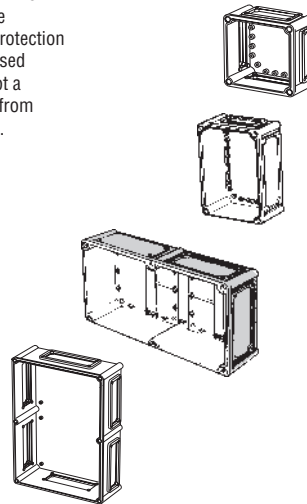
Medium to large size enclosures manufactured using impact resistant polycarbonate.

Available with one or more flange openings. The flange openings allow modular assembly of several enclosures and the addition of various size cable glands and knockout flanges. Select from a large selection of standard flanges or request flanges machined separately to customer specifications. The bases feature multiple mounting pods.

A large range of accessories is available.



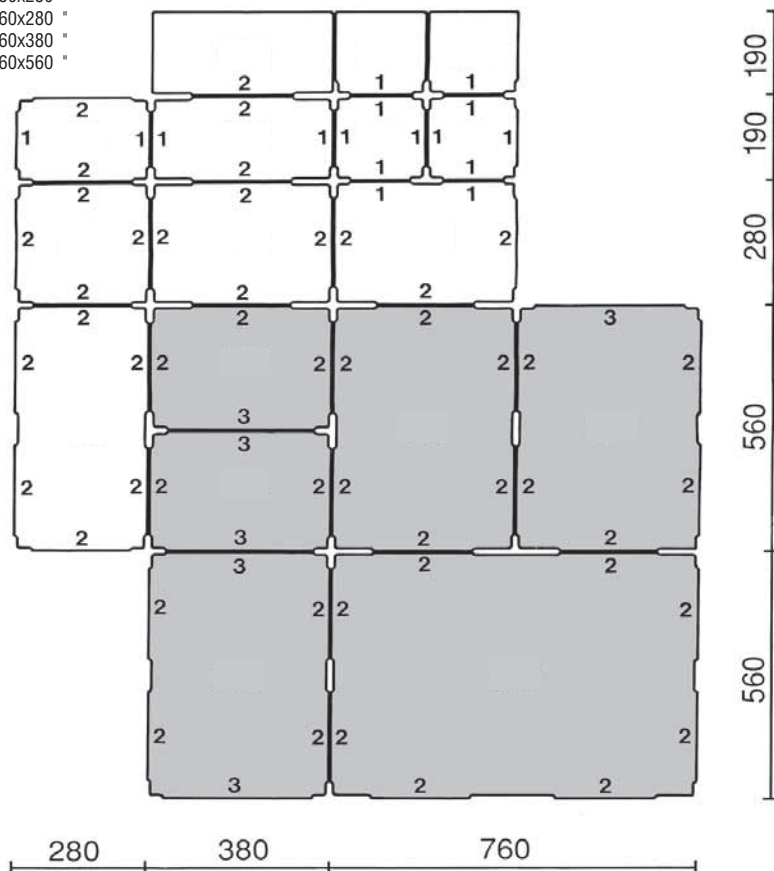
Impact-resistant, medium to large size polycarbonate enclosure with a high protection rating (IP 67). Pre-pressed flange panels can accept a variety of flange plates from the accessory range.



ORDER SYMBOL	SIZE mm
	190x190x100
	190x190x100
	280x190x100
	380x190x100
	380x190x100
	280x280x100
	380x280x100
	380x280x100
	380x280x150
	380x280x150
	560x280x100
	560x380x150
	560x380x150
	560x380x150
	760x560x150

THE THIRD LETTER OF THE ORDER SYMBOL INDICATES THE SIZE OF THE ENCLOSURE:
For example the letter J in the order symbol JB stands for the size 280x190 mm

- H = 190x190 mm
- J = 280x190 "
- M = 380x190 "
- O = 280x280 "
- P = 380x280 "
- T = 560x280 "
- U = 560x380 "
- W = 760x560 "

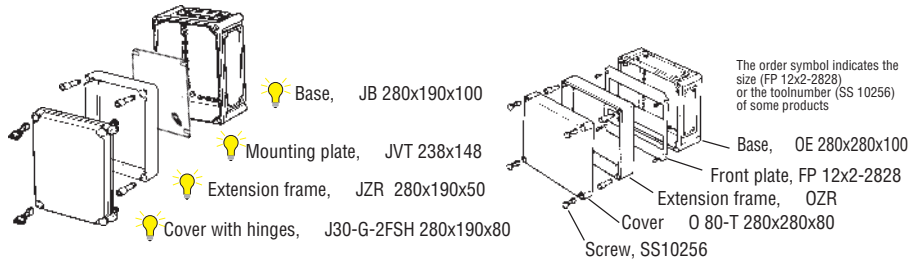


The bases marked with the grey colour have a depth of 150 mm, the others are 100 mm.
The number on the bases indicates the size of the flange plate.

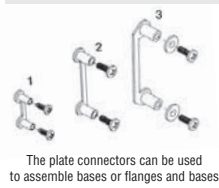
EXAMPLE OF THE ASSEMBLY OF ONE ENCLOSURE



THE SIZE OF THE WHOLE ENCLOSURE ACCORDING TO THE LETTER:
The enclosure sized (280x190x230) can be assembled as follows:



ASSEMBLY ENCLOSURES



Connector set + 4 screws
Connector set + 4 screws
Connector set + 4 screws

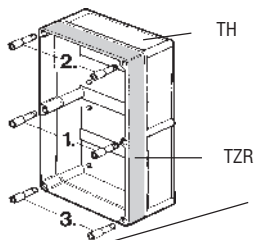
Plastic head screw for the assembly of bases with size 1 opening
Plastic head screw for the assembly of bases with size 2 openings

Lock nuts for plastic head screws

ORDER SYMBOL SIZE

MB 10671	1
MB 10670	2
MB 10672	3
MB 10472	M6x30
MB 10474	M8x30
M6	M6
M8	M8

EXTENSION FRAMES



ORDER SYMBOL SIZE mm

JZR	280x190x50
MZR	380x190x50
OZR	280x280x50
PZR	380x280x50
TZR	560x280x50
UZR	560x380x50



SUPPORT FLANGES

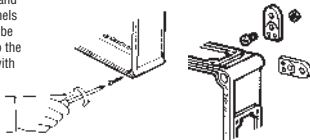


ORDER SYMBOL SIZE

Support flange	MB 10025	2
Support flange	MB 10026	1

WALL FASTENING LUG

Separate enclosures and small distribution panels (2-4 enclosures) can be assembled straight to the wall with screws or with wall fastening lugs.



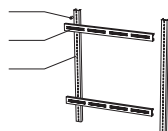
ORDER SYMBOL

Wall fastening lug set, 4 pcs incl. screws

MB 10674



FASTENING OF BIG SYSTEMS

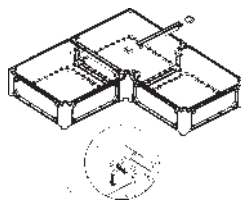


ORDER SYMBOL

Connecting rail, standard length 2000 mm
Stud rail, standard length 2000 mm
Lock for connecting rail



THE BASE CONNECTORS



MB 10717

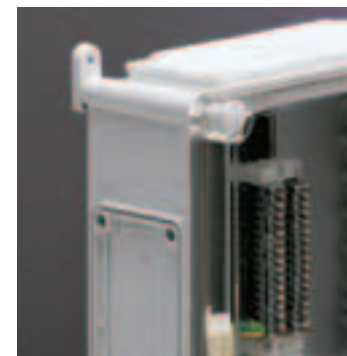
MB 10718

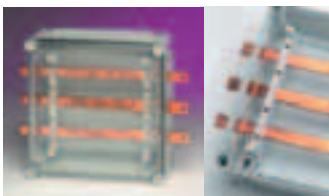
Connection bridge and gasket
Connection bridge and gasket

ORDER SYMBOL SIZE

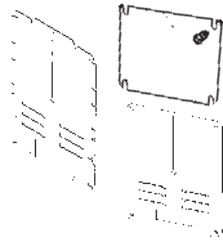
MB 10717	2
MB 10718	3

The plate connectors can be used for assembling bases together or flanges to bases.





MOUNTING PLATES



Mounting plate, metal
Mounting plate, metal
Mounting plate, metal
Mounting plate, metal
Mounting plate, metal
Mounting plate, metal
Mounting plate, metal

ORDER SYMBOL SIZE mm

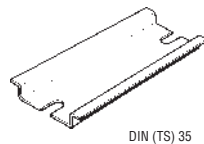


148x148
238x148
338x148
238x238
338x238
518x238
518x338

KWh-mounting plate, metal
KWh- mounting plate, plastic
Accessory screws for mounting
the KWh meter

338x238
338x238
M6x16 6x16

DIN RAILS



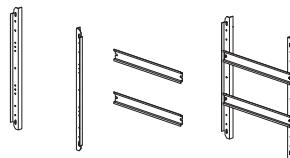
DIN (TS) 35

DIN-rail
DIN-rail
DIN-rail
DIN-rail
Self-cutting mounting screw

ORDER SYMBOL SIZE mm

35x160
35x235
35x335
35x500
4.8x9.5

DIN RAIL FRAME



DIN frame profile
DIN frame profile
DIN frame profile
DIN frame profile

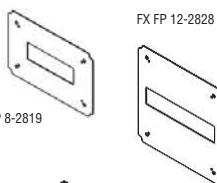
ORDER SYMBOL SIZE mm

MS PROF 19 87
MS PROF 28 166
MS PROF 38 266
MS PROF 56 444

Screws for DIN-rail (terminal) assembly order MSM PT 5x10

Note!
Openings for
DIN-modules

FX FP FRONT PLATES FX20 SET -CORNER STUDS



FX FP 12-2828

FX FP 8-2819

MB 26050

Blue 2 mm PC front plate
Blue 2 mm PC front plate
Blue 2 mm PC front plate
Blue 2 mm PC front plate

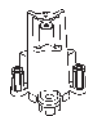
ORDER SYMBOL SIZE mm

FX FP 8-2819 280x190
FX FP 12-2828 280x280
FX FP 2*12-2838 280x380
FX FP 3*12-2856 280x560

Cover plate (12 mod.)

MB 26050

CORNER STUD FX 2000



FX20 SET

Set of corner studs FX 2000
Corner stud FX 2000 (separate)
Front plate screw FX 2000
PE/N brass bar
Screws for mounting PE/N
brass bar

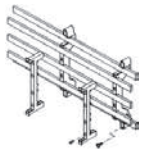
ORDER SYMBOL SIZE mm

FX20 SET
MB 10791
MB 10792
MS BAR 2+18 10x6.5x187
MR 28005EU 40x18

MB FP FRONT PLATES FOR MB 60MM BUS-BAR HOLDES

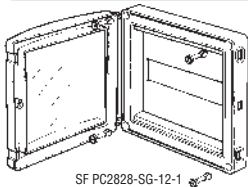
	ORDER SYMBOL	SIZE mm
 MB FP 2828	Blue 2 mm PC front plate	MB FP 2828 280x280
 MB FP 3828	Blue 2 mm PC front plate	MB FP 3828 380x280
 MB FP 5628	Blue 2 mm PC front plate	MB FP 5628 560x280

60 MM BUS-BAR

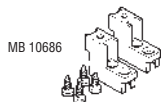


	ORDER SYMBOL	
Bus-bar support set incl. screws and support	MB 60MM	
<i>For assembling to middle of the enclosure use screws KN4.8x13</i>		
RATED CURRENT	250 A	400 A
Bus-bar sizes	L1, L2, L3	20 x 5 mm
	PE/N	15 x 5 mm

SOLID FRAME COVERS












	ORDER SYMBOL	SIZE mm
Solid Frame covers		
With opening 1x12 mod.	SF PC2828-SG-12-1	280x280x54
With opening 2x12 mod.	SF PC2828-SG-12-2	280x280x54
DIN-rail	EKV 22	35x235

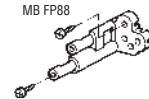

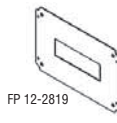
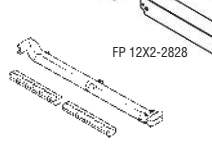


Extension for DIN rail/mbc MB 10686	MB 10686	15/34
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SPACERS

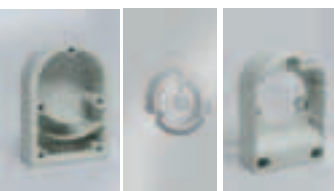
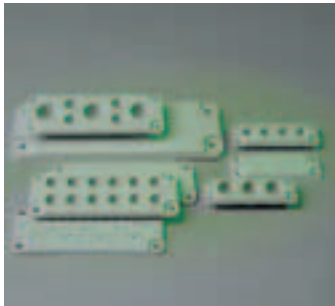
	ORDER SYMBOL	SIZE mm
 M6 spacers, self-cutting for corners of the base	MR 10726	15
 M6 spacers, self-cutting for corners of the base	MR 10727	20
 M6 spacers, self-cutting for corners of the base	MR 10728	30
 M6 spacers, self-cutting for corners of the base	MR 10729	54
 M6/M6 extension for MR spacer	HR 10	10
 M6/M6 extension for MR spacer	HR 15	15
 M6/M6 extension for MR spacer	HR 20	20
 M6/M6 extension for MR spacer	HR 30	30
 M5 spacers, self-cutting for middle mounting pods	FA 12052	42
	FA 12053	14

FP FRONT PLATES FOR FB88 AND FP882 SPACERS

	ORDER SYMBOL	SIZE mm
 MB FP88	Distance spacer for front plates, 1set, 2 pcs	MB FP88 88
 MB FP882	Distance spacer for front plates, 1set, 2 pcs	MB FP882 88
 FP 12-2819	FP front plate with DIN-openings	FP12-2819 280x190
 FP 12X2-2828	FP front plate with DIN-openings	FP12-2828 280x280
	FP front plate with DIN-openings	FP12x2-2828 280x280
	FP front plate with DIN-openings	FP12x2-2838 280x380
	FP front plate with DIN-openings	FP12x3-2838 280x380
	FP front plate with DIN-openings	FP12x3-2856 280x560
	N/PE-terminal bracket, incl. 2 pcs of MR 26100 terminals (16-holes)	MB 26069SET
	Terminal bus-bar clamp, 25 mm ²	MS BAR CLAMP
	Terminal bus-bar clamp, 35 mm ²	MR 26145



PLATES



MB 10546 MB 10215

Cover plate
Cover plate
Cover plate

MB 10537

Cable gland plates, threads 4xPG 13,5
Cable gland plates, threads 4xPG 16
Cable gland plates, threads 3xPG 21
Cable gland plates, threads 1xPG 29
Cable gland plates, threads 4xM20*1.5

MB 10014-10019
MB 10149-10214

Cable gland plates, threads 12xPG 16
Cable gland plates, threads 12xPG 13,5
Cable gland plates, threads 6xPG 16+4xPG21
Cable gland plates, threads 4xPG 16+3xPG29
Cable gland plates, threads 4xPG 16+2xPG36
Cable gland plates, threads 12xM20*1.5

MB 10593-10596

Knock-out plates 9xPG 11+5xPG9/16
Knock-out plates 4xPG 21/29
Knock-out plates 13xPG16
Knock-out plates 4xPG 11/21+7xPG16
Knock-out plates 4x 1/2" + 2x 3/4" + 1x 3/4" / 1"
Knock-out plates 4xM12+4xM12 / M20 + 4xM16/M25
Knock-out plates 8xM20+5xM25 / M16
Knock-out plates 2xM32 / M20 + 2xM40/M25

MK 10438

Flange gasket 1
Flange gasket 2
Flange gasket 3
Flange gasket 1, for smooth side
Flange gasket 2, for smooth side

MK 10441

Connector set + 4 screws
Connector set + 4 screws
Connector set + 4 screws

Plastic screw, lock nut, flange gasket
Plastic screw, lock nut, flange gasket
Plastic screw, lock nut, flange gasket

Plastic head screw

Plastic head screw for size 1 flange
Plastic head screw for size 2 flange
Plastic head screw for size 3

Lock nut for plastic head screws
Lock nut for plastic head screws
Lock nut for plastic head screws

ORDER SYMBOL SIZE

MB 10215 1
MB 10546 2
MB 10324 3

MB 10151 1
MB 10149 1
MB 10214 1
MB 10537 1
MB 10892 1

MB 10014 2
MB 10015 2
MB 10016 2
MB 10017 2
MB 10019 2
MB 10891 2

MB 10593 2
MB 10594 2
MB 10595 2
MB 10596 2
MB 10856 2
MB 10857 2
MB 10889 2
MB 10890 2

MK 10437 1
MK 10438 2
MK 10439 3
MK 10440 1
MK 10441 2

MB 10671 1
MB 10670 2
MB 10672 3

1
2
3

MB 10345 M6x25
MB 10346 M8x25
MB 10347 M10x30

M6 M6
M8 M8
M10 M10

MEMBRANE FLANGE PLATE

ORDER SYMBOL SIZE

Membrane flange plate, IP 65
1x7-10+2x10-14+2x15-30 FMB 5 1
2x24-54+1x30-60 FMC 3 2
4x5-7+4x8-12+12x10-14+4x14-20+1x20-26 FMC 25 2
2x5-7+6x6-10+8x7-12+16x10-14+2x12-18+1x17-32 FMC 35 2

FMB 5 assembly: order MB 10671 connector set
FMC 3, -25, -35 : "fast" connectors incl. delivery

FMC 35
FMC 25
FMC 3
FMB 5

PLATE EXTENSION

ORDER SYMBOL SIZE

MB 10391
Height of the extension 25 mm
Mounting with four MB 10392
M8x50 plastic head screw

MB 10391 2
MB 10392

WATER PLUG VENTILATOR

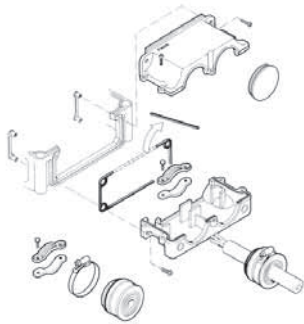
ORDER SYMBOL

MB 12189
MB 10631
MB 10564 II
MB 10858 II
MB 10859 II

Water plug
Pressure stabilizer, M12x1,5
Ventilation device
Ventilation device, gasgated, incl. screws
Grille/filter holder for MB 10564 II. Optional
Holder for 40 x 40 mm fan, incl. screws

MB 12189
MB 10894
MB 10631
MB 10564 II
MB 10858 II
MB 10859 II

CABLE ENTRY BOXES



ORDER SYMBOL

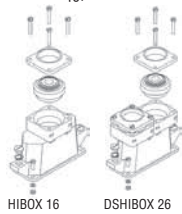
Including: base, cover, cover screws, 1 blind plug, 1 pull-off, hose clamp with screws, membrane cable gland, and plate connector set. MB 2260

Accessory set
Including: membrane cable gland, pull-off, and hose clamp with screws. MB 2260A



Use plastic head screws
for assembly

CABLE ENTRY



HIBOX 16

DSHIBOX 26



EPA 2160



EPA 2260



MK 10426



MK 10428

ORDER SYMBOL

FLANGE
SIZE

Cable entry, 1 cable (incl. rubber gasket)
Cable entry, 2 cables (incl. rubber gasket)

HIBOX 16
DSHIBOX 26

2
2

Cable entry (1 cable)
Cable entry (2 cables)
Cable entry (1 cable)
Cable entry (2 cables)

EPA 1130
EPA 1230
EPA 2160
EPA 2260

1
1
2
2

Rubber gasket for cable entry EPA 1130-1230
Rubber gasket for cable entry EPA 2160-2260

MK 10426
MK 10428

SIZE MM
10-31
28-60



CABLE GLANDS

METRIC!



Metric Cable gland, PA

PA=cable glands in polyamide
Grey RAL 7035
Temperature range
-40° (+100°)
New metric
dimensions EN 60423!



Metric Hexagonal lock nut PA

B=lock nuts for cable gland,
polyamide

Membrane cable glands

EPDM
IP 65 (EN 60529)
Wall thickness (C) 1,5 -5 mm



Multifem

ORDER SYMBOL

FOR CABLE
mm

METRIC SIZE

CLEARANCE
HOLE Ø mm

GPA M12
GPA M16
GPA M20
GPA M25
GPA M32
GPA M40
GPA M50
GPA M63

3-6
5-10
8-13
11-17
15-21
19-28
27-35
32-42

M12x1,5
M16x1,5
M20x1,5
M25x1,5
M32x1,5
M40x1,5
M50x1,5
M63x1,5

12.5
16.5
20.5
25.5
32.5
40.5
50.5
60.5

GPA M12-B
GPA M16-B
GPA M20-B
GPA M25-B
GPA M32-B
GPA M40-B
GPA M50-B
GPA M63-B

M12x1,5
M16x1,5
M20x1,5
M25x1,5
M32x1,5
M40x1,5
M50x1,5
M63x1,5

FEM 3-5
FEM 5-7
FEM 7-10
FEM 10-14/23
FEM 10-14/25
FEM 14-20
FEM 20-26
FEM 26-35
FEM 30-45

3-5
5-7
7-10
10-14
10-14
14-20
20-26
26-35
30-45

M12
M16
M20
M23/PG16
M25
M32
M40
M50
M60

12.5
16.5
20.5
23.5
25.5
32.5
40.5
50.5
60.5

ORDER SYMBOL

FOR CABLE
mm

CLEARANCE HOLE, PG

Membrane cable glands
Flame resistance UL 96-V2
Grey RAL 7035
Temperature range
-50°C-+70°C
Fet 5-7 for cables 5-7 ø
Fet 7-10 for cables 7-10 ø etc.

FET 5-7
FET 7-10
FET 8-14
FET 14-20
FET 20-26
FET 26-35

5-7
7-10
8-14
14-20
20-26
26-35

PG 9
PG 11
PG 16
PG 21
PG 29
PG 36





Cover =



Cover =



Cover =



Cover =



Cover =



Cover =



Cover =

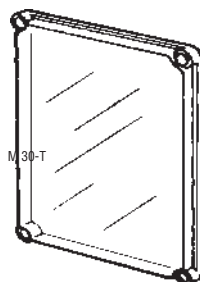


Cover =



Cover =

COVERS

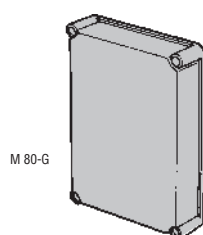


Eight sizes of base and cover.
Three depths for cover 30, 80, 100 mm.
Note! (W only with grey colour)
Note! Order cover screws against the cover height.

-covers (PC)
G=grey cover RAL 7035
T=transparent cover
Height 30 mm.

ORDER SYMBOL SIZE mm

190x190x30
190x190x30
280x190x30
280x190x30
380x190x30
380x190x30
280x280x30
280x280x30
380x280x30
380x280x30
560x280x30
560x280x30
560x380x30
560x380x30



-covers (PC)
G=grey cover RAL 7035
T=transparent cover
Height 80 mm.

More space with extension frames

190x190x80
190x190x80
280x190x80
280x190x80
380x190x80
380x190x80
280x280x80
280x280x80
380x280x80
380x280x80
760x560x100

HINGED COVER

FIBOX COVERS WITH READY ASSEMBLED FSH HINGES

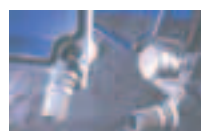
T-30-G-3FSH



Low cover 30 mm.
G=grey cover RAL 7035
T=transparent cover

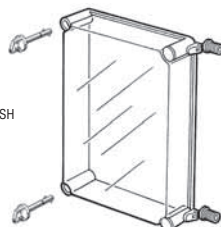


Incl. cover and 2 pcs or 3 pcs HS-wing head (2FSH/3FSH) screws.



High cover 80 mm.
G=grey cover RAL 7035
T=transparent cover

T-80-T-2FSH



ORDER SYMBOL SIZE mm

190x190x30
190x190x30
190x280x30
190x280x30
280x190x30
280x190x30
380x190x30
380x190x30
280x280x30
280x280x30
380x280x30
380x280x30
560x280x30
560x280x30
560x380x30
560x380x30

190x190x80
190x190x80
280x190x80
280x190x80
380x190x80
380x190x80
280x280x80
280x280x80
380x280x80
380x280x80

HINGES, BLIND PLUG

ORDER SYMBOL SIZE mm



MB 10622
















MB 10523

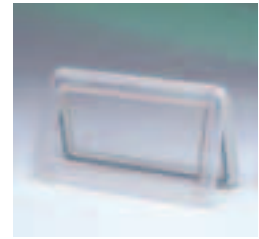
PC hinge set, 1 pair, incl. screws and drill template
PA hinge set, 1 pair, incl. screws
Template for MB 10547 in plastic
Blind plug for cover corner on hinged side when cover screws are not used

MB 10622
MB 10547
PA 10547
MB 10523

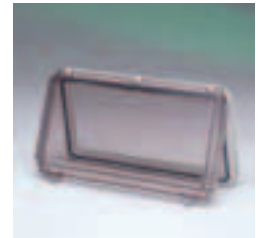
30/80
30/80

COVERS SCREWS

	ORDER SYMBOL	FOR COVERS
 ——— Wing head screw	HS 10255	30
 ——— Slotted head screw, sealable	SS 10535	30
 ——— Triangle head screw	DS 10581	30/80/100
 ——— Cross head screw	CS 10256	30/100
 ——— Slotted head screw, quick-lock, *)	SS 10544	30/100
 ——— Wing head screw, quick-lock, *)	HS 10533	30
 ——— Quick-locking wing head screw, hinged, *)	HS 10532	30
 ——— *) Threaded bushing	MB 10534	
 ——— *) Threaded bushing (needed for quick-locking screws)		
 ——— Cross head screw	SS 10563	80
 ——— Wing head screw	HS 10562	80
 ——— Noryl slotted head screw (good chemical resistance)	SS 10256N	30
 ——— Noryl wing head screw (good chemical resistance)	HS 10255N	30
Set of four cross head screws	SS 10256-4	30/100
Set of six cross head screws	SS 10256-6	30/100
Set of four cross head screws	SS 10563-4	80



L 12 clear



L 12 II transparent smoked grey



L 13 clear



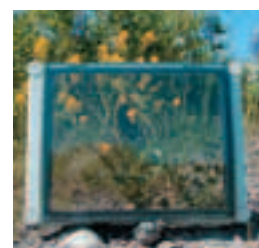
SOLID FRAME application



L 24 clear

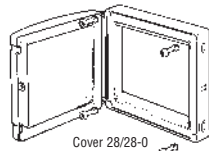


L 44 II transparent smoked grey

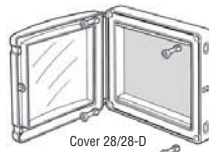


L 43 II transparent smoked grey

SOLID FRAME



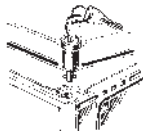
Cover 28/28-0



Cover 28/28-D

	ORDER SYMBOL	SIZE mm
Frame, with opening	Cover 28/28-0	280x280
Front plate aluminium	FP 28/28	
Frame, no opening	Cover 28/28-D	280x280
Key lock set	MR 26065	

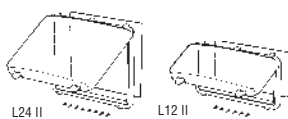
KEY-LOCK SET



ORDER SYMBOL
Key-lock set incl., lock and 2 keys for 30 mm covers
MB 10597

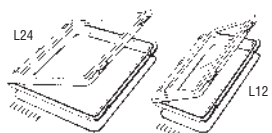
INSPECTION WINDOWS

The order symbol indicates the amount of the DIN modules for example L08=8 modules.



L24 II

L12 II



L24

L12

ORDER SYMBOL	SIZE mm
Windows, IP 65	L12 II 248x128
Windows, IP 65	L24 II 248x128
Windows, IP 65	L12 248x128
Windows, IP 65	L24 248x128
Windows, IP 65	L13 257x108
Windows, IP 54	L10 199x77
Windows, IP 54	L08 162x77
Windows, IP 54	L06 130x77
Windows, IP 54	L04 96x77
Windows, IP 54	L02 60x77



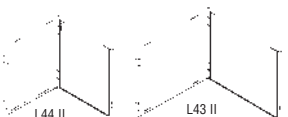
L13

B 24 10620-45

B 12 10621-45

Front plates for L 12 windows	B12 10621-45
Front plates for L 24 windows	B24 10620-45

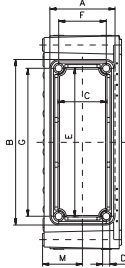
Large size windows, IP 65,	L44 II 377x331
for enclosure EKW 100-G	L43 II 331x277



L44 II

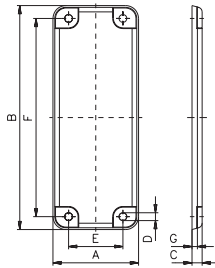
L43 II

DIMENSIONAL DRAWINGS



FLANGE OPENINGS


Plate size	Dimensions							
	A	B	C	D	E	F	G	M
1	48	138	33	7	121	30	120	31
2	86	217	63	9,5	195	62	193	52
3	127	332	101	11,5	306	80	292	71



COVER PLATES

Order symbol	Plate size	Dimensions							
		A	B	C	D	E	F	G	
MB 10215	1	49	140,5	10	7	30	120	5	
MB 10546	2	85	217	10	9,5	62	193	5	
MB 10324	3	127	332	15	11,5	80	292	8	

TECHNICAL INFORMATION

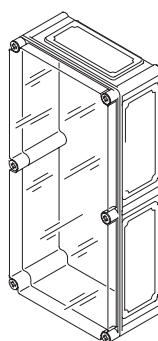
PROPERTY	POLYCARBONATE (PC)	CONFORMITY TO STANDARDS
Ingress Protection (EN 60529)	IP66/IP67	USA Enclosures for Electrical Equipment PC: UL Type 1, 3, 3S, 4, 4X, 6, 6P and 12 (UL 50/508)
Impact Resistance (EN 50102)	IK 08	Canada Industrial Control Equipment Enclosures for Electrical Equipment/ULc
Temperature Range Celsius (short term)	-40°...120°C	Europe Enclosures for Switch Gear and Control Gear Assemblies EN 50298:1998
Temperature Range Fahrenheit (short term)	-40°...250°F	Europe Safety of Information Technology Equipment EN 60950
Temperature Range Celsius (continuous)	-40°...80°C	Australia Enclosures for switch gear and control gear AS 3132-1991
Temperature Range Fahrenheit (continuous)	-40°...175°F	DNV PC: DNV Rules for Classification of Ships and Mobile Offshore Units
Electrical Insulation	Totally insulated 	GL PC: GL Regulations for the Performance of Type Test, Part 1
Light Grey Parts Colour	RAL 7035	LR Marine offshore and industrial installations
Transparent Clear PC Cover	Clear Transparent	BV BV Rules
Cover Screws	RAL 7035	UL 746 C 5 in. vertical flame test
Cover Screws	Polyamide (PA)	IEC 695-2-1, Self-extinguishing
Gasket	PUR	DIN/VDE 0472, Part 815
Enclosure Flammability Rating	UL94-5V	CE, FI -mark
Glow Wire Test	960°C	
Non-toxicity	Halogen Free	
UV resistance	UL 508	
Chemical Resistance *	720 hours in "Weatherometer"	
	Good	

Data subject to change without notice. *Consult separate raw material data for more detailed information

NEW!

enclosure sets

Some most popular sizes are now available as complete enclosures with just one order symbol. Sets include base, cover and cover screws. Naturally same wide accessory range allows you to customise these "easy-to-order" sets to your needs.



TH 130 T

ORDER SYMBOL	SIZE mm	
	190x190x130	
	280x190x130	
	380x190x130	
	280x280x130	
	380x280x130	
	560x280x130	
	560x380x180	
	760x560x250	
	190x190x130	
	280x190x130	
	380x190x130	
	280x280x130	
	380x280x130	
	560x280x130	
	560x380x180	