

Enclosures

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Mini Gamma enclosures

Mini Gamma is a range of 1 row surface mounting enclosures from 2 to 10 modules. These enclosures are adapted for housing and small professional premises.

Mini Gamma enclosures are available in 2, 4, 6, 8 and 10 modules. They are equipped with label holder on front face for the easy locating of circuits and can be equipped with a lockable door (in option). Their modern and refined design will allow to integrate with harmony in all the premises. They are available in the white colour common to all the Hager enclosures (RAL 9010).



- Fixing of the frame with 3 points
- blankings to obtain class II
- passages of side cables and under rail



- flush cover for fixing against a wall
- fixing of cover by quarter of turn



- pre-cut inputs for cables



- Equipped with ground terminal blocks IP2X starting from 4 modules.

Mini Gamma enclosures IP30



GD108N

IP 30 IK05 without door
insulation class: II

Enclosures
1 row for 2 to 10

Surface mounting enclosures, rigid bottom with fixed DIN rail for devices of a maximum shoulder measurement of 47mm

Sealable cover.
Delivered without terminals, with marking strips and screw cap cover for class II.



IEC 60 695-2-1/0
and 60 695-2-1/1

- Options :
- door lock with key
 - plain or transparent door
 - earth and neutral terminals

For technical information, see page 62

Description



Cat. ref

1 row, 2

GD102N

l. 55 x h. 160 x d. 75 mm

1 row, 4

GD104N

E : 2 x 16 + 2 x 10
N : 2 x 16 + 2 x 10

l. 110 x h. 180 x d. 75 mm

1 row, 6

GD106N

E : 2 x 16 + 2 x 10
N : 2 x 16 + 2 x 10

l. 148 x h. 180 x d. 75 mm

1 row, 8

GD108N

E : 3 x 16 + 4 x 10
N : 3 x 16 + 4 x 10

l. 182 x h. 180 x d. 75 mm

1 row, 10

GD110N

E : 3 x 16 + 4 x 10
N : 3 x 16 + 4 x 10

l. 218 x h. 180 x d. 75 mm



GD104N



GD108N

Description

Characteristics

Ref. plain door

Ref. transpar. door

Doors
with integrated handle

for: **GD102N**
GD104N
GD106N
GD108N
GD110N

GP102P
GP104P
GP106P
GP108P
GP110P

GP102T
GP104T
GP106T
GP108T
GP110T



GP102T



GZ04N



G104S

Key lock

For plain or transparent door

VZ313

N-terminal 4 connections 2 x 16[□] + 2 x 10[□]

GZ04N

N-terminal 7 connections 3 x 16[□] + 4 x 10[□]

GZ07N

PE-terminal 4 connections 2 x 16[□] + 2 x 10[□]

GZ04E

PE-terminal 7 connections 3 x 16[□] + 4 x 10[□]

GZ07E

Terminal support for GD104N

GZ104S

Terminal support for GD106N

GZ106S

Terminal support for GD108N

GZ108S

Terminal support for GD110N

GZ110S

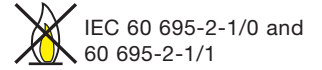


IP 30 IK 07









IP30 surface mounting enclosures
 1-4 rows 13-52 modules.
 enclosures are of an insulating material coloured RAL 9010. insulating chassis and frame. fixed DIN rail for devices of a maximum shoulder measurement of 45mm, distance between rails 125mm
 premarked cable entries on top, bottom and side.

delivered with
 - blanking clips
 - marking strip

- options**
- additional connection assemblies
 - cable trunking
 - back plates
 - plain and transparent doors
 - door locks



☐ For technical information, see page 64

Description		Pack qty	Cat. ref.	
 GD113H	1 row, 13 w. 250 x h. 250 x d. 103 mm	N: 1 x 25 + 11 x 16 + 13 x 10 N: 1 x 25 + 8 x 16 + 8 x 10 E: 1 x 25 + 11 x 16 + 13 x 10	 6 mod.	1 GD113H
 GD213H	2 row, 26 w. 250 x h. 375 x d. 103 mm	N: 1 x 25 + 11 x 16 + 13 x 10 N: 1 x 25 + 8 x 16 + 8 x 10 E: 1 x 25 + 11 x 16 + 13 x 10	 6 mod.	1 GD213H
 GD413H	3 row, 39 w. 250 x h. 500 x d. 103 mm	N: 1 x 25 + 11 x 16 + 13 x 10 N: 1 x 25 + 8 x 16 + 8 x 10 E: 1 x 25 + 11 x 16 + 13 x 10	 13 mod.	1 GD313H
 GD26C	1 row, 26 w. 500 x h. 200 x d. 85 mm	N: 2 x (2x16 + 2x10) E: 10 x 16 + 12 x 10	 6 mod.	1 GD26C

Doors for Gamma enclosures offer an additional protection of modular devices and increases ingress protection to IP40. Plain (RAL 9010) or transparent. Delivered with 2 hinges, 1 latch and 2 screws.



EC 60 695-2-1/0 and 60 695-2-1/1: 850 °C

option lock.



GP213T

GP213P

Description	Characteristics	Pack qty.	Cat. ref
Plain door depth : 30mm	for: GP113H	1	GP113P
	GP213H	1	GP213P
	GP313H	1	GP313P
	GP413H	1	GP413P
Transparent door depth : 30mm	for: GP113H	1	GP113T
	GP213H	1	GP213T
	GP313H	1	GP313T
	GP413H	1	GP413T
Door lock with key	for doors: GP113P GP213P GP313P GP413P GP113T GP213T GP313T GP413T	1	GZ05A
Back plate insulated material	for enclosure: GP113H	1	GP113D
	GP213H	1	GP213D
	GP313H	1	GP313D
	GP413H	1	GP413D
Blanking strip to blank unused rows	width 12 ■	10	S35S
	width 0,5 ■		P031F
	width 1 ■		P032F



S35S

Volta flush mounting enclosures IP30




VU24D

Distribution enclosures with metallic door 1 to 4 rows, 12 to 48 ■
 flush mounting in brick or partition walls removable chassis
 for devices of shoulder measurement 47 mm, distance between rails 125 mm flush part made out of insulated material, frame and door manufactured from metal, reversible door with integrated handle, sealable front cover, colour RAL 9010





delivered with :
 earth bar, blanking strips with 12l premarked, mounting kit for partition walls, circuit identification labelling

Options :
 key lock

Compliance to : EN 60 439-3
 IEC 60 695-2-1/0 and 60 695-2-1/1

For technical information, see page 63

IP 30 IK 07
class II 

Description	Pack qty.	Cat. ref												
1 row 12 ■ Wall recess w.330 x h.317 x d. 89mm outside w.348 x h. 336 x d.9 mm	 2 + 1/2	1 VU12B												
2 rows 24 ■ Wall recess w.330 x h.442 x d. 89mm outside w.348 x h. 461 x d.9 mm	 4 + 1/2	1 VU24B												
3 rows 36 ■ Wall recess w.330 x h.567 x d. 89mm outside w.348 x h. 586 x d.9 mm	 6 + 1/2	1 VU36B												
4 rows 48 ■ Wall recess w.330 x h.692 x d. 89mm outside w.348 x h. 771 x d.9 mm	 8 + 1/2	1 VU48B												
Transparent door	for enclosure	<table border="0"> <tr> <td>VU12B</td> <td>1</td> <td>VZ131</td> </tr> <tr> <td>VU24B</td> <td>1</td> <td>VZ132</td> </tr> <tr> <td>VU36B</td> <td>1</td> <td>VZ133</td> </tr> <tr> <td>VU48B</td> <td>1</td> <td>VZ134</td> </tr> </table>	VU12B	1	VZ131	VU24B	1	VZ132	VU36B	1	VZ133	VU48B	1	VZ134
VU12B	1	VZ131												
VU24B	1	VZ132												
VU36B	1	VZ133												
VU48B	1	VZ134												
Lock with key	delivered with 2 keys	1 VZ303												
Connection assembly single phase	2 x (3 x 16 + 4 x 10)	1 VZ403												
TP + N 63A	3 x (3 x 16 + 2 x 10) 1 x (5 x 16 + 6 x 10)	1 VZ428												
Blanking strip	12 ■ premarked	1 S35S												



VU12B

VU24B



VZ132



VZ303



S35S



VS12PA

IP41 surface mounting enclosures

1-3 rows, 4-36 modules. enclosures are made of an insulating material coloured RAL9010. Fixed Din rail for devices of a maximum shoulder measurement of 47mm, distance between rails 125mm reversible door-opening 180°.

delivered with :
- blanking clips

Options :
key lock



these enclosures can be delivered with brass terminal and supports for neutral and earth connection



IEC 60 695-2-1/0 and 60 695-2-1/1

For technical information, see page 65

IP 41 IK 07
class II

Description	Pack qty.	ref transparent door
 <p>1 row 4 ■</p> <p>dimensions mm: (width x height x depth) 130 x 180 x 86</p>	1	VS04TD
<p>1 row 8 ■</p> <p>dimensions mm: (width x height x depth) 200 x 180 x 86</p>	1	VS08TD
<p>1 row 12 ■</p> <p>dimensions mm: (width x height x depth) 275 x 225 x 95</p>	1	VS12TD
 <p>2 rows 24 ■</p> <p>dimensions mm: (width x height x depth) 275 x 350 x 95</p>	1	VS24TD
<p>3 rows 36 ■</p> <p>dimensions mm: (width x height x depth) 275 x 500 x 95</p>	1	VS36TD
<p>Key lock</p>	golf enclosures 12, 24, 36 ■	VZ311

Golf flush mounting enclosures IP41



IP41 flush mounting enclosures

1-3 rows, 4-36 modules. enclosures are made of an insulating material coloured RAL 9010. Fixed Din rail for devices of a maximum shoulder measurement of 47mm, distance between rails 125mm reversible door-opening 180°.

delivered with :
- blanking clips

Options :
key lock

these enclosures can be delivered with brass terminal and supports for neutral and earth connection.



IEC 60 695-2-1/0 and 60 695-2-1/1

For technical information, see page 65

IP 41 IK 07
class II

Description	Pack qty.	ref transparent door
1 row 4 dimensions mm: (width x height x depth) surface 180 x 220 x 17 wall recess 140 x 177 x 7	1	VF04TA
1 row 8 dimensions mm: (width x height x depth) surface 250 x 230 x 17 wall recess : 209 x 189 x 77	1	VF08TA
1 row 12 dimensions mm: (width x height x depth) surface 322 x 265 x 17 wall recess : 281 x 224 x 80	1	VF12TA
2 rows 24 dimensions mm: (width x height x depth) surface 322 x 390 x 17 wall recess : 281 x 349 x 80	1	VF24TA
3 rows 36 dimensions mm: (width x height x depth) surface 322 x 535 x 17 wall recess : 281 x 491 x 80	1	VF36TA
Key lock	golf enclosures 12, 24, 36	1 VZ311 VZ311

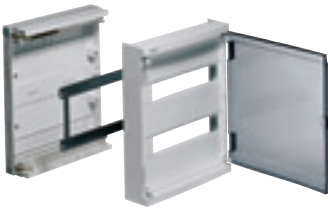


VF12TA



VF24TA

Vega surface mounting enclosures



VB36W

IP40 surface mounting enclosures
 with transparent or plain doors.
 1 -3 rows 18-54 modules.
 enclosures are made of an insulating material coloured white RAL 9010.
 the enclosures feature a removable chassis with Din rails for ease of installation.
 top and bottom cable entry plates are removable and interchangeable.
 the door is also reversible with an integral flush handle.

Options :
 door lock.
 cable trunking,
 these enclosures can be delivered with brass terminal and supports for neutral and earth connection.

IP30 IK 07 without door
IP40 IK 08 with door

class II



IEC 60 695-2-1/0
 and 60 695-2-1/1

Description		Pack qty.	ref transparent door
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VB18W

Surface enclosures 1 row 18	E: 2 x (1x25 + 5x16 + 5x10) N: 2 x (1x25 + 5x16 + 5x10)	1	VB18W
w. 370 x h. 300 x d. 145mm			

2 rows 36	E: 2 x (1x25 + 5x16 + 5x10) N: 2 x (1x25 + 5x16 + 5x10)	1	VB36W
w. 370 x h. 450 x d. 145mm			



VB54W

3 rows 54	E: 2 x (1x25 + 11x16 + 13x10) N: 2 x (1x25 + 11x16 + 13x10)	1	VB54W
w. 370 x h. 600 x d. 145mm			

Description	Pack	ref plain door	ref transparent door
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Flush enclosures 1 rows 18	1	VC18P	VB18T
w. 430 x h.335 x d. 102 mm			



VC36T

2 rows 36	1	VC36P	VB36T
w. 430 x h.335 x d. 102 mm			

3 rows 54	1	VC54P	VB54T
w. 430 x h.335 x d. 102 mm			

Vector enclosures - IP65



VE212R

Surface mounting enclosures with transparent doors
 1 to 4 rows from 2 to 48 ■,
 1 to 3 rows from 18 to 54 ■.

Adjustable DIN rail for shoulder measurement 47 and 63 mm, transparent hinged cover (2 to 10) or door (12 to 54), 2 lateral knock outs for cable entry or coupling pieces: Pg16 for VE110 and VE116 Pg21 for VE112 to VE318.

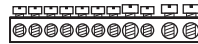
IP 65 IK 07 < 12 ■
 IK 08 ≥ 12 ■
class II □

With premarked knock outs for bushes or cable glands M20, M25, M32, M40 and M50; delivered with loose cable bushes, colour : light grey RAL7035 nominal voltage : Ui 400V~ nominal current : 63A at 230/400V~



IEC 60 695-2-1/0 and 60 695-2-1/1

Description



Pack Qty.

Cat. ref.



VE106L

1 row 2 + 1 ■
 w. 111 x h. 175 x d. 93 mm

E : 2 x 16 + 2 x 10 □
 supplied cable bushes
 3xM20

1

VE103L

1 row, 4 + 2 ■
 w. 165 x h. 190 x d. 113 mm

E : 3 x 16 + 4 x 10 □
 supplied cable bushes
 2xM20+2xM25+1xM32

1

VE106R

1 row, 8 + 2 ■
 w. 237 x h. 210 x d. 114 mm

E : 5 x 16 + 6 x 10 □
 supplied cable bushes
 4xM20+2xM25+1xM32

1

VE110L



VE312L

1 row, 12 ■
 w. 310 x h. 302 x d. 151 mm

E : 1 x 25 + 5 x 16 + 7 x 10 □
 supplied cable bushes
 10xM20+2xM25+1xM32

1

VE112R

2 rows, 24 ■
 w. 310 x h. 427 x d. 151 mm

E : 1 x 25 + 11 x 16 + 13 x 10 □
 supplied cable bushes
 14xM20+4xM25+1xM32

1

VE212R

3 rows, 36 ■
 w. 310 x h. 552 x d. 151 mm

E : 1 x 25 + 8 x 16 + 8 x 10 □
 supplied cable bushes
 8xM20+14xM25+1xM32

1

VE312R

4 rows, 48 ■
 w. 310 x h. 677 x d. 151 mm

E : 2 x (1 x 25 + 10 x 16 + 11 x 10)
 N: 2 x (1 x 25 + 10 x 16 + 11 x 10)
 supplied cable bushes
 8xM20+14xM25+1xM32

1

VE412Y



VE218L

1 row, 18 ■
 w. 418 x h. 302 x d. 151 mm

E : 1 x 25 + 8 x 16 + 11 x 10 □
 supplied cable bushes
 14xM20+4xM25+1xM32

1

VE118R

2 row, 36 ■
 w. 418 x h. 452 x d. 151 mm

E : 1 x 25 + 8 x 16 + 8 x 10 □
 supplied cable bushes
 8xM20+14xM25+1xM32

1

VE218R






3 row, 54 ■
 w. 418 x h. 602 x d. 151 mm

E : E: 2 x (1 x 25 + 8 x 16 + 8 x 10)
 N: 2 x (1 x 25 + 8 x 16 + 8 x 10)
 supplied cable bushes
 8xM20+18xM25+2xM32

1

VE318Y

Accessories for Vector enclosures

	<i>Description</i>	<i>Characteristics</i>	<i>Pack qty.</i>	<i>Cat. ref</i>
 VZ403	Single phase assembly 63A snaps on lateral support	$2 \times (3 \times 16 + 4 \times 10^{-2})$	1	VZ403
 VZ428	Three phase + N connection assembly 63A snaps on lateral support	$3 \times (3 \times 16 + 2 \times 10^{-2})$ $1 \times (5 \times 16 + 6 \times 10^{-2})$	1	VZ428
 VZ311	Lock with 2 keys to connect side by side enclosures reduction of ingress protection to IP54	for all enclosures from 2 to 54 ■	1	VZ311
 VZ758	Coupling sleeve reduction of ingress protection IP54	fit on lateral PG21 knock outs of the enclosures VE112, VE212, VE312, VE412, VE118, VE218 and VE318	1 set	VZ754
 VZ758	Cable entry reduction of ingress protection IP54	$14 \times M20 + 10 \times M25 + 2 \times M32$	1	VZ758

Vector enclosures - IP65



2 ranges of monobloc enclosures made out of insulating material, colour RAL7035
Modular distribution enclosure surface mounting with transparent door
 2 to 4 rows, 20 to 72 removable chassis with DIN rails depth adjustable, 150 mm between rails
 front covers with modular cut out, made out of insulating material

IP 65 IK 10
class II

Non modular distribution enclosure (VPxxG) surface mounting with plain door fitted with a plain zincked mounting plate 2 mm thickness

Plain sides without knock out for cable entries

Symmetrical enclosure permits change of the door opening direction by simple reversal of the enclosure door fitted with either one or two locks with 8mm triangular key.

Delivered with :
 4 wall mounting brackets, terminals, marking strip (for VP..M)

Options :

- key lock, VP01Z
- plain front cover (for VP..M)
- blanking strip (for VP..M)



IEC 60 695-2-1/0 and 60 695-2-1/1

Description



Pack qty.

Cat. ref



VP54M

2 rows, 20	N : 5 x 16 + 5 x 10 E : 1 x 25 + 2 x 16 + 3 x 10	1	VP20M
non modular		1	VP20G
h. 350 x w. 250 x d. 160mm			



VP72G

3 rows, 36	N : 5 x 16 + 6 x 10 E : 5 x 16 + 5 x 10	1	VP36M
non modular		1	VP36G
h. 500 x w. 300 x d. 160mm			

3 rows, 54	N : 6 x 16 + 7 x 10 T : 5 x 16 + 5 x 10	1	VP54M
non modular		1	VP54G
h. 500 x l. 400 x p. 210mm			

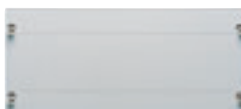
3 rows, 72	N : 6 x 16 + 7 x 10 T : 5 x 16 + 5 x 10	1	VP72M
non modular		1	VP72G
h. 650 x l. 400 x p. 210mm			



VP72G

Lock with key	to replace the delivered triangular lock, delivered with 2 keys	1	VP01Z
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Blank for cover (for VP ...M)	for enclosure	width 250mm	4	VP02Z
		width 300mm	4	VP03Z
	to replace the front covers with modular cut outs (height 150mm)	width 400mm	4	VP04Z



Blanking strips	width 1	20	VP05Z
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VP04Z

Insulated Enclosures



VC008G

<i>Insulated enclosure with doors</i>	<i>Terminal bars</i>		<i>Pack qty.</i>	<i>Cat ref. Insulated plain door</i>	<i>Cat ref. Insulated glazed door</i>
8 module	E: 7 x 16mm ²	N: 9 x 16mm ²	1	VC008	VC008G
12 module	E: 11 x 16mm ²	N: 13 x 13mm ²	1	VC012	VC012G
16 module	E: 15 x 16mm ²	N: 17 x 16mm ²	1	VC016	VC016G
22 module	E: 21 x 16mm ²	N: 23 x 16mm ²	1	VC022	VC022G

Metal Enclosures



VH008

<i>Insulated enclosure with doors</i>	<i>Terminal bars</i>		<i>Pack qty.</i>	<i>Cat ref. Metal plain door</i>	<i>Cat ref. Metal glazed door</i>
4 module	E: 5 x 16mm ²	N: 7 x 16mm ²	1	VH004	
8 module	E: 7 x 16mm ²	N: 9 x 16mm ²	1	VH008	VH008G
12 module	E: 7 x 16mm ²	N: 9 x 16mm ²	1	VH012	VH012G
16 module	E: 15 x 16mm ²	N: 17 x 16mm ²	1	VH016	VH016G
22 module	E: 21 x 16mm ²	N: 23 x 16mm ²	1	VH022	VH022G

Enclosures and Switch Fuses



IU41



IU44-11

<i>Metal enclosure without door</i>		<i>Pack qty.</i>	<i>Cat ref.</i>
1 module RCBO		1	IU41
2 module		1	IU2
2 module with extended height		1	IU42
3 module		1	IU3
4 module		1	IU4
4 module with extended height		1	IU44
5 module with extended height		1	IU45
4 mod metal unit	1 x 100A Isolator, AC22A Connection capacity: 50mm ² rigid conductor 35mm ² flexible conductor 1 x 63A Fuse	1	IU4-16
4 mod metal unit	1 x 100A Isolator, AC22A Connection capacity: 50mm ² rigid conductor 35mm ² flexible conductor 1 x 100A Fuse	1	IU44-11

More choice, more efficiency



More choice, more efficiency!

The Orion Plus IP65 range of enclosures has been developed to suit your requirements for electrical installations in any environment (chemical agents, humidity, outdoor use...) up to 630A. These enclosures are of monobloc construction available in metal or glass reinforced polyster (GRP), are easy to wire and install and have many common features out of which :

- colour RAL 7035,
- IP 65 with door closed, IK 10,
- In \uparrow 630A.

The metallic and GRP enclosures with same characteristics can be fitted with equipment kits for modular products or with different types of mounting plates for the installation of non modular products, automation, etc ...



Metal enclosures

Available with plain or transparent door
Common characteristics :

- sheet stell 12/10
- wall mounting or floor mounting with plinth
- top and bottom removable cable entries
- vertical assembly
- automatic equipotential continuity between door and accessories.

Glass reinforced polyester enclosures

Two ranges are available :
wall mounting enclosures, one section, fitted with plain or transparent door, wall/floor mounting, two sections, fitted as standards with plain door, transparent door available as option. Heights from 500 to 2050mm and various depths (160, 200, 250, 300mm) and also various widths.

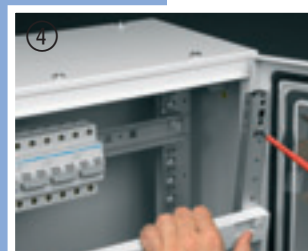
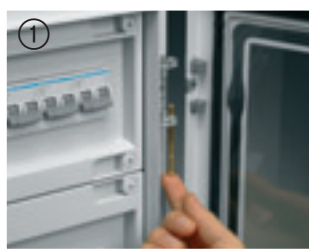
Advantages :

- delivered with adjustable sliding guides
- **distribution :**
 - complete kits for modular products,
 - removable chassis, easy to access,
 - wiring can be done at the workshop,
 - quick fixing of front plates with 1/4 turn screws,
 - plain or perforated mounting plates adjustable in depth,
 - premarked plain front plate to facilitate drilling
- **automation :**
 - plain or perforated metal mounting plates,
 - insulated back plates,
 - plates with large usable surface,
 - plates either fixed or adjustable in depth,
 - metal or polyester internal doors.

Change the door from right to left without problems

Safe and fast wall-mounting thanks to four wall fixings

Detachable top and bottom plates offer space for the introduction and mounting of cables as well as an easy handling



Easy fixing of the internal mounting system C simply by interlocking

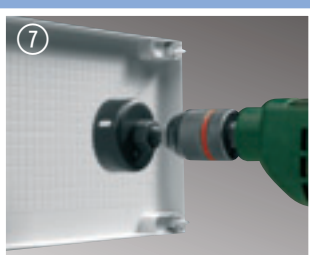


PZ2 fixing screw with fast fixing technique

Tips for professionals



Good cable guidance due to cable retainers



Front plate with rear marking for an easy and precise addition of openings



Easy handling of the cover thanks to four ergonomic grip cavities

Orion Plus general purpose enclosures IP65

The IP65 Orion Plus enclosures

These enclosures are of mono-bloc construction available in metal, glass reinforced polyester (GRP) with plain or transparent doors.

They constitute a large range of enclosures with heights from 300 up to 2050mm and width up to 800mm (metal) and 1100mm (polyester).

These enclosures are flexible and can be used with different types of equipments :

- plain, perforated or insulated metal mounting plates

These enclosures allow :

- installation of automation products for the control of machines or small processes
- installation of non modular products such as contactors, transformers, etc....
- cable termination and distribution

□ choice of enclosures and kits, see page 42 - 45

□ enclosures and accessories, see page 46 - 51

Metal mounting plates :

- available in various sizes, plain, perforated, insulated for the installation of non modular equipment.
- fixed directly on the back of the enclosure or on depth adjustable guides depending on the size of the equipment.

Chassis kits

for modular products

designed for easy mounting of modular equipment. The chassis can be removed and tilted. Supplied complete with front cover, DIN rails and uprights.



Orion Plus IP 65 metal enclosures

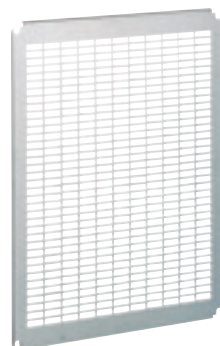


Orion Plus IP 65 polyester enclosures

Choice of kits:



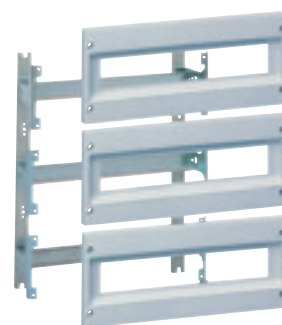
Plain metal mounting plates for automation or non modular products



Perforated metal mounting plates for automation or non modular products



Insulated metal mounting plates for automation or non modular products



Kits for modular products

Selection chart Orion Plus IP65 metal enclosures

**Orion Plus
metal enclosures**



metal mounting plate



**Modular chassis
functional uprights**



Consumer Units
and enclosures

enclosures dimensions in mm			modular height	n.° per row	capacity max. in	enclosures		plinth h. 150	mounting plates			internal doors		modular equipment kits
height	width	depth				with plain door	with trans. door		metal plain	perforated	insulated	metal	insulated	
250*	200*	160*	-	-	-	FL 101A*	FL 151A*	-	FL 401A	-	-	FL 541A	-	-
300*	250*	160*	-	-	-	FL 102A*	FL 152A*	-	FL 402A	FL 472A	FL 422A	FL 542A	-	-
300*	300*	160*	-	-	-	FL 103A*	FL 153A*	-	FL 403A	-	-	FL 543A	-	-
350	300	160	300	10	20	FL 104A	FL 154A	-	FL 404A	FL 473A	FL 423A	FL 544A	FL 643A	FL 990A
350	300	200	300	10	20	FL 105A	FL 155A	-	FL 404A	FL 473A	FL 423A	FL 544A	FL 643A	FL 990A
400*	300*	160*	-	-	-	FL 106A*	FL 156A*	-	FL 405A	-	-	FL 545A	-	-
400*	300*	200*	-	-	-	FL 107A*	FL 157A*	-	FL 405A	-	-	FL 545A	-	-
400*	400*	200*	-	-	-	FL 108A*	FL 158A*	-	FL 406A	-	-	FL 546A	-	-
500	300	160	450	10	30	FL 109A	FL 159A	-	FL 407A	FL 474A	FL 424A	FL 547A	FL 644A	FL 991A
500	300	200	450	10	30	FL 110A	FL 160A	-	FL 407A	FL 474A	FL 424A	FL 547A	FL 644A	FL 991A
500	400	160	450	16	48	FL 111A	FL 161A	-	FL 408A	FL 475A	FL 425A	FL 548A	FL 645A	FL 992A
500	400	200	450	16	48	FL 112A	FL 162A	-	FL 408A	FL 475A	FL 425A	FL 548A	FL 645A	FL 992A
500*	500*	200*	-	-	-	FL 113A*	FL 163A*	-	FL 409A	-	-	FL 549A	-	-
600*	400*	200*	-	-	-	FL 114A*	FL 164A*	-	FL 410A	-	-	FL 550A	-	-
600*	400*	250*	-	-	-	FL 115A*	FL 165A*	-	FL 410A	-	-	FL 550A	-	-
600*	600*	250*	-	-	-	FL 116A*	FL 166A*	-	FL 411A	-	-	FL 553A	-	-
650	400	200	600	16	64	FL 117A	FL 167A	-	FL 412A	FL 476A	FL 426A	FL 551A	-	FL 993A
650	400	250	600	16	64	FL 118A	FL 168A	-	FL 412A	FL 476A	FL 426A	FL 551A	-	FL 993A
650	500	200	600	22	88	FL 119A	FL 169A	FL 957A	FL 413A	FL 477A	FL 427A	FL 552A	-	FL 994A
650	500	250	600	22	88	FL 120A	FL 170A	FL 958A	FL 413A	FL 477A	FL 427A	FL 552A	-	FL 994A
800	500	200	750	22	110	FL 121A	FL 171A	FL 957A	FL 414A	FL 478A	FL 428A	FL 554A	-	FL 995A
800	500	250	750	22	110	FL 122A	FL 172A	FL 958A	FL 414A	FL 478A	FL 428A	FL 554A	-	FL 995A
800	600	250	750	26	130	FL 123A	FL 173A	FL 959A	FL 415A	FL 479A	FL 429A	FL 555A	FL 649A	FL 996A
800	600	300	750	26	130	FL 124A	FL 174A	FL 960A	FL 415A	FL 479A	FL 429A	FL 555A	FL 649A	FL 996A
950	600	250	900	26	156	FL 125A	FL 175A	FL 959A	FL 416A	FL 480A	FL 430A	FL 556A	-	FL 997A
950	600	300	900	26	156	FL 126A	FL 176A	FL 960A	FL 416A	FL 480A	FL 430A	FL 556A	-	FL 997A
950	800	250	900	37	222	FL 127A	FL 177A	FL 961A	FL 417A	FL 481A	FL 431A	FL 557A	-	FL 998A
950	800	300	900	37	222	FL 128A	FL 178A	FL 962A	FL 417A	FL 481A	FL 431A	FL 557A	-	FL 998A
1250	600	250	1200	26	208	FL 129A	FL 179A	FL 959A	FL 418A	FL 482A	FL 432A	FL 558A	-	FL 999A
1250	800	300	1200	37	296	FL 130A	FL 180A	FL 962A	FL 419A	FL 483A	FL 433A	FL 559A	-	FL 000A

*in these enclosures plates will only fit on bottom, not on sliding guides

Selection chart Orion Plus IP65 metal enclosures

plain front plates



partial metal mounting plates
fixed or adjustable



DIN rails for
terminals



plain front plates

partial metal plates
fixed

partial metal plates
adjustable

DIN rail
for
terminals

plain front plates				partial metal plates fixed				partial metal plates adjustable				DIN rail for terminals
h.50	h.150	h.200	h.300	h.150	h.200	h.300	h.400	h.150	h. 200	h.300	h.400	
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	FL 711E	-	-	FL 311A	-	-	-	-	-	-	-	-
-	FL 711E	-	-	FL 311A	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	FL 711E	-	-	FL 311A	-	-	-	-	-	-	-	-
-	FL 711E	-	-	FL 311A	-	-	-	-	-	-	-	-
FL 702E	FL 712E	FL 722E	-	FL 312A	FL 322A	-	-	-	-	-	-	FL 500A
FL 702E	FL 712E	FL 722E	-	FL 312A	FL 322A	-	-	-	-	-	-	FL 500A
-	-	-	-	-	-	-	-	-	-	-	-	FL 500A
-	-	-	-	-	-	-	-	-	-	-	-	FL 500A
-	-	-	-	-	-	-	-	-	-	-	-	FL 500A
-	-	-	-	-	-	-	-	-	-	-	-	FL 500A
FL 702E	FL 712E	FL 722E	-	FL 312A	FL 322A	-	-	-	-	-	-	FL 500A
FL 702E	FL 712E	FL 722E	-	FL 312A	FL 322A	-	-	FL 314A	FL 324A	-	-	FL 500A
FL 703E	FL 713E	FL 723E	FL 733E	FL 313A	FL 323A	FL 333A	FL 343A	-	-	-	-	FL 501A
FL 703E	FL 713E	FL 723E	FL 733E	FL 313A	FL 323A	FL 333A	FL 343A	FL 315A	FL 325A	FL 335A	FL 345A	FL 501A
FL 703E	FL 713E	FL 723E	FL 733E	FL 313A	FL 323A	FL 333A	FL 343A	-	-	-	-	FL 501A
FL 703E	FL 713E	FL 723E	FL 733E	FL 313A	FL 323A	FL 333A	FL 343A	FL 315A	FL 325A	FL 335A	FL 345A	FL 501A
FL 704E	FL 714E	FL 724E	FL 734E	-	-	-	-	FL 316A	FL 326A	FL 336A	FL 346A	FL 502A
FL 704E	FL 714E	FL 724E	FL 734E	-	-	-	-	FL 316A	FL 326A	FL 336A	FL 346A	FL 502A
FL 704E	FL 714E	FL 724E	FL 734E	-	-	-	-	FL 316A	FL 326A	FL 336A	FL 346A	FL 502A
FL 704E	FL 714E	FL 724E	FL 734E	-	-	-	-	FL 316A	FL 326A	FL 336A	FL 346A	FL 502A
FL 705E	FL 715E	FL 725E	FL 735E	-	-	-	-	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 705E	FL 715E	FL 725E	FL 735E	-	-	-	-	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 704E	FL 714E	FL 724E	FL 734E	-	-	-	-	FL 316A	FL 326A	FL 336A	FL 346A	FL 502A
FL 705E	FL 715E	FL 725E	FL 735E	-	-	-	-	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A

Selection chart Orion Plus IP65 metal enclosures

Orion Plus metal enclosures



with plain door

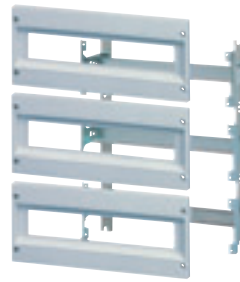
FL102A



with transparent door

FL152A

Modular kit on chassis



FL104A	FL154A	FL980A
FL105A	FL155A	FL980A
FL109A	FL159A	FL981A
FL110A	FL160A	FL981A
FL111A	FL161A	FL982A
FL112A	FL162A	FL982A
FL117A	FL167A	FL983A
FL118A	FL168A	FL983A
FL119A	FL169A	-
FL120A	FL170A	-
FL121A	FL171A	-
FL122A	FL172A	-
FL123A	FL173A	-
FL124A	FL174A	-
FL125A	FL175A	-
FL126A	FL176A	-
FL127A	FL177A	-
FL128A	FL178A	-
FL129A	FL179A	-
FL130A	FL180A	-

Selection chart Orion Plus IP65 polyester enclosures

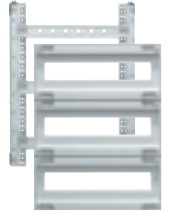
Orion Plus polyester enclosures



metal mounting plate



modular chassis functional uprights



enclosures dimensions in mm			modular height	n.° per row	max. capacity in	enclosures		mounting plates			internal doors		modular equipment kit
height	width	depth				with plain door	with transparent door	metal plain	perforated	insulated	metal plain	insulated	
350	300	160	300	10	20	FL 204B	FL 254B	FL 404A	FL 473A	FL 423A	FL 544A	FL 643A	FL 990A
500	300	200	450	10	30	FL 209B	FL 259B	FL 407A	FL 474A	FL 424A	FL 547A	FL 644A	FL 991A
500	400	200	450	16	48	FL 213B	FL 263B	FL 408A	FL 475A	FL 425A	FL 548A	FL 645A	FL 992A
650	400	200	600	16	64	FL 216B	FL 266B	FL 412A	FL 476A	FL 426A	FL 551A	FL 646A	FL 993A
650	500	250	600	22	88	FL 221B	FL 271B	FL 413A	FL 477A	FL 427A	FL 552A	FL 647A	FL 994A
800	600	300	750	26	130	FL 229B	FL 279B	FL 415A	FL 479A	FL 429A	FL 555A	FL 649A	FL 996A

Enclosures		
with plain door	with transparent door	modular kit on chassis
FL204A	FL254B	FL980A
FL209B	FL259B	FL981A
FL213B	FL263B	FL982A
FL216B	FL266B	FL983A
FL221B	FL271B	-
FL229B	FL279B	-

Selection chart Orion Plus IP 65 polyester enclosures

plain front plates



partial metal mounting plates



DIN rail for terminal



plain front plates				partial metal plates fixed				partial metal plates adjustable				DIN rail for terminals
h.50	h.150	h.200	h.300	h.150	h.200	h.300	h.400	h.150	h.200	h.300	h.400	
-	FL 711E	-	-	FL 311A	-	-	-	-	-	-	-	-
-	FL 711E	-	-	FL 311A	-	-	-	-	-	-	-	-
FL 702E	FL 712E	FL 722E	-	FL 312A	FL 322A	-	-	-	-	-	-	FL 500A
FL 702E	FL 712E	FL 722E	-	FL 312A	FL 322A	-	-	-	-	-	-	FL 500A
FL 703E	FL 713E	FL 723E	FL 733E	FL 313A	FL 323A	FL 333A	FL 343A	-	-	-	-	FL 501A
FL 704E	FL 714E	FL 724E	FL 734E	-	-	-	-	FL 316A	FL 326A	FL 336A	FL 346A	FL 502A

Selection chart Orion Plus IP65 polyester enclosures

polyester enclosures
depth 300 mm
see page 47

Transparent doors

Metal mounting plates



enclosures dimensions in mm

h.	w.	modular height		upper section		lower section		enclosures		Transparent doors		metal mounting plates		
		width	upper	lower	n.° p/row	max. capacity in	n.° p/row	max. capacity in	with plain door	with transparent door	upper part	lower part	plain upper section	lower section
enclosures														
550	600	500	450	-	23	69	-	-	FL 300B	FL 500B	-	-	FL 510E	-
850	600	500	750	-	23	115	-	-	FL 301B	FL 501B	-	-	FL 511E	-
1150	600	500	1050	-	23	161	-	-	FL 302B	FL 502B	-	-	FL 512E	-
550	850	750	450	-	37	111	-	-	FL 305B	FL 505B	-	-	FL 520E	-
850	850	750	750	-	37	185	-	-	FL 306B	FL 506B	-	-	FL 521E	-
1150	850	750	1050	-	37	259	-	-	FL 307B	FL 507B	-	-	FL 522E	-
550*	1100	500+500	450	-	46	138	-	-	FL 310B*	FL 510B*	-	-	FL 530E	-
850*	1100	500+500	750	-	46	230	-	-	FL 311B*	FL 511B*	-	-	FL 531E	-
1150*	1100	500+500	1050	-	46	322	-	-	FL 312B*	FL 512B*	-	-	FL 532E	-
600	600	500	450	-	23	69	-	-	FL 320B	FL 520B	-	-	FL 510E	-
900	600	500	750	-	23	115	-	-	FL 321B	FL 521B	-	-	FL 511E	-
1200	600	500	1050	-	23	161	-	-	FL 322B	FL 522B	-	-	FL 512E	-
600	850	750	450	-	37	111	-	-	FL 325B	FL 525B	-	-	FL 520E	-
900	850	750	750	-	37	185	-	-	FL 326B	FL 526B	-	-	FL 521E	-
1200	850	750	1050	-	37	259	-	-	FL 327B	FL 527B	-	-	FL 522E	-
600*	1100	500+500	450	-	46	138	-	-	FL 330B*	FL 530B*	-	-	FL 530E	-
900*	1100	500+500	750	-	46	230	-	-	FL 331B*	FL 531B*	-	-	FL 531E	-
1200*	1100	500+500	1050	-	46	322	-	-	FL 332B*	FL 532B*	-	-	FL 532E	-
enclosures with 2 sections														
1150	600	500	450	450	23	69	23	69	FL 340B	-	FL 400B	FL 400B	FL 510E	FL 510E
1450	600	500	450	750	23	69	23	115	FL 342B	-	FL 400B	FL 401B	FL 510E	FL 511E
1750	600	500	450	1050	23	69	23	161	FL 344B	-	FL 400B	FL 402B	FL 510E	FL 512E
1750	600	500	750	750	23	115	23	115	FL 346B	-	FL 401B	FL 401B	FL 511E	FL 511E
2050	600	500	750	1050	23	115	23	161	FL 348B	-	FL 401B	FL 402B	FL 511E	FL 512E
1150	850	750	450	450	37	111	37	111	FL 350B	-	FL 405B	FL 405B	FL 520E	FL 520E
1450	850	750	450	750	37	111	37	185	FL 352B	-	FL 405B	FL 406B	FL 520E	FL 521E
1750	850	750	450	1050	37	111	37	259	FL 354B	-	FL 405B	FL 407B	FL 520E	FL 522E
1750	850	750	750	750	37	185	37	185	FL 356B	-	FL 406B	FL 406B	FL 521E	FL 521E
2050	850	750	750	1050	37	185	37	259	FL 358B	-	FL 406B	FL 407B	FL 521E	FL 522E
1150	1100	500+500	450	450	46	138	46	138	FL 360B*	-	FL 410B	FL 410B	FL 530E	FL 530E
1450	1100	500+500	450	750	46	138	46	230	FL 362B*	-	FL 410B	FL 411B	FL 530E	FL 531E
1750	1100	500+500	450	1050	46	138	46	322	FL 364B*	-	FL 410B	FL 412B	FL 530E	FL 532E
1750	1100	500+500	750	750	46	230	46	230	FL 366B*	-	FL 411B	FL 411B	FL 531E	FL 531E
2050	1100	500+500	750	1050	46	230	46	322	FL 368B*	-	FL 411B	FL 412B	FL 531E	FL 532E

Selection chart Orion Plus IP 65 polyester enclosures

**modular chassis
functional uprights**

plain front plates

**partial metal
mounting plates**

DIN rail



mounting plate insulated		internal door metal		Modular kits		Plain front plates				partial metal plates adjustable				DIN rail for terminals
upper section	lower section	upper section	lower section	upper section	lower section	h.50	h.150	h.200	h.300	h.150	h.200	h.300	h.400	
FL 550E	-	FL 590E	-	FL 990B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 551E	-	FL 591E	-	FL 992B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 552E	-	FL 592E	-	FL 994B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 560E	-	FL 600E	-	FL 991B	-	FL 705E	FL 715E	FL 725E	FL 535E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 561E	-	FL 601E	-	FL 993B	-	FL 705E	FL 715E	FL 725E	FL 535E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 562E	-	FL 602E	-	FL 995B	-	FL 705E	FL 715E	FL 725E	FL 535E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 570E	-	2xFL 590E	-	2xFL 990B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 571E	-	2xFL 591E	-	2xFL 992B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 572E	-	2xFL 592E	-	2xFL 994B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 550E	-	FL 590E	-	FL 990B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 551E	-	FL 591E	-	FL 992B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 552E	-	FL 592E	-	FL 994B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 560E	-	FL 600E	-	FL 991B	-	FL 705E	FL 715E	FL 725E	FL 735E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 561E	-	FL 601E	-	FL 993B	-	FL 705E	FL 715E	FL 725E	FL 735E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 562E	-	FL 602E	-	FL 995B	-	FL 705E	FL 715E	FL 725E	FL 735E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 570E	-	2xFL 590E	-	2xFL 990B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 571E	-	2xFL 591E	-	2xFL 992B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 572E	-	2xFL 592E	-	2xFL 994B	-	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 550E	FL 550E	FL 590E	FL 590E	FL 990B	FL 990B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 550E	FL 551E	FL 590E	FL 591E	FL 990B	FL 992B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 550E	FL 552E	FL 590E	FL 592E	FL 990B	FL 994B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 551E	FL 551E	FL 591E	FL 591E	FL 992B	FL 992B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 551E	FL 552E	FL 591E	FL 592E	FL 992B	FL 994B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 560E	FL 560E	FL 600E	FL 600E	FL 991B	FL 991B	FL 705E	FL 715E	FL 725E	FL 735E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 560E	FL 561E	FL 600E	FL 601E	FL 991B	FL 993B	FL 705E	FL 715E	FL 725E	FL 735E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 560E	FL 562E	FL 600E	FL 602E	FL 991B	FL 995B	FL 705E	FL 715E	FL 725E	FL 735E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 561E	FL 561E	FL 601E	FL 601E	FL 993B	FL 993B	FL 705E	FL 715E	FL 725E	FL 735E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 561E	FL 562E	FL 601E	FL 602E	FL 993B	FL 995B	FL 705E	FL 715E	FL 725E	FL 735E	FL 317A	FL 327A	FL 337A	FL 347A	FL 503A
FL 570E	FL 570E	2xFL 590E	2xFL 590E	2xFL 990B	2xFL 990B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 570E	FL 571E	2xFL 590E	2xFL 591E	2xFL 990B	2xFL 992B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 570E	FL 572E	2xFL 590E	2xFL 592E	2xFL 990B	2xFL 994B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 571E	FL 571E	2xFL 591E	2xFL 591E	2xFL 992B	2xFL 992B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E
FL 571E	FL 572E	2xFL 591E	2xFL 592E	2xFL 992B	2xFL 994B	-	FL 710E	-	-	FL 610E	FL 620E	FL 630E	FL 640E	FL 500E

Metal enclosures IP 65 Orion Plus

Sheet metal enclosures with plain or transparent door
 colour RAL 7035
IP 65 / IK 10 with door closed
IP 30 with door open
 insulation class: II
 compliance to IEC 529
 Enclosures delivered with :
 2 removable cable entry plates
 top/bottom, earthings studs on
 enclosure body and door,

easy dismantable hinges to
 reverse the door, plain or
 transparent door with
 1 or 2 locks with triangular
 centre 8mm located on the non
 weatherproof part, mounting
 slides, gasket moulded on the
 door,

Accessories :
 locks, wall fixing brackets,
 metallic or insulated internal
 doors plain or perforated
 metallic mounting plates kits
 for modular equipment

Description	Dimensions	Pack qty.	ref plain door	ref transparent door
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FL113A

Metal enclosures Orion Plus

dimensions in mm:
 H x W x D

250 x 200 x 160	1	FL101A	FL151A
300 x 250 x 160	1	FL102A	FL152A
300 x 300 x 160	1	FL103A	FL153A
350 x 300 x 160	1	FL104A	FL154A
350 x 300 x 200	1	FL105A	FL155A
400 x 300 x 160	1	FL106A	FL156A
400 x 300 x 200	1	FL107A	FL157A
400 x 400 x 200	1	FL108A	FL158A
500 x 300 x 160	1	FL109A	FL159A
500 x 300 x 200	1	FL110A	FL160A
500 x 400 x 160	1	FL111A	FL161A
500 x 400 x 200	1	FL112A	FL162A
500 x 500 x 200	1	FL113A	FL163A
600 x 400 x 200	1	FL114A	FL164A
600 x 400 x 250	1	FL115A	FL165A
600 x 600 x 250	1	FL116A	FL166A
650 x 400 x 200	1	FL117A	FL167A
650 x 400 x 250	1	FL118A	FL168A
650 x 500 x 200	1	FL119A	FL169A
650 x 500 x 250	1	FL120A	FL170A
800 x 500 x 200	1	FL121A	FL171A
800 x 500 x 250	1	FL122A	FL172A
800 x 600 x 250	1	FL123A	FL173A
800 x 600 x 300	1	FL124A	FL174A
950 x 600 x 250	1	FL125A	FL175A
950 x 600 x 300	1	FL126A	FL176A
950 x 800 x 250	1	FL127A	FL177A
950 x 800 x 300	1	FL128A	FL178A
1250 x 600 x 250	1	FL129A	FL179A
1250 x 800 x 300	1	FL130A	FL180A

Description	Dimensions	Pack qty.	Ref.
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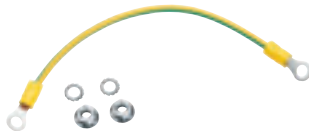

FL958A

Plinth

height 50 mm


for enclosures :
 FL113A, FL119A, FL121A,
 FL163A, FL169A, FL171A

FL120A, FL122A, FL170A, FL172A	1	FL958A
FL116A, FL123A, FL125A, FL129A, FL166A, FL173A, FL175A, FL179A	1	FL959A
FL124A, FL126A, FL174A, FL176A	1	FL960A
FL127A, FL177A	1	FL961A
FL128A, FL130A, FL178A, FL180A	1	FL962A

Description	Characteristics	Qty.	Cat ref.	
	<p>Lock with key to replace existing lock</p>	10	FL96Z	
FL 96Z	<p>Locks set of 2 locks square centre 8 mm, 1 key</p>	10	FL80Z	
	<p>set of 2 locks square centre 6 mm, 1 key</p>	10	FL82Z	
FL 80Z		<p>set of 2 locks triangular centre 8 mm</p>	10	FL93Z
FL 95Z	<p>set of 2 double bit 3 m centre locks</p>	10	FL95Z	
	<p>Set of wall fixing brackets</p>	1	FL85Z	
FL 85Z	<p>metallic</p>			
	<p>Earthing kit for metal enclosures section : 4 mm²</p>	10	FL874A	
FL 874A				
	<p>Vertical association kit (sealstrip + screws)</p>	1	FL670A	
FL 670A				

Polyester enclosures IP 65 Orion Plus

Enclosures with plain or transparent doors
glass reinforced polyester enclosures,
colour RAL 7035
IP 65 / IK 10 with door closed
IP30 with door open

insulation class: IK 07
compliance to IEC 536 

enclosures delivered with :
 plain or transparent door with
1 or 2 locks with triangular
centre 8mm located on the
non weatherproof part
 mounting slides
 gasket moulded on the door



Compliance to standard
IEC 60 695-2-1/0
and 60 695-2-1/1

Accessories :
 locks,
 wall fixing brackets,
 metallic or insulated internal
doors
 plain or perforated metallic
mounting plates,
 kits for modular equipment

For technical information,
see page 68



FL216B

Description	Dimensions	Pack qty.	ref plain door	ref transparent door
Orion Plus polyester enclosures	dimensions in mm: H x W x D			
moulded monobloc structure	350 x 300 x 160	1	FL204B	FL254B
	500 x 300 x 200	1	FL209B	FL259B
	500 x 400 x 200	1	FL213B	FL263B
	650 x 400 x 200	1	FL216B	FL266B
	650 x 500 x 250	1	FL221B	FL271B
	800 x 600 x 300	1	FL229B	FL279B
	1150 x 600 x 300	1	FL302B	FL352B
	1200 x 850 x 300	1	FL327B	FL377B
	1450 x 850 x 300	1	FL352B	FL402B
	1750 x 850 x 300	1	FL354B	FL404B
	2050 x 850 x 300	1	FL368B	FL418B

Description	Dimensions	Pack qty.	Ref.
Lock with key	supplied with 2 keys n.° 427 for enclosures a ≤ 800	10	FL96Z
Locks	set of 2 locks square centre 8 mm	10	FL81Z
	set of 2 locks triangular centre 8 mm	10	FL94Z
	set of 2 locks double bit centre 3 mm	10	FL97Z



FL96Z



FL81Z



FL97Z

Polyester enclosures IP 65 Orion Plus



FL305B



FL320B

Description	Characteristics	upper and lower section height	Pack qty.	ref plain door	ref transparent door
Polyester enclosures	dimensions in mm: H x W x D				
	550 x 600 x 300		1	FL300B	FL500B
	550 x 850 x 300		1	FL305B	FL505B
	550 x 1100 x 300 ⁽¹⁾ *		1	FL310B	FL510B
(1) equipped with double doors	850 x 600 x 300		1	FL301B	FL501B
	850 x 850 x 300		1	FL306B	FL506B
	850 x 1100 x 300 ⁽¹⁾ *		1	FL311B	FL511B
	1150 x 600 x 300		1	FL302B	FL502B
	1150 x 850 x 300		1	FL307B	FL507B
	1150 x 1100 x 300 ⁽¹⁾ *		1	FL312B	FL512B
Polyester enclosures delivered with a 50mm plinth	600 x 600 x 300		1	FL320B	FL520B
	600 x 850 x 300		1	FL325B	FL525B
	600 x 1100 x 300 ⁽¹⁾ *		1	FL330B	FL530B
	900 x 600 x 300		1	FL321B	FL521B
	900 x 850 x 300		1	FL326B	FL526B
	900 x 1100 x 300 ⁽¹⁾ *		1	FL331B	FL531B
(1) equipped with double doors	1200 x 600 x 300		1	FL322B	FL522B
	1200 x 850 x 300		1	FL327B	FL527B
	1200 x 1100 x 300 ⁽¹⁾ *		1	FL332B	FL532B
made of :	1150 x 600 x 300	550+550	1	FL340B	-
- 2 plain door enclosures on top of each other	1150 x 850 x 300	550+550	1	FL350B	-
	1150 x 1100 x 300 ⁽¹⁾ *	550+550	1	FL360B	-
	1450 x 600 x 300	550+850	1	FL342B	-
	1450 x 850 x 300	550+850	1	FL352B	-
	1450 x 1100 x 300 ⁽¹⁾ *	550+850	1	FL362B	-
(1) equipped with double doors	1750 x 600 x 300	550+1150	1	FL344B	-
	1750 x 600 x 300	850+850	1	FL346B	-
	2050 x 600 x 300	850+1150	1	FL348B	-
	1750 x 850 x 300	550+1150	1	FL354B	-
	1750 x 850 x 300	850+850	1	FL356B	-
	2050 x 850 x 300	850+1150	1	FL358B	-
	1750 x 1100 x 300 ⁽¹⁾ *	550+1150	1	FL364B	-
	1750 x 1100 x 300 ⁽¹⁾ *	850+850	1	FL366B	-
	2050 x 1100 x 300 ⁽¹⁾ *	850+1150	1	FL368B	-
Transparent doors	500 x 600		1	-	FL400B
	550 x 850		1	-	FL405B
to replace standard plain doors	550 x 1100		1	-	FL410B⁽¹⁾
	850 x 600		1	-	FL401B
	850 x 850		1	-	FL406B
	850 x 1100		1	-	FL411B⁽¹⁾
(1) double doors	1150 x 600		1	-	FL402B
	1150 x 850		1	-	FL407B
	1150 x 1100		1	-	FL412B⁽¹⁾

Description	Characteristics	Qty.	Ref.
Lock with key	supplied with 2 keys n.° 427	10	FL98Z
Set of M6 nuts	to fix equipment directly on back	100	FZ801
Set of wall fixing brackets	delivered with fixing screws M6 x 12 in insulated material		FL863Z



FL98Z



FZ801



FZ863Z

Accessories for enclosures Orion Plus

<i>Description</i>	<i>Characteristics</i>	<i>Dimensions</i> <i>h. x w. in mm</i>	<i>Qty.</i>	<i>Ref.</i>
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FL408A

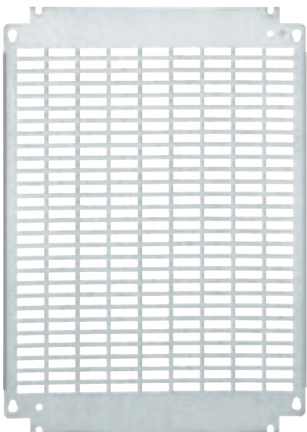
Plain mounting plates

sheet metal thickness 2 mm,
delivered with fixing screws

mounting:

- directly on the back of the enclosures,
- on the integrated slides with brackets FL450A to adjust depth

FL101A, FL151A	230 x 143	1	FL401A
FL102A, FL152A	280 x 193	1	FL402A
FL103A, FL153A	280 x 243	1	FL403A
FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	330 x 243	1	FL404A
FL106A, FL107A, FL156A, FL157A	380 x 243	1	FL405A
FL108A, FL158A	380 x 343	1	FL406A
FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	480 x 243	1	FL407A
FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	480 x 343	1	FL408A
FL300B, FL500B, FL320B, FL520B	480 x 493	1	FL510E
FL305B, FL505B, FL325B, FL525B	480 x 743	1	FL520E
FL310B, FL510B, FL330B, FL530B	480 x 993	1	FL530E
FL113A, FL163A	480 x 443	1	FL409A
FL114A, FL115A, FL164A, FL165A	580 x 343	1	FL410A
FL116A, FL166A	580 x 543	1	FL411A
FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	630 x 343	1	FL412A
FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	630 x 443	1	FL413A
FL121A, FL122A, FL171A, FL172A	780 x 443	1	FL414A
FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	780 x 543	1	FL415A
FL301B, FL501B, FL321B, FL521B	780 x 493	1	FL511E
FL306B, FL506B, FL326B, FL526B	780 x 743	1	FL521E
FL311B, FL511B, FL331B, FL531B	780 x 993	1	FL531E
FL302B, FL502B, FL322B, FL522B	1080 x 493	1	FL512E
FL307B, FL507B, FL327B, FL527B	1080 x 793	1	FL522E
FL312B, FL512B, FL332B, FL532B	1080 x 993	1	FL532E
FL125A, FL126A, FL175A, FL176A	930 x 543	1	FL416A
FL127A, FL128A, FL177A, FL178A	930 x 743	1	FL417A
FL129A, FL179A	1230 x 543	1	FL418A
FL130A, FL180A	1230 x 743	1	FL419A



FL475A

Perforated mounting plates,

sheet metal thickness 2mm,
delivered with fixing screws

mounting:

- directly on the back of the enclosures
- on the integrated slides with brackets FL450A to adjust depth
- use clip with screw UC969 to fix equipment on the mounting plate.

FL102A, FL152A	280 x 193	1	FL472A
FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	330 x 243	1	FL473A
FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	480 x 243	1	FL474A
FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	480 x 343	1	FL475A
FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	630 x 343	1	FL476A
FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	630 x 443	1	FL477A
FL121A, FL122A, FL171A, FL172A	780 x 443	1	FL478A
FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	780 x 543	1	FL479A
FL125A, FL126A, FL175A, FL176A	930 x 543	1	FL480A
FL127A, FL128A, FL177A, FL178A	930 x 743	1	FL481A
FL129A, FL179A	1230 x 543	1	FL482A
FL130A, FL180A	1230 x 743	1	FL483A

Accessories for enclosures Orion Plus



FL427A

<i>Description</i>	<i>Characteristics</i>	<i>Dimensions h. x w. in mm</i>	<i>Qty.</i>	<i>Ref.</i>
Insulated mounting plates	FL102A, FL152A	235 x 195	1	FL422A
insulating material, delivered with fixing screws	FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	285 x 245	1	FL423A
mounting: <input type="checkbox"/> directly on the back of the enclosures, <input type="checkbox"/> on the integrated slides with brackets FL450A to adjust depth	FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	435 x 245	1	FL424A
	FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	435 x 345	1	FL425A
	FL300B, FL500B, FL320B, FL520B	435 x 495	1	FL550E
	FL305B, FL505B, FL325B, FL525B	435 x 745	1	FL560E
	FL310B, FL510B, FL330B, FL530B	435 x 995	1	FL570E
	FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	585 x 345	1	FL426A
	FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	585 x 345	1	FL427A
	FL121A, FL122A, FL171A, FL172A	735 x 445	1	FL428A
	FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	735 x 545	1	FL429A
	FL301B, FL501B, FL312B, FL512B	735 x 495	1	FL551E
	FL306B, FL506B, FL326B, FL526B	735 x 745	1	FL561E
	FL311B, FL511B, FL331B, FL531B	735 x 995	1	FL571E
	FL302B, FL502B, FL322B, FL522B	1035 x 745	1	FL552E
	FL307B, FL507B, FL327B, FL527B	1035 x 745	1	FL562E
	FL312B, FL512B, FL332B, FL532B	1035 x 995	1	FL572E
	FL125A, FL126A, FL175A, FL176A	885 x 545	1	FL430A
	FL127A, FL128A, FL177A, FL178A	885 x 745	1	FL431A
	FL129A, FL179A	1185 x 545	1	FL432A
	FL130A, FL180A	1185 x 745	1	FL433A



UC969

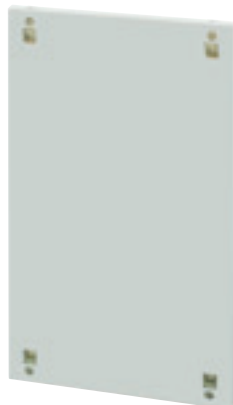
Clip nut screw M5 for perforated mounting plates	1 set = 25 pieces		1	UC969
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Accessories for enclosures Orion Plus



FL552A

<i>Description</i>	<i>Characteristics</i>	<i>Qty.</i>	<i>Ref.</i>
Internal doors, sheet metal reversible delivered with fixing accessories mounting on slides with delivered fixing frame	FL101A, FL151A	1	FL541A
	FL102A, FL152A	1	FL542A
	FL103A, FL153A	1	FL543A
	FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	1	FL544A
	FL106A, FL107A, FL156A, FL157A	1	FL545A
	FL108A, FL158A	1	FL546A
	FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	1	FL547A
	FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	1	FL548A
	FL300B, FL500B, FL310B, FL510B, FL320B, FL520B, FL330B, FL530B	1	FL590E
	FL305B, FL505B, FL325B, FL525B	1	FL600E
	FL113A, FL163A, FL114A, FL115A, FL164A, FL165A	1	FL549A
	FL114A, FL115A, FL164A, FL165A	1	FL550A
	FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	1	FL551A
	FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	1	FL552A
	FL116A, FL166A	1	FL553A
	FL121A, FL122A, FL171A, FL172A	1	FL554A
	FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	1	FL555A
	FL301B, FL501B, FL311B, FL511B, FL321B, FL521B, FL331B, FL531B	1	FL591E
	FL306B, FL506B, FL326B, FL526B	1	FL601E
	FL302B, FL502B, FL312B, FL512B, FL322B, FL522B, FL332B, FL532B	1	FL592E
	FL307B, FL507B, FL327B, FL527B	1	FL602E
	FL125A, FL126A, FL175A, FL176A	1	FL556A
	FL127A, FL128A, FL177A, FL178A	1	FL557A
	FL129A, FL179A	1	FL558A
	FL130A, FL180A	1	FL559A




















FL643A

Internal doors, polyester reversible delivered with fixing accessories mounting on slides with delivered fixing frame	FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	1	FL643A
	FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	1	FL644A
	FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	1	FL645A
	FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	1	FL646A
	FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	1	FL647A
	FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	1	FL649A





Accessories for enclosures Orion Plus




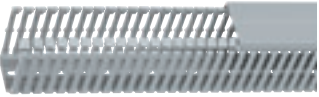






FL990A

Description	Characteristics	Qty.	Ref.
Equipment kits	FL204B, FL254B	1	FL990A
for modular products	FL104A, FL105A, FL154A, FL155A	2 rows (20 )	1 FL990A
mounting on functional uprights made of :	FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	3 rows (30 )	1 FL991A
- fixing frame	FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	3 rows (48 )	1 FL992A
- 2 functional uprights for DIN rails	FL300B, FL500B, FL320B, FL520B	3 rows (69 )	1 FL990B
- 2 uprights to fix DIN rails	FL305B, FL505B, FL325B, FL525B	3 rows (111 )	1 FL991B
- DIN rails	FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	4 rows (64 )	1 FL993A
- front plates with modular cut out h.150 mm	FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	4 rows (88 )	1 FL994A
	FL121A, FL122A, FL171A, FL172A	5 rows (110 )	1 FL995A
	FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	5 rows (130 )	1 FL996A
	FL301B, FL501B, FL321B, FL521B	5 rows (115 )	1 FL992B
	FL306B, FL506B, FL326B, FL526B	5 rows (185 )	1 FL993B
	FL125A, FL126A, FL175A, FL176A	6 rows (156 )	1 FL997A
	FL127A, FL128A, FL177A, FL178A	6 rows (222 )	1 FL998A
	FL302B, FL502B, FL322B, FL522B,	7 rows (161 )	1 FL994B
	FL307B, FL507B, FL327B, FL527B	7 rows (259 )	1 FL995B
	FL129A, FL179A	8 rows (208 )	1 FL199A
	FL130A, FL180A	8 rows (296 )	1 FL000A
Kit for modular devices H200	for kits:	width:	
	FL992A, FL993A	400	1 FL366A
	FL994A, FL995A	500	1 FL367A
	FL996A, FL997A, FL999A	600	1 FL368A
	FL991A, FL993A, FL995A, FL998A, FL000A	800	1 FL369A
Kit for main incomer H125/H160A (modular)	width:	height:	
	400	300	1 FL371A
	500	300	1 FL372A
	600	300	1 FL373A
	800	300	1 FL374A
Kit for main incomer H250	width:	height:	
	600	200	1 FL380A
	800	200	1 FL381A
	300	500	1 FL391A
	400	500	1 FL392A
	400	650	1 FL393A
Kit for main incomer H400A/H630	width:	height:	
	400	650	1 FL399A

Accessories for enclosures Orion Plus

	Description	Characteristics	Qty.	Ref.	
 FL323A	Fixed partial mounting plates mounting on functional uprights	for kits:			
		FL 990A, FL 991A	width: 300 mm	height : 150 mm	1
		FL 992A, FL 993A	400 mm	150 mm	1
				200 mm	1
		FL 994A, FL 995A	500 mm	150 mm	1
 FL325A	Fixed partial mounting plates mounting on functional uprights	for kits:			
		FL 993A	width: 400 mm	height: 150 mm	1
				200 mm	1
		FL 994A, FL 995A	500 mm	150 mm	1
				200 mm	1
				300 mm	1
				400 mm	1
		FL 996A, FL 997A, FL 999A	600 mm	150 mm	1
				200 mm	1
				300 mm	1
				400 mm	1
		FL 990B, FL 992B, FL 994B	600 mm	150 mm	1
				200 mm	1
				300 mm	1
				400 mm	1
 FL712E	Plain front plate fixed by screws of 1/4 turn to replace modular covers	height 50 mm for kits :			
		FL 992A, FL 993A		1	
		FL 994A, FL 995A		1	
		FL 996A, FL 997A, FL 999A		1	
		FL 998A, FL 000A, FL 991B, FL 993B, FL 995B		1	
		height 150 mm			
		FL 990B, FL 992B, FL 994B		1	
		FL 990A, FL 991A, FL 990C		1	
		FL 992A, FL 993A		1	
		FL 994A, FL 995A		1	
FL 996A, FL 997A, FL 999A		1			
FL 998A, FL 000A, FL 991B, FL 993B, FL 995B		1			
height 200 mm					
FL 992A, FL 993A		1			
FL 994A, FL 995A		1			
FL 996A, FL 997A, FL 999A		1			
FL 998A, FL 000A, FL 991B, FL 993B, FL 995A		1			
height 300 mm					
FL 994A, FL 995A		1			
FL 996A, FL 997A, FL 999A		1			
FL 998A, FL 000A, FL 991B, FL 993B, FL 995B		1			
 FL501A	Plain front plate fixed by screws of 1/4 turn to replace modular covers	for kits:			
		FL 992A, FL 993A		1	
		FL 994A, FL 995A		1	
		FL 996A, FL 997A, FL 999A		1	
		FL 998A, FL 000A, FL 991B, FL 993B, FL 995B		1	
FL 990B, FL 992B, FL 994B		1			
Support for earth and neutral terminals	for enclosures	width:			
		300 mm		FL492A	
		400 mm		FL493A	
		500 mm		FL494A	
		600 mm		FL495A	
800 mm		FL496A			

Accessories for enclosures Orion Plus

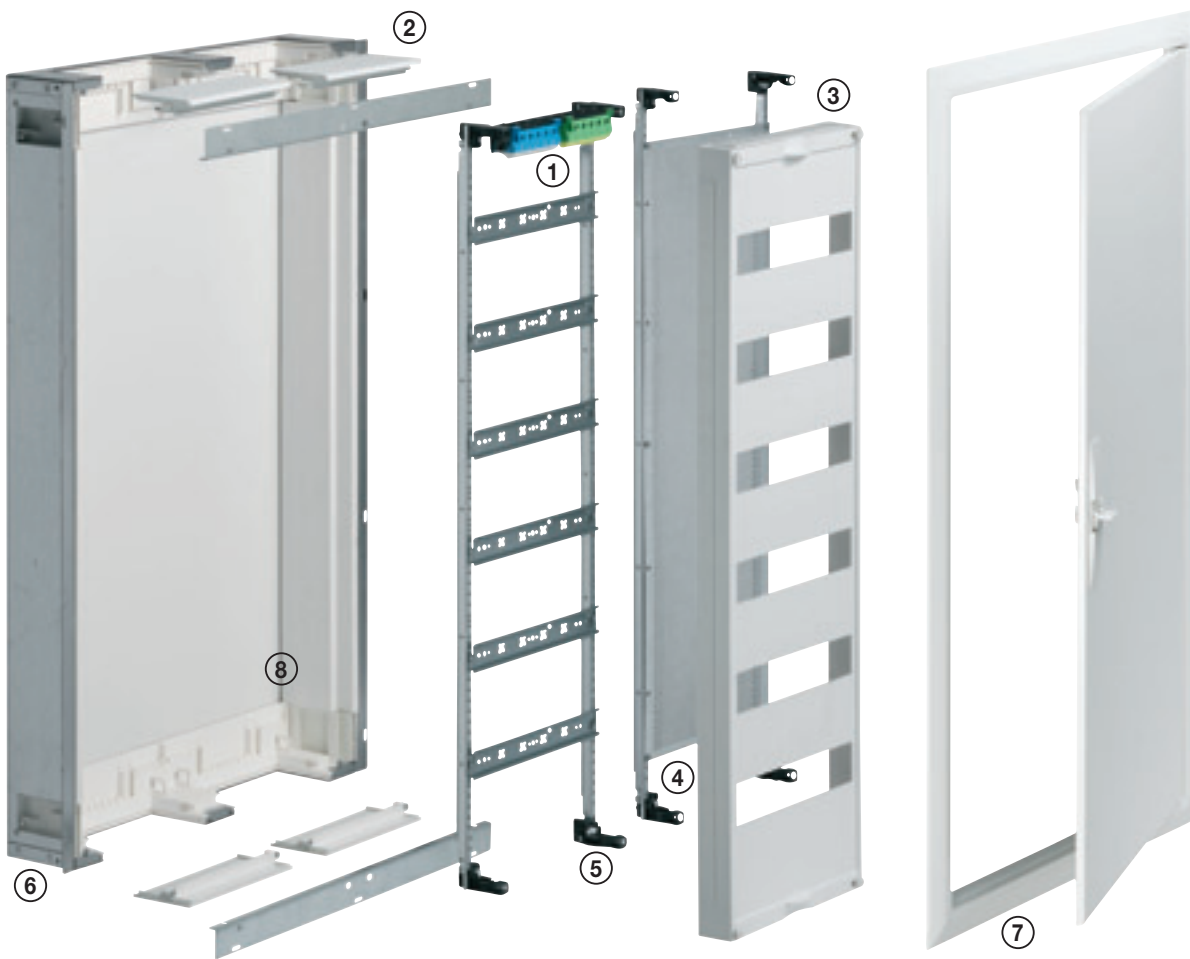
	Description	Characteristics	Qty.	Ref.
	Brackets Assembly being carried out in the guides of slips to control depth.	4 brackets delivered with fixing screws	1	FL450A
FL450A				
	Slotted cable duct horizontal and vertical	w x d 25 x 60 mm 40 x 60 mm	length. 2m length. 2m	2 2
FL70Z				FL70Z FL71Z
	Cable guide fixing with UZ 01V1	section 2200 mm ² section 1600 mm ²	1 set 1 set	UZ25V1 UZ25V2
	Fixing bracket for cable guide	clips on rail 1 set = 20 pieces	1 set	UZ01V1
UZ25V1 UZ25V2				
	Blanking clip	pre-cut to 1/2 ■ RAL 7035	width. 4 ■ 6	FL871Z
	Label holder for front plates	- label holder - label	width. 24 ■	JE003
	Ventilating fan for enclosures reinforced polyamide colour RAL 7035 / IP54 supply 230V	20W rotation/mín. 2650/3000 airflow 57m ³ /h w. 150 x h. 150 x d. 71 mm	1	FL210Z
FL212Z		20W rotation/mín. 2650/3000 airflow 115m ³ /h w. 250 x h. 250 x d. 113 mm	1	FL212Z
	Air vent with filter IP54 colour RAL7035	29W rotation/mín. 2500 airflow 240m ³ /h w. 250 x h. 250 x d. 121 mm	1	FL214Z
FL220Z		67W rotation/mín. 2480/2650 airflow 520m ³ /h w. 325 x h. 325 x d. 161 mm	1	FL216Z
	Filter	dimensions: w. 150 x h. 150 x d. 28 mm w. 250 x h. 250 x d. 31 mm	1 1	FL220Z FL224Z
	Heater supply	30W 80W 150W	1 1 1	FL230Z FL234Z FL253Z FL255Z FL256Z
FL253Z				
	Thermostat to control temperature in the enclosure, changeover contact	fixing on DIN rail settings -10° to 80° C w. 29 x h. 68 x d. 45 mm	1	FL258Z
FL258Z		to control condensation contact NC	1	FL258Z
	Spray paint	colour RAL 7035	1	FL259Z FL672Z
FL672Z				

FW Flush Cabinets

In house building today, more and more is expected from electrical distribution systems. Media such as computer, telephone, Internet etc., are closely growing together. The new FW Flush Cabinets from Hager offer reliability and flexibility in that they are ideal for housing domestic consumer units as well as home automation or multimedia equipment (See Hager Media Hub chapter, Page 471).

This is why installers see the increase in the demand for fitting additional devices such as modems or TV equipment in the distribution board. The FW Cabinets allow for the fitting of such devices by way of a mounting plate which comes with or can be fitted into the board.

Cable entries on the top and bottom, transparent doors optional.



Key features:

- Recess depth of only 110mm
- For devices up to 125A
- Complete boards come with door, DIN Rail chassis and shock protective cover
- Mounting plate (accessories) for fitting of communication / multimedia equipment
- Delivered with an earth Quick Connect Terminal, to order more terminals see page 348 [QuickConnect](#)
- Cable entries top and bottom
- Flat trimming frames
- Integrated cable rails

Technical Data:

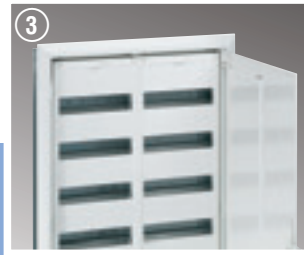
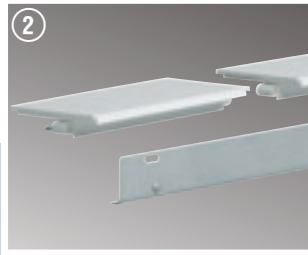
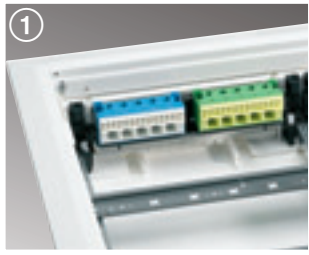
- | | |
|---------------------------------|--|
| Mounting: | Flush |
| IP Rating | IP 30 |
| Dimension | Width: 300-1050 mm, 1 to 4 fields
Height: 500-1100 mm, 3 to 7 rows
Depth: 110 mm |
| Protection Class | II |
| Material: | Steel |
| Colour: | Pure white, RAL 9010 |
| Outer surface: | Powder coated |
| Type of door catch: | Twist release lock |
| Number of module spaces: | 36 - 288 ■ |

QuickConnect

Quick connect terminals: standard with complete boards

Cable entry plates top and bottom, plastic, for feeding cables in from the front.

3 to 7 Rows
1 to 4 Fields
Total of 17 references
36 to 288 mod



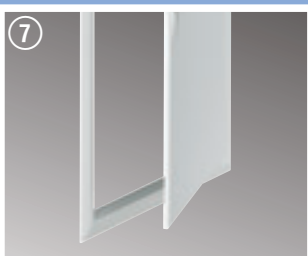
compatible for new media slotted mounting plates for fitting of additional devices e.g. modem, TV equipment etc.



DIN Rail kits singly detachable



Integrated cable rails top and bottom



Trimming frames with door packed separately, flat trimming frames with flush differential of <12mm



Compact: only 110mm recess depth
A robust, galvanised steel wall cabinet; recess depth 110mm, galvanised steel mounting brackets as standard.

Tips for-professionals

FW Flush Cabinets IP Rating IP30, Protection Class II, 110mm recess depth

Complete FW Flush Cabinet

- for devices up to 125A
- Complete boards come with door, DIN Rail chassis and shock protective cover
- Quick Connect Terminals for ease and safety



- Cable entries top and bottom
- Flat trimming frames

- Integrated Cable Rails
- Depth 110 mm

Complies with Standard:
EN 60439-3



FW62US2

Description	Height (mm)	Width (mm)	PE/N Terminals	Fields	Rows	Modules	Pack qty	Cat. ref.
FW Flush Cabinet with PE/N terminals per field DIN Rail 35 x 7.5mm 125mm gap	500	300	2 x 17	1	3	36	1	FW31US2
		550	2 x 17	2	3	72	1	FW32US2
		800	2 x 17	3	3	108	1	FW33US2
	650	300	2 x 22	1	4	48	1	FW41US2
		550	2 x 22	2	4	96	1	FW42US2
		800	2 x 22	3	4	144	1	FW43US2
	800	300	2 x 25	1	5	60	1	FW51US2
		550	2 x 25	2	5	120	1	FW52US2
		800	2 x 25	3	5	180	1	FW53US2
		1050	2 x 25	4	5	240	1	FW54US2
	950	300	2 x 25	1	6	72	1	FW61US2
		550	2 x 25	2	6	144	1	FW62US2
		800	2 x 25	3	6	216	1	FW63US2
		1150	2 x 25	4	6	288	1	FW64US2
	1100	300	2 x 25	1	7	84	1	FW71US2
		550	2 x 25	2	7	168	1	FW72US2
		800	2 x 25	3	7	252	1	FW73US2

FW Flush Cabinet empty, with trimming frames and door (without fitting grid), IP Rating IP30, Protection Class II, 110mm recess depth

Empty cabinet

- For devices up to 125A
- With trimming frames and doors, without fitting grid and cover
- Quick Connect Terminals

- Cable entries top and bottom
- Flat trimming frames
- Integrated cable rails

Complies with Standard:
EN 60439-3



see page 348 to order spares



FW62UD1

Description	Height (mm)	Width (mm)	Fields	Rows	Pack qty	Cat. ref.
Empty flush distribution board with trimming frames and doors, without backplates or covers	500	300	1	3	1	FW31UD2
		550	2	3	1	FW32UD2
		800	3	3	1	FW33UD2
	650	300	1	4	1	FW41UD2
		550	2	4	1	FW42UD2
		800	3	4	1	FW43UD2
	800	300	1	5	1	FW51UD2
		550	2	5	1	FW52UD2
		800	3	5	1	FW53UD2
		1050	4	5	1	FW54UD2
	950	300	1	6	1	FW61UD2
		550	2	6	1	FW62UD2
		800	3	6	1	FW63UD2
		1150	4	6	1	FW64UD2
	1100	300	1	7	1	FW71UD2
		550	2	7	1	FW72UD2
		800	3	7	1	FW73UD2

FW metal surface cabinets IP43

distribution enclosures
 - extra slim depth 160 mm
 - insulation class: II - IP43

3 to 6 rows, 1 to 7 sections,
 from 36 to 336 ■
 for distribution < 125A in
 commercial installations
 for modular devices on DIN rails,
 max. depth 96 mm, shoulder
 measur. 47 mm

ingress protection:
 IP43 to IEC 529

class II , additional internal
 insulation by polystyrene plates
 (P.S.), glow wire test 960°C
 extinguishing = 5 sec.

rated insulated voltage :
 Ui : 400 V ~
 In : 125A – three phase 380V ~

- enclosure manufactured from
 sheet metal
 - colour RAL 9002
 - polyester front covers width
 1 section
 - 12 modules per row
 - 125 mm between DIN rails
 - 63 A connection assembly
 with earth and neutral bar in
 each section

options :
 - trimming frame
 - lock with key
 - separators
 - connection assembly TP+N
 63A
 - sealing kit

□ For technical information,
 see page 73

<i>Description</i>	<i>width x depth</i>	<i>Number of sections</i>	<i>Pack qty</i>	<i>Cat ref.</i>
Height 500 mm				
1 x 3 rows, 36 ■	300 x 160 mm	1	1	FWB31
2 x 3 rows, 72 ■	550 x 160 mm	2	1	FWB32
3 x 3 rows, 108 ■	800 x 160 mm	3	1	FWB33
4 x 3 rows, 144 ■	1050 x 160 mm	4	1	FWB34
Height 650 mm				
1 x 4 rows, 48 ■	300 x 160 mm	1	1	FWB41
2 x 4 rows, 96 ■	550 x 160 mm	2	1	FWB42
3 x 4 rows, 144 ■	800 x 160 mm	3	1	FWB43
4 X 4 rows, 192 ■	1050 x 160 mm	4	1	FWB44
Height 800 mm				
1 x 5 rows, 60 ■	300 x 160 mm	1	1	FWB51
2 x 5 rows, 120 ■	550 x 160 mm	2	1	FWB52
3 x 5 rows, 180 ■	800 x 160 mm	3	1	FWB53
4 x 5 rows, 240 ■	1050 x 160 mm	4	1	FWB54
Height 950 mm				
1 x 6 rows, 72 ■	300 x 160 mm	1	1	FWB61
2 x 6 rows, 144 ■	550 x 160 mm	2	1	FWB62
3 x 6 rows, 216 ■	800 x 160 mm	3	1	FWB63
4 x 6 rows, 288 ■	1050 x 160 mm	4	1	FWB64
Height 1100 mm				
1 x 7 rows, 84 ■	300 x 160 mm	1	1	FWB71
2 x 7 rows, 168 ■	550 x 160 mm	2	1	FWB72
3 x 7 rows, 252 ■	800 x 160 mm	3	1	FWB73
4 x 7 rows, 336 ■	1050 x 160 mm	4	1	FWB74









FW31

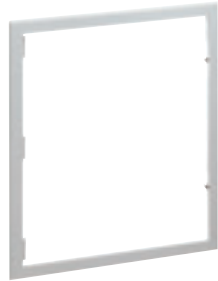


FW42



FW63

	Description	Characteristics	Pack qty	Cat ref.
 F010	Connection assembly TP + N 63A to be fitted on the uprights of the 1 section wide chassis	3 x (1 x 25 + 2 x 16 + 3 x 10) N : 1 X 25 + 3 X 16 + 7 X 10	1	F010
 UT22B	Lowered DIN rail lowered by 21 mm for terminals or devices bigger than 47 mm with a shoulder measurement = 68 mm	width 1 section of 12 ■	1	UT22B
 FZ403	Cable entry plate replacement		1	FZ403
 FZ597	Lock	with 2 keys, for retrofitting	1	FZ597
 FZ598	Plastic lock replacement	with 2 keys, for retrofitting	1	FZ598
 FZ104	Transparent door only for 2 sections enclosures width 550 mm	for enclosures FW 42 FW 52	1 1	FZ104 FZ106
	Blanking	strip of 12 ■ with modules premarked	10	S35S
		strip of 18 ■ ,lockable premarked for 10, 12 and 18 ■	10	JP015
	Separators	vertical, for enclosure height:		
		500 mm	1	UT44A
		650 mm	1	UT44B
		800 mm	1	UT44C
		950 mm	1	UT44D
	to separate internally either sections (vertical) or rows (horizontal)	horizontal, width 1 section	1	UT44E

	Description	Height	Width	Section	Cat ref.		
 FZ307	Trimming frame for flush mounting adjustment to level of plaster surface : 45 mm max.	500		300 FW31	FZ301		
				550 FW32	FZ302		
				800 FW33	FZ303		
				1050 FW34	FZ304		
		650		300 FW41	FZ306		
				550 FW42	FZ307		
				800 FW43	FZ308		
				1050 FW44	FZ309		
		800		300 FW51	FZ311		
				550 FW52	FZ312		
				800 FW53	FZ313		
				1050 FW54	FZ314		
				950		300 FW61	FZ316
						550 FW62	FZ317
800 FW63	FZ318						
			1050 FW64	FZ319			



UN61TN

<i>Description</i>	<i>Height (mm)</i>	<i>Width (mm)</i>	<i>Pack qty</i>	<i>Cat. ref.</i>
Pre-drilled mounting plate	470	265	1	UN31TN
	610	265	1	UN41TN
	760	265	1	UN51TN
	60	265	1	UN61TN
	1060	260	1	UN71TN
	475	475	1	UN32TN
	605	515	1	UN42TN
	754	513	1	UN52TN
	60	510	1	UN62TN
	1065	520	1	UN72TN



UN03GN



US31A3



UT44AN



UT44EN



UZ04A1

UZ05A1



UZ03A1




UZ01A2


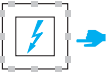


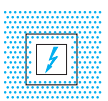

Description	Height (mm)	Width (mm)	Fields	Rows	Modules	Pack qty	Cat. ref.
Modular devices field 125mm gap without cover	450	250	1	3	36	1	UN03GN
	600	250	1	4	48	1	UN04GN
	750	250	1	5	60	1	UN05GN
	900	250	1	6	72	1	UN06GN
	1050	250	1	7	84	1	UN07GN
Slotted cover 125mm row gap for modular device field	450	250	1	3	36	1	US31A3
	600	250	1	4	48	1	US41A5
	750	250	1	5	60	1	US51A5
	900	250	1	6	72	1	US61A5
Closed cover	300	250	1	2	24	1	US21A1
	450	250	1	3	36	1	US31A1
	600	250	1	4	48	1	US41A1
	750	25	1	5	60	1	US51A1
Partition vertical	Cabinet height in mm						
	500					1	UT44AN
	600					1	UT44BN
	800					1	UT44CN
Partition horizontal	Cabinet height in mm						
	250					1	UT44EN
Depth adjustment over 12mm - max. 32 mm						1 Set	FZ279
Hollow wall mounting kit						1 Set	FZ276
Cable entry sliders						1	FZ277
Double pillar with screw						1	UZ04A1
Top pillar overpart						1 Set = 4 pcs	UZ05A1
Pillar, bottom part with snap fastener, 1 x left and 1 x right						1	UZ03A1
Pillar top part						1	UZ01A2
Original Door Lock						1	FZ598

the Ingress Protection (IP) for all low voltage enclosures up to 1000 V a.c. and 1500 V d.c. is defined in identical fashion by the standards EN 60529 - IEC 529 it comprises the letters IP followed by two character numerals:


The first character numeral

indicates the degree of protection provided by the enclosure with respect to persons, also to the equipment inside the enclosure

 **The first character numeral:** protection against solid substances

IP	désignation
0	non-protected
1	protected against solid objects greater than 50 mm 
2	protected against solid objects greater than 12,5 mm 
3	protected against solid objects greater than 2,5 mm 
4	protected against solid objects greater than 1,0 mm 
5	dust-protected 
6	dust-tight 


code IK: protection against mechanical shocks





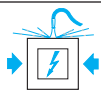
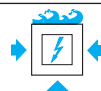
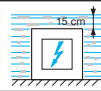
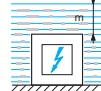
 code IK according to EN 50-102 (new designation)


code IK	shock energy
00	non-protected
01	0,15 joule
02	0,2 joule
03	0,35 joule
04	0,5 joule
05	0,7 joule
06	1 joule
07	2 joules
08	5 joules
09	10 joules
10	20 joules

The second character numeral


indicates the degree of protection provided by the enclosure with respect to harmful ingress of water; a third character may be used to indicate mechanical strength. An x signifies that no test has been carried out

 **The second character numeral:** protection against liquid substances

IP	désignation
	non-protected
1	protected against dripping water 
2	protected against dripping water when titled up to 15° 
3	protected against spraying water 
4	protected against splashing water 
5	protected against water jets 
6	protected against heavy seas 
7	protected against the effect of immersion 
8	protected against submersion 

 **additional letter (in option)** protection of people against access to dangerous parts

	designation
A	protected against access of the back of the hand
B	protected against access of a finger
C	protected against access of a tool - Ø 2,5 mm
D	protected against access of a tool - Ø 1 mm

 **additional letter (in option)** specific information on the product

	designation
H	high voltage material
M	movements during water test
S	stationary during water test
W	bad weather

Consumer Units & Distribution Boards

As you might expect, consideration has been given to the design of the enclosure to accommodate the range of MCB and RCD devices which are suitable for use in domestic or similar installations, or generally in installations where unskilled persons have access to their use. This, as it happens, describes the European Standard covering the requirements of LV Distribution Boards suitable for this application.

The full title is:

EN 60439-3

Specification for low voltage switchgear and control switchgear assemblies. Part 3. Particular requirements for low-voltage switchgear and control gear assemblies intended to be installed in places where unskilled persons have access to their use - Distribution boards

This standard covers the supplementary requirements for enclosure distribution boards suitable for indoor use containing protective devices and intended for use either in domestic applications or in other places where unskilled persons have access for their use, Control and/or signalling devices may also be included.

They are for use on ac, with a nominal voltage to earth not exceeding 300V. The outgoing circuits contain short circuit protection devices, each having a rated current not exceeding 125A with a total incoming load current not exceeding 250A.

Customer Distribution Boards which are generally known in Ireland as Consumer Units are also included in this Standard. The additional test requirements are set out in annex ZA which calls for the assembly to withstand a short-circuit fault of 16kA when protected by a 100A specified fuse.

By definition a customer distribution board or consumer unit is an integrated assembly, for the control and distribution of electrical energy, principally in domestic installations, incorporating manual means of double pole isolation in the incoming circuits, and are designed for use exclusively with one or more of the following outgoing circuit protective devices: fuses, MCB's and RCBO's. The units may also incorporate RCD's. Polarity must be observed throughout and the consumer unit is type tested when energised through a 100A type II fuse complying with BS1361. The rated current of a consumer unit is determined by the rated current of the incoming protective device, usually 63A, 80A or 100A, the rated current of the incoming device(s) is limited to 100A.

As there are no diversity factors applied to consumer units, the incoming circuit and the bus-bar system must be able to carry their full rated current without exceeding the temperature rise limits.

Panelboards

The idea of group mounting MCCBs or MCBs on to a vertical three phase bus-bar system came from North America during the 1960s, where it had been used very effectively for a number of years. The design takes advantage of the modular dimensions of the circuit breakers which, together with the simple bus-bar system, proved to be very economical and safe. The basic design philosophy behind the panelboard is to provide a three phase distribution board capable of accommodating MCCBs, which is simple to specify, manufacture and install, and can be made available "off the shelf" or on a very short delivery cycle.

Generally installed for commercial and light industrial application the panelboard is, however, used in many different types of applications.

Panelboards are covered by the European Standard for Low-voltage Switchgear and Control Gear Assemblies EN 60439 Part 1, which is the specification for type-tested and partially type-tested assemblies (general requirements).

Panelboards are usually type-tested assemblies but, unlike consumer units and distribution boards, they do not, as yet, have their own particular standard, so care must be taken in their selection and application. It is important that the system designer understands, and is able to use, the technical information that the manufacturer is required to publish regarding the panelboard. Most of the information is straightforward and presents little problem, except perhaps for internal separation (Form numbers), degree of protection (IP rating) and short-circuit withstand strength.

Internal Separation

The internal separation of assemblies is described in the European Standard EN 60439 and is concerned with three requirements which can be met by the suitable arrangement of barriers or partitions.

- Protection against contact with live parts belonging to adjacent functional units.
- Limitation of the possibility of initiating and spreading of arcing faults.
- Prevention of the passage of solid foreign bodies from one unit of an assembly to an adjacent unit.

Form numbers are given to some typical forms of separation -

Form 1 - no separation

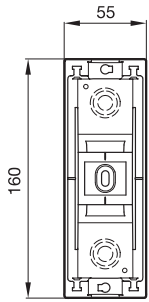
Form 2 - separation of bus-bars from the functional units

Form 3 - separation of bus-bars from the functional units and separation of all functional units from one another, but not their outgoing terminals.

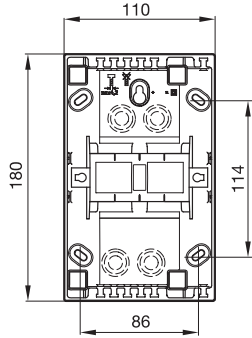
Form 4 - separation of bus-bars from the functional units and separation of all functional units from one another including their outgoing terminals.

Mini Gamma enclosures

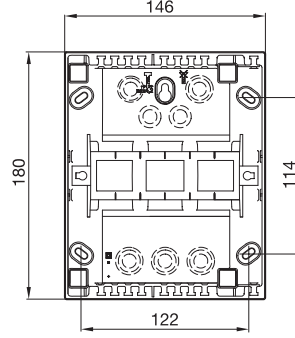
GD102N



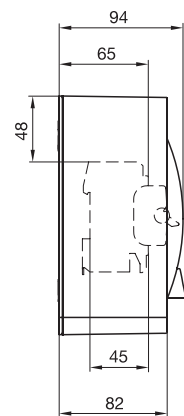
GD104N



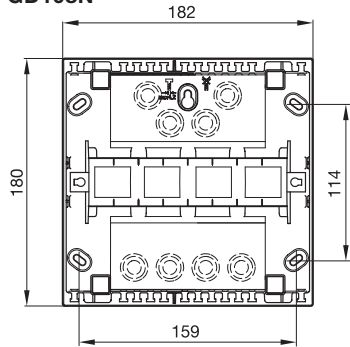
GD106N



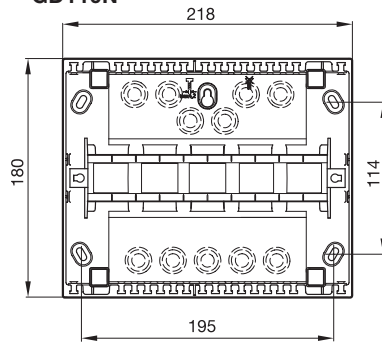
GD104N bis GD110N



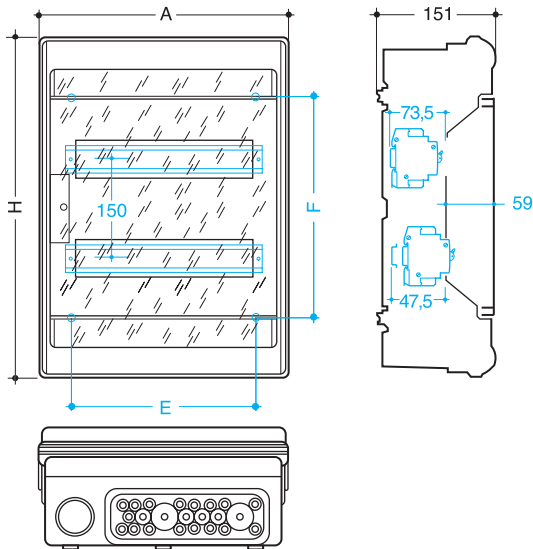
GD108N



GD110N



Vector IP65 enclosures



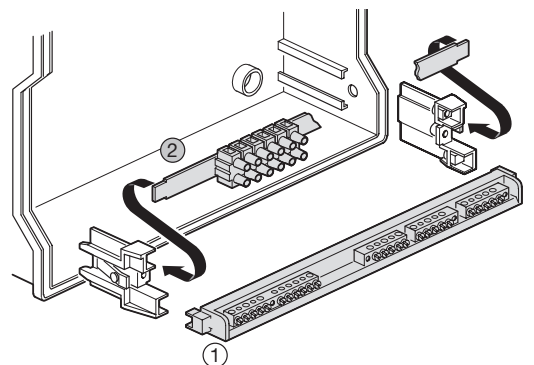
Dimensions

References	Enclosure sizes Wall box				
	R	A	H	E	F
VE103L	3	111	175	-	147
VE106L	6	165	190	108	158
VE110L	10	237	210	180	173
VE112L	12	310	302	230	155
VE212L	24	310	427	230	280
VE312L	36	310	552	230	405
VE412L	18	310	677	230	550
VE118L	18	418	302	338	155
VE218L	36	418	452	338	305
VE318L	54	418	602	338	455

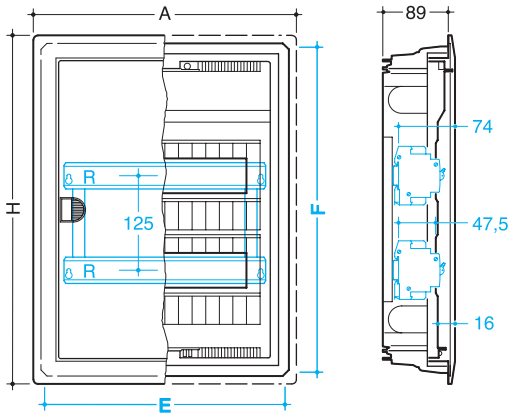
Connection assembly

mounting on insulating support at both end of the chassis ∞ additional connection assembly: VZ403 or VZ428,insulated terminal VZ743

enclosure reference	knock outs	supplied cable bushes
VE103	2xM20	3xM20
VE106	1xM20+1xM25+1xM30/32	2xM20+2xM25+1xM32
VE110	1xM20/32+1xM25+3xM20	4xM20+2xM25+1xM32
VE112	2xM20/32/40+2xM25/32+3xM25+6xM20	10xM20+2xM25+1xM32
VE118	1xM20/40/50+2xM20/32+12xM25+2xM20	8xM20+10xM25+1xM32
VE212	2xM20/32/40+2xM25/32+3xM25+6xM20	14xM20+4xM25+1xM32
VE218	1xM20/40/50+2xM20/32+12xM25+2xM20	8xM20+14xM25+1xM32
VE312	2xM20/32/40+2xM25/32+3xM25+6xM20	14xM20+10xM25+2xM32
VE318	1xM20/40/50+2xM20/32+12xM25+2xM20	8xM20+18xM25+2xM32
VE412	2xM20/32/40+2xM25/32+3xM25+6xM20	14xM20+10xM25+1xM32



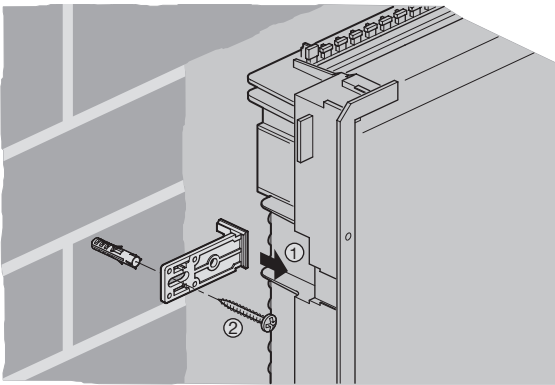
VU24B



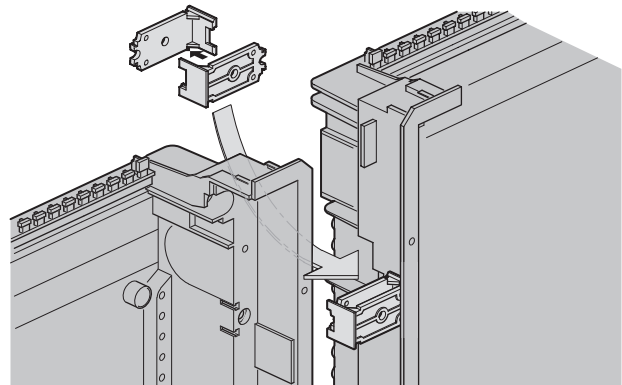
Enclosure

Volta	R	Outside		Inside		
		A	B	E	F	
VU12B	12	1	348	336	330	317
VU24B	24	2	348	461	330	442
VU36B	36	3	348	586	330	567
VU48B	48	4	348	711	330	692

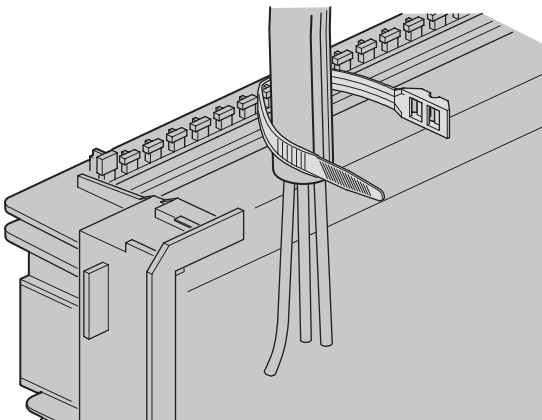
Wall mounting bracket



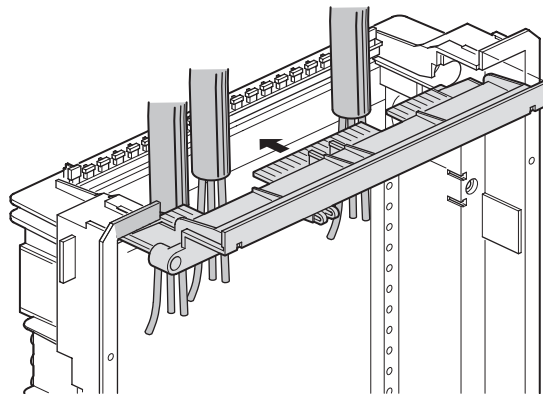
Connecting two enclosures



Conduit entry

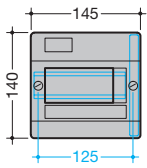


Cable entry plate

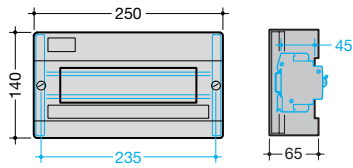


Gamma dimensions

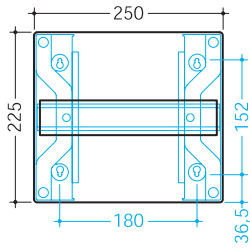
GD106N - 1 row 5



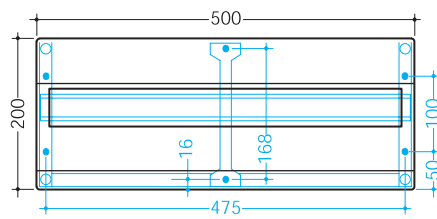
GD110N - 1 row 10



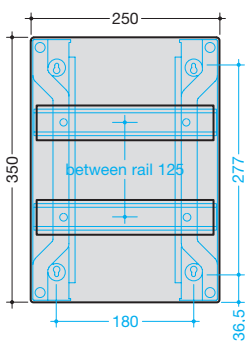
GD113H - 1 row 13



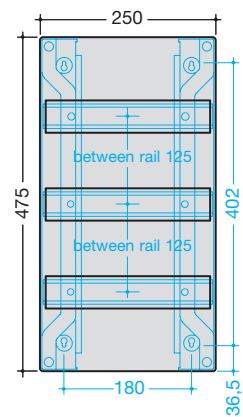
GD26C - 1 row 26



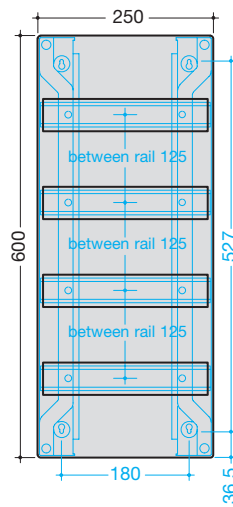
GD213H - 2 row 26



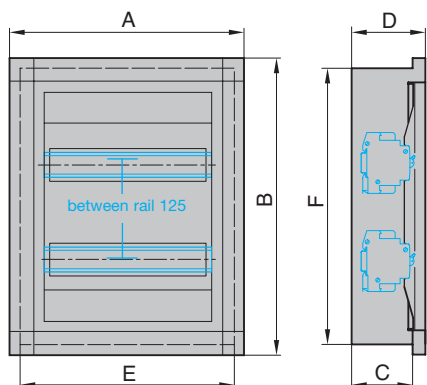
GD313H - 3 row 39



GD413D - 4 row 52



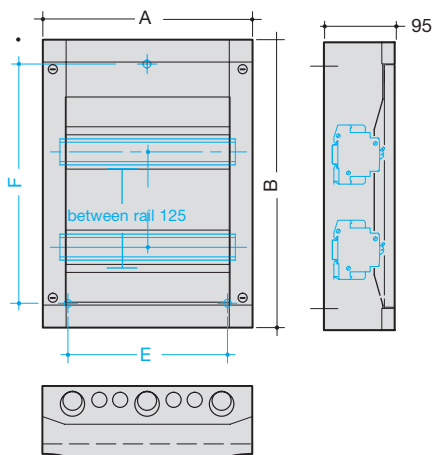
Flush mounting



		dimension (mm)				fixing	
		A	B	C	D	E	F
VF04	1 row 4	180	220	73	90	140	177
VF08	1 row 8	250	230	77	94	209	189
VF12	1 row 12	322	265	80	97	281	224
VF24	2 row 24	322	390	80	97	281	349
VF36	3 row 36	322	535	80	97	281	494

Consumer Units and enclosures

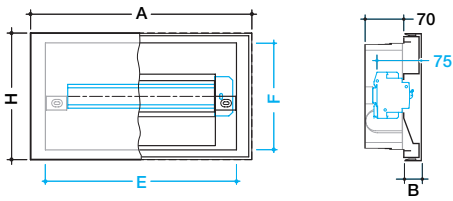
Surface mounting



		dimension (mm)			fixing	
		A	B	D	E	F
VS04	1 row 4	130	180	86		
VS08	1 row 8	200	180	86	120	140
VS12	1 row 12	275	225	95	205	160
VS24	2 row 24	275	350	95	205	285
VS36	3 row 36	275	500	95	205	410

VL enclosure

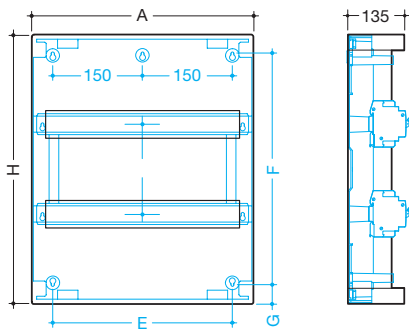
VL 12



References		Enclosure dimensions			Wall box	
		A	H	B	E	F
VL 08..	12	250	186	27	200	170
VL 12..	24	324	186	27	272	170
VL 18..	36	445	208	28	360	170

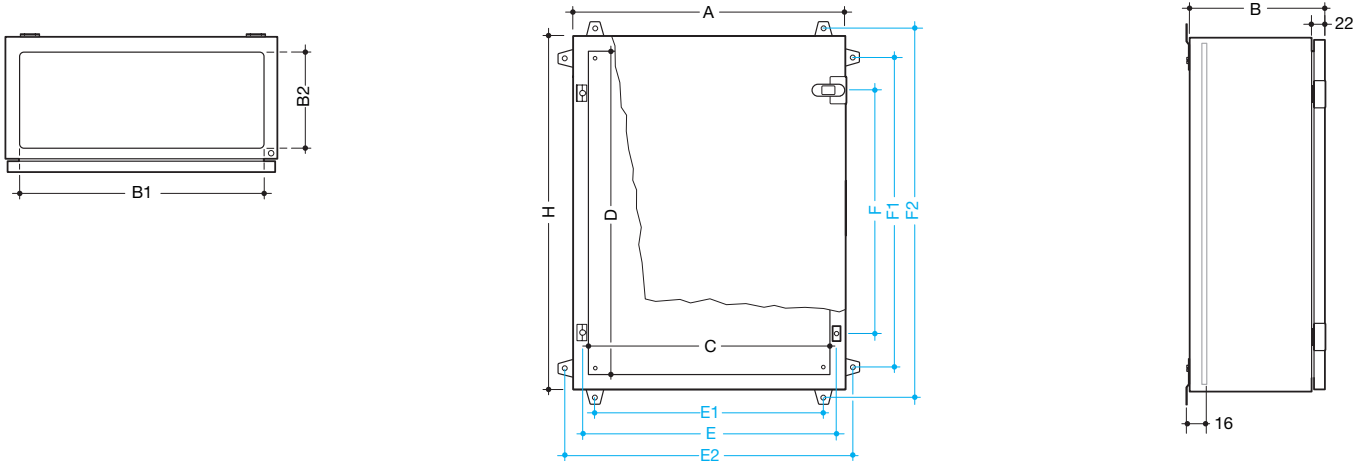
Vega enclosure

VB 36W - 2 rows 36



References		Enclosure dimensions		Fixing		
		A	H	E	F	G
VB 18W	18	370	300	300	236	32
VB 36W	36	370	450	300	386	32
VB 54W	54	370	600	300	536	32

Metal enclosure Orion Plus

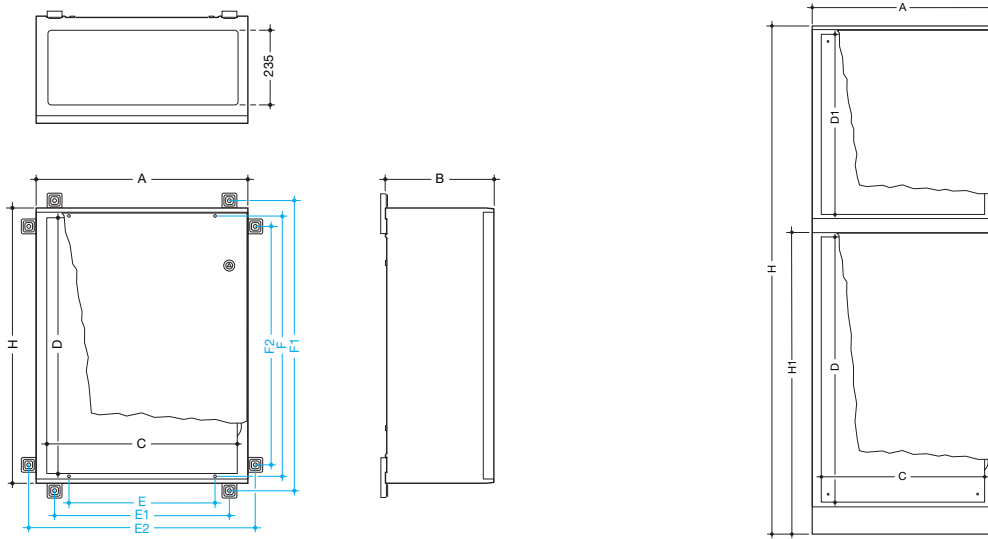


Dimensions

references

plain door	transp. door	number of rows	enclosure L	A	B	B1	B2	C	D	external fixing E1	E2	F1	F2
FL101A	FL151A	-	200	250	160	145	80	150	200	160	270	170	282
FL102A	FL152A	-	250	300	160	195	80	200	250	210	320	220	332
FL103A	FL153A	-	300	300	160	245	80	250	250	260	370	220	332
FL104A	FL154A	2	300	350	160	245	80	250	300	260	370	270	382
FL105A	FL155A	2	300	350	200	245	120	250	300	260	370	270	382
FL106A	FL156A	-	300	400	160	245	80	250	350	260	370	320	432
FL107A	FL157A	-	300	400	200	245	120	250	350	260	370	320	432
FL108A	FL158A	-	400	400	200	345	120	350	350	360	470	320	432
FL109A	FL159A	3	300	500	160	245	80	250	450	260	370	420	532
FL110A	FL160A	3	300	500	200	245	120	250	450	260	370	420	532
FL111A	FL161A	3	400	500	160	345	80	350	450	360	470	420	532
FL112A	FL162A	3	400	500	200	345	120	350	450	360	470	420	532
FL113A	FL163A	-	500	500	200	445	120	450	450	460	570	420	532
FL114A	FL164A	-	400	600	200	345	120	350	550	360	470	520	632
FL115A	FL165A	-	400	600	250	345	170	350	550	360	470	520	632
FL116A	FL166A	-	600	600	250	545	170	550	550	560	670	520	632
FL117A	FL167A	4	400	650	200	345	120	350	600	360	470	570	682
FL118A	FL168A	4	400	650	250	345	170	350	600	360	470	570	682
FL119A	FL169A	4	500	650	200	445	120	450	600	460	570	570	682
FL120A	FL170A	4	500	650	250	445	170	450	600	460	570	570	682
FL121A	FL171A	5	500	800	200	445	120	450	750	460	570	720	832
FL122A	FL172A	5	500	800	250	445	170	450	750	460	570	720	832
FL123A	FL173A	5	600	800	250	545	170	550	750	560	670	720	832
FL124A	FL174A	5	600	800	300	545	220	550	750	560	670	720	832
FL125A	FL175A	6	600	950	250	545	170	550	900	560	670	870	982
FL126A	FL176A	6	600	950	300	545	220	550	900	560	670	870	982
FL127A	FL177A	6	800	950	250	745	170	750	900	760	870	870	982
FL128A	FL178A	6	800	950	300	745	220	750	900	760	870	870	982
FL129A	FL179A	8	600	1250	250	545	170	550	1200	560	670	1170	1282
FL130A	FL180A	8	800	1250	300	745	220	750	1200	760	870	1170	1282

orion Plus polyester enclosures



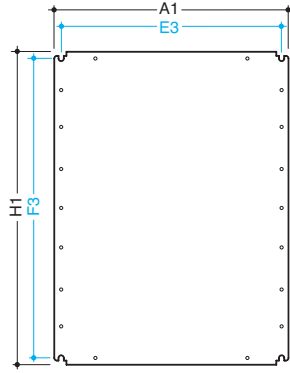
note: plan for "A + 25 mm" for door opening

Dimensions

references

plain door	transp. door	number of rows	enclosure		A1	A2	B	C	D	D1	in.fixing E	F	external fixing		F1	F2
			L	A									E1	E2		
FL204B	FL254B	2	300	500	-	-	160	250	300	-	219	258	339	339	269	389
FL209B	FL259B	3	300	500	-	-	200	250	450	-	219	408	339	339	419	539
FL213B	FL263B	3	400	500	-	-	200	350	450	-	319	408	439	439	419	539
FL216B	FL266B	4	400	650	-	-	200	350	600	-	319	558	439	439	569	689
FL221B	FL271B	4	500	650	-	-	250	450	600	-	419	558	539	539	569	689
FL229B	FL279B	5	600	800	-	-	300	550	750	-	519	708	639	639	719	839
FL300B	FL500B	3	600	550	-	-	300	500	450	-	-	-	-	-	-	-
FL301B	FL501B	5	600	850	-	-	300	500	750	-	-	-	-	-	-	-
FL302B	FL502B	7	600	1150	-	-	300	500	1050	-	-	-	-	-	-	-
FL305B	FL505B	3	850	550	-	-	300	750	450	-	-	-	-	-	-	-
FL306B	FL506B	5	850	850	-	-	300	750	750	-	-	-	-	-	-	-
FL307B	FL507B	7	850	1150	-	-	300	750	1050	-	-	-	-	-	-	-
FL310B	FL510B	3	1100	550	-	-	300	1000	450	-	-	-	-	-	-	-
FL311B	FL511B	5	1100	850	-	-	300	1000	750	-	-	-	-	-	-	-
FL312B	FL512B	7	1100	1150	-	-	300	1000	1050	-	-	-	-	-	-	-
FL320B	FL520B	3	600	600	-	-	300	500	450	-	-	-	-	-	-	-
FL321B	FL521B	5	600	900	-	-	300	500	750	-	-	-	-	-	-	-
FL322B	FL522B	7	600	1200	-	-	300	500	1050	-	-	-	-	-	-	-
FL325B	FL525B	3	850	600	-	-	300	750	450	-	-	-	-	-	-	-
FL326B	FL526B	5	850	900	-	-	300	750	750	-	-	-	-	-	-	-
FL327B	FL527B	7	850	1200	-	-	300	750	1050	-	-	-	-	-	-	-
FL330B	FL530B	3	1100	600	-	-	300	1000	450	-	-	-	-	-	-	-
FL331B	FL531B	5	1100	900	-	-	300	1000	750	-	-	-	-	-	-	-
FL332B	FL532B	7	1100	1200	-	-	300	1000	1050	-	-	-	-	-	-	-
FL340B	-	3+3	600	1150	550	550	300	500	450	-	-	-	-	-	-	-
FL342B	-	5+3	600	1450	850	550	300	500	750	450	-	-	-	-	-	-
FL344B	-	7+3	600	1750	1150	550	300	500	1050	450	-	-	-	-	-	-
FL346B	-	5+5	600	1750	850	850	300	500	750	750	-	-	-	-	-	-
FL348B	-	7+5	600	2050	1150	850	300	500	1050	750	-	-	-	-	-	-
FL350B	-	3+3	850	1150	550	550	300	750	450	450	-	-	-	-	-	-
FL352B	-	5+3	850	1450	850	550	300	750	750	450	-	-	-	-	-	-
FL354B	-	7+3	850	1750	1150	550	300	750	1050	450	-	-	-	-	-	-
FL356B	-	5+5	850	1750	850	850	300	750	750	750	-	-	-	-	-	-
FL358B	-	7+5	850	2050	1150	850	300	750	1050	750	-	-	-	-	-	-
FL360B	-	3+3	1100	1500	550	550	300	1000	450	450	-	-	-	-	-	-
FL362B	-	5+3	1100	1450	850	550	300	1000	750	450	-	-	-	-	-	-
FL364B	-	7+3	1100	1750	1150	550	300	1000	1050	450	-	-	-	-	-	-
FL366B	-	5+5	1100	1750	850	850	300	1000	750	750	-	-	-	-	-	-
FL368B	-	7+5	1100	2050	1150	550	300	1000	1050	750	-	-	-	-	-	-

Mounting plate



Dimensions

plain plate	perforated plate	size		for enclosures	insulated	size	
		L1	A1			L1	A1
FL401A	-	143	230	FL101A,FL151A	-	-	-
FL402A	FL472A	193	280	FL102A,FL152A	FL422A	195	235
FL403A	-	243	280	FL103A,FL153A	-	-	-
FL404A	FL473A	243	330	FL104A,FL105A,FL154A, FL155A,FL204B,FL254B	FL423A	245	285
FL405A	-	243	380	FL106A,FL107A, FL156A,FL157A	-	-	-
FL406A	-	343	380	FL108A,FL158A	-	-	-
FL407A	FL474A	243	480	FL109A,FL110A,FL159A, FL160A,FL209B,FL259B	FL424A	245	285
FL408A	FL475A	343	480	FL111A,FL112A,FL161A, FL162A,FL213B,FL263B	FL425A	245	435
FL510E	-	493	480	FL300B,FL500B, FL320B,FL520B	FL550E	495	435
FL520E	-	743	480	FL305B,FL505B, FL325B,FL525B	FL560E	745	435
FL530E	-	993	480	FL310B,FL510B, FL330B,FL530B	FL570E	995	435
FL409A	-	443	480	FL113A,FL163A	-	-	-
FL410A	-	343	580	FL114A,FL115A, FL164A,FL165A	-	-	-
FL411A	-	543	580	FL116A,FL166A	-	-	-
FL412A	FL476A	343	630	FL117A,FL118A,FL167A, FL168A,FL216B,FL266B	FL426A	345	585
FL413A	FL477A	443	630	FL119A,FL120A,FL169A, FL170A,FL221B,FL271B	FL427A	445	585
FL414A	FL478A	443	780	FL121A,FL122A, FL171A,FL172A	FL428A	445	735
FL415A	FL479A	543	780	FL123A,FL124A,FL173A, FL174A,FL229B,FL279B	FL429A	545	735
FL511E	-	493	780	FL301B,FL501B, FL321B,FL521B	FL551E	495	735
FL521E	-	743	780	FL306B,FL506B, FL326B,FL526B	FL561E	745	735
FL531E	-	993	780	FL311B,FL511B, FL331B,FL531B	FL571E	995	735
FL512E	-	493	1080	FL302B,FL502B, FL322B,FL522B	FL552E	495	1035
FL522E	-	693	1080	FL307B,FL507B, FL327B,FL527B	FL562E	745	1035
FL532E	-	993	1080	FL312B,FL512B, FL332B,FL532B	FL572E	995	1035
FL416A	FL480A	543	930	FL125A,FL126A, FL175A,FL176A	FL430A	545	885
FL417A	FL481A	743	930	FL127A,FL128A, FL177A,FL178A	FL431A	745	885
FL418A	FL482A	543	1230	FL129A,FL179A	FL432A	545	1185
FL419A	FL483A	743	1230	FL130A,FL180A	FL433A	745	1185

Power dissipated

IEC standard EN 60439-1 (IEC 17-13/1) standard in Table 7 shows the list of checks and tests to be carried out on BT panel types AS (series equipment subject to type testing) and ANS (series equipment partially subject to type testing).

One of the characteristics to be monitored is the overtemperature limit check to ensure that the temperatures specified in Table 3 of the standard are not exceeded for the various parts of the panel.

IEC standard EN 60439-1 requires that for ANS type panels the overtemperature limit check can be carried out by means of extrapolation of the series panels (AS) that have passed the type testing.

The extrapolation method laid down by the standard is set out in the IEC 890 publication corresponding to IEC standard 17-43 "Overtemperature determination method, by extrapolation, for non-standard (ANS) protection and control equipment assemblies for low tension (BT panels)".

To make the overtemperature limit check easier, Hager Lume have drawn up a series of tables where the maximum power values that can be dissipated P.Max (W) are shown for all the Lume panels.

These values have been determined so as to obtain the overtemperature values specified in Table 3 of IEC standard EN 60439-1 for accessible external envelopes and coverings (30K for metal surfaces and 40K for insulating surfaces) for the upper part of the panel.

The maximum power values shown in the tables that can be dissipated by the metalwork are valid for the mounting conditions of the panel considered and for the overtemperature values halfway up $t \pm 0.5$ and in the upper part $t \pm 1.0$ indicated.

IP 65 standard metal panels

Article		Dimensional data (mm)	Laid	ΔT 0,5 (K)	ΔT 1,0 (K)	P. max (W)
FL102A	FL152A	300 x 250 x 160	Walls	25,0	30	28
FL104A	FL154A	350 x 300 x 160	Walls	25,0	30	35
FL105A	FL155A	350 x 300 x 200	Walls	24,9	30	39
FL109A	FL159A	500 x 300 x 160	Walls	24,3	30	44
FL110A	FL160A	500 x 300 x 200	Walls	24,3	30	49
FL111A	FL161A	500 x 400 x 160	Walls	24,7	30	54
FL112A	FL162A	500 x 400 x 200	Walls	24,9	30	60
FL117A	FL167A	650 x 400 x 200	Walls	24,3	30	71
FL118A	FL168A	650 x 400 x 250	Walls	24,5	30	80
FL119A	FL169A	650 x 500 x 200	Walls	24,8	30	84
FL120A	FL170A	650 x 500 x 250	Walls	24,9	30	93
FL121A	FL171A	800 x 500 x 200	Walls	24,4	30	97
FL122A	FL172A	800 x 500 x 250	Walls	24,5	30	107
FL123A	FL173A	800 x 600 x 250	Walls	22,0	30	100
FL124A	FL174A	800 x 600 x 300	Walls	22,7	30	114
FL125A	FL175A	950 x 600 x 250	Walls	21,4	30	113
FL126A	FL176A	950 x 600 x 300	Walls	21,8	30	127
FL127A	FL177A	950 x 800 x 250	Walls	22,1	30	148
FL128A	FL178A	950 x 800 x 300	Walls	22,8	30	170
FL129A	FL179A	1250 x 600 x 250	Walls	20,0	30	134,5
FL130A	FL180A	1250 x 800 x 300	Walls	21,3	30	211

Polyester panels IP 65 series boxes

Article	Dimensional data (mm)	Laid	ΔT 0,5 (K)	ΔT 1,0 (K)	P. max (W)
FL204B	FL254B 350 x 300 x 160	Walls	33,4	40	50
FL209B	FL259B 500 x 300 x 200	Walls	32,4	40	70
FL213B	FL263B 500 x 400 x 200	Walls	33,0	40	85
FL216B	FL266B 650 x 400 x 200	Walls	32,6	40	102
FL221B	FL271B 650 x 500 x 250	Walls	33,0	40	132
FL229B	FL279B 800 x 600 x 300	Walls	29,9	40	160

Polyester panels IP 65 series panels

Article	Dimensional data (mm)	Laid	ΔT 0,5 (K)	ΔT 1,0 (K)	P. max (W)
FL300B	550 x 600 x 300	Walls	34,3	40	150
FL301B	850 x 600 x 300	Walls	29,7	40	167
FL302B	1150 x 600 x 300	Walls	27,8	40	205
FL305B	550 x 850 x 300	Walls	32,5	40	170
FL306B	850 x 850 x 300	Walls	30,7	40	230
FL307B	1150 x 850 x 300	Walls	29,2	40	300
FL310B	550 x 1100 x 300	Walls	32,8	40	215
FL311B	850 x 1100 x 300	Walls	31,8	40	310
FL312B	1150 x 1100 x 300	Walls	30,4	40	405

Polyester panels IP 65 series cupboards

Article	Dimensional data (mm)	Laid	ΔT 0,5 (K)	ΔT 1,0 (K)	P. max (W)
FL320B	600 x 600 x 300	Floor-Walls	33,9	40	15
FL321B	900 x 600 x 300	Floor-Walls	29,4	40	17
FL322B	1200 x 600 x 300	Floor-Walls	27,8	40	215
FL325B	600 x 850 x 300	Floor-Walls	32,2	40	180
FL326B	900 x 850 x 300	Floor-Walls	30,7	40	245
FL327B	1200 x 850 x 300	Floor-Walls	29,1	40	315
FL330B	600 x 1100 x 300	Floor-Walls	32,8	40	230
FL331B	900 x 1100 x 300	Floor-Walls	31,4	40	325
FL332B	1200 x 1100 x 300	Floor-Walls	30,1	40	420

Polyester panels IP 65 series cupboards

Article	Dimensional data (mm)	Laid	ΔT 0,5 (K)	ΔT 1,0 (K)	P. max (W)
FL340B	1150 x 600 x 300	Floor-Walls	27,5	40	190
FL342B	1450 x 600 x 300	Floor-Walls	26,9	40	240
FL344B	1750 x 600 x 300	Floor-Walls	25,7	40	285
FL346B	1750 x 600 x 300	Floor-Walls	25,7	40	285
FL348B	2050 x 600 x 300	Floor-Walls	25,6	40	340
FL350B	1150 x 850 x 300	Floor-Walls	29,0	40	280
FL352B	1450 x 850 x 300	Floor-Walls	27,9	40	345
FL354B	1750 x 850 x 300	Floor-Walls	26,9	40	400
FL356B	1750 x 850 x 300	Floor-Walls	26,9	40	400
FL358B	2050 x 850 x 300	Floor-Walls	26,2	40	450
FL360B	1150 x 1100 x 300	Floor-Walls	30,3	40	380
FL362B	1450 x 1100 x 300	Floor-Walls	29,0	40	455
FL364B	1750 x 1100 x 300	Floor-Walls	27,9	40	505
FL366B	1750 x 1100 x 300	Floor-Walls	27,9	40	505
FL368B	2050 x 1100 x 300	Floor-Walls	27,1	40	535

General Description:

Surface mounting enclosures for domestic and commercial electrical distribution

Included in delivery:

- Cabinet with door
- Carrier rails with complete board
- Device covers with 46mm slots, with complete board

Complies with Standards:

DIN VDE 0603, DIN43870, EN60529, Parts 500, 504 and 504/A 1 SN EN 60439-3

Nominal Voltage:

AC230/400V, 50Hz

Current Rating:

for devices up to 125A

Protection Class:

II (insulation protected)

IP Rating:

IP 44

Protection details:

Protection against direct contact: IP3X behind the door
 Protection with indirect contact: Insulation Protection

Air & leakage distance:

as per DIN VDE 0110, Part 1 and 2/1.80, according to electrical surge category IV, pollution Grade 3, Insulation material II and IIIa, nominal voltage AC400V, max incoming current 355A.

Door:

frontal fastening, with internal hinges, all adjustable, removable without tools, optionally attachable on right or left, width from 800mm double door, opening angle 110°.

Door lock:

Twist release lock, exchangeable with other locks, 3 point bar locks on double door cabinet

Colour:

RAL 9010 (pure white)

Cable entries:

cable entry plates top and bottom made of plastic to feed in the cable from the front.

Material

Housing and door made of steel, powder coated

Carrier Rails:

Steel, powdercoated

Supports:

Plastic

Device rails:

steel, galvanised

Covers and knockouts:


plastic

	Height (mm)	Width (mm)	Depth (mm)	DIN-Rails (12mod)	Fields across	number of mods	IP-Class (standard)	IP-Class Special Order only
FWB31	500	300	161	3	1	36	IP44	IP54 (on request)
FWB32		550	161	3	2	72	IP44	IP54 (on request)
FWB33		800	161	3	3	108	IP44	IP54 (on request)
FWB34		1050	161	3	4	144	IP44	IP54 (on request)
FWB41	650	300	161	4	1	48	IP44	IP54 (on request)
FWB42		550	161	4	2	96	IP44	IP54 (on request)
FWB43		800	161	4	3	144	IP44	IP54 (on request)
FWB44		1050	161	4	4	192	IP44	IP54 (on request)
FWB51	800	300	161	5	1	60	IP44	IP54 (on request)
FWB52		550	161	5	2	120	IP44	IP54 (on request)
FWB53		800	161	5	3	180	IP44	IP54 (on request)
FWB54		1050	161	5	4	240	IP44	IP54 (on request)
FWB61	950	300	161	6	1	72	IP44	IP54 (on request)
FWB62		550	161	6	2	144	IP44	IP54 (on request)
FWB63		800	161	6	3	216	IP44	IP54 (on request)
FWB64		1050	161	6	4	288	IP44	IP54 (on request)
FWB71	1100	300	161	7	1	84	IP44	IP54 (on request)
FWB72		550	161	7	2	168	IP44	IP54 (on request)
FWB73		800	161	7	3	252	IP44	IP54 (on request)
FWB74		1050	161	7	4	336	IP44	IP54 (on request)

General Description:

Flush mounting enclosures for domestic and commercial electrical distribution

Included in delivery:

- Cabinet with door
- Carrier rails with complete board
- Device covers with 46mm slots, with complete board
- Comes fitted with  Quick Connect Terminals in complete boards

Complies with Standards:

DIN VDE 0660, Parts 500, 504 and 504/A 1 SN EN 60439-3

Nominal Voltage:

AC 400 V / 50 Hz

Current Rating:

for devices up to 125A

Protection Class:

II (insulation protected)

IP Rating:

IP 30

Protection details:

Protection against direct contact: IP3X behind the door
Protection with indirect contact: Insulation Protection

Air & leakage distance:

as per DIN VDE 0110, Part 1 and 2/1.80, according to electrical surge category III, pollution Grade 2, Insulation material II and IIIa, nominal voltage AC400V


Door:

frontal fastening, with internal hinges, all adjustable, removable without tools, optionally attachable on right or left, width from 800mm double door, opening angle 110°.

Door lock:

Twist release lock, exchangeable with other locks, 3 point bar locks on double door cabinet

Quick Connect Terminals,

built in per field to every complete board 

Colour:

RAL 9010 (pure white)

Cable entries:

cable entry plates top and bottom made of plastic to feed in the cable from the front.

Material

Housing and door made of steel, powder coated

Carrier Rails:

Steel, powdercoated

Supports:

Plastic

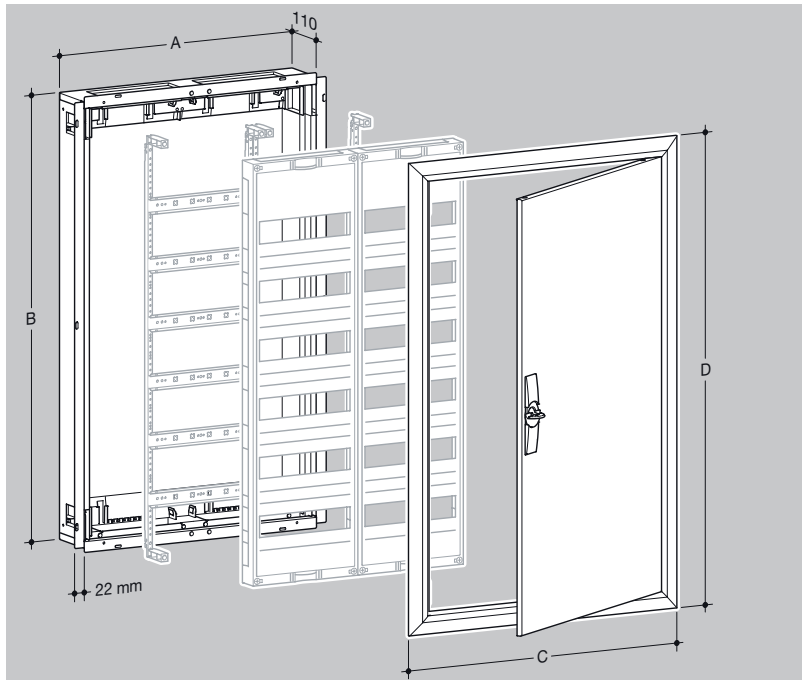
Device rails:

steel, galvanised

Covers and knockouts:

plastic

	Height (mm)	Width (mm)	Depth (mm)	DIN-Rails (12mod)	Fields across	number of mods	IP-Class (standard)
FW31U..	500	300	110	3	1	36	IP30
FW32U..		550	110	3	2	72	IP30
FW33U..		1050	110	3	3	108	IP30
FW41U..	650	300	110	4	1	48	IP30
FW42U..		550	110	4	2	96	IP30
FW43U..		1050	110	4	3	144	IP30
FW51U..	800	300	110	5	1	60	IP30
FW52U..		550	110	5	2	120	IP30
FW53U..		800	110	5	3	180	IP30
FW54U..		1050	110	5	4	240	IP30
FW61U..	950	300	110	6	1	72	IP30
FW62U..		550	110	6	2	144	IP30
FW63U..		800	110	6	3	216	IP30
FW64U..		1050	110	6	4	288	IP30
FW71U..	1100	300	110	7	1	84	IP30
FW72U..		550	110	7	2	168	IP30
FW73U..		1050	110	7	3	252	IP30



FW Flush Cabinets, depth 110mm

Cat. ref.	Recess Dimensions		Dimension incl. trimming frame	
	A	B	C	D
FW31U..	305	502	353	553
FW32U..	555	502	603	553
FW33U..	805	502	853	553
FW41U..	305	652	353	703
FW42U..	555	652	603	703
FW43U..	805	652	853	703
FW51U..	305	802	353	853
FW52U..	555	802	603	853
FW53U..	805	802	853	853
FW54U..	1055	802	1103	853
FW61U..	305	952	353	1003
FW62U..	555	952	603	1003
FW63U..	805	952	853	1003
FW64U..	1055	952	1103	1003
FW71U..	305	1102	353	1153
FW72U..	555	1102	603	1153
FW73U..	805	1102	853	1153

Consumer Units and enclosures

