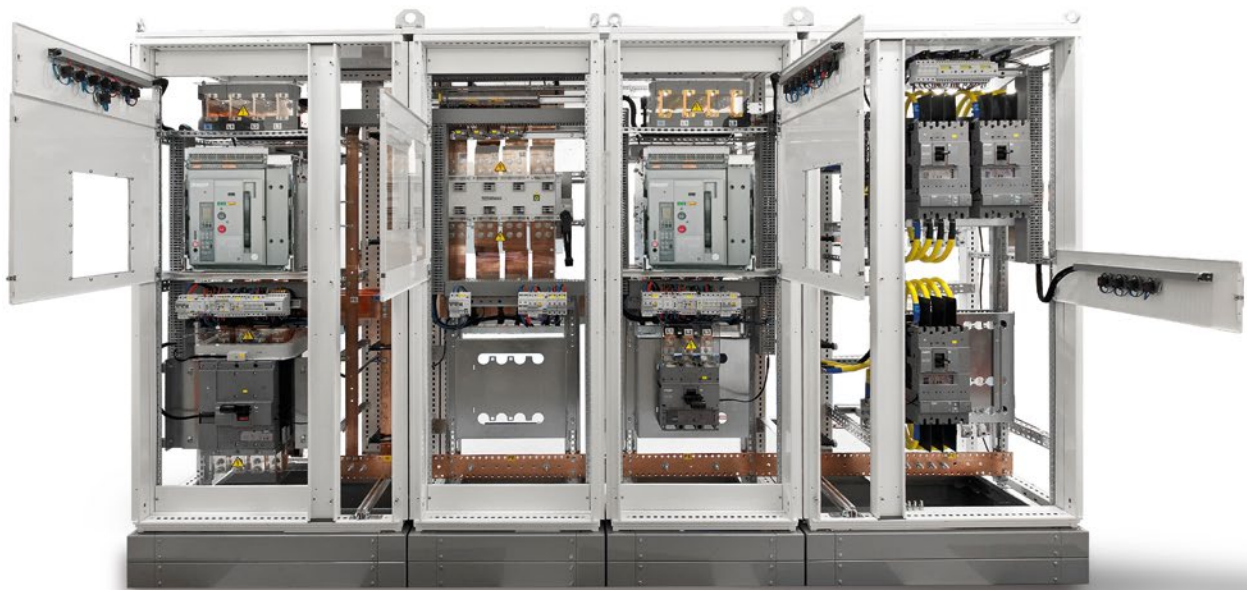


Main switchboards

Our main switchboard range is composed of a wide choice of references and allows to achieve all combinations needed for your projects. Secure and aesthetic, they have been developed as solutions for modern commercial electrical distribution systems.



invicta TPN125 type B distribution board	2.2
invicta TPN250 type B distribution board	2.4
invicta 250A panel board	2.6
invicta 400A panel board	2.7
invicta 630/800A panel board	2.8
enclosed fuse combination switches	2.10
enclosed load break switches	2.12
quadro4	2.14
quadro5	2.22
quadro+	2.28
quadro equipment units	2.48
quadro distribution system	2.58
orion plus	2.71
orion.inox	2.92
orion.tech	2.102
quadro automation	2.104
IP55 control desk monobloc enclosures	2.109
technical guide	2.110

Main switchboards

invicta TPN125 type B distribution board

invicta 125A type B distribution board range is a solution for commercial installations. The invicta range includes both 125A boards with multiple incomer choices. The range is presented in flush and surface mounting enclosures and includes boxes with capacities of 4 ways up to 24 ways in fixed and split load types.

Delivered with

- neutral and earth brass terminal,
- plain door,
- 125A rated pan assembly,
- 100A rated JK1L1003SM link kit for fixed version or 100A rated JK1L1003SMSL link kit for fixed version.

Technical data

- IP41
- class I
- nominal input current: 125A

- nominal output current: 63A
- rated voltage (Ue): 240/400V AC - 50Hz
- insulation voltage (Ui): 440V
- rated impulse withstand voltage (Uimp): 4kV for 0.2s
- Icw = 20kA
- incomer DIN rail mounting
- colour : powder coat grey white RAL 9002
- 1.0mm thickness steel
- metallic enclosure
- 115mm depth
- pre-punched gland

Comply with

BS EN 61 439-1 and -3

ASTA certified insulated tinned copper busbar assembly.



JK1B08S1

TPN125 type B distribution boards fixed load boards

Description	Cat. ref. flush	surface
4 ways	JK1B04F1	JK1B04S1
6 ways	JK1B06F1	JK1B06S1
8 ways	JK1B08F1	JK1B08S1
10 ways	JK1B10F1	JK1B10S1
12 ways	JK1B12F1	JK1B12S1
14 ways	JK1B14F1	JK1B14S1
16 ways	JK1B16F1	JK1B16S1
18 ways	JK1B18F1	JK1B18S1
24 ways	JK1B24F1	JK1B24S1



JK1B042S1

TPN125 type B distribution boards split load boards

Description	Cat. ref. flush	surface
2+2 ways	JK1B022F1	JK1B022S1
4+2 ways	JK1B042F1	JK1B042S1
4+4 ways	JK1B044F1	JK1B044S1
6+2 ways	JK1B062F1	JK1B062S1
6+4 ways	JK1B064F1	JK1B064S1
6+6 ways	JK1B066F1	JK1B066S1
8+2 ways	JK1B082F1	JK1B082S1
8+4 ways	JK1B084F1	JK1B084S1
8+6 ways	JK1B086F1	JK1B086S1
8+8 ways	JK1B088F1	JK1B088S1
10+4 ways	JK1B104F1	JK1B104S1

Extension boxes for JK1 TPN125 type B

Description	Cat. ref. flush	surface
16 modules DIN extension box (15 modules available)	JK1E16F	JK1E16S
32 modules DIN extension box	JK1E32F	JK1E32S
48 modules DIN extension box	JK1E48F	JK1E48S

Spreader boxes for JK1 TPN125 type B

Description	Cat. ref. flush	surface
JK1 cable spreader box	JK1E01F	JK1E01S

Joint kit for spreader and extension box

Description	Cat. ref. flush	surface
JK1 - Joint kit for spreader box	JK1XJKEF	JK1XJKES

Incoming link kits

Description	Cat. ref.
3P 80A - 125A MCB incomer kit	JK1L1253MM
4P 80A - 125A MCB incomer kit	JK1L1254MM
3P 100A switch or RCCB incomer kit	JK1L1003SR
3P 125A switch disconnecter kit	JK1L1253SK
125A direct connection kit	JK1L1254D
3P 63A/100A switch disconnecter/RCCB or 3P 63A MCB incomer kit (only for fixed load)	JK1L1003SM
4P 63A/100A switch disconnecter/RCCB or 4P 63A MCB incomer kit (only for fixed load)	JK1L1004SM
3P 63A/100A switch disconnecter/RCCB or 3P 63A MCB incomer kit (only for split load)	JK1L1003SMSL
4P 63A/100A switch disconnecter/RCCB or 4P 63A MCB incomer kit (only for split load)	JK1L1004SMSL
125A 3 poles top link kit	JK1L1253TL



JK1L1004SM

Shrouds

Description	Cat. ref.
incomer shroud in 125A fixed load board in 9M without cutout	JK1XISF0
incomer shroud in 125A fixed load board in 9M with 3M cutout	JK1XISF3
incomer shroud in 125A split load board in 13M with 7M cutout	JK1XISS7
incomer shroud in 125A split load board in 13M with 11M cutout	JK1XISS11
incomer shroud in 125A split load board in 13M with 13M cutout	JK1XISS13
top busbar shroud	JK1XTBS

Terminals

Description	Cat. ref.
neutral terminal cover IP2X	JK1XNC
spare neutral terminal (4 ways)	JK1XSNT
spare neutral terminal extra (10 ways)	JK1XSNTE
neutral terminal support (4 ways)	JK1XNTS
neutral terminal link support	JK1XNTLS



JK1XSNT

Accessories

Description	Cat. ref.
1 module blank for incomer cutout	JK1XBSP
single phase blank for outgoing cutout	P032H
busbar protective boot	P100H
2 pieces of gland plate with screw for 125A for flush version board	JK1XGPF
2 pieces of gland plate with screw for 125A for surface version board	JK1XGPS
key lock for distribution boards	JK1XKLS



JK1XBSP

invicta 250A TPN board range is a solution for commercial electrical installations. The invicta range includes both 250A boards with MCCB incomer or direct link. The range is presented in surface mounting enclosures and includes boxes with capacities of 4 ways up to 24 ways in fixed load types.

Delivered with

- neutral and earth brass terminal,
- plain door,
- 250A rated pan assembly.

Technical data

- IP41
- class I
- nominal current (In): 250A
- rated voltage (Ue): 240/415V AC - 50Hz
- insulation voltage (Ui): 690V

- rated impulse withstand voltage (Uimp): 6kV
- Icw: 20 kA at 415V for 0.2 sec. and 25kA for 0.3s
- colour: powder coat grey, white RAL 9002
- 1.2mm thickness steel
- metallic enclosure
- 115mm depth
- reversible door

Comply with

BS EN 61 439-1 and -3

ASTA certified insulated tinned copper busbar assembly.



JK2B08S1

TPN250 type B distribution boards fixed load boards

- link kits are not supplied with standard, please order I/e link kits separately

Description	Cat. ref. flush	surface
4 ways	JK2B04F1	JK2B04S1
6 ways	JK2B06F1	JK2B06S1
8 ways	JK2B08F1	JK2B08S1
10 ways	JK2B10F1	JK2B10S1
12 ways	JK2B12F1	JK2B12S1
14 ways	JK2B12F1	JK2B14S1
16 ways	JK2B16F1	JK2B16S1
18 ways	JK2B18F1	JK2B18S1
24 ways	JK2B24F1	JK2B24S1

Extension boxes for JK2 TPN250 type B

Description	Cat. ref. flush	surface
16 modules DIN extension box (15 modules available)	JK2E16F	JK2E16S
32 modules DIN extension box	JK2E32F	JK2E32S
48 modules DIN extension box	JK2E48F	JK2E48S

Spreader boxes for JK2 TPN250 type B

Description	Cat. ref. flush	surface
JK2 cable spreader box	JK2E01F	JK2E01S

Joint kits

Description	Cat. ref. flush	surface
for spreader and extension box	JK2XJKEF	JK2XJKES

Incoming link kits

Description	Cat. ref.
3P 160A switch disconnecter incomer kit for JK 250A	JK2L1603SK
3P 200/250A switch disconnecter incomer kit for JK 250A	JK2L2503SK
3P 160A MCB / MCS incomer kit for JK 250A	JK2L1603MH
3P 200/250A MCB / MCS incomer kit for JK 250A	JK2L2503MH
3P 200/250A direct connection kit	JK2L2503D
4P 125/160A MCCB incomer kit for JK 200/250A	JK2L1604MH
4P 250A MCCB incomer kit for JK 250A	JK2L2504MH
4P 200/250A direct connection kit	JK2L2504D

Switch disconnectors

Description	Cat. ref.
3P 160A switch disconnecter - AC22	JK160S
3P 160A switch disconnecter - AC23	JK161S
3P 200A switch disconnecter - AC23	JK200S
3P 250A switch disconnecter - AC22	JK250S



JK200S

Switch on covers

Description	Cat. ref.
13M blank for 125/160A switch on cover	JK2XBSK1
13M blank for 200/250A switch on cover	JK2XBSK2
13M blank for 125/160A MCCB / MCS on cover	JK2XBMH1
13M blank for 200/250A MCCB / MCS on cover	JK2XBMH2



JK2XB..

Accessories

Description	Cat. ref.
1 module incomer blank	P032H
busbar protective boot	P100H
single phase blank for TPN boards	JK1XBSP
1/4 turn lock for distribution boards	JK1XKLS
boards neutral terminal cover IP2X	JK1XNC
spare neutral terminal (4 ways)	JK1XSNT
spare neutral terminal extra (10 ways)	JK1XSNT E
2 pieces of gland plate with screws for 250A flush boards	JK2XGPF
2 pieces of gland plate with screws for 250A surface boards	JK2XGPS



JK1XSNT



P032H



JK1XBSP



JK1XNC

invicta 250A panel board range is a solution for commercial electrical installations. The invicta range includes both 250A boards with MCCBs, isolating switches or direct link incomers. The range is presented in surface mounting enclosures and includes boxes with capacities of 2 ways up to 16 ways in fixed load types.

Delivered with

- neutral and earth brass terminal,
- plain door,
- 250A rated pan assembly.

Technical data

- IP41
- class I
- nominal current (In): 250A
- rated voltage (Ue): 240/415V AC - 50Hz
- insulation voltage (Ui): 690V

- rated impulse withstand voltage (Uimp): 6kV
- Icw for 250A busbar: 25kA at 415V for 0.3 sec.
- colour: epoxy powder coating RAL 9002
- metallic enclosure
- 1.5mm thickness sheet steel
- 160mm depth
- reversible door.

Comply with

BS EN 61 439-1 and -3

ASTA certified insulated tinned copper busbar assembly.



JN2B0008S1

invicta 250 panel board system 250A incoming and 125A (x160) MCCB outgoing

- surface mounted
- link kits are not supplied with standard, please order I/e link kits separately

Description	Cat. ref.
2 ways	JN2B00002S1
4 ways	JN2B00004S1
6 ways	JN2B00006S1
8 ways	JN2B00008S1
10 ways	JN2B00010S1
12 ways	JN2B00012S1
16 ways	JN2B00016S1

Incoming kits

Description	Cat. ref.
250A 3P MCCB incomer kit	JN2L2503MH
250A 3P isolator incomer kit	JN2L2503SK
250A direct incomer kit	JN2L2503D

Switch disconnecter

Description	Cat. ref.
switch 3 x 250A 400V	JK250S

Extension boxes

Description	Cat. ref.
250A spreader box	JN2E01S
250A DIN rail box - 20 modules	JN2E20S

Accessories / spares

Description	Cat. ref.
single pole blanking plate 125A frame	JN2XBSP
keylock for distribution board	JK1XKLS

The three phases and neutral metal clad of invicta 400A panel board range is a solution for commercial installations. The invicta range includes both 400A boards with MCCBs or direct link incomers. Suitable for MCCBs incomers and outgoing. The range is presented in surface mounting enclosures and includes boxes with capacities of 4 ways up to 16 ways in fixed load types.

Delivered with

- neutral and earth brass terminal,
- plain door,
- 400A rated pan assembly.

Technical data

- IP41
- class I
- nominal current (In): 400A
- rated voltage (Ue): 240/415V AC - 50Hz

- insulation voltage (Ui): 690V
- rated impulse withstand voltage (Uimp): 6kV
- lcv for 400A busbar: 35kA at 415V for 1 sec.
- colour: epoxy powder coating RAL 9002
- metallic enclosure
- 1.5mm thickness sheet steel
- 200mm depth
- removable pre-punched top and bottom gland plates.

Comply with

BS EN 61 439-1 and -3

ASTA certified insulated tinned copper busbar assembly.

invicta 400 panel board system 400A incoming and up to 125A (x160) outgoing fixed load boards

Description	Cat. ref.
4 ways	JN4B00004S1
6 ways	JN4B00006S1
8 ways	JN4B00008S1
10 ways	JN4B00010S1
12 ways	JN4B00012S1
16 ways	JN4B00016S1



JN4B00008S1

invicta 400 panel board system 400A incoming and up to 125A (x160) outgoing split load boards

Description	Cat. ref.
2 ways 250A + 2 ways 125A	JN4B00202S1
2 ways 250A + 4 ways 125A	JN4B00204S1
2 ways 250A + 6 ways 125A	JN4B00206S1
2 ways 250A + 8 ways 125A	JN4B00208S1
2 ways 250A + 10 ways 125A	JN4B00210S1
2 ways 250A + 14 ways 125A	JN4B00214S1

Incoming kits

Description	Cat. ref.
400A 3P MCCB incomer kit	JN4L4003MH
400A 3P MCCB extension bar	JN4L4003EB
400A 3P direct incomer kit	JN4L4003D

Extension boxes

Description	Cat. ref.
400A spreader box	JN4E01S
400A small DIN rail box (125A outgoing only) - 24 modules	JN4E24S
400A large DIN rail box (250A+125A outgoing only) - 32 modules	JN8E32S

Accessories / spares

Description	Cat. ref.
single pole blanking plate 125A frame	JN2XBSP
three pole blanking plate 250A frame	JN4XBTP
keylock for distribution board	JK1XKLS



JN2XBSP

The three phases and neutral metal clad of invicta 630/800A panel board range is a solution for commercial electrical installations. The invicta range includes both 630/800A boards with MCCBs or direct link incomers. Suitable for MCCBs incomers and outgoing. The range is presented in surface mounting enclosures and includes boxes with capacities of 4 ways up to 16 ways in fixed load types.

Delivered with

- neutral and earth brass terminal,
- plain door,
- 630/800A rated pan assembly.

Technical data

- IP41
- class I
- nominal current (In): 630/800A
- rated voltage (Ue): 240/415V AC - 50Hz

- insulation voltage (Ui) : 690V
- rated impulse withstand voltage (Uimp): 6kV
- lcv for 630/800A busbar: 40kA for 1 sec. or 43kA for 0.2 sec
- colour: epoxy powder coating RAL 9002
- metallic enclosure
- 1.5mm thickness sheet steel
- 200mm depth
- removable pre-punched top and bottom gland plates.

Comply with

BS EN 61 439-1 and -3

ASTA certified insulated tinned copper busbar assembly.



JN8B00008S1

invicta 630/800A panel board system up to 630/800A incoming 125A (x160) MCCB outgoing

Description	Cat. ref.
4 ways 125A	JN8B00004S1
6 ways 125A	JN8B00006S1
8 ways 125A	JN8B00008S1
10 ways 125A	JN8B00010S1
12 ways 125A	JN8B00012S1
16 ways 125A	JN8B00016S1

invicta 630/800A panel board system up to 630/800A incoming 250A (x250) MCCB outgoing

Description	Cat. ref.
4 ways 250A	JN8B00400S1
6 ways 250A	JN8B00600S1
8 ways 250A	JN8B00800S1
10 ways 250A	JN8B01000S1
12 ways 250A	JN8B01200S1
16 ways 250A	JN8B01600S1

invicta 630/800A panel board system up to 630/800A incoming 250A (x250) MCCB outgoing and up to 125A (x160) MCCB outgoing

Description	Cat. ref.
2 ways 250A + 2 ways 125A	JN8B00202S1
2 ways 250A + 4 ways 125A	JN8B00204S1
2 ways 250A + 6 ways 125A	JN8B00206S1
2 ways 250A + 8 ways 125A	JN8B00208S1
2 ways 250A + 10 ways 125A	JN8B00210S1
2 ways 250A + 14 ways 125A	JN8B00214S1

invicta 630A/800A panel board system up to 630/800A incoming up to 250A (x250) MCCB outgoing and up to 125A (x160) MCCB outgoing

Description	Cat. ref.
4 ways 250A + 2 ways 125A	JN8B00402S1
4 ways 250A + 4 ways 125A	JN8B00404S1
4 ways 250A + 6 ways 125A	JN8B00406S1
4 ways 250A + 8 ways 125A	JN8B00408S1
4 ways 250A + 10 ways 125A	JN8B00410S1

invicta 630A/800A panel board system up to 630/800A incoming up to 250A (x250) MCCB outgoing

Description	Cat. ref.
6 ways 250A + 6 ways 125A	JN8B00606S1
6 ways 250A + 8 ways 125A	JN8B00608S1

Incoming kits

Description	Cat. ref.
630A 3P MCCB incomer kit	JN8L6303MH
630A 3P direct incomer kit	JN8L6303D
800A 3P MCCB incomer kit	JN8L8003MH
800A 3P direct incomer kit	JN8L8003D
630A 3P MCCB extension bar	JN8L6303EB
800A 3P MCCB extension bar	JN8L8003EB

Extension boxes

Description	Cat. ref.
800A spreader box	JN8E01S
800A DIN rail box - 32 modules	JN8E32S

Accessories / spares

Description	Cat. ref.
single pole blanking plate 125A frame	JN2XBSP
three pole blanking plate 250A frame	JN4XBTP
keylock for distribution board	JK1XKLS



JN4XBTP

The range of enclosed FCS have been designed to match the TP&N range of distribution boards. The number of enclosure sizes has been optimized, to ensure an easy installation. The FCS products are designed to isolate individual circuits. The range is presented in surface mounting enclosures and includes 3 versions of boxes:

- SPSN 20 - 100A (4 ratings)
- TP&N 20 - 800A (12 ratings)
- TPSN 20 - 800A (12 ratings)

Delivered with

- fuse combination switch
- fuse links, fitted in all 4 poles fuse combination switches
- extended rotary handle
- plain door

Technical data

- IP41
- nominal current (In): 20A up to 800A
- rated voltage (Ue): 415V AC
- utilisation category: AC23A and AC23B
- colour: epoxy powder coating RAL 9002
- metallic enclosure
- 1.2mm thickness
- extra cabling space

Comply with

EN 60947-3, IEC 60947-3
Sequence 1 & 4

Enclosed fuse combination switch single pole switched neutral

Description	Size h x w x d (mm)	Utilisation category	Fuse type	Cat. ref.
20A	250 x 200 x 150	AC23A	A1	JFB202U
32A	250 x 200 x 150	AC23A	A1	JFB203U
63A	325 x 300 x 150	AC23A	A2-A3	JFD206U
100A	400 x 375 x 200	AC23A	A4	JFE210U



JFD306U

Enclosed fuse combination switch triple pole and neutral

Description	Size h x w x d (mm)	Utilisation category	Fuse type	Cat. ref.
20A	250 x 200 x 150	AC23A	A1	JFB302U
32A	250 x 200 x 150	AC23A	A1	JFB303U
63A	325 x 300 x 150	AC23A	A2-A3	JFD306U
100A	400 x 375 x 200	AC23A	A4	JFE310U
125A	500 x 375 x 200	AC23A	B1-B2	JFG312U
160A	500 x 375 x 200	AC23A	B1-B2	JFG316U
200A	500 x 375 x 200	AC23A	B1-B2	JFG320U
250A	500 x 375 x 200	AC23A	B1-B3	JFG325U
315A	650 x 500 x 300	AC23B	B1-B3	JFH331U
400A	650 x 500 x 300	AC23B	B1-B4	JFH340U
630A	800 x 600 x 350	AC23B	C1-C2	JFI363U
800A	800 x 600 x 350	AC23B	C1-C3	JFI380U

Enclosed fuse combination switch triple pole switched neutral

Description	Size h x w x d (mm)	Utilisation category	Fuse type	Cat. ref.
20A	250 x 200 x 150	AC23A	A1	JFB402U
32A	250 x 200 x 150	AC23A	A1	JFB403U
63A	325 x 300 x 150	AC23A	A2-A3	JFD406U
100A	400 x 375 x 200	AC23A	A4	JFE410U
125A	500 x 375 x 200	AC23A	B1-B2	JFG412U
160A	500 x 375 x 200	AC23A	B1-B2	JFG416U
200A	500 x 375 x 200	AC23A	B1-B2	JFG420U
250A	500 x 375 x 200	AC23A	B1-B3	JFG425U
315A	650 x 500 x 300	AC23B	B1-B3	JFH431U
400A	650 x 500 x 300	AC23B	B1-B4	JFH440U
630A	800 x 600 x 350	AC23B	C1-C2	JFI463U
800A	800 x 600 x 350	AC23B	C1-C3	JFI480U

Cable extension boxes triple pole and triple pole switched neutral

Description	Cat. ref.
125A, 160A, 200A, 250A	JZA701
315A, 400A	JZA702
630A, 800A	JZA703

Auxiliary contact

Description	Cat. ref.
1AC type NO	HZF301
1AC type NC	HZF302



HZF301

Terminal cover

Description	Cat. ref.		
	2P	3P	4P
terminal cover 100A	HZF201	-	-
terminal cover 100A - 160A	-	HZF202	HZF203
terminal cover 200A - 400A	-	HZF204	HZF205
terminal cover 630A - 800A	-	HZF206	HZF207



HZF207

The range of enclosed LBS has been designed to match the TP&N range of distribution boards. The number of enclosure sizes has been optimized, to ensure an easy installation.

The LBS products are designed to isolate individual circuits. The range is presented in surface mounting enclosures and includes 2 versions of boxes :

- TPN 20-1600A (14 ratings)
- TPSN 20-1600A (14 ratings)

Delivered with

- load break switch
- plain door
- extended rotary handle

Technical data

- IP41
- nominal current (In): 20A up to 1600A
- rated voltage (Ue): 415V AC
- utilisation category: AC23A / AC23B / AC22B
- colour: epoxy powder coating RAL 9002
- metallic enclosure
- 1.2mm thickness
- extra cabling space

Comply with

IEC 60947-3, EN 60947-3
Sequence 1, 2 and 3



JAB306

Enclosed load break switches triple pole and neutral

Description	Size: h x w x d (mm)	Utilisation category	Cat. ref.
20A	230 x 175 x 105	AC23A	JAB302
32A	230 x 175 x 105	AC23A	JAB303
63A	230 x 175 x 105	AC23A	JAB306
100A	250 x 200 x 150	AC23A	JAB310
125A	300 x 250 x 150	AC23A	JAC312
160A	300 x 250 x 150	AC23A	JAC316
200A	400 x 375 x 200	AC23A	JAE320
250A	400 x 375 x 200	AC23A	JAE325
315A	500 x 375 x 200	AC23A	JAG331
400A	500 x 375 x 200	AC23A	JAG340
630A	650 x 500 x 300	AC23A	JAH363
800A	650 x 500 x 300	AC23B	JAH380
1250A*	1050 x 750 x 300	AC23B	JAH390
1600A*	1050 x 750 x 300	AC22B	JAH392

Enclosed load break switches triple pole switched neutral

Description	Size: h x w x d (mm)	Utilisation category	Cat. ref.
20A	230 x 175 x 105	AC23A	JAB402
32A	230 x 175 x 105	AC23A	JAB403
63A	230 x 175 x 105	AC23A	JAB406
100A	250 x 200 x 150	AC23A	JAB410
125A	300 x 250 x 150	AC23A	JAC412
160A	300 x 250 x 150	AC23A	JAC416
200A	400 x 375 x 200	AC23A	JAE420
250A	400 x 375 x 200	AC23A	JAE425
315A	500 x 375 x 200	AC23A	JAG431
400A	500 x 375 x 200	AC23A	JAG440
630A	650 x 500 x 300	AC23A	JAH463
800A	650 x 500 x 300	AC23B	JAH480
1250A*	1050 x 750 x 300	AC23B	JAH490
1600A*	1050 x 750 x 300	AC22B	JAH492

* For these references, please contact us.

Cable extension boxes triple pole and triple pole switched neutral

Description	Cat. ref.
125A, 160A	JZA700
200A, 250A, 315A, 400A	JZA701
630A, 800A	JZA702

Auxiliary contacts

Description	Cat. ref.
20A to 160A, 1NO+1NC	HZC311
20A to 160A, 2NO	HZC312
125A to 1600A, 2x(1NO+1NC)	HZ023



HZ023

Terminal shrouds

Description	Cat. ref.	
	3P	4P
20A to 40A	HZC211	HZC212
63A to 100A	HZC213	HZC214
125A to 160A	HZC201	HZC202
200A to 315A	HZC203	HZC204
400A to 630A	HZC205	HZC206



HZC201

Terminal protection screens






Description	Cat. ref.	
	3P	4P
800A	HZ036	HZ046
1250A to 1600A	HZ037	HZ047



HZ046

260 mm depth		Back plate	Top and bottom panels		Top panel and plinth		Sides (set of 2)	
enclosures height with top and plinth	inside height capacity	ref. for enclosure width:		ref. for enclosure width:		ref. for enclosure width:		ref.
		370 mm	620 mm	370 mm	620 mm	370 mm	620 mm	
500 mm	450 mm	FC110	FC210	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC010
650 mm	600 mm	FC111	FC211	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC011
800 mm	750 mm	FC112	FC212	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC012
950 mm	900 mm	FC113	FC213	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC013
1100 mm	1050 mm	FC114	FC214	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC014
1250 mm	1200 mm	FC115	FC215	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC015
1525 mm	1350 mm	FC116	FC216	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC016
1675 mm	1500 mm	2xFC112	2xFC112	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC012 + FC012
1825 mm	1650 mm	FC118	FC218	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	FC012 + FC013
1975 mm	1800 mm	FC119	FC219	FC415 FC416	FC425 FC426	FC445 FC446	FC455 FC456	2 x FC013

ref. in blue = IP43

		Full door		Transparent door	Assembling kits	
					horizontal	vertical
						
		delivered with keylock		delivered with keylock		
doors height		ref. for enclosure width: 370 mm 620 mm		ref. for enclosure width: 620 mm	ref.	ref.
450 mm		FC310	FC330	FC340	FC120	FC230
600 mm		FC311	FC331	FC341	FC121	FC230
750 mm		FC312	FC332	FC342	FC122	FC230
900 mm		FC313	FC333	FC343	FC123	FC230
1050 mm		FC314	FC334	FC344	FC124	FC230
1200 mm		FC315	FC335	FC345	FC125	FC230
1350 mm		FC316	FC336	FC346	FC126	FC230
1500 mm		FC317	FC337	FC347	FC122 + FC122	FC230
1650 mm		FC318	FC338	FC348	FC122 + FC123	FC230
1800 mm		FC319	FC339	FC349	2 x FC123	FC230

Examples of equipments of quadro4, IP 40 enclosures :

the references of the equipments units, to use + needed references of enclosures

	width 620 mm		width 990 mm		width 1240 mm
height 450 mm	<p>FC210 FC010 FC425</p> <p>+ mod. kits centre distance 150 mm with 48 ■</p>	<p>FC210 FC010 FC425</p> <p>+ mod. kits centre distance 200 mm with 48 ■</p>	<p>FC110 FC210 FC010 FC120 FC415 FC425</p> <p>+ mod. kits centre distance 150 mm with 68 ■</p>	<p>2x FC210 FC010 2x FC425 FC120</p> <p>+ mod. kits centre distance 150 mm with 96 ■</p>	
height 600 mm	<p>FC211 FC011 FC425</p> <p>+ mod. kits centre distance 150 mm with 72 ■</p>	<p>FC211 FC011 FC425</p> <p>+ mod. kits centre distance 200 mm with 72 ■</p>	<p>FC111 FC211 FC121 FC011 FC415 FC425</p> <p>+ mod. kits centre distance 150 mm with 102 ■</p>	<p>2x FC211 FC011 2x FC425 FC121</p> <p>+ mod. kits centre distance 150 mm with 144 ■</p>	
height 750 mm	<p>FC212 FC012 FC425</p> <p>+ mod. kits centre distance 150 mm with 96 ■</p>	<p>FC212 FC012 FC425</p> <p>+ mod. door 24 ■ + mod. kits centre distance 200 mm with 72 ■</p>	<p>FC112 FC212 FC012 FC122 FC415 FC425</p> <p>+ kit x160 + mod. kits centre distance 150 mm with 116 ■</p>		
height 900 mm	<p>FC213 FC013 FC425</p> <p>+ mod. kits centre distance 150 mm with 120 ■</p>	<p>FC213 FC013 FC425</p> <p>+ kit x 160 + mod. kits centre distance 200 mm with 72 ■</p>	<p>FC113 FC213 FC013 FC123 FC415 FC425</p> <p>+ kit x160 + mod. kits centre distance 150 mm with 150 ■</p>		
height 1050 mm	<p>FC214 FC014 FC425</p> <p>+ mod. kits centre distance 150 mm with 144 ■</p>	<p>FC214 FC014 FC425</p> <p>+ kit HA 160A + mod. kits centre distance 150 mm with 96 ■</p>	<p>FC114 FC214 FC014 FC124 FC415 FC425</p> <p>+ kit HA 160A + mod. kits centre distance 150 mm with 140 ■ + set of tilded bars + terminal blocks 22 ■</p>	<p>2x FC214 FC014 2x FC425 FC124</p> <p>+ kit x160 + mod. kits centre distance 150 mm with 192 ■ + 2 terminal blocks 44 ■</p>	

The range of quadro4 has been designed in order to propose a complete solution from subdistribution enclosure to the main low voltage distribution boards up to 630A. The dimensions of the quadro4 give it an easy accessibility and increased comfort of internal wiring. The range allows to choose enclosure heights from 450 mm up to 1800 mm, width of 370 mm and 640 mm width in wall mounting or floor standing versions and multiple combinations of enclosures.

quadro4 is composed of back plate

- + top and bottom panel kit or top panel and plinth kit
- + kit of 2 sides
- + full or transparent door

Technical data

- indoor use
- IP30, IK07 without door
- IP40, IK08 with closed door
- IP43, IK08 with closed door
- rated insulation voltage: 690V AC
- nominal current (In): 630A
- Icw: 35kA (1s)
- depth: 267 mm
- colour: RAL 9010
- colour of plinth: RAL 7042
- metallic enclosure
- 12/10 mm thickness CR4 steel for the back plate and the sides
- 10/10 mm thickness CR4 steel for the door

Comply with IEC 62 208, IEC 61 439-1 and -2



FC113

Back plate

- for 1500 mm height back plate (2xFC112) , use FC230 association kit,
- the 1650 and 1800 mm back plates are delivered with 2 intermediate pillars

Height (mm)	Cat. ref. width 370 mm	width 620 mm
450	FC110	FC210
600	FC111	FC211
750	FC112	FC212
900	FC113	FC213
1050	FC114	FC214
1200	FC115	FC215
1350	FC116	FC216
1500	FC112 x 2	FC122 x 2
1650	FC118	FC218
1800	FC119	FC219



FC415

Top and bottom panels

- delivered with the pre-mounting screws (unloosable), cable entry

Description	Cat. ref. triple pole & N	triple pole & switched N
delivered with cable entry plate in insulating material and with contractor name plate holder to ensure IP40	FC415	FC425
delivered with cable entry plates in insulating material to ensure IP43 and with contractor name plate holder	FC416	FC426



FC456

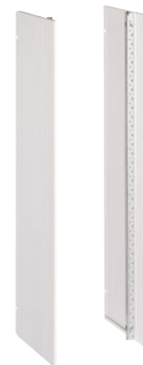
Top panel and plinth

- delivered with the pre-mounting screws (unloosable)
- cable entry and 150mm height plinth

Description	Cat. ref. triple pole & N	triple pole & switched N
delivered with cable entry to ensure IP40	FC445	FC455
delivered with cable entry to ensure IP43	FC446	FC456

Kit of 2 sides

Height (mm)	Cat. ref. width 620 mm
450	FC010
600	FC011
750	FC012
900	FC013
1050	FC014
1200	FC015
1350	FC016
1500	FC012 + FC012
1650	FC012 + FC013
1800	FC013 x 2



FC013

Main switchboards

Full metallic doors

- delivered with adjustable hinges and key lock

Height (mm)	Cat. ref. width 370 mm	width 620 mm
450	FC310	FC330
600	FC311	FC331
750	FC312	FC332
900	FC313	FC333
1050	FC314	FC334
1200	FC315	FC335
1350	FC316	FC336
1500	FC317	FC337
1650	FC318	FC338
1800	FC319	FC339



FC333

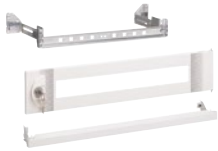
Transparent glazed door

- delivered with adjustable hinges and key lock

Height (mm)	Cat. ref. width 620 mm
450	FC340
600	FC341
750	FC342
900	FC343
1050	FC344
1200	FC345
1350	FC346
1500	FC347
1650	FC348
1800	FC349



FC343



FC350

Equipment unit with door

- for modular devices and DIN rail
- reversible kit
- delivered complete with lock
- adjustable in depth

Description	Cat. ref.
equipment 1 row, 24 modules for enclosure width 620 mm	FC350



FZ597



FZ451



FZ450



FZ449

Locks

- replace the original latch

Description	Cat. ref.
key lock n° 1242E, delivered with 2 keys	FZ597
key lock n° 405, delivered with 2 keys	FZ452
key lock n° 455, delivered with 2 keys	FZ453
lock with male square of 7 mm, chrome plated with 1 key	FZ451
lock with male triangle of 7 mm chrome plated with 1 key	FZ450
lock with double chrome plated bar of 3mm with 1 key	FZ449
plastic spare lock	FZ598N



FC230

Enclosure vertical association kit

- width 370 and 620 mm the continuity of equipments is guaranteed
- 1 set is composed of 2 bolts with screws for connection of the bottoms and of 2 pillars for connection on the sides

Description	Cat. ref.
vertical association kit	FC230



FC123

Enclosure horizontal association kits

- the kit is common for the bottoms of width 370 and 620 mm
- 1 set is composed of 2 bolts with screws for connection of the bottoms and of 2 pillars for connection on the sides

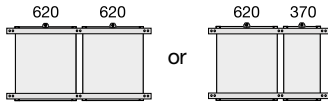
- for bottom of 1650 mm, use 1 x FC 122 + 1 x FC 123
- for bottom of 1800 mm, use 2 x FC 123

Description	for height (mm)	Cat. ref.
horizontal association kit	450	FC120
horizontal association kit	600	FC121
horizontal association kit	750	FC122
horizontal association kit	900	FC123
horizontal association kit	1050	FC124
horizontal association kit	1200	FC125
horizontal association kit	1350	FC126

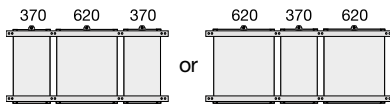
Horizontal link bars

- set of 2 bars delivered with fastening screw on enclosures
- to link several enclosures to facilitate transport or fixing on the wall
- precuts allow to adapt the bars to the desired length
- It is strongly recommended to use the link bars during the association of several bottoms

Description	Cat. ref.
for the association of 2 enclosures 2 x 620 mm or 1 x 620 + 1 x 370 mm	FC192



for the association of 3 enclosures: 2 x 370 + 1 x 620 mm or 2 x 620 + 1 x 370 mm	FC193
--	--------------



Cable entry plates

- insulating material
- IP43 full plastic plate
- for spare top and bottom entry plates

Description	Cat. ref.
cable entry gland plate	FZ402
full cable entry plate	FZ404



Spare entry plate

Description	Cat. ref. width 370 mm	width 620 mm
spare entry plate IP40, RAL 9010	FC419	FC429



FC419

Schematic holders

- self-adhesive, to stick inside the doors
- A4 format

Description	Cat. ref.
flexible	FZ794
rigid	FZ795D

Wall mounting lugs

- fixed at the back delivered with fastening screws

Description	Cat. ref.
1 set of 2 lugs	FM640



FM640

Partition

- 620 mm width sheet metal plate
- for quadro4 and quadro5

Description	Cat. ref.
partition plate	FC664

		Enclosures depth 260 mm delivered without plinth			Enclosures depth 260 mm and 400 mm delivered with plinth of 150 mm			
enclosures height with top and bottom or plinth	internal equipment height	enclosures width:			enclosures width: (435 mm useful) 450 mm total		(685 mm useful) 700 mm total	
		(685 mm useful) 700 mm total	pair of sides	plinth 150 mm	d. 260 mm	d. 400 mm	d. 260 mm	d. 400 mm
510 mm	450 mm	FM200	FM400	FM450	-	-	-	-
660 mm	600 mm	FM201	FM401	FM450	-	-	-	-
810 mm	750 mm	FM202	FM402	FM450	-	-	-	-
960 mm	900 mm	FM203	FM403	FM450	-	-	-	-
1110 mm	1050 mm	FM204	FM404	FM450	-	-	-	-
1260 mm	1200 mm	FM205	FM405	FM450	-	-	-	-
1410 mm	1350 mm	FM206	FM406	FM450	-	-	-	-
1710 mm	1500 mm	-	-	-	FM107	FM117	FM207	FM217
1860 mm	1650 mm	-	-	-	FM108	FM118	FM208	FM218
2010 mm	1800 mm	-	-	-	FM109	FM119	FM209	FM219
vertical association kit		FM 630+ UC890	-	-	-	-	FM630 possible	
horizontal association kit		FM 635+ UC890	-	-	FM 635+ UC890	FM 635+ UC890	FM 635+ UC890	-

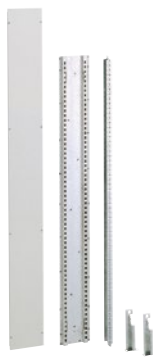
Enclosures
depth 260 mm and
400 mm delivered with
plinth of 150 mm



Side panels



**Busbar compartment
and cable sleeve**



Doors



Enclosures		Side panels		Busbar compartment and cable sleeve		Doors			transparent doors:		functionnal uprights
(885 mm useful) 900 mm total d. 260 mm d. 400 mm		pair of sides d. 260 mm d. 400 mm		for enclosure: width 900 mm total d. 260 mm d. 400 mm		full doors:			width		d. 400 mm
						width 435 mm	width 685 mm	width 885 mm	width 685 mm	width 885 mm	
-	-	-	-	-	-	-	FM530	-	FM540	-	-
-	-	-	-	-	-	-	FM531	-	FM541	-	-
-	-	-	-	-	-	-	FM532	-	FM542	-	-
-	-	-	-	-	-	-	FM533	-	FM543	-	-
-	-	-	-	-	-	-	FM534	-	FM544	-	-
-	-	-	-	-	-	-	FM535	-	FM545	-	-
-	-	-	-	-	-	-	FM536	-	FM546	-	-
FM307	FM317	FM407	FM417	FM427	FM437	FM517	FM537	FM557	FM547	FM567	FM477
FM308	FM318	FM408	FM418	FM428	FM438	FM518	FM538	FM558	FM548	FM568	FM478
FM309	FM319	FM409	FM419	FM429	FM439	FM519	FM539	FM559	FM549	FM569	FM479
-	-	-	-	-	-	-	-	-	-	-	-
FM635+ UC890	-	-	-	-	-	-	-	-	-	-	-

The range of quadro5 proposes a complete solution from subdistribution enclosures to the main low voltage distribution boards. The quadro5 monobloc enclosures are designed for enclosed distribution up to 630A. Delivered without sides, they can be joined horizontally and vertically to create multiple assemblies. The range allows you to choose enclosure heights from 1710 mm up to 2010 mm, depth from 260 mm up to 400 mm width in wall mounting or floor standing versions and multiple combinations of enclosures.

quadro5 is composed of
 structure with back plate, top panel and plinth kit
 + kit of 2 sides
 + full or transparent door

Technical data

- IP30, IK08 without door
- IP55, IK10 with door
- rated insulation voltage : 690V AC
- floor standing nominal current (In): 630A, 35kA (1s)
- wall mounting nominal current (In): 250A, 25kA (1s)
- depth: 260 or 400 mm
- colour: RAL 9010
- colour of plinth: RAL 7042
- metallic enclosure
- extra cabling space
- plinth height: 150 mm
- 12/10 mm thickness CR4 steel for the back plate and the sides
- 10/10 mm thickness CR4 steel for the door

Complies with

IEC 62 208, IEC 61 439



FM208

Enclosures with plinth

- delivered with 2 wall fixing lugs, top and bottom cover plate and 150 mm height plinth

Width (mm)	Total height (mm)	Equipment height (mm)	Depth (mm)	Cat. ref. enclosure	sides
450	1710	1500	260	FM107	FM407
450	1710	1500	400	FM117	FM417
450	1860	1650	260	FM108	FM408
450	1860	1650	400	FM118	FM418
450	2010	1800	260	FM109	FM409
450	2010	1800	400	FM119	FM419
700	1710	1500	260	FM207	FM407
700	1710	1500	400	FM217	FM417
700	1860	1650	260	FM208	FM408
700	1860	1650	400	FM218	FM418
700	2010	1800	260	FM209	FM409
700	2010	1800	400	FM219	FM419
900	1710	1500	260	FM307	FM407
900	1710	1500	400	FM317	FM417
900	1860	1650	260	FM308	FM408
900	1860	1650	400	FM318	FM418
900	2010	1800	260	FM309	FM409
900	2010	1800	400	FM319	FM419



FM204

Boards

- 700 mm width
- delivered with 4 mounting lugs and cover plate

Width (mm)	Total height (mm)	Equipment height (mm)	Depth (mm)	Cat. ref. enclosure	sides
700	510	450	260	FM200	FM400
700	660	600	260	FM201	FM401
700	810	750	260	FM202	FM402
700	960	900	260	FM203	FM403
700	1110	1050	260	FM204	FM404
700	1260	1200	260	FM205	FM405
700	1410	1350	260	FM206	FM406

Note

- for total width of 450 mm, the inside width is 435 mm (with sides)
- for total width of 700 mm, the inside width is 685 mm (with sides)
- for total width of 900 mm, the inside width is 885 mm (with sides), to use with a kit for cable sleeve or busbar compartment cable sleeve or busbar compartment: 200 mm

Kits for cable compartment

- allow to create a cable compartment with cable of 200 mm in 885 mm width enclosure
- delivered with 2 fixing lugs, 1 pillar kit, 1 support of front plates and a full front plate

Description	Depth (mm)	Cat. ref.
for FM307	260	FM427
for FM317	400	FM437
for FM308	260	FM428
for FM318	400	FM438
for FM309	260	FM429
for FM319	400	FM439



FM428

Main switchboards

Plinth

- delivered with 4 screws + 4 nuts + cover plates
- dimensions : height = 150 mm, useful width = 685 mm, total width = 700 mm
- RAL 9042

Description	Depth (mm)	Cat. ref.
for enclosures of width 700 mm	260	FM450



FM450

Functional uprights

Description	Depth (mm)	Cat. ref.
for FM317	400	FM477
for FM318	400	FM478
for FM319	400	FM479

Plain metallic doors

- delivered with hinges, equipped with triangle lock (for locks, see next page), reversible doors
- distance between door and front plate is 54 mm

Height (mm)	Cat. ref.		
	width 450 mm	width 700 mm	width 900 mm
510	-	FM530	-
660	-	FM531	-
810	-	FM532	-
960	-	FM533	-
1110	-	FM534	-
1260	-	FM535	-
1410	-	FM536	-
1710	FM517	FM537	FM557
1860	FM518	FM538	FM558
2010	FM519	FM539	FM559



FM532



FM568

Transparent glazed doors

- in sheet steel with a tempered smoked grey glass plate, thickness 3 mm
- delivered with hinges and equipped with triangle lock

Height (mm)	Cat. ref.		
	width 450 mm	width 700 mm	width 900 mm
510	-	FM540	-
660	-	FM541	-
810	-	FM542	-
960	-	FM543	-
1110	-	FM544	-
1260	-	FM545	-
1410	-	FM546	-
1710	-	FM547	FM567
1860	-	FM548	FM568
2010	-	FM549	FM569



FZ597



FZ449



FZ451



FZ450

Locks

- dedicated to wall mounting boards
- replace the original lock for the following doors height: 510 mm, 660 mm, 810 mm, 960 mm, 1110 mm, 1260 mm, 1410 mm

Description	Cat. ref.
key lock n° 1242E, delivered with 2 keys	FZ597
key lock n° 405, delivered with 2 keys	FZ452
key lock n° 455, delivered with 2 keys	FZ453
lock with male square of 7 mm, chrome plated with 1 key	FZ451
lock with male triangle of 7 mm chrome plated with 1 key	FZ450
lock with double chrome plated bar of 3mm with 1 key	FZ449
IP44 door shield handle	FZ598N



FZ515



FZ517

Inserts for locks

- replace the lock of origin on the doors height: 1710 mm, 1860 mm, 2010 mm

Description	Cat. ref.
triangle insert 8 mm	FZ515
square insert 6 x 6 mm	FZ517
rotary handle lock with key 1242E lock cylinder	FZ508
triangle key + square + double bar	FZ850



FZ680

IP55 handle

- dedicated to floor standing enclosures

Description	Cat. ref.
without key insert	FZ680
padlockable handle, Ø 7 mm hole, padlock not included	FL78Z

Inserts for locks for handle

- replace the lock of origin on the doors height:
1710 mm, 1860 mm, 2010 mm



FL74Z-FL75Z-FL76Z-FL77Z

Description	Cat. ref.
half cylinder triangle 8 mm insert	FL74Z
half cylinder double bit Ø 3 mm insert	FL75Z
half cylinder squared 8 x 8 mm insert	FL76Z
half cylinder with key E333 key insert	FL77Z
half cylinder squared 6 x 8 mm insert	FL98Z

Association kits

Description	Cat. ref.
kit of vertical association for boards including: 4 screws + M12 nuts, 4 washers, 1 self-adhesive seal	FM630
kit of horizontal association for boards and enclosures including: 6 screws + M6 nuts, 1 self-adhesive seal	FM635



FM630

Back plates

Description	Cat. ref.
h.150 x w.600 mm	FM482
h.200 x w.600 mm	FM483
h.300 x w.600 mm	FM484
h.400 x w.600 mm	FM485
h.600 x w.600 mm	FM486
h.150 x w.800 mm	FM492
h.200 x w.800 mm	FM493
h.300 x w.800 mm	FM494
h.400 x w.800 mm	FM495
h.600 x w.800 mm	FM496

Schematic holders

- size A4

Description	Cat. ref.
flexible, in plastic material, self-adhesive to stick inside the doors	FZ794
rigid, in sheet metal, with adhesive to stick inside the doors	FZ795D



FZ794

2 wall mounting lugs

- for quadro4 and quadro5
- to fix the enclosures on the wall, the lugs can be positioned vertically and horizontally

Description	Cat. ref.
2 wall mounting lugs	FM640



FM640

2 lifting rings

- allow the transport (lifting) of a unit, maximum weight 250 kg
- including 2 rings and 2 nuts M12 screws

Description	Cat. ref.
2 lifting rings	FM653



FM653

quadro+ includes assemblies, equipment and accessories required to build distribution enclosures with IP30 or IP55 protection levels up to 4000A with or without solid or transparent door.

The range includes:

- L 450 mm assemblies to be used as busbar or cable compartments or to be equipped with kits for modules and blocks with a width of 10 DIN modules
- L700 mm assemblies to be equipped with kits for modules and blocks with a width of 24 DIN modules
- L900 mm assemblies to be equipped with kits for modules and blocks with a width of 36 DIN modules
- L1000 mm assemblies to be equipped with kits for modules and blocks with a width of 24 DIN modules + 300 mm (usable 200 mm) busbar compartment
- Solid and transparent doors

- IP30 trim cornice

- All assemblies are available in heights of 1900 and 2100 mm and depths of 400, 600 and 800 mm
- Solid front panels, kits for modular apparatus, kits for moulded-case circuit-breakers
- Internal doors to enable the installation of control enclosures to supplement the distribution enclosures
- Internal panels
- DIN cable-trays
- Universal and pre-drilled panels
- Vertical and horizontal separation panels
- Bar systems up to 1600A
- Distribution blocs and staged busbar blocs
- Horizontal and vertical ducts

Technical data:

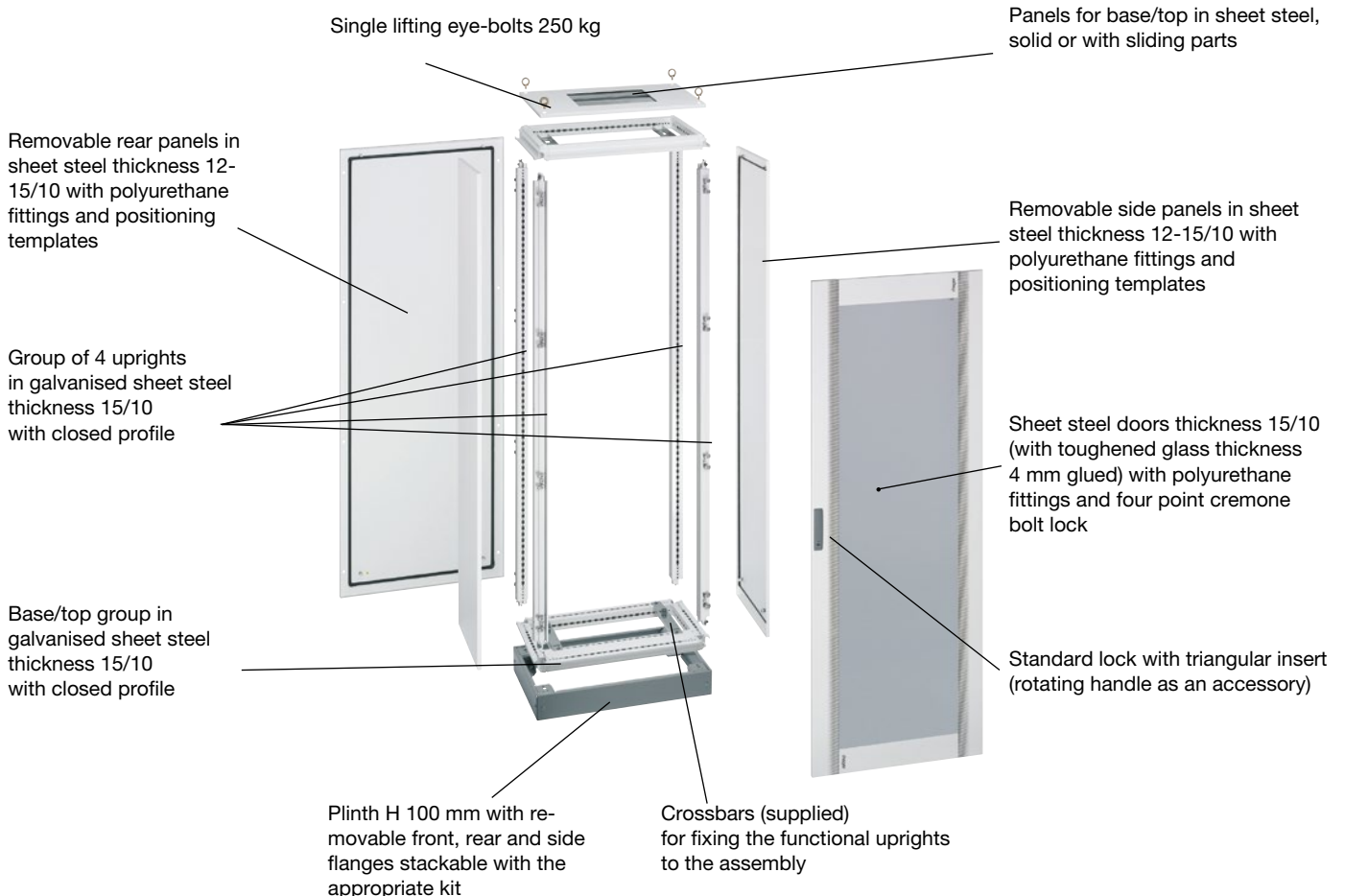
- Modular, composable assembly allowing side-by-side positioning
- Uprights, base and top in galvanised sheet steel, thickness 15/10 in closed profile
- Join between base, top and uprights using patent three dimensional die-cast joint and only 8 screws
- Base panels/top panels, side panels, rear panels and solid / transparent doors constructed of sheet steel with a thickness of 12-15/10 with polyurethane seals continuously glued by a robot-controlled process;
- Interior panels with DIN profiles, pre-drilled brackets and assembly accessories made in galvanised and Sendzimir sheet steel
- Transparent doors fitted with toughened safety glass thickness 4 mm continuously glued with polyurethane adhesive by a robot-controlled process
- Painted using epoxy powder smooth finish colour RAL 9010 for assembly, doors, fitting kits and RAL 7042 for the plinths, after previous washing, phosphating and passivation of the metal sheets.
- Equipotential joints between the various parts of the assembly and between the assembly and the fitting kits, made by contact and

without the need for joins in the cable.

- Reversible doors, fitted with clasp and cremone bolts having locks with interchangeable triangular insert (rotating handle with interchangeable inserts provided as an accessory). Installable front and rear.
- Plinths height 100 mm with removable front, rear and side flanges and with holes for fixing to the floor.
- Lifting eye-bolts for single and series enclosures (supplied as an accessory)
- IP55 protection level (IP30 with door open/without door)
- Separation matrix up to 3a
- Rated operating voltage 690 V
- Rated insulation voltage 690 V
- Rated current 1600A
- Rated overload current 50 kA

Complies with

- CEI EN 62208
- CEI EN 61439-1/2 standard with CESI test-reports
- Internal installation

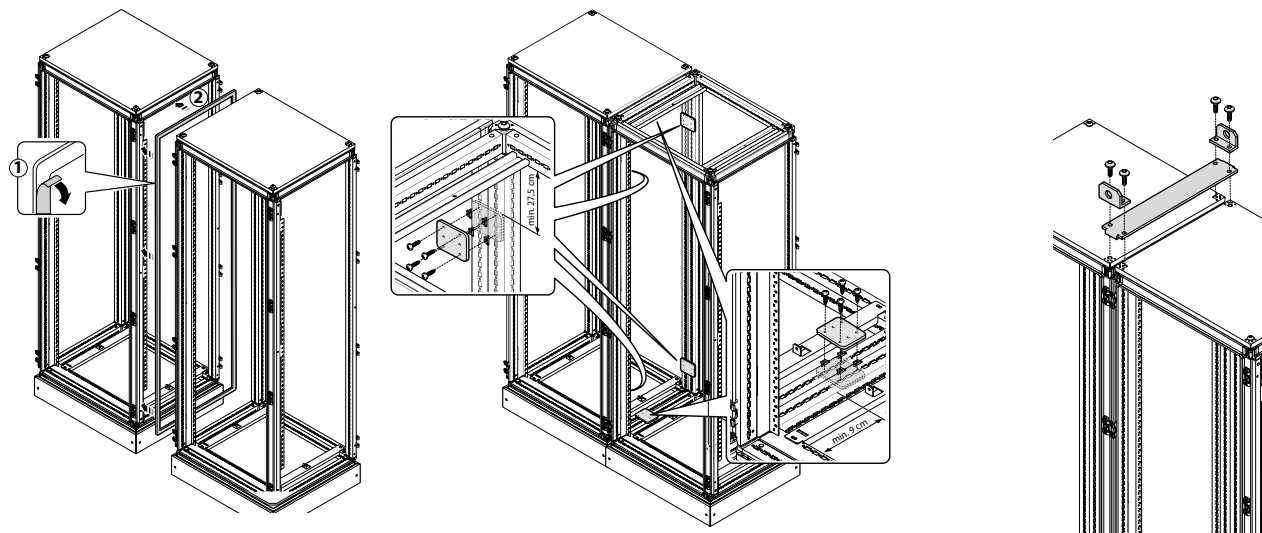


Side-by-side positioning

quadro+ assemblies can be placed side by side without specific constraints on size or combination, while maintaining unchanged the IP55 protection level using only:
2 side-coupling elements article 10894 - FN950*; adhesive fittings article 10890 - UC890*;
covering flange article:
- FN942E for P400 mm enclosures
- FN943E for P600 mm enclosures
- FN944E for P800 mm enclosures

Even in the case of assemblies positioned side by side, equipotential linking is made by contact, without the need for joins in the cable

For lifting the enclosures, eye bolts are also provided for single enclosures (art. 17880 - FZ767* max load 250 kg) and for enclosures placed side by side (art. FZ760E max load 500 kg).



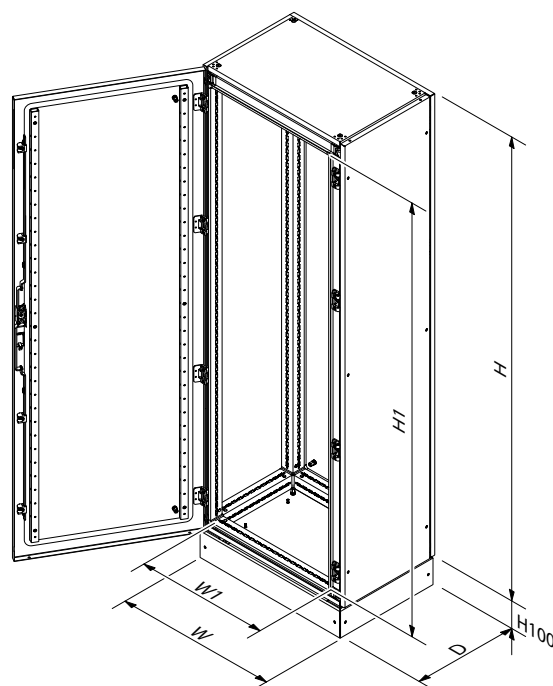
Modular construction

quadro+ is designed to combine the concept of composability with the concept of modularity in order to simplify as much as possible the planning of the enclosure and the choice of the relevant components.

This modular design is constructed on a 50 mm base vertical module and on a 250 mm base horizontal module.

All quadro+ structural components (uprights, vertical dividing uprights, functional uprights, doors, etc.) as well as all the fitting components (kits for modular and moulded units, solid panels, internal panels, separators, etc.), are constructed in a height which is a multiple of the 50 mm module and a width which is a multiple of the 250 mm module.

The following are the capacities of the assemblies in mod 50 and in DIN modules:



Assemblies with height H1900 mm

modular height H1:
9 mod. 200 (1800 mm)
120/288/432 mod. DIN

Assemblies with height H2100 mm

modular height H1:
10 mod. 200 (2000 mm)
130/312/468 mod. DIN

Assemblies with width W450 mm

(W1: 350 mm)
Modular width W2: 250 mm
10 mod. DIN per row

Assemblies with width W700/1000 mm

(W1: 600 mm)
Modular width W2: 500 mm
24 mod. DIN per row

Assemblies with width W900 mm

(W1: 800 mm)
Modular width W2: 750 mm
36 mod. DIN per row



Composability

quadro+ is a cabinet of composable design which, thanks to its die-cast three dimensional joint, combines the practicality typical of composable assemblies (storage volumes and transport of contents, increased combination options with a reduced number of codes) with the strength found in one-piece welded assemblies.

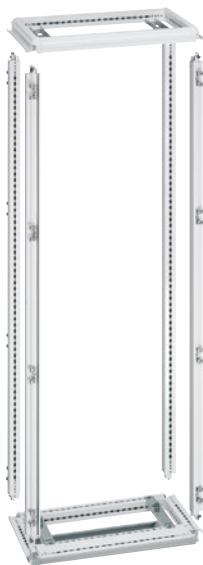
The three-dimensional joint allows for simple and quick assembly with only 8 screws, which guarantees, in addition to IP55 grade protection, the correct positioning of the uprights and the perfect squareness of the assembly.

The base assembly comprises the elements pictured below.

Equipotential connection between the various parts of the assembly is by contact, without the need for cable-joints.



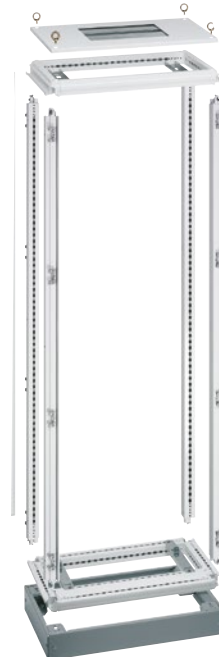
base/top group



group of 4 uprights



solid panel for base or top; panel with sliding parts for base or top



base plinth with removable flanges



fixed panel for rear



fixed panel for side



transparent door with clasp fitted with triangular insert

Range of sizes

quadro+ includes assemblies, fittings and accessories for constructing distribution enclosures with IP55 grade protection up to 1600A with solid or transparent door. The range of assemblies comprises:



Assemblies width 450 mm
height 1900 mm /36 mod. 50 (1800 mm)
2100 mm / 40 mod. 50 (2000 mm)
Depth
400 mm
600 mm
800 mm

For use with busbar/cable spaces or for fitting with kit for moulded-case and modular circuit-breakers width 250 mm / 10 mod. DIN



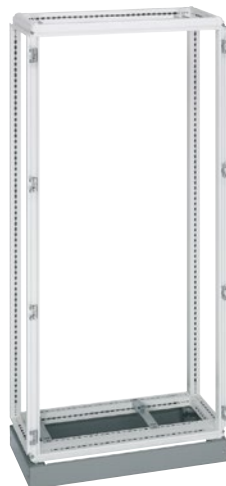
Assemblies width 700 mm
height 1900 mm /36 mod. 50 (1800 mm)
2100 mm /40 mod. 50 (2000 mm)
Depth
400 mm
600 mm
800 mm

For use with kits for moulded and modular circuit-breakers width 600mm /24 mod. DIN



Assemblies width 900 mm
height 1900 mm /36 mod. 50 (1800 mm)
2100 mm /40 mod. 50 (2000 mm)
Depth
400 mm
600 mm
800 mm

For use with kits for moulded modular circuit-breakers width 800mm/36 mod. DIN



Assemblies width 1000 mm
height 1900 mm / 36 mod. 50 (1800 mm)
2100 mm 40 mod. 50 (2000 mm)
Depth
400 mm
600 mm
800 mm

For fitting with the kit for moulded-case and modular circuit-breakers width 600 mm / 24 mod. DIN + busbar/cable space 300 mm (usable 200 mm)



busbar/cable space (right or left)
constructed using 2 vertical upright dividers (front and rear) and 1 panel in front or behind width 300 mm;
The rear can be closed off using 1 panel behind or in front width 1000 mm or 2 panels width 700 and 300 mm

If it is required to fit a full height internal panel, you will need to use 2 further dividing uprights (upper and lower).

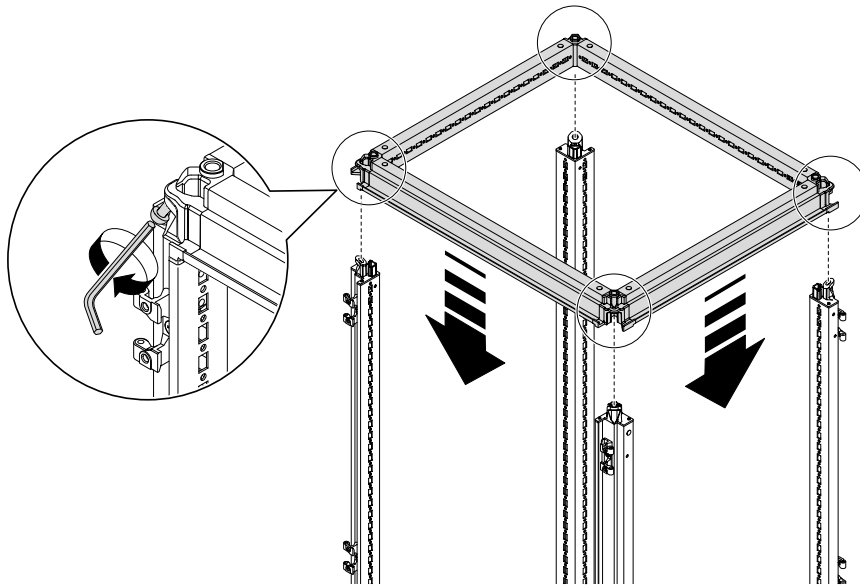
The dimensions of complete assemblies with doors, rear panels and side panels can be determined by adding to the dimensions shown for the modules:
- 18 mm in width
- 18 mm in height*
- 15 mm in depth.

(*) + 100 mm for the base plinth

New joint

The new die-cast joint not only keeps the assembly completely solid and the three planes perfectly upright, but also has new functional characteristics which make assembling the cabinet extremely easy and quick:

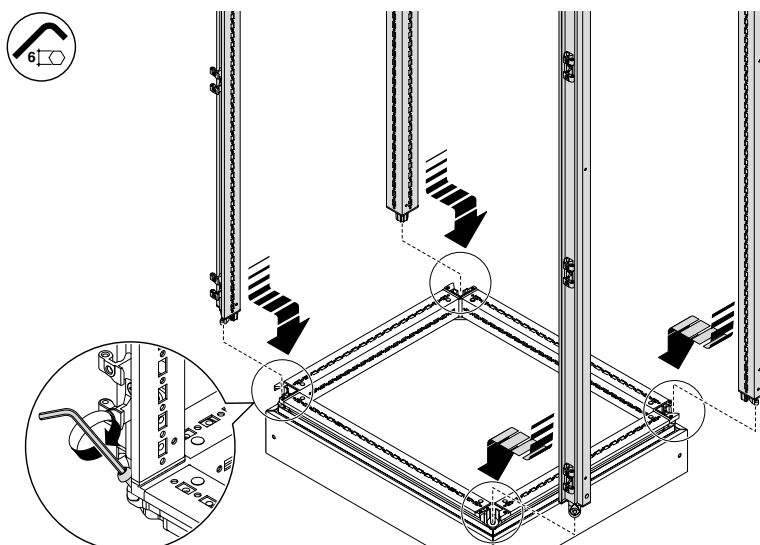
- Joint completely pre-mounted onto base and top
- Only 8 pre-mounted captive screws for assembly
- No loose accessories
- No possibility for assembly errors thanks to the fact that the uprights can only be inserted one way
- Easy access to the 8 fixing screws thanks to their angled insertion.



New uprights

The new uprights combine maximum rigidity with functional characteristics that make assembling the cabinet extremely simple and quick:

- Closed-profile construction
- Captive screws pre-mounted for joining to the base and the top
- Continuous double perforations on the internal sides for inserting wing-nuts and M6 self-tapping screws with the maximum fixing options.
- Die-cast pre-mounted hinges with dual hinge / closing clasp function for doors and front and rear panels



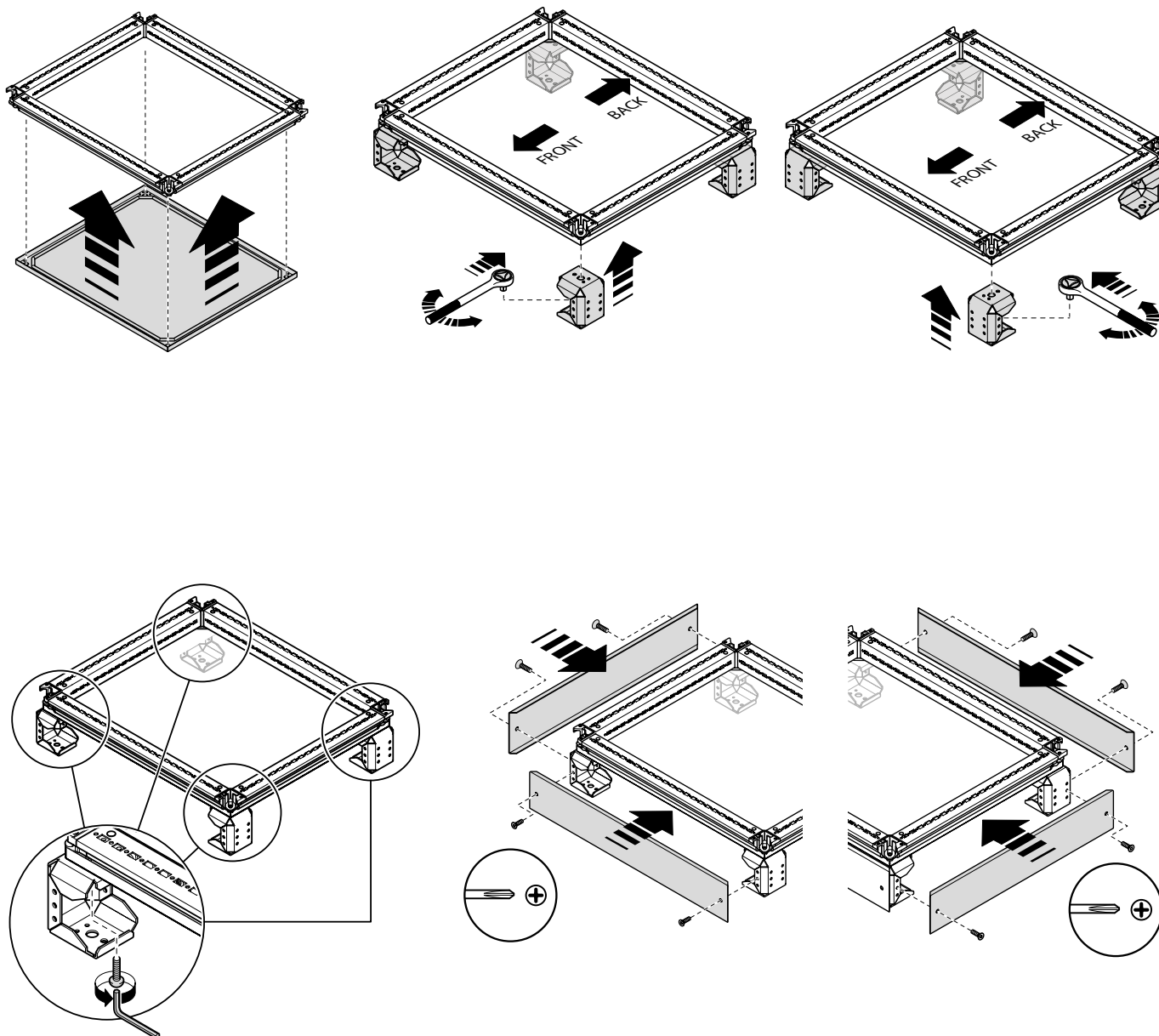
New plinth

The new plinth offers totally reversible corner sections provided with anti-rotation templates.

- The direction of assembly of the corner sections allows you to select the most accessible position for floor fixing. This can be front/back or left/right side.
- The anti-rotation templates and the easy access to the four fixing screws make assembling the corner pieces easy and rapid.
- The full-width closing flanges are fixed by 2 simple screws and provide an enlarged access «window» for easy moving with a fork-lift.



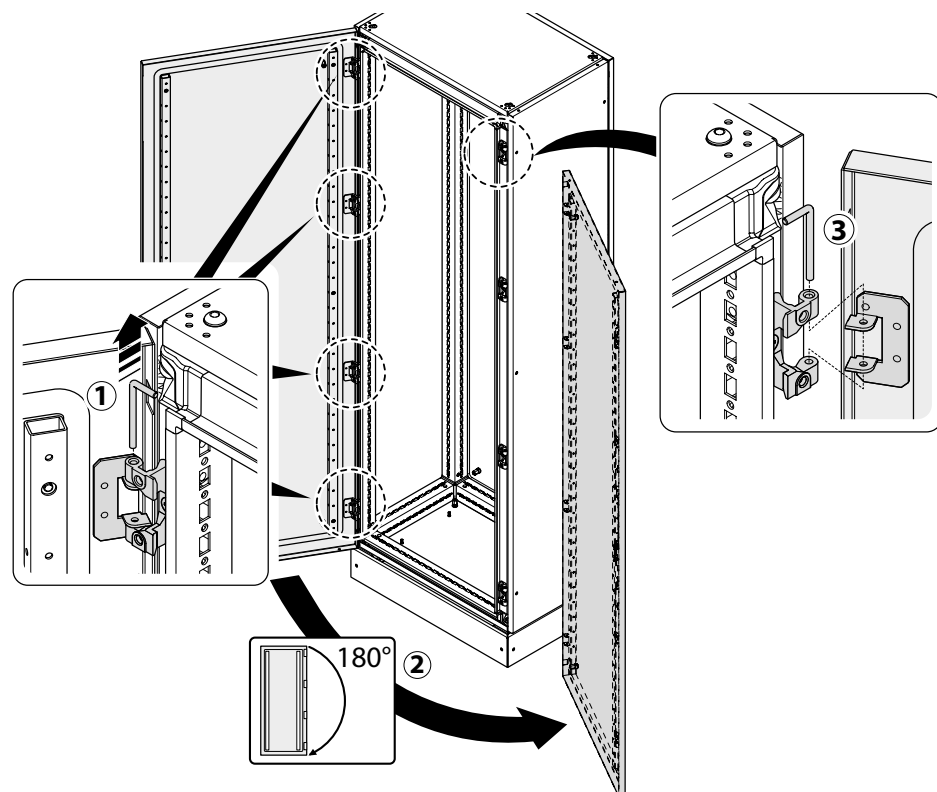
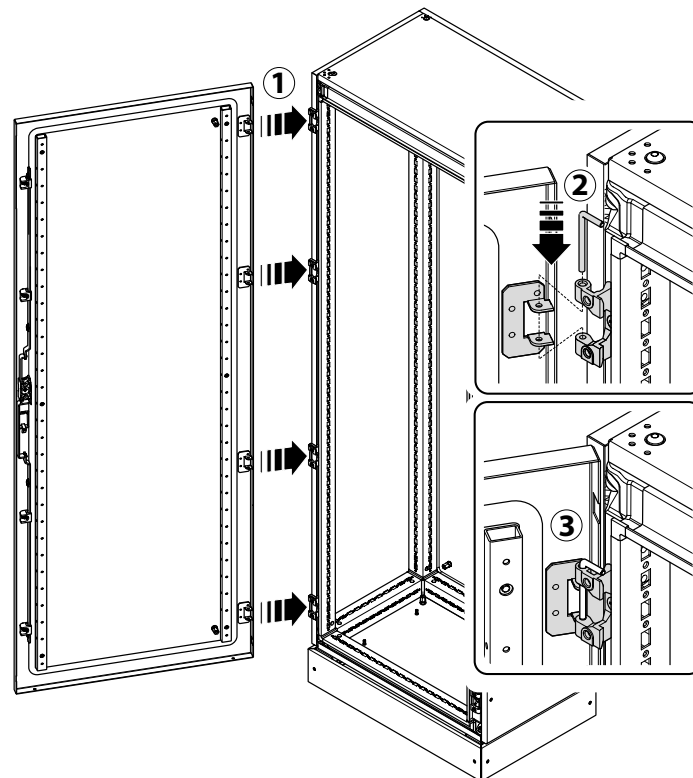
Main switchboards



New hinges

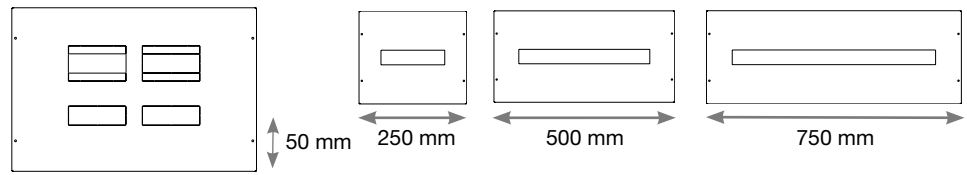
The new die-cast hinges make assembling the door extremely easy and quick:

- Pre-mounted hinges on the uprights
- Dual function hinge and closing clasp
- Assembly of the door with 2 simple operations:
 - 1-Position the door onto the hinges
 - 2-Insert the pins
- The door can be reversed in 2 simple operations:
 - 1-rotate the door through 180°
 - 2-turn the lock (not necessary with the standard lock)



Selection of fitting kits

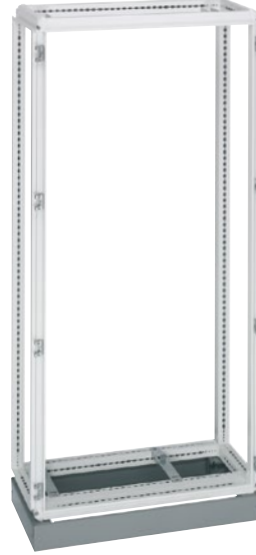
The fitting kits are produced with a modular concept based on the 50 mm high module and the 250 mm wide module (3 modular widths).



Height 50 mm module

Width 250 mm module

Main switchboards

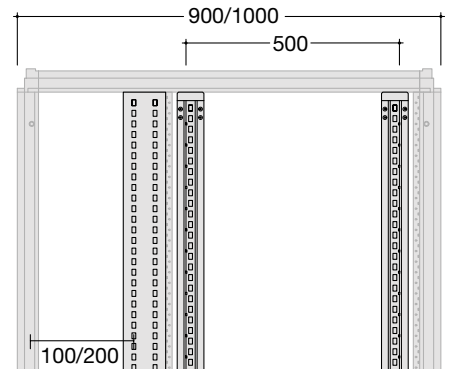
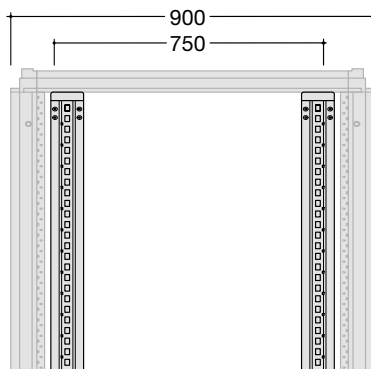
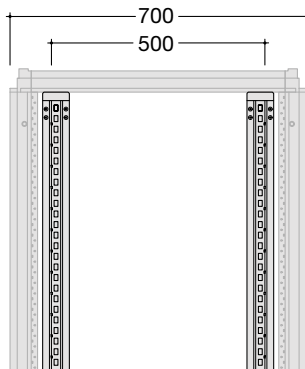
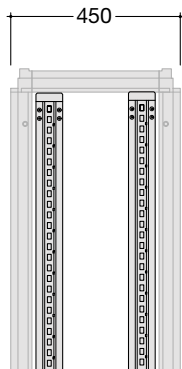


L450 mm assemblies

L700 mm assemblies

L900 mm assemblies

L1000 mm assemblies



Modular width 250 mm

Modular width 500 mm

Modular width 575 mm

Modular width 500 mm



front kit and panels L350



front kit and panels L600



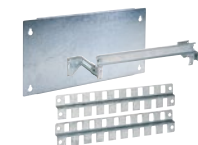
front kit and panels L800



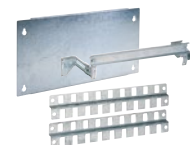
front kit and panels L600



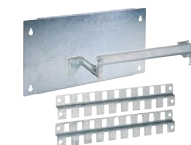
front panels, DIN rails, L250 brackets



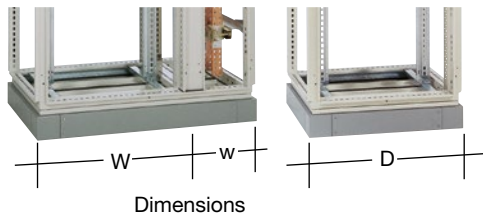
front panels, DIN rails, L500 brackets



front panels, DIN rails, L750 brackets



front panels, DIN rails, L500 brackets













	width W+w (mm)	width W (mm)	height H (mm)	depth D (mm)	top and bottom frame	4 uprights	vertical dividing upright	horizontal dividing upright	plain plate for top and bottom frames	sliding plate plate for top and bottom frames	full door
-	450	1900	400	FN018E	FN046E	-	-	FN078E	FN098E	FN546E	
-	450	2100	400	FN018E	FN047E	-	-	FN078E	FN098E	FN547E	
-	450	1900	600	FN020E	FN046E	-	-	FN080E	FN100E	FN546E	
-	450	2100	600	FN020E	FN047E	-	-	FN080E	FN100E	FN547E	
-	450	1900	800	FN022E	FN046E	-	-	FN082E	FN102E	FN546E	
-	450	2100	800	FN022E	FN047E	-	-	FN082E	FN102E	FN547E	
-	700	1900	400	FN021E	FN046E	-	-	FN081E	FN101E	FN506E	
-	700	2100	400	FN021E	FN047E	-	-	FN081E	FN101E	FN507E	
-	700	1900	600	FN029E	FN046E	-	-	FN089E	FN109E	FN506E	
-	700	2100	600	FN029E	FN047E	-	-	FN089E	FN109E	FN507E	
-	700	1900	800	FN013E	FN046E	-	-	FN073E	FN093E	FN506E	
-	700	2100	800	FN013E	FN047E	-	-	FN073E	FN093E	FN507E	
-	900	1900	400	FN023E	FN046E	-	-	FN083E	FN103E	FN526E	
-	900	2100	400	FN023E	FN047E	-	-	FN083E	FN103E	FN527E	
-	900	1900	600	FN031E	FN046E	-	-	FN091E	FN111E	FN526E	
-	900	2100	600	FN031E	FN047E	-	-	FN091E	FN111E	FN527E	
-	900	1900	800	FN017E	FN046E	-	-	FN077E	FN097E	FN526E	
-	900	2100	800	FN017E	FN047E	-	-	FN077E	FN097E	FN527E	
700+200	-	1900	400	FN023E	FN046E	FN286E	FN289E	FN083E	FN103E	FN506E ⁽¹⁾	
700+200	-	2100	400	FN023E	FN047E	FN287E	FN289E	FN083E	FN103E	FN507E ⁽²⁾	
700+200	-	1900	600	FN031E	FN046E	FN286E	FN291E	FN091E	FN111E	FN506E ⁽¹⁾	
700+200	-	2100	600	FN031E	FN047E	FN287E	FN291E	FN091E	FN111E	FN507E ⁽²⁾	
700+200	-	1900	800	FN017E	FN046E	FN286E	FN292E	FN077E	FN097E	FN506E ⁽¹⁾	
700+200	-	2100	800	FN017E	FN047E	FN287E	FN292E	FN077E	FN097E	FN507E ⁽²⁾	
700+300	-	1900	400	FN024E	FN046E	FN286E	FN289E	FN084E	FN104E	FN506E ⁽³⁾	
700+300	-	2100	400	FN024E	FN047E	FN287E	FN289E	FN084E	FN104E	FN507E ⁽⁴⁾	
700+300	-	1900	600	FN032E	FN046E	FN286E	FN291E	FN092E	FN112E	FN506E ⁽³⁾	
700+300	-	2100	600	FN032E	FN047E	FN287E	FN291E	FN092E	FN112E	FN507E ⁽⁴⁾	
700+300	-	1900	800	FN037E	FN046E	FN286E	FN292E	FN121E	FN117E	FN506E ⁽³⁾	
700+300	-	2100	800	FN037E	FN047E	FN287E	FN292E	FN121E	FN117E	FN507E ⁽⁴⁾	

⁽¹⁾ Door + busbar compartment panel FN266

⁽²⁾ Door + busbar compartment panel FN267

⁽³⁾ Door + busbar compartment panel FN206

⁽⁴⁾ Door + busbar compartment panel FN207

	 transparent doors	 back panel	 finishing frame (without door)	 cable compartment (front/rear)	 sides full panel	 plinth H = 100mm	 internal steel door	 galvanized steel plate	 functionnal uprights whole height 1900 mm	 functionnal uprights partial height 1600 mm
-	FN216E	-	-	FN356E	FN438E	-	FN726E	FN696E	FN896E + 2 x FN690E	
-	FN217E	-	-	FN357E	FN438E	-	FN727E	FN697E	FN897E + 2 x FN690E	
-	FN216E	-	-	FN366E	FN440E	-	FN726E	FN696E	FN896E + 2 x FN691E	
-	FN217E	-	-	FN367E	FN440E	-	FN727E	FN697E	FN897E + 2 x FN691E	
-	FN216E	-	-	FN376E	FN442E	-	FN726E	FN696E	FN896E + 2 x FN692E	
-	FN217E	-	-	FN377E	FN442E	-	FN727E	FN697E	FN897E + 2 x FN692E	
FN516E	FN276E	FN406E	-	FN356E	FN441E	FN700E	FN736E	FN696E	FN896E + 2 x FN690E	
FN517E	FN277E	FN407E	-	FN357E	FN441E	FN701E	FN737E	FN697E	FN897E + 2 x FN690E	
FN516E	FN276E	FN406E	-	FN366E	FN451E	FN700E	FN736E	FN696E	FN896E + 2 x FN691E	
FN517E	FN277E	FN407E	-	FN367E	FN451E	FN701E	FN737E	FN697E	FN897E + 2 x FN691E	
FN516E	FN276E	FN406E	-	FN376E	FN433E	FN700E	FN736E	FN696E	FN896E + 2 x FN692E	
FN517E	FN277E	FN407E	-	FN377E	FN433E	FN701E	FN737E	FN697E	FN897E + 2 x FN692E	
FN536E	FN296E	FN426E	-	FN356E	FN443E	FN706E	FN746E	FN696E	FN896E + 2 x FN690E	
FN537E	FN297E	FN427E	-	FN357E	FN443E	FN711E	FN747E	FN697E	FN897E + 2 x FN690E	
FN536E	FN296E	FN426E	-	FN366E	FN453E	FN706E	FN746E	FN696E	FN896E + 2 x FN691E	
FN537E	FN297E	FN427E	-	FN367E	FN453E	FN711E	FN747E	FN697E	FN897E + 2 x FN691E	
FN536E	FN296E	FN426E	-	FN376E	FN437E	FN706E	FN746E	FN696E	FN896E + 2 x FN692E	
FN537E	FN297E	FN427E	-	FN377E	FN437E	FN711E	FN747E	FN697E	FN897E + 2 x FN692E	
FN516E ⁽¹⁾	FN296E	FN426E	FN266E	FN356E	FN443E	FN706E	FN746E	FN696E	FN896E + 2 x FN690E	
FN517E ⁽²⁾	FN297E	FN427E	FN267E	FN357E	FN443E	FN711E	FN747E	FN697E	FN897E + 2 x FN690E	
FN516E ⁽¹⁾	FN296E	FN426E	FN266E	FN366E	FN453E	FN706E	FN746E	FN696E	FN896E + 2 x FN691E	
FN517E ⁽²⁾	FN297E	FN427E	FN267E	FN367E	FN453E	FN711E	FN747E	FN697E	FN897E + 2 x FN691E	
FN516E ⁽¹⁾	FN296E	FN426E	FN266E	FN376E	FN437E	FN706E	FN746E	FN696E	FN896E + 2 x FN692E	
FN517E ⁽²⁾	FN297E	FN427E	FN267E	FN377E	FN437E	FN711E	FN747E	FN697E	FN897E + 2 x FN692E	
FN516E ⁽³⁾	FN246E	FN406E	FN206E	FN356E	FN444E	FN700E	FN736E	FN696E	FN896E + 2 x FN690E	
FN517E ⁽⁴⁾	FN247E	FN407E	FN207E	FN357E	FN444E	FN701E	FN737E	FN697E	FN897E + 2 x FN690E	
FN516 ⁽³⁾	FN246E	FN406E	FN206E	FN366E	FN454E	FN700E	FN736E	FN696E	FN896E + 2 x FN691E	
FN517E ⁽⁴⁾	FN247E	FN407E	FN207E	FN367E	FN454E	FN701E	FN737E	FN697E	FN897E + 2 x FN691E	
FN516E ⁽³⁾	FN246E	FN406E	FN206E	FN376E	FN459E	FN700E	FN736E	FN696E	FN896E + 2 x FN692E	
FN517E ⁽⁴⁾	FN247E	FN407E	FN207E	FN377E	FN459E	FN701E	FN737E	FN697E	FN897E + 2 x FN692E	

quadro+ range is the ideal solution for achieving the main distribution boards up to 4000A in commercial and industrial installation ; where efficiency and operational continuity impose high quality standards and flexibility, where performances are required in terms of degree of protection, safety and reliability.
quadro+ enclosures join horizontally with no limit, to form a complete structure.

quadro+ is composed of

- + top and bottom frames
- + plinth kit, height 100mm
- + uprights
- + side panels
- + back panel
- + panel for busbar compartment
- + full or transparent doors
- + top and bottom cable gland plates

Technical data

- IP30 / IK08 without door
- IP55 / IK10 with door
- rated insulation voltage: 690V AC
- nominal current (In) : 1600 A
- short circuit level: 85kA (1s)
- RAL 9010 (structure) and RAL 7042 (plinth)
- metallic enclosure
- 4 widths: 450, 700, 900, 1000 mm,
- 2 heights: 1900, 2100 mm,
- 3 depths: 400, 600, 800 mm.
- form 2b
- 12/10 mm thickness CR4 steel for the back plate and the sides
- 10/10 mm thickness CR4 steel for the door

Comply with

IEC 62 208, IEC 61 439-1 and -2



FN018E

Top and bottom frames

Width (mm)	Depth (mm)	Cat. ref.
450	400	FN018E
700	400	FN021E
900	400	FN023E
1000	400	FN024E
450	600	FN020E
700	600	FN029E
900	600	FN031E
1000	600	FN032E
450	800	FN022E
700	800	FN013E
900	800	FN017E
1000	800	FN037E



FN081E

Cable gland plates

- can be mounted on top and bottom

Width (mm)	Depth (mm)	Cat. ref.	
		full	sliding
450	400	FN078E	FN098E
700	400	FN081E	FN101E
900	400	FN083E	FN103E
1000	400	FN084E	FN104E
450	600	FN080E	FN100E
700	600	FN089E	FN109E
900	600	FN091E	FN111E
1000	600	FN092E	FN112E
450	800	FN082E	FN102E
700	800	FN073E	FN093E
900	800	FN077E	FN097E
1000	800	FN121E	FN117E



FN101E

Structural uprights

Description	Height (mm)	Cat. ref.
set of 4 uprights	1900	FN046E
set of 4 uprights	2100	FN047E



FN046E

Vertical dividing uprights

- for cable compartment in enclosure width 900 mm (700 + 200) or 1000 mm (700 + 300)
- delivered with 1 upright and fixing accessories

Description	Height (mm)	Cat. ref.
vertical dividing uprights	1900	FN286E
vertical dividing uprights	2100	FN287E



FN286E

Functional uprights kits

- do not fit in 300 mm busbar compartment or cable sleeve
- FN896E and FN897E dedicated for enclosure with 200mm horizontal top busbar compartment

Description	Height (mm)	Mod. height (mm)	Cat. ref.
kit composed of 2 full height uprights for the kit fixation and 2 full height uprights for the front plate fixation	1900	1800	FN696E
kit composed of 2 full height uprights for the kit fixation and 2 full height uprights for the front plate fixation	1900	1600	FN896E
kit composed of 2 partial height uprights for the kit fixation and 2 partial height uprights for the front plate fixation	2100	2000	FN697E
kit composed of 2 partial height uprights for the kit fixation and 2 partial height uprights for the front plate fixation	2100	1800	FN897E



FN696E

Functional uprights partial height

- fixing of the uprights with 4 perforated brackets (not included):
 - FN690E for quadro+ P400 mm
 - FN691E for quadro+ P600 mm
 - FN692E for quadro + P800 mm

Height (mm)	Cat. ref.
150	FN891E
200	FN892E
300	FN893E
400	FN894E
600	FN895E

Vertical functional uprights

- allows to achieve a double face mounting enclosure

Description	Width (mm)	Cat. ref.
vertical functional uprights	700	UC807
vertical functional uprights	900	UC809

Profiles for front cover fixing

- for the use of FN891E to FN895E and UC807 and UC809

Description	Height (mm)	Mod. height (mm)	Cat. ref.
kit composed of 2 full height uprights for the front plate fixation	1900	1800	FN696EP
kit composed of 2 full height uprights for the front plate fixation	1900	1600	FN896EP
kit composed of 2 partial height uprights for the front plate fixation	2100	2000	FN697EP
kit composed of 2 partial height uprights for the front plate fixation	2100	1800	FN897EP



FN289E

Horizontal brackets

Description	Depth (mm)	Cat. ref.
horizontal brackets	400	FN289E
horizontal brackets	600	FN291E
horizontal brackets	800	FN292E



FN438E

Base plinth kits

Width (mm)	Depth (mm)	Cat. ref.
450	400	FN438E
700	400	FN441E
900	400	FN443E
1000	400	FN444E
450	600	FN440E
700	600	FN451E
900	600	FN453E
1000	600	FN454E
450	800	FN442E
700	800	FN433E
900	800	FN437E
1000	800	FN459E

Plinth overlapping kits

- to superpose 2 plinths

Description	Cat. ref.
seal 10 x 6 mm, length 10 m	FN430E



FN276E

Back panels

- to be mounted on the back of the enclosures

Width (mm)	Height (mm)	Cat. ref.
450	1900	FN216E
450	2100	FN217E
700	1900	FN276E
700	2100	FN277E
900	1900	FN296E
900	2100	FN297E
1000	1900	FN246E
1000	2100	FN247E

Side panels

- fixing by screws on the sides

Depth (mm)	Height (mm)	Cat. ref.
400	1900	FN356E
400	2100	FN357E
600	1900	FN366E
600	2100	FN367E
800	1900	FN376E
800	2100	FN377E

Cable compartment panels

- to close 200 or 300 mm cable compartment,
- can be mounted on the front or on the back side

Width (mm)	Height (mm)	Cat. ref.
900 mm (200 mm cable compartment)	1900	FN266E
900 mm (200 mm cable compartment)	2100	FN267E
1000 mm (300 mm cable compartment)	1900	FN206E
1000 mm (300 mm cable compartment)	2100	FN207E
450 mm (450 mm cable compartment)	1900	FN216E
450 mm (450 mm cable compartment)	2100	FN217E



Full and transparent doors

- delivered complete with hinges and with triangular key lock

Width (mm)	Height (mm)	Cat. ref.	
		full	transparent
450	1900	FN546E	FN510E
450	2100	FN547E	FN511E
700	1900	FN506E	FN516E
700	2100	FN507E	FN517E
900	1900	FN526E	FN536E
900	2100	FN527E	FN537E
1000	1900	FN506E + FN206E	FN516E + FN206E
1000	2100	FN507E + FN207E	FN517E + FN207E



Door stopper

- to block the door in open position

Description	Cat. ref.
for door width: 450 and 700 mm	FN952



Door handle

Description	Cat. ref.
rotary handle lock cylinder, with key 1242E	FZ508



FZ517

Inserts for locks

- replace the lock of the original door handle FZ508

Description	Cat. ref.
triangle insert 8 mm	FZ515
square insert 8 x 8 mm	FZ517
rotary handle lock with key 1242E lock cylinder	FZ508
triangle key + square + double bar	FZ850



FZ515



FZ680

IP55 handle

- dedicated to floor standing enclosures

Description	Cat. ref.
without key insert	FZ680
padlockable handle, Ø 7 mm hole, padlock not included	FL78Z



FL74Z-FL75Z-FL76Z-FL77Z-
FZ98Z

Inserts for locks for handle

- replace the lock of origin on the doors height: 710 mm, 1860 mm, 2010 mm

Description	Cat. ref.
half cylinder triangle 8mm insert	FL74Z
half cylinder double bit Ø 3 mm insert	FL75Z
half cylinder squared 8 x 8 mm insert	FL76Z
half cylinder squared 6 x 8 mm insert	FL77Z
half cylinder with key E333 key insert	FL98Z



FZ795

Rigid diagram holders

- delivered with adhesive for fixing inside doors

Description	Cat. ref.
in sheet steel, A4 size	FZ795

Corner transfer pre-assembled enclosure

- to be used for realisation of a "L" or "U" shape enclosure installation
- 100mm height plinth kit included

Width (mm)	Depth (mm)	Height (mm)	Cat. ref.
600	600	1900	FN006E
600	600	2100	FN007E
800	800	1900	FN008E
800	800	2100	FN009E



FN950

Horizontal association kits

- for all the enclosures

Description	Cat. ref.
kit with 4 galvanized steel parts 40/10e	FN950

Cells connection kits

- replace the lock of the original door handle FZ508

Description	Cat. ref.
seal 10 x 6 mm length 10 m	FN951

Plinth overlapping kits

- to superpose 2 plinths

Description	Cat. ref.
seal 10 x 6 mm length 10 m	FN430E



FN430E

Back to back association kit

Description	Cat. ref.
plates + screws	FN954E

Cover plates

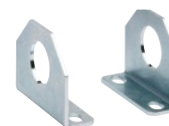
- to close space between two associated enclosures
- to be used for each association

Description	Cat. ref.
lateral association 400 mm	FN942E
lateral association 600 mm	FN943E
lateral association 800 mm	FN944E
back to back association 450 mm	FN946E
back to back association 700 mm	FN947E
back to back association 900 mm	FN948E
back to back association 1000 mm	FN949E

Lifting brackets

- set of 2, delivered with M12 bolt

Description	Cat. ref.
single	FZ767
double	FZ760E



FZ760E

Internal doors

Width (mm)	Height (mm)	Cat. ref.
700	1900	FN700E
700	2100	FN701E
900	1900	FN706E
900	2100	FN711E



FN406E

Finishing frames

- to be used without door (IP30) to help the air dissipation when the cell is located in a technical room

Width (mm)	Height (mm)	Cat. ref.
700/1000	1900	FN406E
900	1900	FN426E
700/1000	2100	FN407E
900	2100	FN427E



FL212Z

Ventilating fans

- reinforced polyamide, colour RAL7035
- IP54
- 230V supply

Description	Rotation/ min.	Airflow	Dimensions WxHxD (mm)	Cat. ref.
ventilating fan 20W	2650/3000	57m ³ /h	150 x 150 x 71	FL210Z
ventilating fan 20W	2650/3000	115m ³ /h	250 x 250 x 113	FL212Z
ventilating fan 29W	2500	240m ³ /h	250 x 250 x 121	FL214Z
ventilating fan 67W	2480/2650	520m ³ /h	325 x 325 x 161	FL216Z



FL220Z

Air vents with filters

- colour RAL7035
- IP54

Description	Dimensions WxHxD (mm)	Cat. ref.
air vent with filter	150 x 150 x 28	FL220Z
air vent with filter	250 x 250 x 31	FL224Z
air vent with filter	325 x 325 x 161	FL226Z



FL230Z

Fan filters

Description	Cat. ref.
filter for FL220Z	FL230Z
filter for FL224Z	FL234Z
filter for FL226Z	FL236Z



FL253Z

Heater supplies

Description	Cat. ref.
heater supply 15W	FL252Z
heater supply 30W	FL253Z
heater supply 45W	FL254Z
heater supply 80W	FL255Z
heater supply 150W	FL256Z



FL258Z

Thermostats

- to control temperature in the enclosure, changeover contact
- fixing on DIN rail

- settings -10° to 80° C
- dimensions: w. 29 x h. 68 x d. 45 mm

Description	Cat. ref.
to control condensation contact NC	FL258Z
to control fan-contact NO	FL259Z

Mounting plates

Width (mm)	Height (mm)	Cat. ref.
450	1900	FN726E
450	2100	FN727E
700	1900	FN736E
700	2100	FN737E
900	1900	FN746E
900	2100	FN747E

Perforated crossbars with clamps

- to mount horizontally on enclosures sides
- H = 50 mm, step of 25 mm



Description	Cat. ref.
for enclosure depth 400 mm	FN690E
for enclosure depth 600 mm	FN691E
for enclosure depth 800 mm	FN692E

FN690E

Mounting rails perforated

- to mount directly on the uprights on the back of the enclosure
- H = 50 mm, step of 25 mm



Description	Cat. ref.
for enclosure width 300 mm	FN873E
for enclosure width 450 mm	FN875E
for enclosure width 700 mm	FN877E
for enclosure width 900 mm	FN879E

FN877E

Perforated brackets

- in depth on crossbars FN690E to FN692E
- step of 25 mm



Description	Cat. ref.	
	H = 50 mm	H = 25 mm
for enclosure width 450 mm	FN863E	FN862E
for enclosure width 700 mm	FN865E	FN864E
for enclosure width 900 mm	FN867E	FN866E

FN864E



FN883E

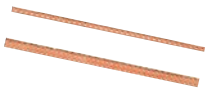
Perforated brackets assemblies

- to mount inside on brackets FN862E to FN867E
- step of 25 mm

Description	Cat. ref.	
	H = 50 mm	H = 25 mm
for enclosure width 400 mm	FN883E	FN882E
for enclosure width 600 mm	FN885E	FN884E
for enclosure width 800 mm	FN887E	FN886E

Brackets for bars support

Description	Cat. ref.
for enclosure width 400 mm	FN970E
for enclosure width 600 mm	FN971E
for enclosure width 800 mm	FN972E



UT87E

Perforated busbars

- copper bar to keep earth PE/PEN continuity

Description	Cat. ref.
25 x 5 mm, length 1750 mm	UT87E
50 x 5 mm, length 400 mm	UT87F



UT88A

UT88B

Single brackets

- for copper busbars

Description	Cat. ref.
for busbars 25 x 5 mm	UT88A
for busbars 50 x 5 mm	UT88B



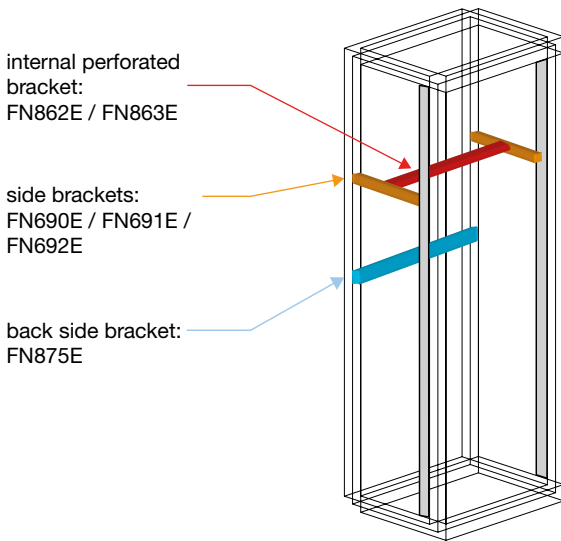
UT88C

Double brackets

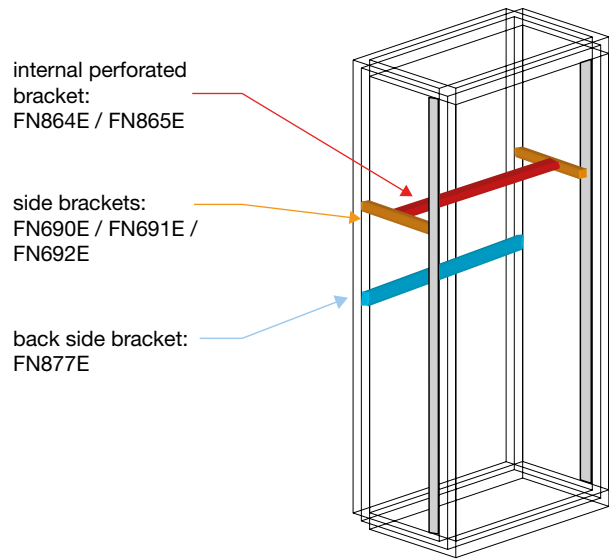
- for copper busbars

Description	Cat. ref.
for busbars 25 x 5 mm	UT88C
for busbars 50 x 5 mm	UT88D

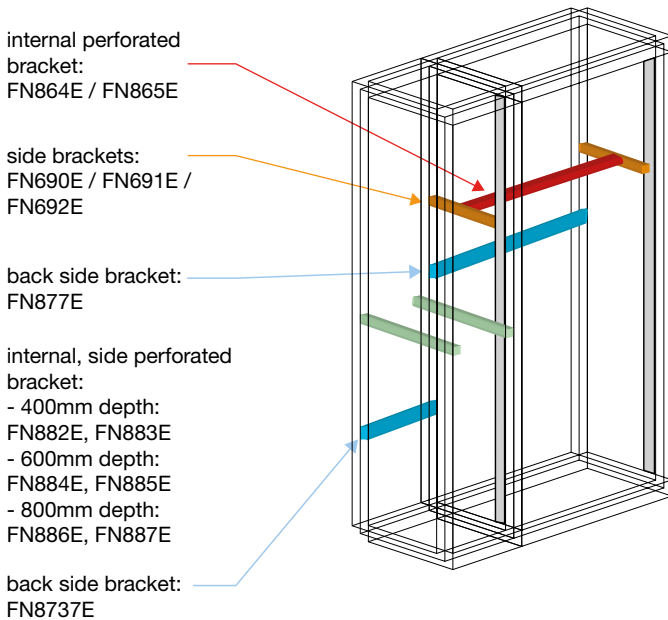
**For enclosures 450mm width
(400 / 600 / 800mm depth)**



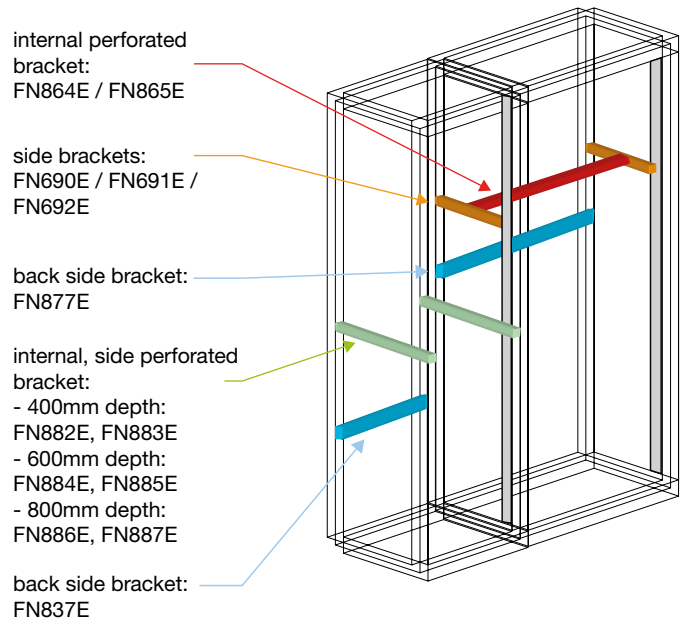
**For enclosures 700mm width
(400 / 600 / 800mm depth)**



**For enclosures 1000mm width, 700+200mm
(400 / 600 / 800mm depth)**



**For enclosures 1000mm width, 700+300mm
(400 / 600 / 800mm depth)**



Main
switchboards

MCCBs,
trip-free switches
125 and 160A
x160



MCCBs,
trip-free switches
250A
x250



MCCBs
trip-free switches
250 A (electronic)
h250

		width (mm)			width (mm)			width (mm)			
		350	600	800	350	600	800	350	600		
Equipment kits - height (mm)	for rotary handle and flush toggle	150									
		class I		UC013H	UC014H						
		class II		UC313H	UC314H						
		200									
		class I					UC127H	UC128H		UC127H	
		class II					UC427H	UC428H		UC427H	
	for motor operator	300	class I								
			class II	UC010H	UC011H	UC012H	UC020H	UC021H	UC022H	UC020H	UC021H
		400	class I								
			class II				UC030H	UC023H	UC024H	UC030H	UC023H
		600	class I								
			class II								
for manual control plug-in devices	300										
	class II					UC321HM	UC322HM		UC321HM		
	400										
for motorized control plug-in devices	300										
	class II								UC321HR		
	400										
									UC321HMR		



MCCBs,
trip-free switches
400 and 630A
h400-h630



MCCBs,
800 and 1000A
h1000



MCCBs,
1250 and 1600A
h1600



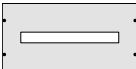





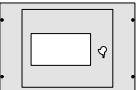
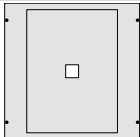
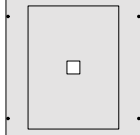


Main
switchboards

800	350	600	800	600	800	600	800

Main switchboards

Equipment kits for quadro range

	Modular changeover kit		Load break switches with visible breaking 100 to 400A		HA switches, visual breaking 160 to 1600A		Modular devices: 10 ■ (w. 350 mm) 24 ■ (w. 600 mm) 36 ■ (w. 800 mm)	
width	600 mm	800 mm	350 mm	600 mm	350 mm	600 mm	350 mm	
50 mm								
75 mm								
100 mm								
150 mm								
200 mm								UC200
300 mm	UC317S	UC318S	 UC310H + HY170	 UC311H + HY170	 UC008	 UC001 (160A)		
	UC321S	UC322S	 UC332		 UC009	 UC003 (250/400A)		
400 mm				 UC335				
600 mm		UC328S				 UC005 (160A)		
800 mm						 UC270 (1600A)		

Metering device front plates for SM102E and SM103E multi-function meter































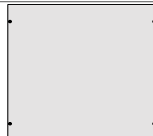
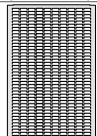

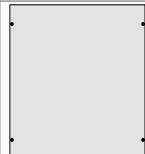

Full front plates and grids for special devices
- DIN rails for terminals
w. 600 mm
UC951

- equipment kits for terminals
w. 600 mm, h. 150 mm
UC209



Full front plates

Grids for special devices

		Metering device front plates for SM102E and SM103E multi-function meter		Full front plates and grids for special devices - DIN rails for terminals w. 600 mm UC951		- equipment kits for terminals w. 600 mm, h. 150 mm UC209			
		600 mm	800 mm	600 mm	800 mm	350 mm	600 mm	800 mm	600 mm
						 UC221	 UC231	 UC241	
						 UC220	 UC230	 UC240	
							 UC239	 UC249	
		 UC201	 UC203			 UC222	 UC232	 UC242	
		 UC205	 UC207	 UC233EM UC234EM	 UC243EM	 UC223	 UC233	 UC243	
						 UC224	 UC234	 UC244	 UC960
						 UC225	 UC235	 UC245	 UC692 (450 mm)
						 UC226	 UC236	 UC246	 UC964
						 UC227	 UC237	 UC247	

Equipment kits for h3 MCCBs x160, x250, h250 LSI, h630 LSI
Double insulation, class II for direct or rotary handle.

Composition

- 1 lowered symmetrical DIN rail, fixed on a mounting plate with 4 class II insulated mounting brackets
- 1 sheet metal front plate
- fixing accessories

Capacity

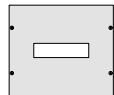
width 500 mm space for one more device.

Equipment kits for switches with visible breaking 160 to 1600 A
For direct or rotary handle

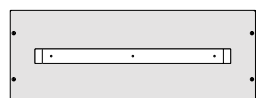
Composition

- 1 insulated mounting plate for the main device
- 1 sheet metal front plate
- fixing accessories.

The mounting plate for versions 160 and 250/400 A in width 500 mm are fitted with a symmetrical DIN rail to receive a set of distribution blocks.



UC010H / UC310H



UC012H / UC312H



UC013H / UC313H

Equipment kits for MCCBs x160

Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
for direct or rotary handle control vertical layout with or without add-on block	300	350	UC010H	UC310H
	300	600	UC011H	UC311H
for direct or rotary handle control horizontal layout without add-on block	300	800	UC012H	UC312H
	150	600	UC013H	UC313H
	150	800	UC014H	UC314H
	200	600	UC015H	-
	200	800	UC016H	-

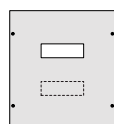


HYA036H

DIN rail raiser, 30 mm

- allows to raise MCBs with standard shoulder when mounted on the same kit as modular MCCBs and moulded case switch disconnectors > 125 A

Description	Cat. ref.
DIN rail raiser, 3 x 6 modules	HYA036H



UC030H / UC330H



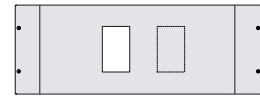
UC128H / UC428H

Equipment kits for MCCBs x250

Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
for direct or rotary handle control vertical layout without add-on block	300	350	UC020H	UC320H
	300	600	UC021H	UC321H
	300	800	UC022H	UC322H
for direct or rotary handle control vertical layout with add-on block	400	350	UC030H	UC330H
	400	600	UC023H	UC323H
	400	800	UC024H	UC324H
for direct or rotary handle control horizontal layout with or without add-on block	200	600	UC127H	UC427H
	200	800	UC128H	UC428H
for motor operator vertical layout without add-on block	300	600	-	UC321HM
	300	800	-	UC322HM

Equipment kits for MCCBs h250 LSI

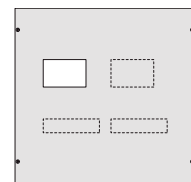
Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
for direct or rotary handle control vertical layout	300	350	UC020H	UC320H
	300	600	UC021H	UC321H
for direct or rotary handle control horizontal layout	200	600	-	UC427HL
	200	800	-	UC428HL
for motor operator control vertical layout without add-on block	300	600	-	UC321HM
	300	800	-	UC322HM
for manual control plug-in version, vertical layout	400	600	-	UC441HM
	400	800	-	UC442HM
for motor operator control plug-in version, vertical layout	300	600	-	UC321HMR



UC322HM

Equipment kits for MCCBs h630 LSI

Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
for direct or rotary handle control vertical layout without add-on block	400	350	UC140H	UC440H
	400	600	UC141H	UC441H
	400	800	UC142H	UC442H
for direct or rotary handle control vertical layout with add-on block	600	350	UC144H	UC444H
	600	600	UC145H	UC445H
	600	800	UC146H	UC446H
for direct or rotary handle control horizontal layout with or without add-on block	200	600	UC147H	UC447H
	200	800	UC148H	UC448H
for motor operator control vertical layout without add-on block	400	600	-	UC441HM
	400	800	-	UC442HM
for manual control plug-in version, vertical layout	300	600	-	UC441HR
for motor operator control plug-in version, vertical layout	300	600	-	UC441HMR
for direct or rotary handle control withdrawable version, vertical layout, without add-on block	400	600	-	UC441HW



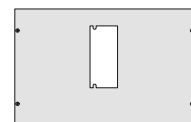
UC145H / UC445H



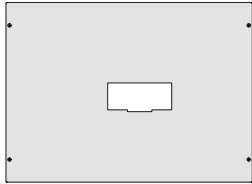
UC147H / UC447H

Equipment kits for MCCBs h1000 LSI

Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
for direct or rotary handle horizontal layout	400	600	UC054H	UC354H
	400	800	UC055H	UC355H
for direct or rotary handle vertical layout	600	600	UC050H	UC350H
	600	800	UC051H	UC351H
for direct or rotary handle vertical layout, withdrawable	600	600	-	UC350HR
for motor operator vertical layout	600	600	-	UC350HM
	600	800	-	UC351HM



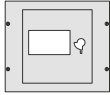
UC054H / UC354H



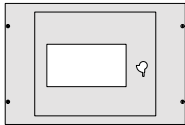
UC061H / UC361H

Equipment kits for MCCBs h1600 LSI

Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
for direct or rotary handle vertical layout	600	600	UC060H	UC360H
	600	800	UC061H	UC361H
for motor operator vertical layout	600	600	-	UC360HM
	600	800	-	UC361HM



UC332



UC335

Equipment kits for switch disconnectors with visible breaking 100 to 400 A double isolation class II

Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
kits for switches HA 100 to 200A	300	350	-	UC310H
	300	600	-	UC311H
kits for switches 250 A HA964N with direct control	300	350	-	UC332
kits for switches 400 A HA966N with direct control	400	600	-	UC335

Motorized changeover kits

Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
for HIC from 63 to 160A changeovers	300	600	-	UC311S
	300	800	-	UC312S
for HIB, HIC from 125 to 400A changeovers	300	600	-	UC317S
	300	800	-	UC318S
for HIB, HIC from 125 to 630A changeovers	300	600	-	UC321S
	300	800	-	UC322S
for HIB, HIC from 800 to 1600A changeovers	600	800	-	UC328S



UC001

Equipment kits for switch disconnectors with visual breaking 160 to 1600 A

Description	Height (mm)	Width (mm)	Cat. ref. class I	class II
kits for switches 160 A HA452	300	350	-	UC008
	300	600	-	UC001
kits for switches 250/400 A, HA454, HA457	250	350	-	UC009
	250	600	-	UC003
kits for switches 630 A HA458	600	600	-	UC005
kits for switches 800 to 1600A	600	600	-	UC270
	800	200	-	UC002
	800	600	-	UC004
	800	600	-	UC006
	800	600	-	UC006

Equipment kits for hw ACBs size 1

Description	Height (mm)	Width (mm)	Cat. ref.
from 630A up to 1600A Class I version, in 600 and 800 mm depth enclosures	600	600	UC062HEM

Equipment kits for hw ACBs size 2

Description	Height (mm)	Width (mm)	Cat. ref.
from 630A up to 4000A Class I version, in 800 mm depth enclosures	600	800	UC082HEM

Equipment kits for modular devices
Available in height 150 mm and 200 mm, their positioning is facilitated by gauges delivered with each kit.

Equipment kits for terminals
Available in height 150 mm, DIN rail adjustable in depth, 20° inclinable.

The DIN rail supports allow a fast fixing by clipping on the bottom of the enclosure.
Front plates are mounted with screws included in the kit.



UC200

Equipment kits for modular devices

delivered with:
- modular DIN rail for shoulder devices 45 mm
- sheet metal front plate



UC201

Description	Height (mm)	Cat. ref.
length 250 mm, equipment 1 row 10 modules	150	UC200
length 500 mm, equipment 1 row 24 modules	150	UC201
	200	UC205
length 700 mm, equipment 1 row 24 modules	150	UC203
	200	UC207

Equipment kits for non modular

- for 92x92mm SM102E and SM103E multi-meter devices

Description	Height (mm)	Cat. ref.
length 500 mm	200	UC233EM
	300	UC234EM
length 700 mm	300	UC243EM

Equipment kits for terminals

- delivered with DIN rail and front plate

Description	Height (mm)	Cat. ref.
length 500 mm, equipment 1 row 24 modules	150	UC209



UC231



UC230



UC239



UC232



UC235

Full front plates

Height (mm)	Cat. ref.		
	250 mm	500 mm	750 mm
50	UC221	UC231	UC241
75	UC220	UC230	UC240
100	-	UC239	UC249
150	UC222	UC232	UC242
200	UC223	UC233	UC243
300	UC224	UC234	UC244
400	UC225	UC235	UC245
600	UC226	UC236	UC246
700	UC227	UC237	UC247

Adjustable DIN rails

- in depth for terminals, 20° inclinable

Description	Cat. ref.
for width 500 mm length	UC951
for width 750 mm length	UC952

Perforated mounting plates

- for special devices
- delivered with fixing supports

Description	Length (mm)	Height (mm)	Cat. ref.
perforated mounting plates for special devices	500	300	UC960
perforated mounting plates for special devices	500	450	UC962
perforated mounting plates for special devices	500	600	UC964



UC962

Clips nuts and M5 screws

- for perforated mounting plates

Description	Cat. ref.
1 set = 25 nuts	UC969

Hinges for front plates

- to mount on the left or the right side of the front plate

Description	Cat. ref.
set of 2 hinges	UC268



UC268

Main switchboards

quadro range - busbar support reference guide



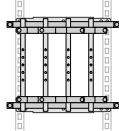
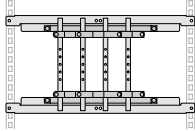
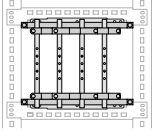

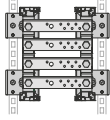
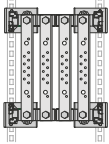
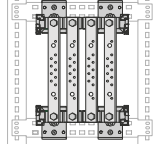



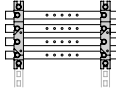
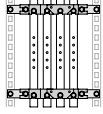
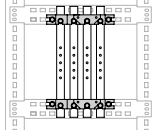

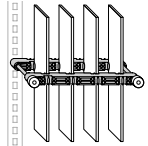
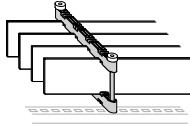

Several systems allow to ensure the electric distribution in the enclosures quadro4, quadro5 and quadro+:

- flat busbars,
- inclined busbars,
- side busbars,
- staggered bars,
- 4 poles supports

Distribution systems complete the offer

- single pole distribution blocks
- multi-plug repartitors
- 80 to 160A modular distribution blocks

A range of connectors allow to ensure the electrical link among some incoming devices and the distribution systems.

Busbar supports	In	Copper bars	Application and accessories (crossbars, brackets, protective screen)			
Flat busbars  UC820	160A	12 x 5 mm KS72B, KS72C	horizontal in bottom 250 and 500 mm  UC811 UC827	vertical in bottom 250 mm  UC811 UC827	vertical in bottom 500 mm  UC812 UC827	vertical on crossbars (quadro+)  UT89B, UT89C UC827
	250A 400A	20 x 5 mm UC832 30 x 5 mm UM30A1, UM30A2 UM30A5				
Inclined busbars  UC826	250A 400A 630A	20 x 5 mm UC832 32 x 5 mm UC842 30 x 10 mm UM30A4, UM30A5	horizontal in bottom 250 and 500 mm  UC826	vertical in bottom 250 and 500 mm  UC828	vertical on crossbars (quadro+)  UT89C, UT89B	
Side busbars  UC830	250A	20 x 5 mm UC832	on pillars in bottom  UC834			
Staggered busbars  UC815	250A 400A	20 x 5 mm UC832 32 x 5 mm UC842	horizontal in bottom 250 and 500 mm  UC816	vertical in bottom 250 mm  UC816 - UC988	vertical on crossbars (quadro5, quadro+)  UC288 (sheath 200 mm), UT89A (sheath 300 mm), UT89B - UT89C	
4 poles support (quadro+ only)  UC824 UC823	500A 630A 800A 1000A	50 x 5 mm UC844 63 x 5 mm UC922 80 x 5 mm UC 966 100 x 5 mm UC967	horizontal  UT81H, UC821, FN690 or FN690E, FN896 or FN896E, mount with supports UC825 or UC822	vertical  UC821, UC825 UT89A or FN873E (sheath 300 mm), UT89B or FN875E		
On edge busbars with variable phase-spacing 	500A 630A 800A 1000A 1250A 1600A 2000A 2500A 3200A 4000A	50 x 50 mm UC844 63 x 5 mm UC922 80 x 5 mm UC966 100 x 5 mm UC967 80 x 10 mm UC966E 2 x 80 x 5 mm UC966 2 X 100 X 5 mm UC967 120 x 10 mm UC968E 2 x 80 x 10 mm UC966E 2 x 100 x 10 mm UC967 3 x 120 x 10 mm UC968E	horizontal and vertical mounting Busbars support kits UC895E (4 x 5), UC896E (2 x 10), UC897E (3 x 10). Aluminium profiles kit UC860E. Steel brackets kit to fix on uprights or perforated profiles UC861E. Spare parts fixing kit UC862E. Use perforated mounting rails FN873E to FN877E, FN862E to FN866E, FN882E to FN886E, FN690E to FN692E and UC821 according to configurations.			

Flat busbars to compose from 160 to 630A

To mount on bottoms of quadro4, quadro5 enclosures and on quadro+ crossbars
 - rear vertical mounting especially adapted to carry out busbars behind the modular devices
 - vertical mounting in bottom
 - horizontal mounting.

Inclined busbars to compose from 250 to 630A

To mount behind the front plate
 Horizontal mounting possible on 250 and 500 mm bottom widths, vertical mounting possible on 250 mm bottom widths.

Busbars supports to compose 500 to 1600A

To mount vertical and horizontal distribution busbars in quadro+ cells.
 Up to 2 copper bars per pole.
 For copper bars:
 - 400A, 50 x 5 mm
 - 630A, 63 x 10 mm
 - 800A, 80 x 5 mm
 - 1000A, 100 x 5 mm

Flat busbars from 160 to 630A

- includes 1 support, 3 M6 screws and 2 pillars for protective screen



UC820

Description	Cat. ref.
for copper bars: 160A, 12 x 5 mm - 250A, 20 x 5 mm - 400A, 32 x 5 mm 630A, 30 x 10 mm	UC820

Vertical busbars

- delivered with 2 cage nut and 2 M6 screws

Description	Cat. ref.
rear vertical busbar sfor bottom width 250 mm	UC812
vertical busbar in bottom mounting on 250 mm width bottom, horizontal mounting on 250 mm and 500 mm width bottoms	UC811

Protective screen

Description	Height (mm)	Width (mm)	Cat. ref.
protective screen to cut to the right dimensions	990	294	UC827

Inclined busbars to compose from 250 to 630A, behind the front plate

Description	Cat. ref.
4P support, set of 2 with 4 fixing parts, 8 cage nut, 16 M6 screws, 8 M8 screws and 4 pillars for protective screen	UC826
for copper bars 250A, 20 x 5 mm - 400A, 32 x 5 mm - 630A, 30 x 10 mm	
protective screen, to be adapted in length - l. 212 x h. 990 mm	UC828

Busbars supports to compose 500 to 1600 A

Description	Cat. ref.
3 poles support	UC823
4 poles support for copper bars, with screws and fixing parts	UC824
mounting brackets, to mount on supports UC824 and UC823	UC821



UC824

Busbars bearing

- for vertical mounted copper bars
 - includes 1 support, screw and fixing parts for the mounting on crossbars

Description	Cat. ref.
for 3P distribution	UC822
for 4P distribution	UC825

The compact adjustable busbars supports kits for 5mm thick and 10mm allow to connect moulded case circuit breakers in combination with flexible copper bars to distribute current and to connect the downstream circuit breakers in order to energize all the connected devices or sub-boards.

The compact busbar support kit can be installed vertically on the sides or on the bottom of the enclosure; in combination with functional partial uprights can be installed horizontally at any point of the cell (top, bottom, middle).

The compact busbar support kits are mounted inside of the fixing to joint the pre-drilled aluminium profiles UC860E. The aluminium

profiles are to be cut adapted to the size according to the width and depth of the enclosure and fixed to the structure through the UC861E corner bracket.

Technical data

- In: from 400A to 3200A,
- Icc: max up to 85 kA eff
- Ue: 1000 V AC and 1500V DC,
- thickness: 5 and 10mm,
- max busbar height: from 30 to 125mm,
- distance between 125mm pitch adjustable,
- operating temperature: from -40 to +130°C
- polyamide with halogenfree fibreglass.



UC895E

Busbar support kits

- one kit is composed of 8 insulating support and 6 lugs and fixing screw
- to be mounted inside of the fixing to joint the pre-drilled aluminium profiles UC860E

Description	Bars / phase	Thickness (mm)	Height (mm)	Cat. ref.
set of 4 x 3Ph+N	1 to 4	5	30 to 120	UC895E
set of 2 x 3Ph+N	1 to 2	10	30 to 120	UC896E
set of 3 x 3Ph+N	1 to 3	10	30 to 120	UC897E



UC860E

Perforated aluminium profiles

- for fastening the bars support kit
- one kit is composed of 2 profiles
- use the fixing brackets UC861E

Description	Cat. ref.
kit of 2 perforated aluminium profile	UC860E



UC861E

Brackets for aluminium profiles

- for fixing of the UC860E aluminium profiles to the enclosure

Description	Cat. ref.
kit composed of 10 square brackets with fixing screws	UC861E



UC862E

Additional screw kit

- for 2 bars of 10mm thickness busbar support

Description	Cat. ref.
spare parts fixing kit	UC862E

Sets of side bars quadro 250A to be composed

To mount in the sides of quadro enclosures.
Icc peak: 36 kA
Fixing centers of the supports: 225 mm

Possibility to install them directly on the bottoms of the quadro4, quadro5 and quadro+ enclosures, without using the crossbars.

Sets of multi stage bars In 250 and 400A - to be composed

For vertical installation in the cable sheaths of the quadro4, quadro5 and quadro+ enclosures.

Sets of side bars quadro 250 A to be composed

Description

set of 4-pole busbar 250A, 20 x 5 mm

protective screen, length: 1000 mm

Cat. ref.

UC830

UC834



UC830

Sets of multi stage bars In 250 and 400 A to be composed

Description

4 poles support for copper bars 250A, 20 x 5 mm and 400A, 32 x 5 mm delivered with 6 M6 screws and 2 cage nuts

universal crossbars for quadro5, quadro+ cable sleeve

universal crossbars for quadro4 (width 370), quadro5 (width 450) and quadro+ (width 400, 450)

protective screen, delivered with screw, length: 620 mm

Sheath length (mm)

-

200

250

-

Cat. ref.

UC815

UC288

UC988

UC816



UC815

Copper bars allow to connect miniature circuit breakers and moulded case circuit breakers. In combination with cables or flexible copper bars they allow to connect and energize the downstream circuits. The choice of busbar supports depends on the bar crosssections and their length. The connection screws must be ordered separately for the bars from 250 to 1000A.

The current capacities (Iz) of flat busbars with components fitted were calculated by testing at :
 - 35°C for ambient temperature
 - 45°C for enclosure internal temperature
 - 85°C for conductors temperature with an enclosure IP degree over than 30 and with enclosure doors closed.

Complies with BS EN 13601.

Technical data

- In : mini 1049A and maxi 2144A (1 bar per phase)
- Icc : max 854A eff
- Ue : 1000 AC
- thickness : 10 mm
- height : mini 50 mm



Copper bars

KS72B



UC842

Description	In	Length (mm)	Cat. ref.
12 x 5 mm copper bar, M5 tapped, delivered with screw	160A	245	KS72B
12 x 5 mm copper bar, M5 tapped, delivered with screw	160A	1000	KS72C
20 x 5 mm copper bar, M6 tapped	250A	1000	UC832
25 x 5 mm copper bar, M6 tapped	250A	1750	UT87E
32 x 5 mm copper bar, M6 tapped	400A	1000	UC842
30 x 5 mm copper bar, M6 tapped	400A	280	UM30A3
30 x 5 mm copper bar, M6 tapped	400A	430	UM30A1
30 x 5 mm copper bar, M6 tapped	400A	880	UM30A2
32 x 5 mm copper bar, M6 tapped	500A	1750	UC843
30 x 10 mm copper bar, M6 tapped	630A	430	UM30A4
30 x 10 mm copper bar, M6 tapped	630A	880	UM30A5
20 x 5 mm ????????	????	?1750	UC833



UC966

Perforated copper bars, 5mm thickness

- for use with UC896 -UC897

Description	Length (mm)	Cat. ref.
50x5 - I max 772A	1750	UC844
63x5 - I max 951A	1750	UC922
80x5 - I max 1173A	1750	UC966
100x5 - I max 1431A	1750	UC967
125x5 - I max 1723A	1750	UC968

Perforated copper bars, 10mm thickness

- for use with UC896 -UC897

Description	Length (mm)	Cat. ref.
50x10 - I max 1049A	1750	UC844E
60x10 - I max 1214A	1750	UC922E
80x10 - I max 1528A	1750	UC966E
100x10 - I max 1836A	1750	UC967E
120x10 - I max 2144A	1750	UC968E

Screws

Description	Cat. ref.
self thread forming screws M6 x 10	UC856E
connection screws M6 x 12 with washers	UC851
connection screws M8 x 30 with washers	UC853
connection screws M10 x 30 with washers	UC855



UC851

Busbar selection guide depending on nominal current In (A)

In (A)	cross-section and number of bars per phase			busbar holders
	1	2	3	cat. ref.
500	50 x 5	-	-	UC895E
630	63 x 5	-	-	UC895E
800	80 x 5	-	-	UC895E
1000	100 x 5	-	-	UC895E
1250	-	80 x 5	-	UC895E
1600	-	100 x 5	-	UC896E
2000	-	80 x 10	-	UC896E
2500	-	100 x 10	-	UC896E
3200	-	-	100 x 10	UC897E
4000	-	-	120 x 10	UC897E



UC895E

Link connectors and bars

To carry out connections between incoming devices and distribution system (set of busbars, repartitor blocks).

Connectors

To carry out connections between incoming devices and distribution system (set of busbars, distribution blocks).
- h3 MCCBs: x250, h250 LSI, h630 LSI



UC870

Link connectors

Description	includes	Cat. ref.
to connect the switches HA406N, HA407, HA408 to distribution blocks KJ02 fixed on the same line	4 cables H 07-V-K black, 50 mm ² , length 450 mm with lugs	UC870
to connect the switches HA452 / HA454 to distribution blocks KJ02 fixed beside the switch	4 flexible connectors 20 x 3 mm	UC874
to connect the switches HA452 / HA454 to the side busbars	4 flexible connectors 20 x 3 mm	UC876



UM92Y

Flexible copper bars

- to connect the switches HA452/HA454 to the side busbars

Description	In	Length (m)	Cat. ref.
section 20 x 2 mm	160A	2	UM92X
section 20 x 3 mm	250A	2	UM92Y
section 32 x 4 mm	400A	2	UM92Z
section 24 x 5 mm	400A	2	UM92ZE
section 32 x 6 mm	630A	2	UM92W
section 24 x 8 mm	630A	2	UM92WE
section 40 x 6 mm	800A	2	UM92V
section 40 x 8 mm	1000A	2	UM92VE



UC877

Connectors

- possible mounting in quadro4 and quadro5

Description	includes	Cat. ref.
to connect x250 and h250 LSI MCCBs to the inclined bars set UC826 mounted in 250 mm width	4 cables with lugs, 20 x 3 mm ²	UC877
to connect h630 LSI MCCBs to inclined bars set UC826 mounted in 250 mm width	4 cables, 25 x 6 mm ²	UC868
to connect the horizontal mounted x250 and h250 LSI MCCBs in 500 mm width to bars set UC820 mounted behind modular devices in 500 mm width	4 cables, 25 x 6 mm ²	UC875



UC868



UC871

Incoming kits

- possible mounting in quadro4, quadro5 and quadro+

Description	includes	Cat. ref.
to supply the horizontal mounted x250 and h250 LSI MCCBs in 500 mm width	1 support for cable incoming (maxi 70 mm ²) and 4 cables 70 mm ² with lugs	UC871
to connect the horizontal mounted x250 and h250 LSI MCCBs in 500 mm width to inclined bars set UC826 horizontal mounted	4 cables 70 mm ² with lugs	UC869



UC879

Link connection

- possible mounting in quadro4, quadro5 and quadro+

Description	includes	Cat. ref.
to connect x250 et h250 LSI MCCBs to bars set UC826 mounted behind the modular devices in 500 mm width	4 cables 70 mm ² with lugs	UC879

Stepped distribution blocks

- modular
 - monobloc
 - for copper conductors
 - removable front cover
 - Ui: 500V
 - fixing on DIN rail
- Equipped with an insulated rear plate.

Single pole distribution blocks

- monoblocs, insulated, grey colour,
- clip fixing on mounting plate DIN rail of the main devices kit,
- lcc peak: 36 kA

Comply with IEC 60 998-1and IEC 60947-7-1.

Modular distribution monobloc

- h. 74.5 x d. 45 mm

Description	Isc peak (kA)	Connection capacity per bar	Width (mm)	Cat. ref.
100 A - four pole	20	per phase: 1x25 + 2x10 + 5x6 mm ² neutral: 1x25 + 6x10 + 4x6 mm ²	98 (5.5 modules)	KJ02E



KJ02E

Stepped distribution blocks Brass busbar terminals

Description	Isc peak (kA)	Connection capacity per bar	Width (mm)	Cat. ref.
100 A - four pole 4 x 7 connection points	24	2 x25 + 5 x16 mm ² rigid wire 2 x16 + 5x10 mm ² with ferrule	71 (4 modules)	KJ100A
125 A - four pole 4x15 connection points	28	1x35 + 3x35 + 11x16 mm ² rigid wire 1x35 + 3x25 + 11x16 mm ² with ferrule	170 mm (10 modules)	KJ125B
160 A - four pole 4x12 connection points	36	1x70 + 3x35 + 8x25 mm ² rigid wire 1x50 + 3x25 + 8x16 mm ² with ferrule	162 mm (9 modules)	KJ160A



KJ100A



KJ160A

Additional neutral bar

Description	Connection capacity	Cat. ref.
100 A 7 connection points	2x25 + 5x10 mm ² rigid wire 2x16 + 5x6 mm ² with ferrule	KJ07NB
125 A 12 connection points	1x35 + 7x25 + 4x16 mm ² rigid wire 1x25 + 7x16 + 4x10 mm ² with ferrule	KJ12NB
125 A 15 connection points	1x35 + 3x35 + 11x16 mm ² rigid wire 1x25 + 3x25 + 11x10 mm ² with ferrule	KJ15NB



KJ15NB

Single pole distribution blocks

for copper conductors

Description	Ipk (kA)	Connection capacity	Width (m)	Cat. ref.
125A	30	incoming: 1x35 + 1x16 mm ² outgoing: 6x16 mm ²	27	KJ02D
160A	30	incoming: 1x70 mm ² + 1 lateral flat copper max 16x5mm outgoing: 6x16 mm ²	35	KJ02C
250A	50	incoming: 1x95 mm ² outgoing: 2x25 + 5x16 + 4x10 mm ²	45	KJ02A
400A	50	incoming: 1x150 mm ² outgoing: 2x25 + 5x16 + 4x10 mm ²	45	KJ02B



4 x KJ02A

Multi-plug 4P repartitors 250A

- bridging of all types of equipments 2, 3 and 4 poles placed on the same DIN rail
- facilitate phases balancing
- incoming connection by 4 screw ranges
- outgoing connection by insulated flexible connectors with automatic lock.

Delivered with

- 6 blue insulated wire connectors H07 V-K, 6 x 6mm² (blue) and 12 x 6mm² (black)
- 12 black insulated wires connectors H07 V-K: 6 x 6mm² (blue) and 12 x 6mm² (black)
- 2 quadro mounting legs
- 2 unifers fixing brackets.



KJ03A

Multi-plug 4P repartitors

- implementation in 620 or 700 mm width quadro enclosures
- 60 connection points per pole
- sections: 6 mm² and 10 mm²
- acceptable In under 40 °C: per pole: 250A, 40A with connector 6 mm², 63A with connector 10 mm²
- Icc peak: 60 kA
- Un: 500 V AC - 50 Hz

Description	Cat. ref.
without connector	KJ03A
with connectors	KJ03B



KZ007

Connectors (end)

Description	Cat. ref.
to clip 6 mm ² flexible wire	KZ007



KZ001

KZ002

Connectors

- for multi-plug repartitors 250 A
- flexible connectors insulated wire serial H07 V-K

Description	In	Section (mm ²)	Cat. ref.	
			blue	black
connectors length 120 mm	40A	6	KZ001	KZ002
connectors length 500 mm	40A	6	KZ051	KZ052
connectors length 120 mm	63A	10	KZ004	KZ005
connectors length 500 mm	63A	10	KZ074	KZ075

Cable management accessories

Several systems allow to manage the cable trunking, as well as the connections in quadro enclosures:

- vertical slotted trunking
- horizontal slotted trunking
- cable guides.

Universal crossbars

Allow either to maintain the cables using a clamp, or to mount a vertical DIN rail to create a terminal block

Cable spreader box

insulating material, RAL 9010

Fixed on the top or the bottom part of the enclosures, these trunkings allow the enlargement and the arrangement of the incoming and outgoing cables and ensure the junction between the enclosures and the vertical trunking.

Slotted trunking

- delivered with cover

Description	Length (mm)	Cat. ref.
vertical slotted trunking w. 60 x 80 mm	2000	UC916
horizontal slotted trunking w.30 x 80 mm	250	UC911
horizontal slotted trunking w.30 x 80 mm	500	UC912
horizontal slotted trunking w.30 x 80 mm	750	UC313



UC916

Fixing supports

- possible mounting in quadro4, quadro5 and quadro+

Description	Cat. ref.
vertical and horizontal sheaths on the bottom of the quadro enclosures	UC915



UC915

Cable straps

- 1 set includes 20 pieces

Description	Cat. ref.
large volume	UZ25V1
small volume	UZ25V2



UZ25V1

UZ25V2

Cable guides

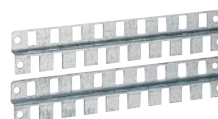
- 1 set includes 20 pieces

Description	Cat. ref.
fixing centres 150 mm	UZ01V1

Universal crossbars

- for 200 mm cable sheaths in 900 mm width quadro5

Description	Width (mm)	Cat. ref.
universal crossbar	185	UC288
universal crossbar	250	UC988
universal crossbar	500	UC289
universal crossbar	900	UC989



UC988

Blanking strips

Description	Cat. ref.
24 modules length	JP024



JP024



JE003

Marking strips

- includes adhesive transparent label holder and marking strip

Description	Length (in modules)	Cat. ref.
marking strips for modular front plates	10	JE001
marking strips for modular front plates	24	JE003



FZ442

Cable spreader boxes

- includes 2 fixing brackets, 1 bottom plate, 1 cover and 2 side cover plates

Description	Length (mm)	Cat. ref.
cable spreader box h. 195 x d. 155 mm	300	FZ441
cable spreader box h. 195 x d. 155 mm	550	FZ442
cable spreader box h. 195 x d. 155 mm	800	FZ443
cable spreader box h. 195 x d. 155 mm	1050	FZ444

Horizontal segregation metallic plate

Description	Length (mm)	Cat. ref.
horizontal segregation metallic plate for quadro4 and quadro5	620	FC664

Incoming earth terminal blocks

To mount on supplied 80mm spacers.

Outgoing connectors for PE conductors

To mount on supplied 80mm spacers, possibility to add quickconnect terminals.

Caution

connectors UC975S and UC976S have no equipotential connection with the structures of the enclosure.

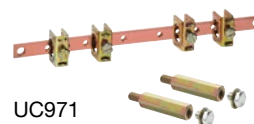
Mounting rail

For terminals blocks vertical or horizontal mounting. Length: 2 m.

Incoming earth terminal blocks

- can be completed with the staples below

Description	Width (mm)	Cat. ref.
incoming earth terminal blocks	250	UC971
Incoming earth terminal blocks	500	UC972



Staples

- for above terminal blocks

Description	Cable section (mm ²)	Cat. ref.
staples	16	K070
staples	35	K071
staples	70	K073
staples	95	K074



Outgoing connectors

- 1 set includes 20 pieces

Description	Width (mm)	Cat. ref.
outgoing connectors for PE conductors connection includes support (1 x 35 mm ² - 11 x 16 mm ² - 13 x 10 mm ²), 2 nuts, 2 screws and spacers	250	UC975
outgoing connectors for PE conductors connection includes support (1 x 35 mm ² - 11 x 16 mm ² - 13 x 10 mm ²), 2 nuts, 2 screws and spacers	500	UC976
outgoing connectors quickconnect for PE conductors connection includes 1 DIN rail, support KN00A, terminal block KN26E, 2 nuts, 2 screws and 2 decked terminals for UC976S	250	UC975S
outgoing connectors quickconnect for PE conductors connection includes 1 DIN rail, support KN00A, terminal block KN26E, 2 nuts, 2 screws and 2 decked terminals for UC976S	500	UC976S



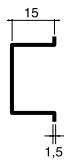
Metal spacers

Description	Cat. ref.
spacer height: 80 mm, M6 screw	UC992





A09900



A09900

Symmetrical DIN rails

- DIN 46277/3
- 35 mm width

Description	Width (mm)	Depth (mm)	Cat. ref.
symmetrical DIN rail	35	15	A09900



A099E



Symmetrical perforated DIN rails

Description	Width (mm)	Depth (mm)	Cat. ref.
symmetrical DIN rails perforated DIN 46277/2	15	5	A099E
symmetrical DIN rails perforated DIN 46277/3	35	55	A099B



A099C



DIN rail for structure

Description	Width (mm)	Depth (mm)	Cat. ref.
DIN rail	250	15	A099C
special sliding screws M6	-	-	A099D



A099D



UC990

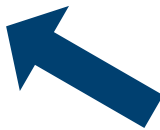
Nuts and screws

Description	Cat. ref.
cage nuts M6	UC990
screws, M6 x 12	UC991
screws, M6 x 10	UC856E



UC991

**orion plus IP 65
metal enclosures**



Choice of equipment :



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 of non modular products

The orion plus enclosures

These enclosures are of monobloc 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.

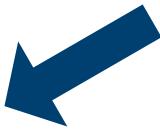
Metal mounting plates:

- 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 66
polyester enclosures**



Equipment kits for modular products



orion plus enclosures sheet steel



mounting plates plain or perforated



Equipment kits for modular chassis



Enclosures dimensions in mm			modular height	qty of modules per row	max. capacity (modules)	enclosures		plinth h. 150	mounting plates			internal doors	
height	width	depth				with plain door	with transp. door		metal plain	metal perforated	insulated	metal	insulated
250	200	160	-	-	-	FL101A	FL151A	-	FL401A	-	-	FL541A	-
300	250	160	-	-	-	FL102A	FL152A	-	FL402A	FL472A	FL422A	FL542A	-
300	300	160	-	-	-	FL103A	FL153A	-	FL403A	-	-	FL543A	-
350	300	160	300	10	20	FL104A	FL154A	-	FL404A	FL473A	FL423A	FL544A	FL643A
350	300	200	300	10	20	FL105A	FL155A	-	FL404A	FL473A	FL423A	FL544A	FL643A
400	300	160	-	-	-	FL106A	FL156A	-	FL405A	-	-	FL545A	-
400	300	200	-	-	-	FL107A	FL157A	-	FL405A	-	-	FL545A	-
400	400	200	-	-	-	FL108A	FL158A	-	FL406A	-	-	FL546A	-
500	300	160	450	10	30	FL109A	FL159A	-	FL407A	FL474A	FL424A	FL547A	FL644A
500	300	200	450	10	30	FL110A	FL160A	-	FL407A	FL474A	FL424A	FL547A	FL644A
500	400	160	450	16	48	FL111A	FL161A	-	FL408A	FL475A	FL425A	FL548A	FL645A
500	400	200	450	16	48	FL112A	FL162A	-	FL408A	FL475A	FL425A	FL548A	FL645A
500	500	200	-	-	-	FL113A	FL163A	-	FL409A	-	-	FL549A	-
600	400	200	-	-	-	FL114A	FL164A	-	FL410A	-	-	FL550A	-
600	400	250	-	-	-	FL115A	FL165A	-	FL410A	-	-	FL550A	-
600	600	250	-	-	-	FL116A	FL166A	-	FL411A	-	-	FL553A	-
650	400	200	600	16	64	FL117A	FL167A	-	FL412A	FL476A	FL426A	FL551A	-
650	400	250	600	16	64	FL118A	FL168A	-	FL412A	FL476A	FL426A	FL551A	-
650	500	200	600	22	88	FL119A	FL169A	FL957A	FL413A	FL477A	FL427A	FL552A	-
650	500	250	600	22	88	FL120A	FL170A	FL958A	FL413A	FL477A	FL427A	FL552A	-
800	500	200	750	22	110	FL121A	FL171A	FL957A	FL414A	FL478A	FL428A	FL554A	-
800	500	250	750	22	110	FL122A	FL172A	FL958A	FL414A	FL478A	FL428A	FL554A	-
800	600	250	750	26	130	FL123A	FL173A	FL959A	FL415A	FL479A	FL429A	FL555A	FL649A
800	600	300	750	26	130	FL124A	FL174A	FL960A	FL415A	FL479A	FL429A	FL555A	FL649A
950	600	250	900	26	156	FL125A	FL175A	FL959A	FL416A	FL480A	FL430A	FL556A	-
950	600	300	900	26	156	FL126A	FL176A	FL960A	FL416A	FL480A	FL430A	FL556A	-
950	800	250	900	37	222	FL127A	FL177A	FL961A	FL417A	FL481A	FL431	FL557A	-
950	800	300	900	37	222	FL128A	FL178A	FL962A	FL417A	FL481A	FL431A	FL557A	-
1250	600	250	1200	26	208	FL129A	FL179A	FL959A	FL418A	FL482A	FL432A	FL558A	-
1250	800	300	1200	37	296	FL130A	FL180A	FL962A	FL419A	FL483A	FL433A	FL559A	-

plain front plates



partial metal mounting plates
fixed or adjustable



DIN rails for
terminals

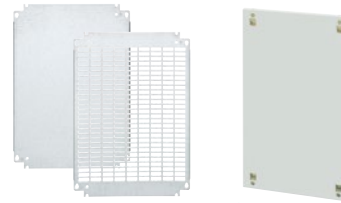


	modular equipment kits	plain front plates				partial metal plates fixed				partial metal plates adjustable				DIN rails for terminals
		h. 50	h. 150	h. 200	h. 300	h. 150	h. 200	h. 300	h. 400	h. 150	h. 200	h. 300	h. 400	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL990A	-	FL711E	-	-	-	FL311A	-	-	-	-	-	-	-	-
FL990A	-	FL711E	-	-	-	FL311A	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL991A	-	FL711E	-	-	-	FL311A	-	-	-	-	-	-	-	-
FL991A	-	FL711E	-	-	-	FL311A	-	-	-	-	-	-	-	-
FL992A	FL702E	FL712E	FL722E	-	-	FL312A	FL322A	-	-	-	-	-	-	FL500A
FL992A	FL702E	FL712E	FL722E	-	-	FL312A	FL322A	-	-	-	-	-	-	FL500A
-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL500A
-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL500A
-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL500A
-	-	-	-	-	-	-	-	-	-	-	-	-	-	FL500A
FL993A	FL702E	FL712E	FL722E	-	-	FL312A	FL322A	-	-	-	-	-	-	FL500A
FL993A	FL702E	FL712E	FL722E	-	-	FL312A	FL322A	-	-	FL314A	FL324A	-	-	FL500A
FL994A	FL703E	FL713E	FL723E	FL733E	FL313A	FL323A	FL333A	FL343A	-	-	-	-	-	FL501A
FL994A	FL703E	FL713E	FL723E	FL733E	FL313A	FL323A	FL333A	FL343A	FL315A	FL325A	FL335A	FL345A	FL501A	FL501A
FL995A	FL703E	FL713E	FL723E	FL733E	FL313A	FL323A	FL333A	FL343A	-	-	-	-	-	FL501A
FL995A	FL703E	FL713E	FL723E	FL733E	FL313A	FL323A	FL333A	FL343A	FL315A	FL325A	FL335A	FL345A	FL501A	FL501A
FL996A	FL704E	FL714E	FL724E	FL734E	-	-	-	-	FL316A	FL326A	FL336A	FL346A	FL502A	FL502A
FL996A	FL704E	FL714E	FL724E	FL734E	-	-	-	-	FL316A	FL326A	FL336A	FL346A	FL502A	FL502A
FL997A	FL704E	FL714E	FL724E	FL734E	-	-	-	-	FL316A	FL326A	FL336A	FL346A	FL502A	FL502A
FL997A	FL704E	FL714E	FL724E	FL734E	-	-	-	-	FL316A	FL326A	FL336A	FL346A	FL502A	FL502A
FL998A	FL705E	FL715E	FL725E	FL735E	-	-	-	-	FL317A	FL327A	FL337A	FL347A	FL503A	FL503A
FL998A	FL705E	FL715E	FL725E	FL735E	-	-	-	-	FL317A	FL327A	FL337A	FL347A	FL503A	FL503A
FL999A	FL704E	FL714E	FL724E	FL734E	-	-	-	-	FL316A	FL326A	FL336A	FL346A	FL502A	FL502A
FL000A	FL705E	FL715E	FL725E	FL735E	-	-	-	-	FL317A	FL327A	FL337A	FL347A	FL503A	FL503A

orion plus polyester enclosures



metal mounting plate internal doors



modular chassis functional uprights



Enclosures dimensions in mm			modular height	qty of modules per row	max. capacity (modules)	enclosures		mounting plates			internal doors		modular equipment kits
height	width	depth				with plain door	with transp. door	metal plain	metal perforated	insulated	metal plain	insulated	
350	300	160	300	10	20	FL204B	FL254B	FL404A	FL473A	FL423A	FL544A	FL643A	FL990A
500	300	200	450	10	30	FL209B	FL259B	FL407A	FL474A	FL424A	FL547A	FL644A	FL991A
500	400	200	450	16	48	FL213B	FL263B	FL408A	FL475A	FL425A	FL548A	FL645A	FL992A
650	400	200	600	16	64	FL216B	FL266B	FL412A	FL476A	FL426A	FL551A	FL646A	FL993A
650	500	250	600	22	88	FL221B	FL271B	FL413A	FL477A	FL427A	FL552A	FL647A	FL994A
800	600	300	750	26	130	FL229B	FL279B	FL415A	FL479A	FL429A	FL555A	FL649A	FL996A

Enclosures dimensions in mm			modular height	qty of modules per row	max. capacity (modules)	modular kit on chassis
height	width	depth				
350	300	160	300	10	20	FL980A
500	300	200	450	10	30	FL981A
500	400	200	450	16	48	FL982A
650	400	200	600	16	64	FL983A
650	500	250	600	22	88	-
800	600	300	750	26	130	-

plain front plates



partial metal mounting plates



DIN rail for terminal



Main switchboards

plain front plates				partial metal plates fixed				partial metal plates adjustable				DIN rails 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	
-	FL711E	-	-	FL311A	-	-	-	-	-	-	-	-
-	FL711E	-	-	FL311A	-	-	-	-	-	-	-	-
FL702E	FL712E	FL722E	-	FL312A	FL322A	-	-	-	-	-	-	FL500A
FL702E	FL712E	FL722E	-	FL312A	FL322A	-	-	-	-	-	-	FL500A
FL703E	FL713E	FL723E	FL733E	FL313A	FL323A	FL333A	FL343A	-	-	-	-	FL501A
FL704E	FL714E	FL724E	FL734E	-	-	-	-	FL316A	FL326A	FL336A	FL346A	FL502A

polyester enclosures
depth 300 mm

Transparent doors

Metal mounting plates



	Enclosures dimensions in mm					upper section		lower section		enclosures		transparent doors		metal mounting plates		insulated mounting plates
	height	width	modular width	modular height upper	modular height lower	qty of mod. p/row	max. capacity in mod.	qty of mod. p/row	max. capacity (mod.)	with plain door	with transparent door	upper part	lower part	plain upper section	lower section	upper section
enclosures	550	600	500	450	-	23	69	-	-	FL300B	FL500B	-	-	FL510E	-	FL550E
	850	600	500	750	-	23	115	-	-	FL301B	FL501B	-	-	FL511E	-	FL551E
	1150	600	500	1050	-	23	161	-	-	FL302B	FL502B	-	-	FL512E	-	FL552E
	550	850	750	450	-	37	111	-	-	FL305B	FL505B	-	-	FL520E	-	FL560E
	850	850	750	750	-	37	185	-	-	FL306B	FL506B	-	-	FL521E	-	FL561E
	1150	850	750	1050	-	37	259	-	-	FL307B	FL507B	-	-	FL522E	-	FL562E
	550	1100	500+500	450	-	46	138	-	-	FL310B	FL510B	-	-	FL530E	-	FL570E
	850	1100	500+500	750	-	46	230	-	-	FL311B	FL511B	-	-	FL531E	-	FL571E
	1150	1100	500+500	1050	-	46	322	-	-	FL312B	FL512B	-	-	FL532E	-	FL572E
	600	600	500	450	-	23	69	-	-	FL320B	FL520B	-	-	FL510E	-	FL550E
	900	600	500	750	-	23	115	-	-	FL321B	FL521B	-	-	FL511E	-	FL551E
	1200	600	500	1050	-	23	161	-	-	FL322B	FL522B	-	-	FL512E	-	FL552E
	600	850	750	450	-	37	111	-	-	FL325B	FL525B	-	-	FL520E	-	FL560E
	900	850	750	750	-	37	185	-	-	FL326B	FL526B	-	-	FL521E	-	FL561E
	1200	850	750	1050	-	37	259	-	-	FL327B	FL527B	-	-	FL522E	-	FL562E
	600	1100	500+500	450	-	46	138	-	-	FL330B	FL530B	-	-	FL530E	-	FL570E
900	1100	500+500	750	-	46	230	-	-	FL331B	FL531B	-	-	FL531E	-	FL571E	
1200	1100	500+500	1050	-	46	322	-	-	FL322B	FL532B	-	-	FL532E	-	FL572E	
enclosures with 2 sections	1150	600	500	450	450	23	69	23	69	FL340B	-	FL400B	FL400B	FL510E	FL510E	FL550E
	1450	600	500	450	750	23	69	23	115	FL342B	-	FL400B	FL401B	FL510E	FL511E	FL550E
	1750	600	500	450	1050	23	69	23	161	FL344B	-	FL400B	FL402B	FL510E	FL512E	FL550E
	1750	600	500	750	750	23	115	23	115	FL346B	-	FL401B	FL401B	FL511E	FL511E	FL551E
	2050	600	500	750	1050	23	115	23	161	FL348B	-	FL401B	FL402B	FL511E	FL512E	FL551E
	1150	850	750	450	450	37	111	37	111	FL350B	-	FL405B	FL405B	FL520E	FL520E	FL560E
	1450	850	750	450	750	37	111	37	185	FL352B	-	FL405B	FL406B	FL520E	FL521E	FL560E
	1750	850	750	450	1050	37	111	37	259	FL354B	-	FL405B	FL407B	FL520E	FL522E	FL560E
	1750	850	750	750	750	37	185	37	185	FL356B	-	FL406B	FL406B	FL521E	FL521E	FL561E
	2050	850	750	750	1050	37	185	37	259	FL358B	-	FL406B	FL407B	FL521E	FL522E	FL561E
	1150	1100	500+500	450	450	46	138	46	138	FL360B	-	FL410B	FL410B	FL530E	FL530E	FL570E
	1450	1100	500+500	450	750	46	138	46	230	FL362B	-	FL410B	FL411B	FL530E	FL531E	FL570E
	1750	1100	500+500	450	1050	46	138	46	322	FL364B	-	FL410B	FL412B	FL530E	FL532E	FL570E
	1750	1100	500+500	750	750	46	230	46	230	FL366B	-	FL411B	FL411B	FL531E	FL531E	FL571E
2050	1100	500+500	750	1050	46	230	46	322	FL368B	-	FL411B	FL412B	FL531E	FL532E	FL571E	

internal door
metal



modular chassis
functional uprights



plain front plates



partial metal
mounting plates



DIN rail



		internal door		modular kits		plain front plates				partial metal plates adjustable				DIN rails for terminals
	lower section	metal upper section	lower section	upper section	lower section	h.50	h.150	h.200	h.300	h.150	h.200	h.300	h.400	
-		FL590E	-	FL990B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		FL591E	-	FL992B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		FL592E	-	FL994B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		FL600E	-	FL991B	-	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
-		FL601E	-	FL993B	-	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
-		FL602E	-	FL995B	-	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
-		2xFL590E	-	2xFL990B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		2xFL591E	-	2xFL992B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		2xFL592E	-	2xFL994B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		FL590E	-	FL990B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		FL591E	-	FL992B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		FL592E	-	FL994B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		FL600E	-	FL991B	-	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
-		FL601E	-	FL993B	-	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
-		FL602E	-	FL995B	-	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
-		2xFL590E	-	2xFL990B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		2xFL591E	-	2xFL992B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
-		2xFL592E	-	2xFL994B	-	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL550E	FL590E	FL590E	FL990B	FL990B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL551E	FL590E	FL591E	FL990B	FL992B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL552E	FL590E	FL592E	FL990B	FL994B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL551E	FL591E	FL591E	FL992B	FL992B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL552E	FL591E	FL592E	FL992B	FL994B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL560E	FL600E	FL600E	FL991B	FL991B	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
	FL561E	FL600E	FL601E	FL991B	FL993B	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
	FL562E	FL600E	FL602E	FL991B	FL995B	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
	FL561E	FL601E	FL601E	FL993B	FL993B	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
	FL562E	FL601E	FL602E	FL993B	FL995B	FL705E	FL715E	FL725E	FL735E	FL317A	FL327A	FL337A	FL347A	FL503A
	FL570E	2xFL590E	2xFL590E	2xFL990B	2xFL990B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL571E	2xFL590E	2xFL591E	2xFL990B	2xFL992B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL572E	2xFL590E	2xFL592E	2xFL990B	2xFL994B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL571E	2xFL591E	2xFL591E	2xFL992B	2xFL992B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E
	FL572E	2xFL591E	2xFL592E	2xFL992B	2xFL994B	-	FL710E	-	-	FL610E	FL620E	FL630E	FL640E	FL500E

Sheet metal enclosures with plain or transparent door

color RAL 7035
 IP 65 / IK 10 with door closed
 IP 30 with door open
 insulation class: I
 compliance to IEC 529

Enclosures delivered with

- 2 removable cable entry plates top/bottom,
- earthing studs on enclosure body and door,
- easy dismountable 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

Complies with IEC62208



FL113A

Metal enclosures orion plus

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

Plinths

Description	Height (mm)	Cat. ref.
for enclosures: FL113A, FL119A, FL121A, FL163A, FL169A, FL171A	50	FL957A
for enclosures: FL120A, FL122A, FL170A, FL172A	50	FL958A
for enclosures: FL116A, FL123A, FL125A, FL129A, FL166A, FL173A, FL175A, FL179A	50	FL959A
for enclosures: FL124A, FL126A, FL174A, FL176A	50	FL960A
for enclosures: FL127A, FL177A	50	FL961A
for enclosures: FL128A, FL130A, FL178A, FL180A	50	FL962A



FL958A

Lock with key

- to replace existing lock

Description	Pack qty.	Cat. ref.
lock with 2 keys n°427	10	FL96Z



FL96Z

Locks

Description	Pack qty.	Cat. ref.
set of 2 locks square centre 8mm, 1 key	10	FL80Z
set of 2 locks square centre 6mm, 1 key	10	FL82Z
set of 2 locks triangular centre 8mm	10	FL93Z
set of 2 double bit 3m centre locks	10	FL95Z



FL80Z



FL95Z

Set of wall fixing brackets

Description	Pack qty.	Cat. ref.
metallic	1	FL85Z



FL85Z

Earthing kit

Description	Pack qty.	Cat. ref.
for metal enclosures, section: 4 mm ²	10	FL874A



FL874A

Vertical association kit

Description	Pack qty.	Cat. ref.
vertical association kit (sealstrip + screws)	1	FL670A



FL670A

Enclosures with plain or transparent doors

glass reinforced polyester enclosures, color RAL 7035
 IP 66 / IK 10 with plain door, IK08 with transparent door
 IP30 with door open
 insulation class: II
 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
- for outdoor use
- insulation voltage Ui: 690V (operational voltage according to IEC EN 61439-1 parag. 10.9: 1000V AC and 1500V DC)
- Installation temperature: -5 to +40°C

Accessories

- locks
- wall fixing brackets
- metallic or insulated internal doors
- plain or perforated metallic

Comply with IEC 60 695-2- 10, 60 695-2-11, EN62208:2011 and IMQ certificate n° CA02.05935



Polyester boxes orion plus

- moulded monobloc structure

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref.	
				plain door	transparent door
polyester box	350	300	160	FL204B	FL254B
polyester box	500	300	200	FL209B	FL259B
polyester box	500	400	200	FL213B	FL263B
polyester box	650	400	200	FL216B	FL266B
polyester box	650	500	250	FL221B	FL271B
polyester box	800	600	300	FL229B	FL279B

FL216B



FL96Z



FL81Z



FL97Z

Accessories

Description	Pack qty.	Cat. ref.
lock with 2 keys n°427, for enclosure height ≤ 800 mm	10	FL96Z
plastic key, RAL7046	10	FL99Z
set of 2 locks square centre 8mm	10	FL81Z
set of 2 locks triangular centre 8mm	10	FL94Z
set of 2 locks double bit centre 3mm	10	FL97Z

Enclosures with plain or transparent doors

glass reinforced polyester enclosures, color RAL 7035
 IP 65 / IK 10 with plain door, IK08 with transparent door
 IP30 with door open
 insulation class: II \square
 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
 - for outdoor use
 - insulation voltage Ui: 690V (operational voltage according to IEC EN 61439-1 parag. 10.9: 1000V AC and 1500V DC)
 - Installation temperature: -5 to +40°C

Accessories

- locks
- wall fixing brackets
- metallic or insulated internal doors
- plain or perforated metallic

Comply with IEC 60 695-2- 10, 60 695-2-11, EN62208:2011 and IMQ certificate n° CA02.02562

Polyester enclosures

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref.	
				plain door	transparent door
polyester enclosure	550	600	300	FL300B	FL500B
polyester enclosure	550	850	300	FL305B	FL505B
polyester enclosure	550	1100	300	FL310B	FL510B
polyester enclosure	850	600	300	FL301B	FL501B
polyester enclosure	850	850	300	FL306B	FL506B
polyester enclosure	850	1100	300	FL311B	FL511B
polyester enclosure	1150	600	300	FL302B	FL502B
polyester enclosure	1150	850	300	FL307B	FL507B
polyester enclosure	1150	1100	300	FL312B	FL512B



FL505B

Polyester enclosures

- delivered with a 70mm plinth

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref.	
				plain door	transparent door
polyester enclosure	600	600	300	FL320B	FL520B
polyester enclosure	600	850	300	FL325B	FL525B
polyester enclosure	600	1100	300	FL330B	FL530B
polyester enclosure	900	600	300	FL321B	FL521B
polyester enclosure	900	850	300	FL326B	FL526B
polyester enclosure	900	1100	300	FL331B	FL531B
polyester enclosure	1200	600	300	FL322B	FL522B
polyester enclosure	1200	850	300	FL327B	FL527B
polyester enclosure	1200	1100	300	FL332B	FL532B



FL321B



FL344B

Polyester enclosures

- made of 2 enclosures with plain doors on top of each other

Description	Height (mm)	Width (mm)	Depth (mm)	Height upper + lower section (mm)	Cat. ref. plain door
polyester enclosure	1150	600	300	550+550	FL340B
polyester enclosure	1150	850	300	550+550	FL350B
polyester enclosure	1150	1100	300	550+550	FL360B
polyester enclosure	1450	600	300	550+850	FL342B
polyester enclosure	1450	850	300	550+850	FL352B
polyester enclosure	1450	1100	300	550+850	FL362B
polyester enclosure	1750	600	300	550+1150	FL344B
polyester enclosure	1750	600	300	850+850	FL346B
polyester enclosure	2050	600	300	850+1150	FL348B
polyester enclosure	1750	850	300	550+1150	FL354B
polyester enclosure	1750	850	300	850+850	FL356B
polyester enclosure	2050	850	300	850+1150	FL358B
polyester enclosure	1750	1100	300	550+1150	FL364B
polyester enclosure	1750	1100	300	850+850	FL366B
polyester enclosure	2050	1100	300	850+1150	FL368B

Doors

- to replace standard plain doors

Description	Height (mm)	Width (mm)	Cat. ref. plain door	transparent door
door	500	600	FL380B	FL400B
door	550	850	FL385B	FL405B
door	550	1100	FL390B	FL410B
door	850	600	FL381B	FL401B
door	850	850	FL386B	FL406B
door	850	1100	FL391B	FL411B
door	1150	600	FL382B	FL402B
door	1150	850	FL387B	FL407B
door	1150	1100	FL392B	FL412B



FL98Z



FL863Z

Accessories

Description	Pack qty.	Cat. ref.
cylindrical barrel, triangular male 8mm	5	FL74Z
cylindrical barrel, double bar 3mm	5	FL75Z
cylindrical barrel, square male 8 x 8 mm	5	FL76Z
cylindrical barrel, square male 6 x 6 mm	5	FL77Z
lock with 2 keys n°427	10	FL98Z
set of M6 nuts to fix equipment directly on back	100	FZ801
euro handle watertight		FZ680
set of wall fixing brackets in insulated material, delivered with fixing screws M6x12		FL863Z

Plain mounting plates

- sheet metal thickness 2mm, delivered with fixing screws
- mounting either directly on the back of the enclosures, or on the integrated slides with brackets FL450A to adjust depth

Description	Height (mm)	Width (mm)	Cat. ref.
for FL101A, FL151A	230	143	FL401A
for FL102A, FL152A	280	193	FL402A
for FL103A, FL153A	280	243	FL403A
for FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	330	243	FL404A
for FL106A, FL107A, FL156A, FL157A	380	243	FL405A
for FL108A, FL158A	380	343	FL406A
for FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	480	243	FL407A
for FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	480	343	FL408A
for FL300B, FL500B, FL320B, FL520B	480	493	FL510E
for FL305B, FL505B, FL325B, FL525B	480	743	FL520E
for FL310B, FL510B, FL330B, FL530B	480	993	FL530E
for FL113A, FL163A	480	443	FL409A
for FL114A, FL115A, FL164A, FL165A	580	343	FL410A
for FL116A, FL166A	580	543	FL411A
for FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	630	343	FL412A
for FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	630	443	FL413A
for FL121A, FL122A, FL171A, FL172A	780	443	FL414A
for FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	780	543	FL415A
for all the enclosures	780	243	FL501E
for all the enclosures	1080	243	FL502E
for FL300B, FL500B, FL320B, FL520B	480	493	FL510E
for FL301B, FL501B, FL321B, FL521B	780	493	FL511E
for FL306B, FL506B, FL326B, FL526B	780	743	FL521E
for FL311B, FL511B, FL331B, FL531B	780	993	FL531E
for FL302B, FL502B, FL322B, FL522B	1080	493	FL512E
for FL307B, FL507B, FL327B, FL527B	1080	793	FL522E
for FL312B, FL512B, FL332B, FL532B	1080	993	FL532E
for FL125A, FL126A, FL175A, FL176A	930	543	FL416A
for FL127A, FL128A, FL177A, FL178A	930	743	FL417A
for FL129A, FL179A	1230	543	FL418A
for FL130A, FL180A	1230	743	FL419A



FL408A



FL475A

Perforated mounting plates

- sheet metal thickness 2mm, delivered with fixing screws
- mounting either directly on the back of the enclosures, or on the integrated slides with brackets FL450A to adjust depth
- use clip with screw UC969 to fix equipment on the mounting plate

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



FL427A

Insulated mounting plates

- insulating material, delivered with fixing screws
- mounting either directly on the back of the enclosures, or on the integrated slides with brackets FL450A to adjust depth

Description	Height (mm)	Width (mm)	Cat. ref.
for FL102A, FL152A	235	195	FL422A
for FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	285	245	FL423A
for FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	435	245	FL424A
for FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	435	345	FL425A
for all the enclosures	735	245	FL541E
for all the enclosures	1035	245	FL542E
for FL300B, FL500B, FL320B, FL520B	435	495	FL550E
for FL305B, FL505B, FL325B, FL525B	435	745	FL560E
for FL310B, FL510B, FL330B, FL530B	435	995	FL570E
for FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	585	345	FL426A
for FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	585	345	FL427A
for FL121A, FL122A, FL171A, FL172A	735	445	FL428A
for FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	735	545	FL429A
for FL301B, FL501B, FL312B, FL512B	735	495	FL551E
for FL306B, FL506B, FL326B, FL526B	735	745	FL561E
for FL311B, FL511B, FL331B, FL531B	735	995	FL571E
for FL302B, FL502B, FL322B, FL522B	1035	745	FL552E
for FL307B, FL507B, FL327B, FL527B	1035	745	FL562E
for FL312B, FL512B, FL332B, FL532B	1035	995	FL572E
for FL125A, FL126A, FL175A, FL176A	885	545	FL430A
for FL127A, FL128A, FL177A, FL178A	885	745	FL431A
for FL129A, FL179A	1185	545	FL432A
for FL130A, FL180A	1185	745	FL433A



UC969

Clip nut screws for perforated mounting plates

Description	Cat. ref.
set of 25 clip nut screws M5	UC969

Internal doors, sheet metal reversible

- delivered with fixing accessories mounting on slides with delivered fixing frame

Description	Cat. ref.
for FL101A, FL151A	FL541A
for FL102A, FL152A	FL542A
for FL103A, FL153A	FL543A
for FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	FL544A
for FL106A, FL107A, FL156A, FL157A	FL545A
for FL108A, FL158A	FL546A
for FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	FL547A
for FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	FL548A
for FL300B, FL500B, FL310B, FL510B, FL320B, FL520B, FL330B, FL530B	FL590E
for FL305B, FL505B, FL325B, FL525B	FL600E
for FL113A, FL163A	FL549A
for FL114A, FL115A, FL164A, FL165A	FL550A
for FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	FL551A
for FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	FL552A
for FL116A, FL166A	FL553A
for FL121A, FL122A, FL171A, FL172A	FL554A
for FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	FL555A
for all the enclosures	FL580E
for all the enclosures	FL581E
for all the enclosures	FL582E
for FL301B, FL501B, FL311B, FL511B, FL321B, FL521B, FL331B, FL531B	FL591E
for FL306B, FL506B, FL326B, FL526B	FL601E
for FL302B, FL502B, FL312B, FL512B, FL322B, FL522B, FL332B, FL532B	FL592E
for FL307B, FL507B, FL327B, FL527B	FL602E
for FL125A, FL126A, FL175A, FL176A	FL556A
for FL127A, FL128A, FL177A, FL178A	FL557A
for FL129A, FL179A	FL558A
for FL130A, FL180A FL545A	FL559A



FL552A

Internal doors, polyester reversible

- delivered with fixing accessories mounting on slides with delivered fixing frame

Description	Cat. ref.
for FL104A, FL105A, FL154A, FL155A, FL204B, FL254B	FL643A
for FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	FL644A
for FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	FL645A
for FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	FL646A
for FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	FL647A
for FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	FL649A



FL647A

Clip nut screws for perforated mounting plates

Description	Cat. ref.
set of 25 clip nut screws M5	UC969



FL463A

Functional uprights

- for the assembly of kit for modular equipment, kit for box section, solid panels and partial internal panels
- fixed to the guide runners by means of brackets provided
- prepared for vertical conduits:
 - ⁽¹⁾ section 25 x 60
 - ⁽²⁾ section 40 x 60

Description	Cat. ref.
for panel h. 350 x ⁽¹⁾ w. 300 - H mod. 300 mm	FL461A
for panel h. 500 x ⁽¹⁾ w. 300 - H mod. 450 mm	FL462A
for panel h. 500 x ⁽¹⁾ w. 400 - H mod. 450 mm	FL462A
for panel h. 650 x ⁽¹⁾ w. 400 - H mod. 600 mm	FL463A
for panel h. 650 x ⁽¹⁾ w. 500 - H mod. 600 mm	FL463A
for panel h. 800 x ⁽¹⁾ w. 500 - H mod. 750 mm	FL465A
for panel h. 800 x ⁽²⁾ w. 600 - H mod. 750 mm	FL466A
for panel h. 950 x ⁽²⁾ w. 600 - H mod. 900 mm	FL467A
for panel h. 950 x ⁽²⁾ w. 800 - H mod. 900 mm	FL467A
for panel h. 1250 x ⁽²⁾ w. 600 - H mod. 1200 mm	FL468A
for panel h. 1250 x ⁽¹⁾ w. 800 - H mod. 1200 mm	FL468A



FL981A

Functional chassis for modular equipment

- pre-assembled made up of:
- 2 uprights
 - DIN guides
 - modular panels in resin
 - 4 fixing brackets are fixed to the guide runners by means of the brackets provided.

Description	Cat. ref.
for panel h.350 x w.300 mm, 24 mod. (2 rows of 12 mod.), for steel enclosures only	FL979A
for panel h.350 x w.300 mm, 24 mod. (2 rows of 12 mod.), for polyester enclosures only	FL980A
for panel h.500 x w.300 mm, 36 mod. (3 rows of 12 mod.)	FL981A
for panel h.500 x w.400 mm, 54 mod. (3 rows of 18 mod.)	FL982A
for panel h.650 x w.400 mm, 72 mod. (4 rows of 18 mod.)	FL983A

Sliding guides



Description	Cat. ref.
for polyester enclosures	FL672E

Equipment kits

- for modular products
- mounting on functional uprights made of fixing frame, 2 functional uprights for DIN rails, 2 uprights to fix DIN rails, DIN rails and front plates with modular cut out h.150mm

Description		Cat. ref.
for FL204B, FL254B		FL990C
for FL104A, FL105A, FL154A, FL155A	2 rows (20 mod.)	FL990A
for FL109A, FL110A, FL159A, FL160A, FL209B, FL259B	3 rows (30 mod.)	FL991A
for FL111A, FL112A, FL161A, FL162A, FL213B, FL263B	3 rows (48 mod.)	FL992A
for FL300B, FL500B, FL320B, FL520B	3 rows (69 mod.)	FL990B
for FL305B, FL505B, FL325B, FL525B	3 rows (111 mod.)	FL991B
for FL117A, FL118A, FL167A, FL168A, FL216B, FL266B	4 rows (64 mod.)	FL993A
for FL119A, FL120A, FL169A, FL170A, FL221B, FL271B	4 rows (88 mod.)	FL994A
for FL121A, FL122A, FL171A, FL172A	5 rows (110 mod.)	FL995A
for FL123A, FL124A, FL173A, FL174A, FL229B, FL279B	5 rows (130 mod.)	FL996A
for FL301B, FL501B, FL321B, FL521B	5 rows (115 mod.)	FL992B
for FL306B, FL506B, FL326B, FL526B	5 rows (185 mod.)	FL993B
for FL125A, FL126A, FL175A, FL176A	6 rows (156 mod.)	FL997A
for FL127A, FL128A, FL177A, FL178A	6 rows (222 mod.)	FL998A
for FL302B, FL502B, FL322B, FL522B	7 rows (161 mod.)	FL994B
for FL307B, FL507B, FL327B, FL527B	7 rows (259 mod.)	FL995B
for FL129A, FL179A	8 rows (208 mod.)	FL999A
for FL130A, FL180A	8 rows (296 mod.)	FL000A



FL992A

Main
switchboards

Kits for modular devices

Description	Width (mm)	Cat. ref.
kits for modular devices H150	300	FL361A
kits for modular devices H150	400	FL362A
kits for modular devices H150	500	FL363A
kits for modular devices H150	600	FL364A
kits for modular devices H150	800	FL365A
kits for modular devices H200, for FL992A, FL993A	400	FL366A
kits for modular devices H200, for FL994A, FL995A	500	FL367A
kits for modular devices H200, for FL996A, FL997A, FL 999A	600	FL368A
kits for modular devices H200, for FL991A, FL993A, FL995A, FL998A, FL000A	800	FL369A

Kits for main incomer

Description	Width (mm)	Height (mm)	Cat. ref.
kit for main incomer 125/160A, modular	400	300	FL371A
kit for main incomer 125/160A, modular	500	300	FL372A
kit for main incomer 125/160A, modular	600	300	FL373A
kit for main incomer 125/160A, modular	800	300	FL374A
kit for main incomer 250A x250	600	200	FL380AH
kit for main incomer 250A x250	800	200	FL381AH
kit for main incomer 250A x250	300	500	FL391AH
kit for main incomer 250A x250	400	500	FL392AH
kit for main incomer 250A x250	400	650	FL393AH
kit for main incomer 400/630A	400	650	FL399AH



FL323A

Fixed partial mounting plates

- mounting on functional uprights

Description	Width (mm)	Height (mm)	Cat. ref.
for FL990A, FL991A	300	150	FL311A
for FL992A, FL993A	400	150	FL312A
for FL992A, FL993A	400	200	FL322A
for FL994A, FL995A	500	150	FL313A
for FL994A, FL995A	500	200	FL323A
for FL994A, FL995A	500	300	FL333A
for FL994A, FL995A	500	400	FL343A



FL325A

Adjustable partial mounting plates

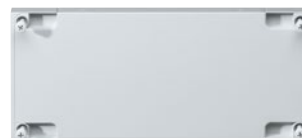
- mounting on functional uprights
- for enclosures with a depth of 250 and 300mm

Description	Width (mm)	Height (mm)	Cat. ref.
for FL993A	400	150	FL314A
for FL993A	400	200	FL324A
for FL994A, FL995A	500	150	FL315A
for FL994A, FL995A	500	200	FL325A
for FL994A, FL995A	500	300	FL335A
for FL994A, FL995A	500	400	FL345A
for FL996A, FL997A, FL999A	600	150	FL316A
for FL996A, FL997A, FL999A	600	200	FL326A
for FL996A, FL997A, FL999A	600	300	FL336A
for FL996A, FL997A, FL999A	600	400	FL346A
for FL990B, FL992B, FL994B	600	150	FL610E
for FL990B, FL992B, FL994B	600	200	FL620E
for FL990B, FL992B, FL994B	600	300	FL630E
for FL990B, FL992B, FL994B	600	400	FL640E
for FL998A, FL000A, FL991B, FL993B, FL995B	800/850	150	FL317A
for FL998A, FL000A, FL991B, FL993B, FL995B	800/850	200	FL327A
for FL998A, FL000A, FL991B, FL993B, FL995B	800/850	300	FL337A
for FL998A, FL000A, FL991B, FL993B, FL995B	800/850	400	FL347A

Plain front plates

- fixed by screws of 1/4 turn to replace modular covers

Description	Height (mm)	Cat. ref.
for FL992A, FL993A	50	FL702E
for FL994A, FL995A	50	FL703E
for FL996A, FL997A, FL999A	50	FL704E
for FL998A, FL000A, FL991B, FL993B, FL995B	50	FL705E
for FL990B, FL992B, FL994B	150	FL710E
for FL990A, FL991A, FL990C	150	FL711E
for FL992A, FL993A	150	FL712E
for FL994A, FL995A	150	FL713E
for FL996A, FL997A, FL999A	150	FL714E
for FL998A, FL000A, FL991B, FL 993B, FL 995B	150	FL715E
for FL992A, FL993A	200	FL722E
for FL 994A, FL995A	200	FL723E
for FL996A, FL997A, FL999A	200	FL724E
for FL998A, FL000A, FL991B, FL993B, FL995A	200	FL725E
for FL994A, FL995A	300	FL733E
for FL996A, FL997A, FL999A	300	FL734E
for FL998A, FL000A, FL991B, FL993B, FL995B	300	FL735E



FL712E

DIN rails for terminals adjustable inclination : 30°

- mounting on functional uprights

Description	Cat. ref.
for FL992A, FL993A	FL500A
for FL994A, FL995A	FL501A
for FL996A, FL997A, FL999A	FL502A
for FL998A, FL000A, FL991B, FL993B, FL995B	FL503A
for FL990B, FL992B, FL994B	FL500E



FL500A

Supports for earth and neutral terminals

Description	Width (mm)	Cat. ref.
for enclosures	300	FL492A
for enclosures	400	FL493A
for enclosures	500	FL494A
for enclosures	600	FL495A
for enclosures	800	FL496A

Mounting plate brackets

Description

4 brackets delivered with fixing screws

Cat. ref.

FL450A



FL450A

Slotted cable ducts horizontal and vertical

Description	Pack qty.	Width (mm)	Depth (mm)	Cat. ref.
2 m length slotted cable ducts	2	25	60	FL70Z
2 m length slotted cable ducts	2	40	60	FL71Z



FL70Z



UZ25V1

UZ25V2

Cable guides

Description	Cat. ref.
set of 20 pieces, section 2200 mm ²	UZ25V1
set of 20 pieces, section 1600 mm ²	UZ25V2
set of 20 fixing brackets for cable guide	UZ01V1



UT50C

Cable retainer plastic cover

Description	Cat. ref.
2m length cable retainer plastic cover	UT50C



FL871Z

Blanking clip

Description	Pack qty.	Cat. ref.
4 modules width blanking clips, pre-cut to 1/2 module	6	FL871Z



JE003

Label holder for front plates

Description	Cat. ref.
24 modules width label holder with label	JE003



FL212Z

Ventilating fans

- reinforced polyamide, colour RAL7035
- IP54
- 230V supply

Description	Rotation/ min.	Airflow	Dimensions WxHxD (mm)	Cat. ref.
ventilating fan 20W	2650/3000	57m ³ /h	150 x 150 x 71	FL210Z
ventilating fan 20W	2650/3000	115m ³ /h	250 x 250 x 113	FL212Z
ventilating fan 29W	2500	240m ³ /h	250 x 250 x 121	FL214Z
ventilating fan 67W	2480/2650	520m ³ /h	325 x 325 x 161	FL216Z



FL220Z

Air vents with filters

- colour RAL7035
- IP54

Description	Dimensions WxHxD (mm)	Cat. ref.
air vent with filter	150 x 150 x 28	FL220Z
air vent with filter	250 x 250 x 31	FL224Z
air vent with filter	325 x 325 x 161	FL226Z

Fan filters

Description	Cat. ref.
filter for FL220Z	FL230Z
filter for FL224Z	FL234Z
filter for FL226Z	FL236Z

Heater supplies

Description	Cat. ref.
heater supply 15W	FL252Z
heater supply 30W	FL253Z
heater supply 45W	FL254Z
heater supply 80W	FL255Z
heater supply 150W	FL256Z



FL253Z

Thermostats

- to control temperature in the enclosure, changeover contact
- fixing on DIN rail
- settings -10° to 80° C
- dimensions: w. 29 x h. 68 x d. 45 mm

Description	Cat. ref.
to control condensation contact NC	FL258Z
to control fan-contact NO	FL259Z



FL258Z



FL259Z

BOARD enclosures

- Suitable for indoor and outdoor installation
 - Material: AISI304 (V2A)
 - Brushed, grain size 240
 - Door opening angle: 120°
 - IP66 protection (IP55 with double door)
 - IK10 shock resistance (IK10 with glazed door)
 - The galvanised, 2 mm thick mounting plate has a separate item number
 - Threaded bolts (M8) available in the internal casing for the mounting plate or for an aluminium profile
 - Threaded bolts (M6) available in the internal casing for earthing
 - Accessories available for the plain door and partially for the glazed door.
 - Safety tempered glass, thickness 4 mm
 - Minimum width 1000 mm with a double door
- Standard locking system: double bar
 - Standards: EN 62208
 - Upon the customer's request, cuts or special enclosure sizes can be provided and holes drilled
 - Several locking systems available as accessories
 - One packing unit
 - Sheet thickness: 1.2 mm (minimum)

Height (mm)	Width (mm)	Depth (mm)	No of doors	Plain door version AISI304	Glazed door version	Mounting plate	Canopy
300	200	150	1	FL010BW	-	UZ2030W	FZ110CW
300	300	210	1	FL012BW	-	UZ3030W	FZ112CW
300	400	150	1	FL013BW	-	UZ4030W	FZ113CW
400	300	150	1	FL014BW	FL014TW	UZ3040W	FZ111CW
400	300	210	1	FL015BW	FL015TW	UZ3040W	FZ112CW
400	400	210	1	FL016BW	FL016TW	UZ4040W	FZ114CW
400	600	210	1	FL017BW	FL017TW	UZ6040W	FZ120CW
500	400	210	1	FL021BW	FL021TW	UZ4050W	FZ114CW
500	500	210	1	FL023BW	FL023TW	UZ5050W	FZ118CW
500	500	250	1	FL024BW	FL024TW	UZ5050W	FZ119CW
600	400	210	1	FL025BW	FL025TW	UZ4060W	FZ114CW
600	500	210	1	FL027BW	FL027TW	UZ5060W	FZ118CW
600	600	210	1	FL028BW	FL028TW	UZ6060W	FZ120CW
600	600	250	1	FL029BW	FL029TW	UZ6060W	FZ121CW
600	600	300	1	FL030BW	FL030TW	UZ6060W	FZ122CW
600	800	300	1	FL032BW	FL032TW	UZ8060W	FZ124CW
600	1000	300	2	FL053BW	-	UZ10060W	FZ126CW
700	500	210	1	FL033BW	FL033TW	UZ5070W	FZ118CW
700	500	250	1	FL034BW	FL034TW	UZ5070W	FZ119CW
800	600	210	1	FL035BW	FL035TW	UZ6080W	FZ120CW
800	600	250	1	FL036BW	FL036TW	UZ6080W	FZ121CW
800	600	300	1	FL037BW	FL037TW	UZ6080W	FZ122CW
800	800	300	1	FL039BW	FL039TW	UZ8080W	FZ124CW
800	1000	300	2	FL054BW	-	UZ10080W	FZ126CW
800	1200	300	2	FL055BW	-	UZ12080W	FZ128CW
1000	600	300	1	FL041BW	FL041TW	UZ60100W	FZ122CW
1000	800	300	1	FL042BW	FL042TW	UZ80100W	FZ124CW
1000	1000	300	2	FL056BW	-	UZ100100W	FZ126CW
1200	600	300	1	FL043BW	FL043TW	UZ60120W	FZ122CW
1200	800	300	1	FL045BW	FL045TW	UZ80120W	FZ124CW
1200	1000	300	2	FL058BW	-	UZ100120W	FZ126CW
1200	1200	300	2	FL060BW	-	UZ120120W	FZ128CW
1400	800	300	1	FL049BW	FL049TW	UZ80140W	FZ124CW
1400	1000	300	2	FL062BW	-	UZ100140W	FZ126CW
1400	1200	300	2	FL064BW	-	UZ120140W	FZ128CW
1600	800	300	1	FL051BW	FL051TW	UZ80160W	FZ124CW

BOARD enclosures

- Suitable for indoor and outdoor installation
 - AISI316L
 - Brushed, grain size 240
 - Door opening angle: 120°
 - IP66 protection (IP55 with double door)
 - IK10 shock resistance (IK10 with glazed door)
 - The galvanised, 2 mm thick mounting plate has a separate item number
 - Threaded bolts (M8) available in the internal casing for the mounting plate or for an aluminium profile
 - Threaded bolts (M6) available in the internal casing for earthing
 - Accessories available for the plain door and partially for the glazed door.
 - Safety tempered glass, thickness 4 mm
 - Minimum width 1000 mm with a double door
- Standard locking system: double bar
 - Standards: EN 62208
 - Upon the customer's request, cuts or special enclosure sizes can be provided and holes drilled
 - Several locking systems available as accessories
 - One packing unit
 - Sheet thickness: 1.2 mm (minimum)

Height (mm)	Width (mm)	Depth (mm)	No of doors	Plain door version AISI316L	Glazed door version	Mounting plate	Canopy
300	200	150	1	FL010BWL	-	UZ2030W	FZ110CWL
300	300	210	1	FL012BWL	-	UZ3030W	FZ112CWL
300	400	150	1	FL013BWL	-	UZ4030W	FZ113CWL
400	300	150	1	FL014BWL	FL014TWL	UZ3040W	FZ111CWL
400	300	210	1	FL015BWL	FL015TWL	UZ3040W	FZ112CWL
400	400	210	1	FL016BWL	FL016TWL	UZ4040W	FZ114CWL
400	600	210	1	FL017BWL	FL017TWL	UZ6040W	FZ120CWL
500	400	210	1	FL021BWL	FL021TWL	UZ4050W	FZ114CWL
500	500	210	1	FL023BWL	FL023TWL	UZ5050W	FZ118CWL
500	500	250	1	FL024BWL	FL024TWL	UZ5050W	FZ119CWL
600	400	210	1	FL025BWL	FL025TWL	UZ4060W	FZ114CWL
600	500	210	1	FL027BWL	FL027TWL	UZ5060W	FZ118CWL
600	600	210	1	FL028BWL	FL028TWL	UZ6060W	FZ120CWL
600	600	250	1	FL029BWL	FL029TWL	UZ6060W	FZ121CWL
600	600	300	1	FL030BWL	FL030TWL	UZ6060W	FZ122CWL
600	800	300	1	FL032BWL	FL032TWL	UZ8060W	FZ124CWL
600	1000	300	2	FL053BWL	-	UZ10060W	FZ126CWL
700	500	210	1	FL033BWL	FL033TWL	UZ5070W	FZ118CWL
700	500	250	1	FL034BWL	FL034TWL	UZ5070W	FZ119CWL
800	600	210	1	FL035BWL	FL035TWL	UZ6080W	FZ120CWL
800	600	250	1	FL036BWL	FL036TWL	UZ6080W	FZ121CWL
800	600	300	1	FL037BWL	FL037TWL	UZ6080W	FZ122CWL
800	800	300	1	FL039BWL	FL039TWL	UZ8080W	FZ124CWL
800	1000	300	2	FL054BWL	-	UZ10080W	FZ126CWL
800	1200	300	2	FL055BWL	-	UZ12080W	FZ128CWL
1000	600	300	1	FL041BWL	FL041TWL	UZ60100W	FZ122CWL
1000	800	300	1	FL042BWL	FL042TWL	UZ80100W	FZ124CWL
1000	1000	300	2	FL056BWL	-	UZ100100W	FZ126CWL
1200	600	300	1	FL043BWL	FL043TWL	UZ60120W	FZ122CWL
1200	800	300	1	FL045BWL	FL045TWL	UZ80120W	FZ124CWL
1200	1000	300	2	FL058BWL	-	UZ100120W	FZ126CWL
1200	1200	300	2	FL060BWL	-	UZ120120W	FZ128CWL
1400	800	300	1	FL049BWL	FL049TWL	UZ80140W	FZ124CWL
1400	1000	300	2	FL062BWL	-	UZ100140W	FZ126CWL
1400	1200	300	2	FL064BWL	-	UZ120140W	FZ128CWL
1600	800	300	1	FL051BWL	FL051TWL	UZ80160W	FZ124CWL



FL010BW

BOARD enclosures, height 300 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	300	200	150	FL010BW	FL010BWL
enclosure	300	300	210	FL012BW	FL012BWL
enclosure	300	400	150	FL013BW	FL013BWL



FL014BW

BOARD enclosures, height 400 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	400	300	150	FL014BW	FL014BWL
enclosure	400	300	210	FL015BW	FL015BWL
enclosure	400	400	210	FL016BW	FL016BWL
enclosure	400	600	210	FL017BW	FL017BWL



FL021BW

BOARD enclosures, height 500 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	500	400	210	FL021BW	FL021BWL
enclosure	500	400	250	FL022BW	FL022BWL
enclosure	500	500	210	FL023BW	FL023BWL
enclosure	500	500	250	FL024BW	FL024BWL

BOARD enclosures, height 600 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10
- Minimum width 1000 mm with double door (IP55)

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	600	400	210	FL025BW	FL025BWL
enclosure	600	500	210	FL027BW	FL027BWL
enclosure	600	600	210	FL028BW	FL028BWL
enclosure	600	600	250	FL029BW	FL029BWL
enclosure	600	600	300	FL030BW	FL030BWL
enclosure	600	800	300	FL032BW	FL032BWL
enclosure	600	1000	300	FL053BW	FL053BWL



FL025BW

BOARD enclosures, height 700 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	700	500	210	FL033BW	FL033BWL
enclosure	700	500	250	FL034BW	FL034BWL



FL033BW

BOARD enclosures, height 800 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10
- Minimum width 1000 mm with double door (IP55)

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	800	600	210	FL035BW	FL035BWL
enclosure	800	600	250	FL036BW	FL036BWL
enclosure	800	600	300	FL037BW	FL037BWL
enclosure	800	800	300	FL039BW	FL039BWL
enclosure	800	1000	300	FL054BW	FL054BWL
enclosure	800	1200	300	FL055BW	FL055BWL



FL035BW



FL056BW

BOARD enclosures, height 1000 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10
- Minimum width 1000 mm with double door (IP55)

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	1000	600	300	FL041BW	FL041BWL
enclosure	1000	800	300	FL042BW	FL042BWL
enclosure	1000	1000	300	FL056BW	FL056BWL



FL058BW

BOARD enclosures, height 1200 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10
- Minimum width 1000 mm with double door (IP55)

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	1200	600	300	FL043BW	FL043BWL
enclosure	1200	800	300	FL045BW	FL045BWL
enclosure	1200	1000	300	FL058BW	FL058BWL
enclosure	1200	1200	300	FL060BW	FL060BWL



FL062BW

BOARD enclosures, height 1400 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10
- Minimum width 1000 mm with double door (IP55)

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	1400	800	300	FL049BW	FL049BWL
enclosure	1400	1000	300	FL062BW	FL062BWL
enclosure	1400	1200	300	FL064BW	FL064BWL



FL051BW

BOARD enclosures, height 1600 mm

- Plain door
- IP66
- Insulation class: ↓
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	1600	800	300	FL051BW	FL051BWL

BOARD enclosures, height 400 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	400	300	150	FL014TW	FL014TWL
enclosure	400	300	210	FL015TW	FL015TWL
enclosure	400	400	210	FL016TW	FL016TWL
enclosure	400	600	210	FL017TW	FL017TWL



FL014TW

BOARD enclosures, height 500 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	500	400	210	FL021TW	FL021TWL
enclosure	500	500	210	FL023TW	FL023TWL
enclosure	500	500	250	FL024TW	FL024TWL



FL021TW

BOARD enclosures, height 600 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	600	400	210	FL025TW	FL025TWL
enclosure	600	500	210	FL027TW	FL027TWL
enclosure	600	600	210	FL028TW	FL028TWL
enclosure	600	600	250	FL029TW	FL029TWL
enclosure	600	600	300	FL030TW	FL030TWL
enclosure	600	800	300	FL032TW	FL032TWL



FL027TW

BOARD enclosures, height 700 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	700	500	210	FL033TW	FL033TWL
enclosure	700	500	250	FL034TW	FL034TWL



FL033TW



FL035TW

BOARD enclosures, height 800 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	800	600	210	FL035TW	FL035TWL
enclosure	800	600	250	FL036TW	FL036TWL
enclosure	800	600	300	FL037TW	FL037TWL
enclosure	800	800	300	FL039TW	FL039TWL



FL041TW

BOARD enclosures, height 1000 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	1000	600	300	FL041TW	FL041TWL
enclosure	1000	800	300	FL042TW	FL042TWL



FL043TW

BOARD enclosures, height 1200 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	1200	600	300	FL043TW	FL043TWL
enclosure	1200	800	300	FL045TW	FL045TWL



FL049TW

BOARD enclosures, height 1400 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	1400	800	300	FL049TW	FL049TWL



FL051TW

BOARD enclosures, height 1600 mm

- Glazed door
- IP66
- Insulation class: \downarrow
- IK 10

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref. AISI304	AISI316L
enclosure	1600	800	300	FL051TW	FL051TWL

Functional chassis for modular equipment*

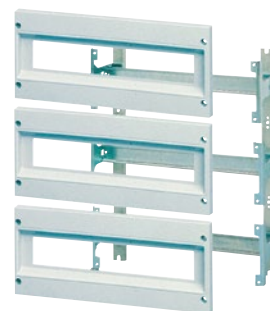
pre-assembled made up of:

- 2 uprights
- DIN guides
- modular panels in resin
- 4 fixing brackets are fixed to the guide runners by means of the brackets provided.

The chassis is made of galvanized steel.

NOTE : functional chassis de-rate the IP when the door is opened up to IP20

* more functional chassis sizes on demand



FL982A

MCBs and MCCBs modular shape can be installed up to 125 A.

Description	For panel height x width	Compatibility	Pack qty.	Cat. ref.
functional chassis	500 x 400 mm 54 DIN, 3 rows of 18 DIN	FL021BW and FL021TW	1	FL982A
functional chassis	800 x 600 mm 140 DIN, 5 rows of 28 DIN	FL035BW and FL035TW	1	FL985A

Frame's adaptors

to install the functional chassis

Description	Pack qty.	Cat. ref.
frame's adaptors	4	FZ110A

Sealable screws set

to seal the front covers (1 set = 40 pcs.)



FL872Z

Description	Pack qty.	Cat. ref.
sealable screws set	1 set	FL872Z

Blanking strips

- 18 modules length
- RAL 7035



VZ416

Description	Pack qty.	Cat. ref.
blanking strips	10	VZ416



UZ3040W

Mounting plates

- material: galvanised steel
- plate thickness 2 mm

Description	Height (mm)	Width (mm)	Cat. ref.
mounting plate	264	134	UZ2030W
mounting plate	264	234	UZ3030W
mounting plate	364	234	UZ3040W
mounting plate	264	334	UZ4030W
mounting plate	364	334	UZ4040W
mounting plate	464	334	UZ4050W
mounting plate	564	334	UZ4060W
mounting plate	464	334	UZ5050W
mounting plate	564	434	UZ5060W
mounting plate	664	434	UZ5070W
mounting plate	364	434	UZ6040W
mounting plate	564	534	UZ6060W
mounting plate	764	534	UZ6080W
mounting plate	964	534	UZ60100W
mounting plate	1164	534	UZ60120W
mounting plate	564	534	UZ8060W
mounting plate	764	734	UZ8080W
mounting plate	964	734	UZ80100W
mounting plate	1164	734	UZ80120W
mounting plate	1382	700	UZ80140W
mounting plate	1582	700	UZ80160W
mounting plate	564	934	UZ10060W
mounting plate	764	934	UZ10080W
mounting plate	964	934	UZ100100W
mounting plate	1182	900	UZ100120W
mounting plate	1382	900	UZ100140W
mounting plate	764	1134	UZ12080W
mounting plate	1182	1100	UZ120120W
mounting plate	1382	1100	UZ120140W

Canopy, BOARD range

- sloped canopy
- installation by the customer (in case of additional holes drilled on the casing, the customer is responsible for the protection rating)
- supplied with fixing hardware



FZ110CW

Description	Height (mm)	Width (mm)	Depth (mm)	Pcs	Cat.Ref AISI304	AISI316L
canopy	50	200	250	1	FZ110CW	FZ110CWL
canopy	50	300	250	1	FZ111CW	FZ111CWL
canopy	50	300	310	1	FZ112CW	FZ112CWL
canopy	50	400	250	1	FZ113CW	FZ113CWL
canopy	50	400	310	1	FZ114CW	FZ114CWL
canopy	50	500	310	1	FZ118CW	FZ118CWL
canopy	50	500	350	1	FZ119CW	FZ119CWL
canopy	50	600	310	1	FZ120CW	FZ120CWL
canopy	50	600	350	1	FZ121CW	FZ121CWL
canopy	50	600	400	1	FZ122CW	FZ122CWL
canopy	50	800	400	1	FZ124CW	FZ124CWL
canopy	50	1000	400	1	FZ126CW	FZ126CWL
canopy	50	1200	400	1	FZ128CW	FZ128CWL

Wall mounting brackets

- material : AISI316L (V4A)
- supplied with fixing screws
- 1 packing unit = 4 pcs



Description	Pcs	Cat. ref.
wall mounting brackets	1	UZ020W

UZ020W

Locking systems

- 1 packing unit = 1 pcs

Description	Pcs	Cat. ref.
double bar locking	1	UZ010LW
stainless steel double bar locking	1	UZ210LW
square locking 8 / 8	1	UZ013LW
stainless steel square locking 8 / 8	1	UZ212LW
butterfly locking with EK333	1	UZ410LW
butterfly locking	1	UZ411LW
butterfly locking for padlock	1	UZ412LW
T-shaped handle lock EK333	1	UZ413LW
T-shaped handle lock	1	UZ414LW
L-shaped handle lock EK333	1	UZ415LW
L-shaped handle lock	1	UZ416LW



UZ010LW

Our range of automation enclosures has been extended with a series of boxes for on-board applications.

Technical characteristics

- Type of enclosure: one-piece box complete with internal mounting plate
- Applications: on-board automation
- Material: box made of 10/10 thickness sheet steel, internal mounting plate made of 18/10 thickness galvanised sheet steel
- Paintwork: RAL 7035 epoxy powder fine textured finish
- Plain door: made of 12/10 thickness sheet steel, no. 1/2 locks with double fin, opening angle 110°, hinged on the right, reversible by rotating the enclosure
- Cable entry: removable covers with gasket
- Access to the interior: door opening: no. 1/2 locks with double fin
- Installation method: wall-mounted using bushes at the back of the box or fixing-brackets (accessory)
- Installation accessories: fixing-brackets for wallmounted installation

- Place of installation: interior
- Operating conditions: Normal, pollution grade 3, installation temperature -5/40°C
- Equipotential bondings: box/door/panel via cable (accessory)
- Insulation category: CL I
- IP protection level: IP 54 with door closed
- IK protection level: IK 10
- Max Ue operating voltage: 400 V
- Ui insulation voltage: 690 V
- Uimp impulse withstand voltage: 8 kV
- Frequency: 50/60 Hz
- Max Icc cto current: 10 kA
- Segregation types: 1
- Conforms to standard CEI EN 62208
- Marks and approvals: IMQ Istituto Italiano del Marchio di Qualità Italian Institute of Quality, CA02.05033



FL715L

Enclosures with plain door

- complete with internal mounting plate
- usable distance between door and internal mounting plate = box depth -20 mm

Description	Height (mm)	Width (mm)	Depth (mm)	Cat. ref.
orion.tech plain door	250	200	160	FL701L
orion.tech plain door	300	250	160	FL702L
orion.tech plain door	300	300	160	FL703L
orion.tech plain door	400	300	160	FL706L
orion.tech plain door	400	300	200	FL707L
orion.tech plain door	400	400	200	FL708L
orion.tech plain door	500	400	200	FL713L
orion.tech plain door	500	500	200	FL712L
orion.tech plain door	600	400	200	FL714L
orion.tech plain door	600	400	250	FL715L
orion.tech plain door	600	600	250	FL716L
orion.tech plain door	700	500	250	FL721L
orion.tech plain door	800	600	250	FL723L
orion.tech plain door	800	600	300	FL729L
orion.tech plain door	950	600	250	FL725L
orion.tech plain door	950	600	300	FL726L
orion.tech plain door	950	800	300	FL728L
orion.tech plain door	1250	800	300	FL730L
orion.tech plain door	1250	800	400	FL731L



FL85Z

Wall fixing brackets

- complete with screws for fixing to the box
- kit of 4 galvanised sheet steel brackets

Description	Pack qty.	Cat. ref.
wall fixing brackets	10	FL85Z

Cable for equipotential bondings

- colour yellow-green
- diameter 4 mm²
- connection with connector



Description	Pack qty.	Cat. ref.
cable for equipotential bondings		FL874A

Plinth

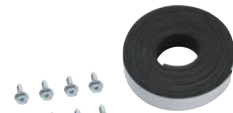
Description	Cat. ref.
plinth H150 for encl. W500 D250 mm	FL958A
plinth H150 for encl. W600 D250 mm	FL959A
plinth H150 for encl. W600 D300 mm	FL960A
plinth H150 for encl. W800 D300 mm	FL962A
plinth H150 for encl. W800 D400 mm	FL963A



FL958A

Vertical coupling kit

Description	Cat. ref.
vertical coupling kit	FL670A



FL670A





Handle



Description	Cat. ref.
handle with key 405	UZ010L

External dimensions			Enclosure with fixed rear panel with solid door, top, base and internal panel.		Solid lower cable feedthrough plates
H height mm	W width mm	D depth mm	Enclosure having internal panel with front insertion	Enclosure having internal panel with side insertion	To close the floor and obtain the IP 65 protection index
1900	600	400	FK110	FK160	FK220
1900	800	400	FK120	FK170	FK230
1900	1000	400	FK130	FK180	FK240
1900	600	500	FK111	FK161	FK220
1900	800	500	FK121	FK171	FK230
1900	1000	500	FK131	FK181	FK240
2100	600	400	FK113	FK163	FK220
2100	800	400	FK123	FK173	FK230
2100	1000	400	FK133	FK183	FK240
2100	600	500	FK114	FK164	FK220
2100	800	500	FK124	FK174	FK230
2100	1000	500	FK134	FK184	FK240

Accessories for special enclosures

Kit for juxtaposition of enclosures	Adhesive seal	Set of brackets for fixing the enclosures to the wall	Set of lifting rings
<p>Plan 1 kit for every 2 juxtaposed enclosures</p>	<p>To ensure the IP 65 protection index for juxtaposed enclosures</p>	<p>Alignable 0-90°</p>	<p>Plan 4 lifting rings for each enclosure</p>
FM635	FN951	FK460	FM653

<p>Sliding lower cable feedthrough plate</p>  <p>to close the floor with a protection seal for the cables</p>	<p>Set of side panels</p>  <p>with attachment accessories</p>	<p>Additional bases</p>  <p>H 100 mm with kit for connecting to the provided base</p>	<p>Set of perforated brackets</p>  <p>H 50 mm for in-depth fixing to the supports of the enclosure</p>
FK270	FK310	FK370	FK404
FK280	FK310	FK380	FK404
FK290	FK310	FK390	FK404
FK270	FK311	FK371	FK405
FK280	FK311	FK381	FK405
FK290	FK311	FK391	FK405
FK270	FK320	FK370	FK404
FK280	FK320	FK380	FK404
FK290	FK320	FK390	FK404
FK270	FK321	FK371	FK405
FK280	FK321	FK381	FK405
FK290	FK321	FK391	FK405

<p>Inserts for standard lock</p>  <p>Double bar; diam. 3 mm</p>	<p>Rotary handle</p>  <p>As a replacement for the standard lock</p>	<p>Inserts for rotary handle</p>     <p>Triangle 8 mm Double flat insert diam. 3 mm Square 8 x 8 mm With key</p>			
10962	FZ680	FL74Z	FL75Z	FL76Z	FL98Z

quadro automation is composed of monoblock enclosures delivered with:

- fixed internal panel,
- plinth kit, height 100mm,
- removable top,
- full door with triangle insert lock,
- side or front insert internal mounting panel

It can be completed with side panels and cable gland plates.

Technical data

- IP65 / IK10 with door and side panels
- RAL 7035 (structure) and (plinth)
- metallic enclosure
- 1.2mm thickness CR4 steel for panels and 1.5 mm for the doors,
- 3 widths: 600, 800, 1000 mm,
- 2 heights: 1900, 2100 mm,
- 2 depths: 400, 500 mm.

Comply with IEC 62 208



FK110

Enclosures with internal panel and front insertion

- monoblock enclosures with juxtaposable fixed rear panel
- height includes H 100 base

Description	Height (mm)	Modular height (mm)	Width (mm)	Depth (mm)	Cat. ref.
enclosure	1900	1800	600	400	FK110
enclosure	1900	1800	800	400	FK120
enclosure	1900	1800	1000	400	FK130
enclosure	1900	1800	600	500	FK111
enclosure	1900	1800	800	500	FK121
enclosure	1900	1800	1000	500	FK131
enclosure	2100	2000	600	400	FK113
enclosure	2100	2000	800	400	FK123
enclosure	2100	2000	1000	400	FK133
enclosure	2100	2000	600	500	FK114
enclosure	2100	2000	800	500	FK124
enclosure	2100	2000	1000	500	FK134



FK160

Enclosures with internal panel and side insertion

- monoblock enclosures with juxtaposable fixed rear panel
- height includes H 100 base

Description	Height (mm)	Modular height (mm)	Width (mm)	Depth (mm)	Cat. ref.
enclosure	1900	1800	600	400	FK160
enclosure	1900	1800	800	400	FK170
enclosure	1900	1800	1000	400	FK180
enclosure	1900	1800	600	500	FK161
enclosure	1900	1800	800	500	FK171
enclosure	1900	1800	1000	500	FK181
enclosure	2100	2000	600	400	FK163
enclosure	2100	2000	800	400	FK173
enclosure	2100	2000	1000	400	FK183
enclosure	2100	2000	600	500	FK164
enclosure	2100	2000	800	500	FK174
enclosure	2100	2000	1000	500	FK184

Set of side panels

- to close the sides of the enclosure
- polyurethane seals
- fixing on the sides with screws (supplied)

Description	Height (mm)	Depth (mm)	Cat. ref.
set of 2 side panels	1900	400	FK310
set of 2 side panels	1900	500	FK311
set of 2 side panels	2100	400	FK320
set of 2 side panels	2100	500	FK321



FK310

Solid lower cable feedthrough plates

- to close the floor of the enclosure
- protection index IP 65 (with IP 65 cable glands)
- continuously moulded polyurethane seals
- fixing to the floor with screws (supplied)

Description	Width (mm)	Cat. ref.
solid lower cable feedthrough plates	600	FK220
solid lower cable feedthrough plates	800	FK230
solid lower cable feedthrough plates	1000	FK240



FK220

Sliding lower cable feedthrough plates

- to close the floor of the enclosure
- adjustable opening for passage of cables
- adhesive expanded polyurethane seals
- fixing to the floor with screws (supplied)

Description	Width (mm)	Cat. ref.
solid lower cable feedthrough plates	600	FK270
solid lower cable feedthrough plates	800	FK280
solid lower cable feedthrough plates	1000	FK290



FK270

Additional bases

- to raise the enclosure
- removable front and rear baseboards
- prepared cut-outs on the sides for passage of cables
- fixing on the standard base with bolts (provided)

Description	Height (mm)	Depth (mm)	Cat. ref.
additional base	600	400	FK370
additional base	800	400	FK380
additional base	1000	400	FK390
additional base	600	500	FK371
additional base	800	500	FK381
additional base	1000	500	FK391



FK370



FK404

Perforated crossbars

- for various attachments
- two holes spaced 25 mm apart for wing nuts

- fixing on the sides of the enclosure with screws (supplied)

Description	Height (mm)	Depth (mm)	Cat. ref.
set of 2 perforated crossbars	50	400	FK404
set of 2 perforated crossbars	50	400	FK405



FM635

Kit for juxtaposition of enclosures

- plan 1 kit for every 2 juxtaposed enclosures

Description	Cat. ref.
kit composed of 6 threaded pins M6 and 12 bolts M5	FM635



FN951

Adhesive expanded polyurethane seal

- to ensure the protection index
- plan 1 reel for every 2 juxtaposed enclosures

Description	Cat. ref.
10 m adhesive seal, w. 10 mm x t. 8 mm	FN951



FM640

Accessories for fixing and transport

Description	Cat. ref.
set of 2 wall fixing brackets to be attached to the rear panel of the enclosure using the supplied screws, alignable 0-90°	FM640



FM653

Description	Cat. ref.
set of 2 lifting rings to be attached to the roof of the enclosure using the supplied cage nuts and screws, Ø 55mm, max. load 250 kg	FM653



10962

Closure inserts for standard lock

- insert for standard lock to replace the standard triangle insert

Description	Pack qty.	Cat. ref.
double bar design 3 mm	10	10962



FZ680

Sealed handle

- to use as a replacement for the standard triangle lock
- can only be activated with the key

Description	Pack qty.	Cat. ref.
handle in technopolymer without insert, to be completed with the closure inserts	5	FZ680



FL74Z FL75Z FL76Z FL98Z

Closure inserts

- applied to the sealed handle
- key insert FL98Z is equipped with 2 keys bearing the unique reference EK333

Description	Pack qty.	Cat. ref.
triangle insert 8 mm	5	FL74Z
double bar insert ø 3 mm	5	FL75Z
square insert 8 x 8 mm	5	FL76Z
insert with key	5	FL98Z

Complete desk with fixed back and sides:

- structure in 15/10 sheet steel,
- plain doors, plates and cable entry with continuous polyester seals,
- reversible plain door in 15/10 sheet steel with rigid profile and interchangeable lock with triangular inserts,
- Rotary handle as accessory,
- Double plain doors for L1200 enclosures are reversible and lock in mounted on the left door,
- enclosure is in 15/10 sheet steel equipped with 2 pneumatic shock absorbers for the opening and 2 lever locks with triangular inserts, rotary handle as accessory,

- fixed internal panel to be installed from the front in 20/10 zinc covered sheet steel,
- Integrated plinth h100mm with lateral locks and holes for floor mounting,
- plain cable entry plate in 15/10 sheet steel,
- epoxy polyester powder coating, RAL 7035,
- Protection class: IP55 - IK10,
- Nominal current of use: 400V,
- short-circuit voltage rating: 10kA,
- for indoor installation,
- max. operating temperature: +40°C.

Monobloc control desks

- control desk height: 200mm
- body height: 700mm
- plinth height: 100mm
- completed with fixed internal panels
- base completely closed
- lockable door and desk panel with triangular insert
- 1 door for width 600, 800 and 1000mm
- double door for width 1200mm

Description	Height (mm)	Width (mm)	Depth (mm)	ΔT 0.5 (K)	ΔT 1.0 (K)	P; max (W)	Cat. ref.
monobloc control desks	1000	600	400	22.9	30	150	FL650CD
monobloc control desks	1000	800	400	23.7	30	200	FL652CD
monobloc control desks	1000	1000	400	23.7	30	250	FL654CD
monobloc control desks	1000	1200	400	23.7	30	200	FL656CD



FL652CD

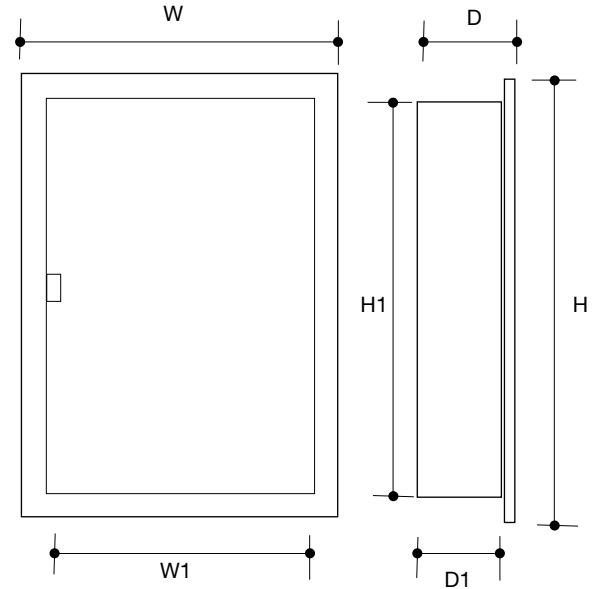
TPN 125A type B distribution boards - fixed busbar

Surface mounting version

Reference (surface)	H	W	D	H1	W1	D1
JK1B04S1	495	405	115	490	400	110
JK1B06S1	555	405	115	550	400	110
JK1B08S1	605	405	115	600	400	110
JK1B10S1	660	405	115	655	400	110
JK1B12S1	715	405	115	710	400	110
JK1B14S1	770	405	115	765	400	110
JK1B16S1	820	405	115	815	400	110
JK1B18S1	940	405	115	935	400	110
JK1B24S1	1105	405	115	1100	400	110

Flush mounting version

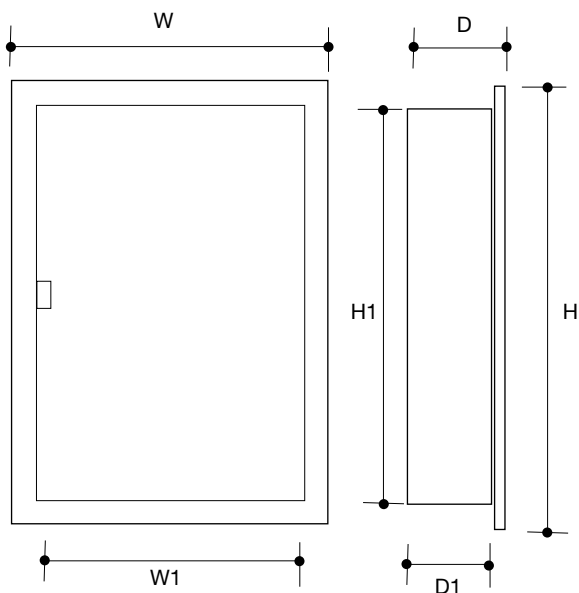
Reference (flush)	H	W	D	H1	W1	D1
JK1B04F1	520	430	115	490	400	110
JK1B06F1	580	430	115	550	400	110
JK1B08F1	630	430	115	600	400	110
JK1B10F1	685	430	115	655	400	110
JK1B12F1	740	430	115	710	400	110
JK1B14F1	795	430	115	765	400	110
JK1B16F1	845	430	115	815	400	110
JK1B18F1	965	430	115	935	400	110
JK1B24F1	1130	430	115	1100	400	110



TPN 125A type B distribution boards - split busbar

Dimensions of spreader box + din extension box

Reference	H	W	D
JK1E01S	275	405	115
JK1E16S	275	405	115
JK1E32S	425	405	115
JK1E48S	655	405	115
JK1E01F	300	430	115
JK1E16F	300	430	115
JK1E32F	450	430	115
JK1E48F	680	430	115

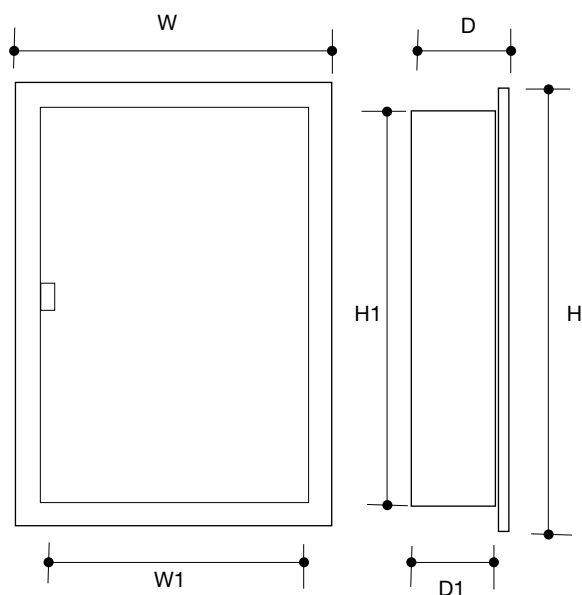


Main switchboards

Reference (surface)	H	W	D	H1	W1	D1
JK1B022S1	555	445	115	550	440	110
JK1B042S1	610	445	115	605	440	110
JK1B044S1	665	445	115	660	440	110
JK1B062S1	665	445	115	660	440	110
JK1B064S1	720	445	115	715	440	110
JK1B066S1	775	445	115	770	440	110
JK1B082S1	720	445	115	715	440	110
JK1B084S1	775	445	115	770	440	110
JK1B086S1	830	445	115	825	440	110
JK1B088S1	885	445	115	880	440	110
JK1B104S1	935	445	115	930	440	110

Reference (flush)	H	W	D	H1	W1	D1
JK1B022F1	580	470	115	550	440	110
JK1B042F1	635	470	115	605	440	110
JK1B044F1	690	470	115	660	440	110
JK1B062F1	690	470	115	660	440	110
JK1B064F1	745	470	115	715	440	110
JK1B066F1	800	470	115	770	440	110
JK1B082F1	745	470	115	715	440	110
JK1B084F1	800	470	115	770	440	110
JK1B086F1	855	470	115	825	440	110
JK1B088F1	910	470	115	880	440	110
JK1B104F1	960	470	115	930	440	110

invicta - 250A type B distribution boards



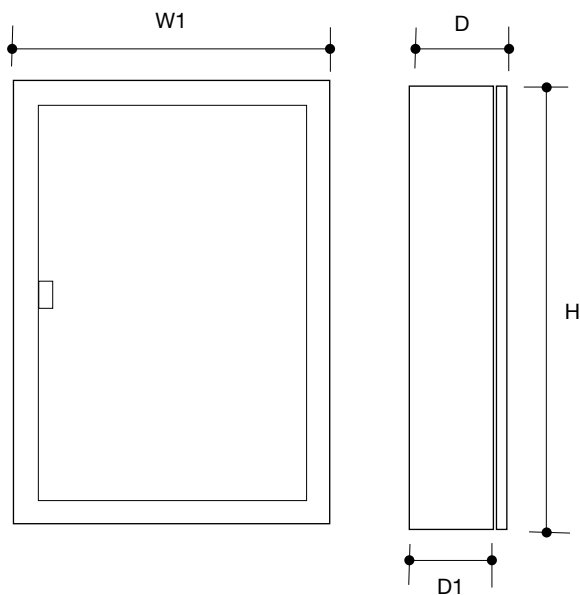
Reference (surface)	H	W	D	H1	W1	D1
JK2B04S1	665	445	115	650	440	110
JK2B06S1	705	445	115	700	440	110
JK2B08S1	760	445	115	755	440	110
JK2B10S1	815	445	115	810	440	110
JK2B12S1	865	445	115	860	440	110
JK2B14S1	920	445	115	915	440	110
JK2B16S1	975	445	115	970	440	110
JK2B18S1	1030	445	115	1025	440	110
JK2B24S1	1195	445	115	1190	440	110

Reference (flush)	H	W	D	H1	W1	D1
JK2B04F1	680	470	115	650	440	110
JK2B06F1	730	470	115	700	440	110
JK2B08F1	785	470	115	755	440	110
JK2B10F1	840	470	115	810	440	110
JK2B12F1	890	470	115	860	440	110
JK2B14F1	945	470	115	915	440	110
JK2B16F1	1000	470	115	970	440	110
JK2B18F1	1055	470	115	1025	440	110
JK2B24F1	1220	470	115	1190	440	110

Dimensions of spreader box + din extension box

Reference	H	W	D
JK2E01F	300	470	115
JK2E01S	275	445	115
JK2E16S	275	445	115
JK2E32S	425	445	115
JK2E48S	575	445	115
JK2E16F	300	470	115
JK2E32F	450	470	115
JK2E48F	600	470	115

invicta - 250A panel board system
250A incoming, 125A outgoing



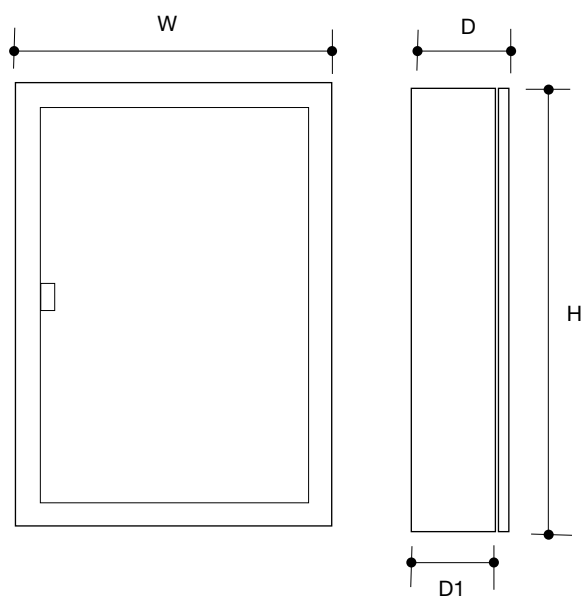
Main
switchboards

Reference (surface)	H	W	D1	D
JN2B00002S1	700	615	160	165
JN2B00004S1	775	615	160	165
JN2B00006S1	855	615	160	165
JN2B00008S1	925	615	160	165
JN2B00010S1	1000	615	160	165
JN2B00012S1	1115	615	160	165
JN2B00016S1	1375	615	160	165

Dimensions of spreader box + din extension box

Reference	H	W	D
JN2E01S	303	615	160
JN2E20S	303	615	160

invicta - 400A panel board system
400A incoming, 125A / 250A incoming

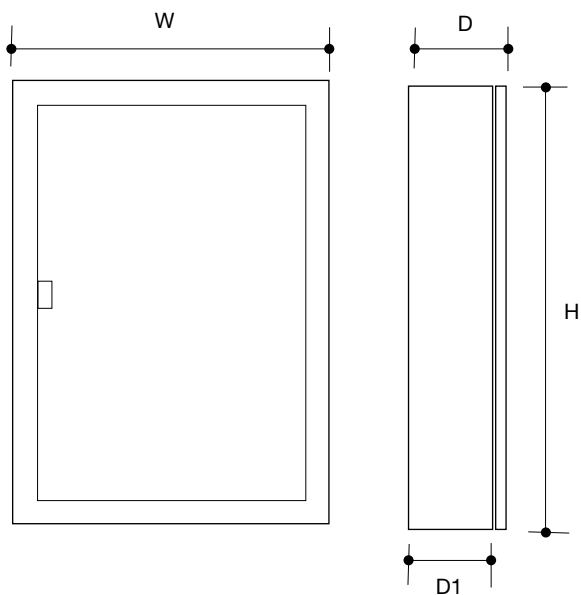


Reference (surface)	H	W	D1	D
JN4B00004S1	930	690	200	205
JN4B00006S1	1005	690	200	205
JN4B00008S1	1080	690	200	205
JN4B00010S1	1155	690	200	205
JN4B00012S1	1230	690	200	205
JN4B00016S1	1380	690	200	205
JN4B00202S1	960	846	200	205
JN4B00204S1	1035	846	200	205
JN4B00206S1	1110	846	200	205
JN4B00208S1	1185	846	200	205
JN4B00210S1	1260	846	200	205
JN4B00214S1	1410	846	200	205

Dimensions of spreader box + din extension box

Reference	H	W	D
JN4E01S	303	690	200
JN4E24S	303	690	200
JN8E32S	453	615	160

invicta - 800A panel board system
630A/ 800A incoming 125A/ 250A/ 400A outgoing

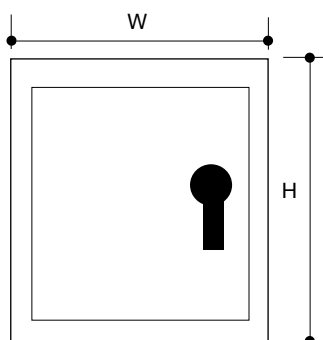


Main
switchboards

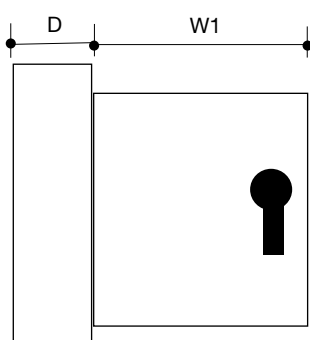
Reference (surface)	H	W	D1	D
JN8B00004S1	1035	846	200	205
JN8B00006S1	1110	846	200	205
JN8B00008S1	1215	846	200	205
JN8B00010S1	1320	846	200	205
JN8B00012S1	1410	846	200	205
JN8B00016S1	1620	846	200	205
JN8B00400S1	1095	846	200	205
JN8B00600S1	1200	846	200	205
JN8B00800S1	1305	846	200	205
JN8B01000S1	1410	846	200	205
JN8B01200S1	1515	846	200	205
JN8B01600S1	1725	846	200	205
JN8B00202S1	1065	846	200	205
JN8B00204S1	1140	846	200	205
JN8B00206S1	1215	846	200	205
JN8B00208S1	1320	846	200	205
JN8B00210S1	1410	846	200	205
JN8B00214S1	1560	846	200	205
JN8B00402S1	1170	846	200	205
JN8B00404S1	1245	846	200	205
JN8B00406S1	1350	846	200	205
JN8B00408S1	1440	846	200	205
JN8B00410S1	1650	846	200	205
JN8B00606S1	1485	846	200	205
JN8B00608S1	1620	846	200	205

Dimensions of spreader box + dim. extension box

Reference	H	W	D
JN8E01S	303	846	200
JN8E32S	453	846	200

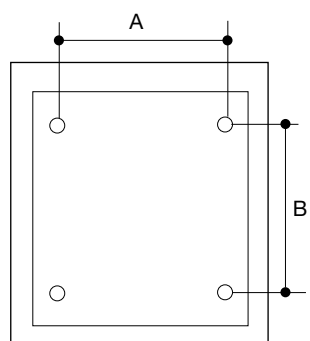


Reference	Product type	Rating	Dimensions					
			H	W	D	W1	A	B
JFB202U	SPSN	20A/ A1	250	200	150	182	120	172
JFB302U	TPN	20A/ A1	250	200	150	182	120	172
JFB402U	TPSN	20A/ A1	250	200	150	182	120	172
JFB203U	TPSN	32A/ A1	250	200	150	182	120	172
JFB303U	TPN	32A/ A1	250	200	150	182	120	172
JFB403U	TPSN	32A/ A1	250	200	150	182	120	172



Size 3									
JFD206U	SPSN	63A/ A2-A3	325	300	150	282	190	217	
JFD306U	TPN	63A/ A2-A3	325	300	150	282	190	217	
JFD406U	TPSN	63A/ A2-A3	325	300	150	282	190	217	

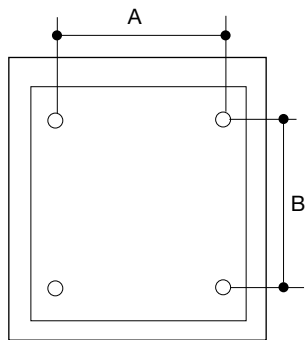
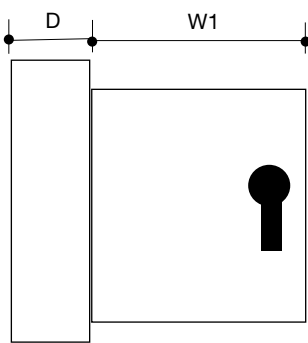
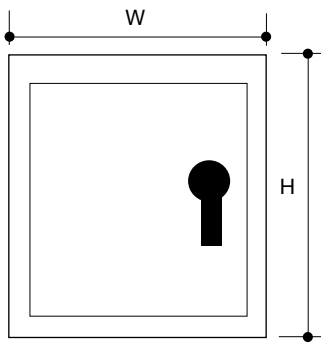
Size 4									
JFE210U	SPSN	100A/ A4	400	375	200	357	265	292	
JFE310U	TPN	100A/ A4	400	375	200	357	265	292	
JFE410U	TPSN	100A/ A4	400	375	200	357	265	292	



Size 6									
JFG312U	TPN	125A/ B1-B2	500	375	200	357	265	380	
JFG412U	TPSN	125A/ B1-B2	500	375	200	357	265	380	
JFG316U	TPN	125A/ B1-B2	500	375	200	357	265	380	
JFG416U	TPSN	125A/ B1-B2	500	375	200	357	265	380	
JFG320U	TPN	125A/ B1-B2	500	375	200	357	265	380	
JFG420U	TPSN	125A/ B1-B2	500	375	200	357	265	380	
JFG325U	TPN	125A/ B1-B2	500	375	200	357	265	380	
JFG425U	TPSN	125A/ B1-B2	500	375	200	357	265	380	

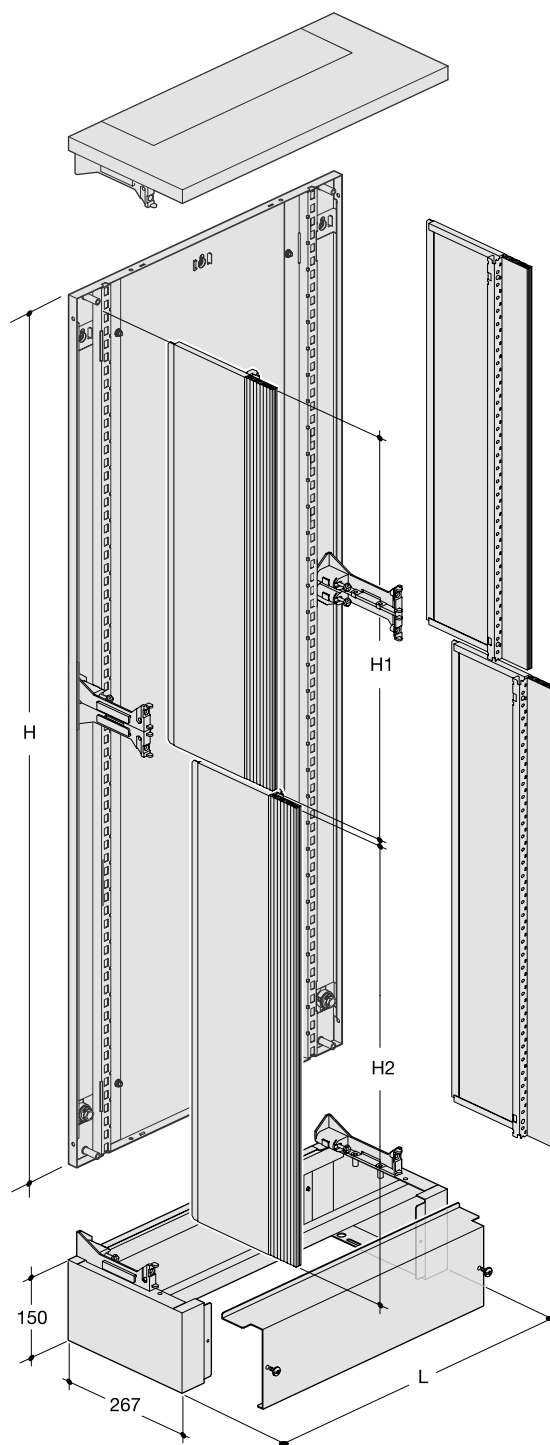
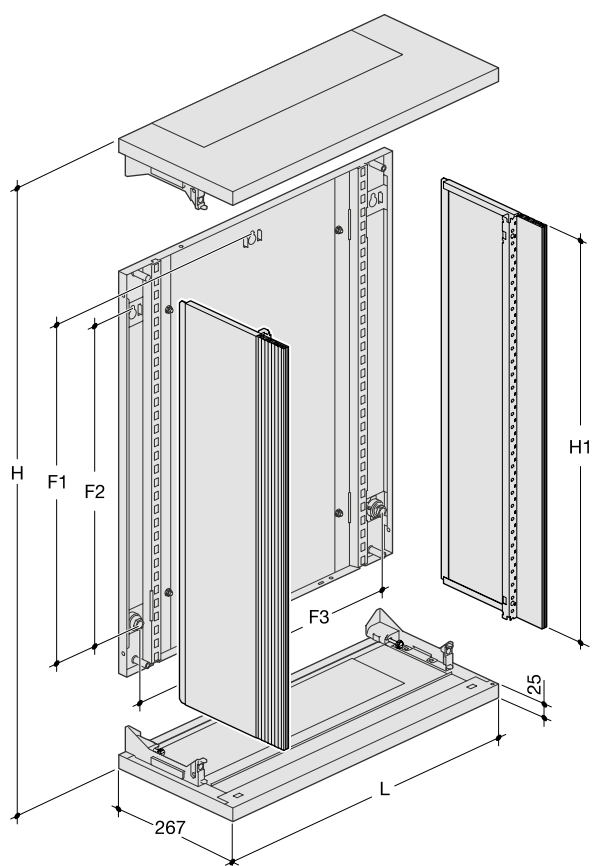
Size 7									
JFH331U	TPN	315A/ B1-B3	650	500	300	481.5	390	529	
JFH431U	TPSN	315A/ B1-B3	650	500	300	481.5	390	529	
JFH340U	TPN	400A/ B1-B4	650	500	300	481.5	390	529	
JFH440U	TPSN	400A/ B1-B4	650	500	300	481.5	390	529	

Size 8									
JFI363U	TPN	630A/ C1-C2	800	600	350	581.5	490	679	
JFI463U	TPSN	630A/ C1-C2	800	600	350	581.5	490	679	
JFI380U	TPN	800A/ C1-C2	800	600	350	581.5	490	679	
JFI480U	TPSN	800A	800	600	350	581.5	490	679	



Reference	Dimensions					
	H	W	D	H1	A	B
JAB302	250	180	105	177	110	172
JAB402	250	180	105	177	120	172
JAB303	250	180	105	177	110	172
JAB403	250	180	105	177	120	172
JAB306	250	180	105	177	120	172
JAB406	250	180	105	177	120	172
JAB310	250	200	150	182	120	172
JAB410	250	200	150	182	120	172
JAC312	300	200	150	182	140	196
JAC412	300	200	150	182	140	196
JAC316	300	200	150	182	140	196
JAC416	300	200	150	182	140	196
JAE320	400	375	200	357	265	292
JAE420	400	375	200	357	265	292
JAE325	400	375	200	357	265	292
JAE425	400	375	200	357	265	292
JAG331	500	375	200	357	265	380
JAG431	500	375	200	357	265	380
JAG340	500	375	200	357	265	380
JAG440	500	375	200	357	265	380
JAH363	650	500	300	481.5	390	529
JAH463	650	500	300	481.5	390	529
JAH380	650	500	300	481.5	390	529
JAH480	650	500	300	481.5	390	529
JAH390	1058	750	300	732	390	937
JAH392	1058	750	300	732	130	937
JZA700	200	250	150	/	140	100
JZA701	200	375	200	/	265	100
JZA702	250	500	300	/	390	134
JZA703	300	600	350	/	490	134

quadro4 enclosures



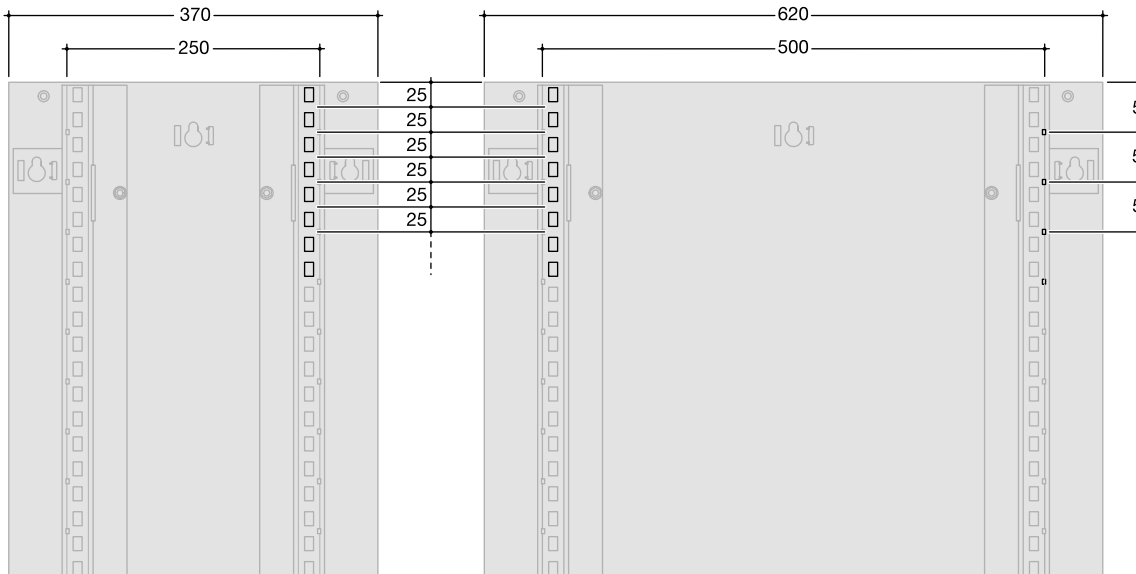
Dimensions in mm

references sides	bottoms	H	H1	L	fixing holes position		
					F1	F2	F3
FC110	FC010	500	450	370	305	270	315
FC210	FC010	500	450	620	305	270	565
FC111	FC011	650	600	370	455	420	315
FC211	FC011	650	600	620	455	420	565
FC112	FC012	800	750	370	605	570	315
FC212	FC012	800	750	620	605	570	565
FC113	FC013	950	900	370	755	720	315
FC213	FC013	950	900	620	755	720	565
FC114	FC014	1100	1050	370	905	870	315
FC214	FC014	1100	1050	620	905	870	565
FC115	FC015	1250	1200	370	1055	1020	315
FC215	FC015	1250	1200	620	1055	1020	565
FC116	FC016	1400	1350	370	1205	1170	315
FC216	FC016	1400	1350	620	1205	1170	565

Dimensions in mm

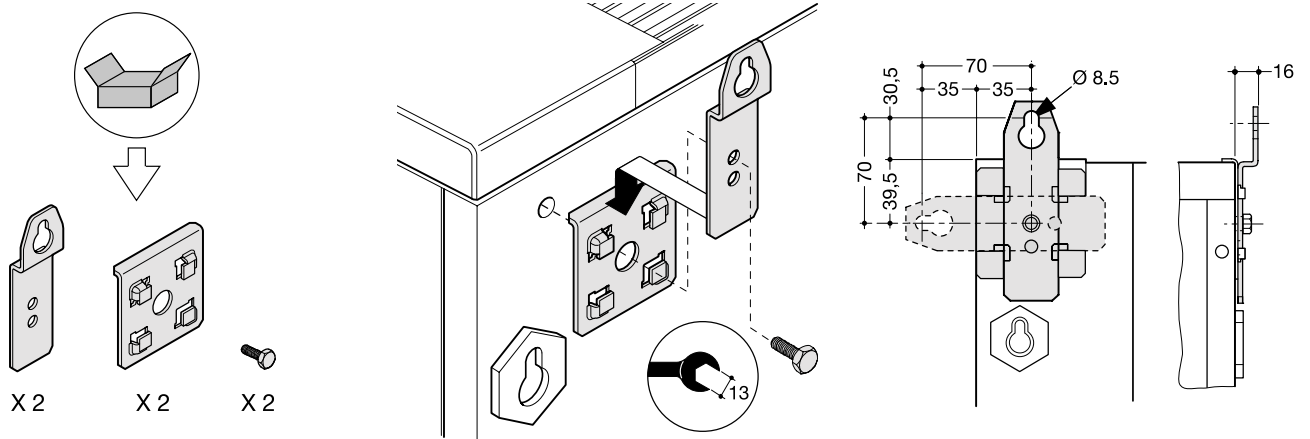
bottoms > 1400	sides	H	L	H1	H2
FC118	FC012 + FC013	1650	370	750	900
FC218	FC012 + FC013	1650	620	750	900
FC119	X FC013 2	1800	370	900	900
FC219	X FC013 2	1800	620	900	900

Back plates (dimensions in mm)

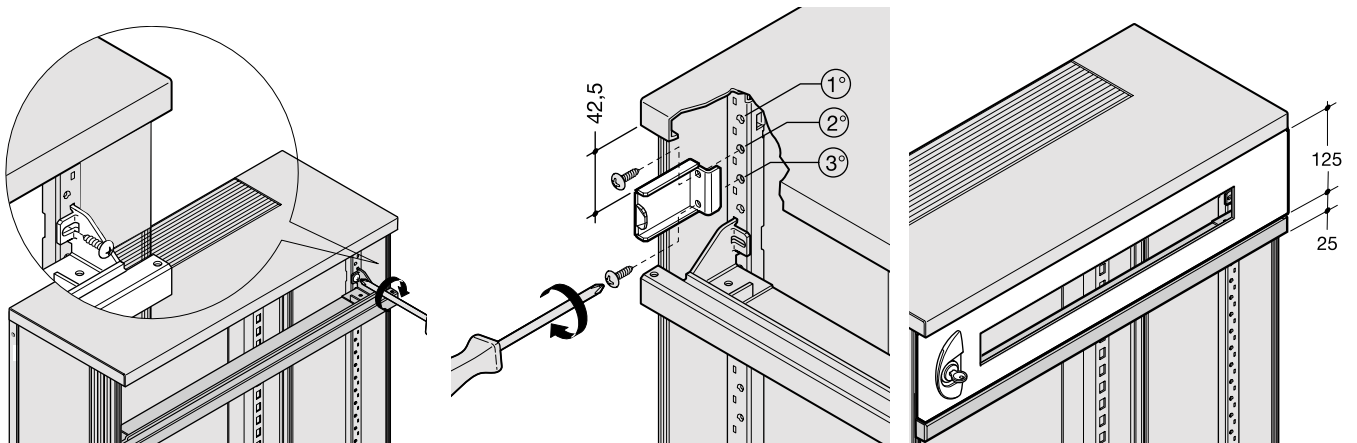


Main switchboards

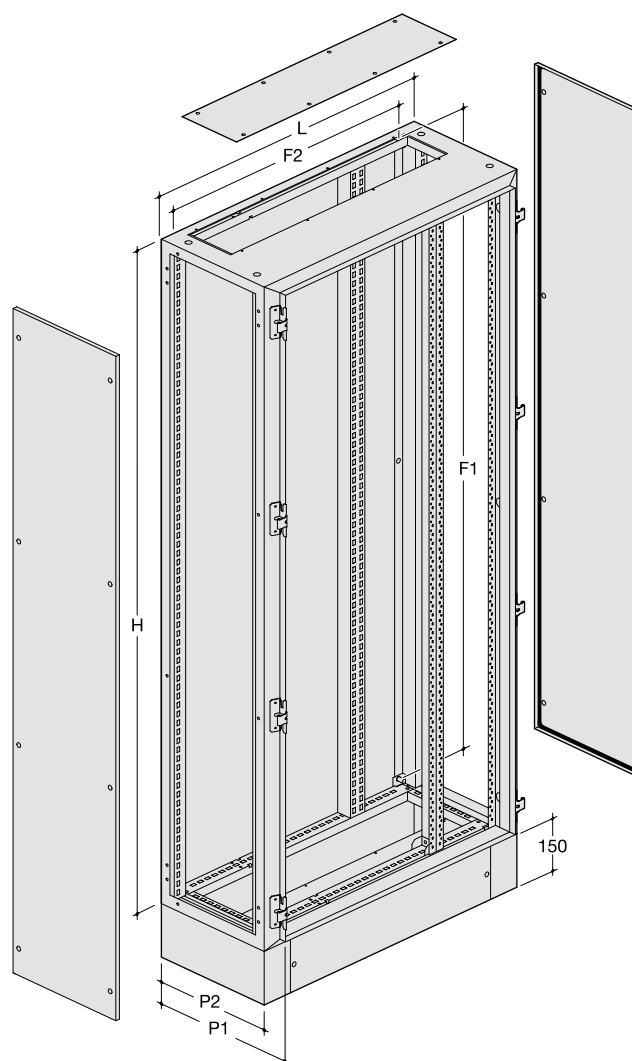
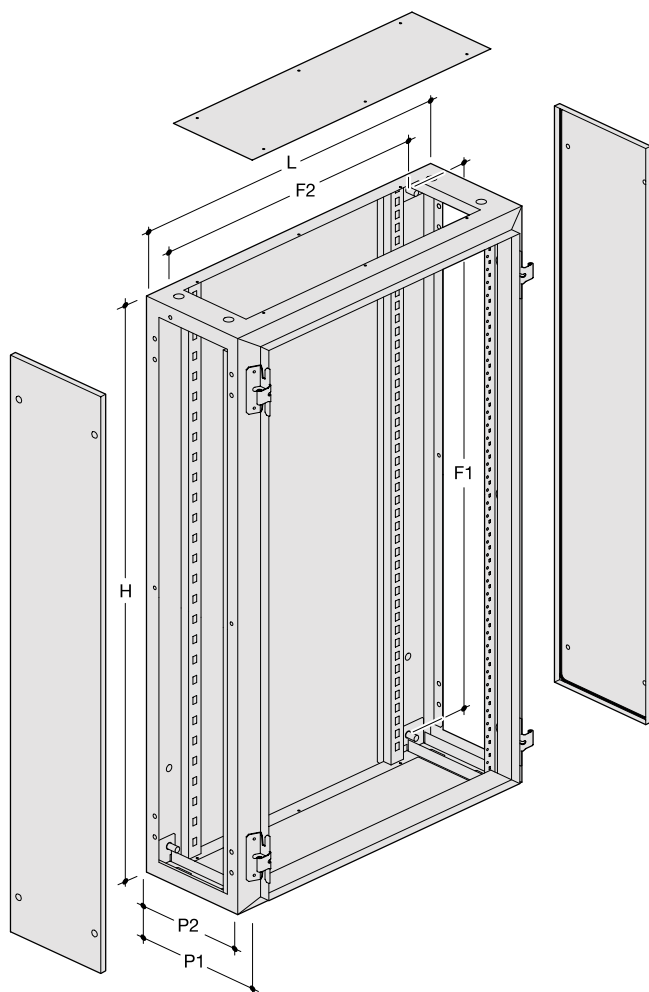
Wall mounting brackets FM640 (dimensions in mm)



Mounting of hinged front plate door of DIN rail equipment unit (dimensions in mm)



quadro5 enclosures and boards



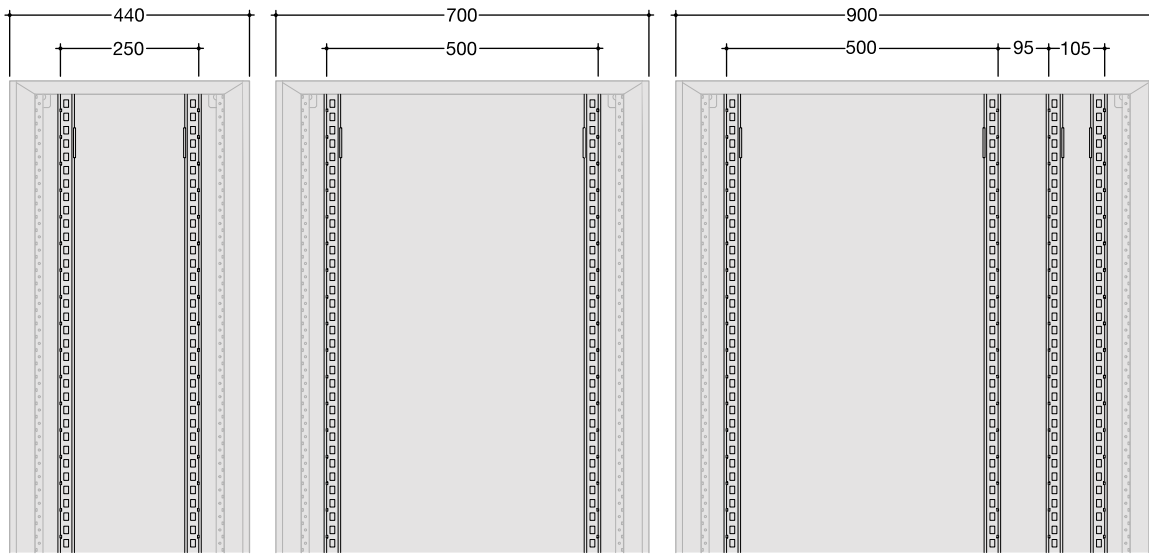
Dimensions in mm

references		fixing					
bodies	sides	H	L	P1	P2	F1	F2
FM200	FM400	510	700	260	220	430	570
FM201	FM401	660	700	260	220	580	570
FM202	FM402	810	700	260	220	730	570
FM203	FM403	960	700	260	220	880	570
FM204	FM404	1100	700	260	220	1030	570
FM205	FM405	1260	700	260	220	1180	570
FM206	FM406	1410	700	260	220	1330	570

Dimensions in mm

references		fixing					
bodies	sides	H	L	P1*	P2	F1	F2
FM107	FM407	1560	450	260	220	1480	320
FM108	FM408	1710	450	260	220	1630	320
FM109	FM409	1860	450	260	220	1780	320
FM207	FM407	1560	700	260	220	1480	570
FM208	FM408	1710	700	260	220	1630	570
FM209	FM409	1860	700	260	220	1780	570
FM307	FM407	1560	900	260	220	1480	770
FM308	FM408	1710	900	260	220	1630	770
FM309	FM409	1860	900	260	220	1780	770
FM117	FM407	1560	450	400	360	1480	320
FM118	FM408	1710	450	400	360	1630	320
FM119	FM409	1860	450	400	360	1780	320
FM217	FM407	1560	700	400	360	1480	570
FM218	FM408	1710	700	400	360	1630	570
FM219	FM409	1860	700	400	360	1780	570
FM317	FM407	1560	900	400	360	1480	770
FM318	FM408	1710	900	400	360	1630	770
FM319	FM409	1860	900	400	360	1780	770

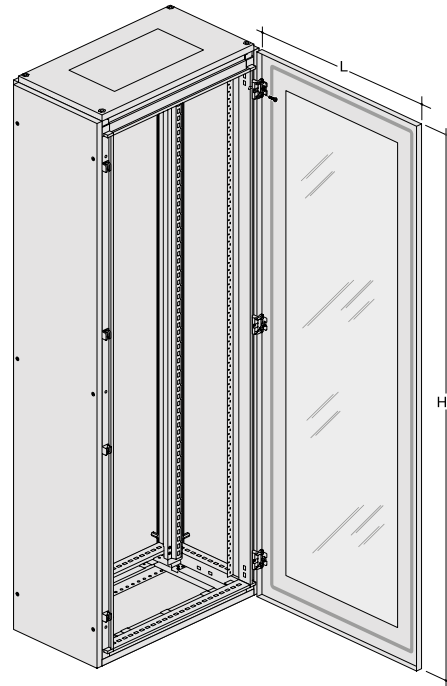
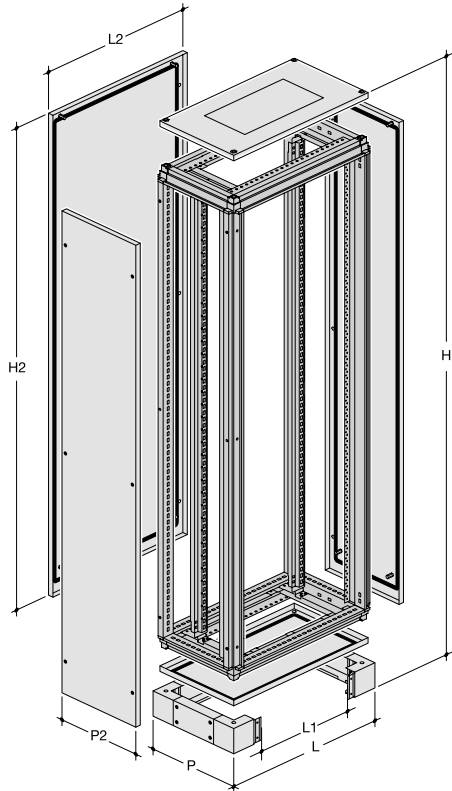
Back plates quadro5



	width (mm)	distance between pillars (mm)	top panel width (mm)
quadro5	450	250	350
	700	500	600
	900	700	800

	distance between pillars (mm)	top panel width (mm)
1 x 10 modules	250	350
1 x 24 modules	500	600
1 x 36 modules	700	800

quadro+ enclosures



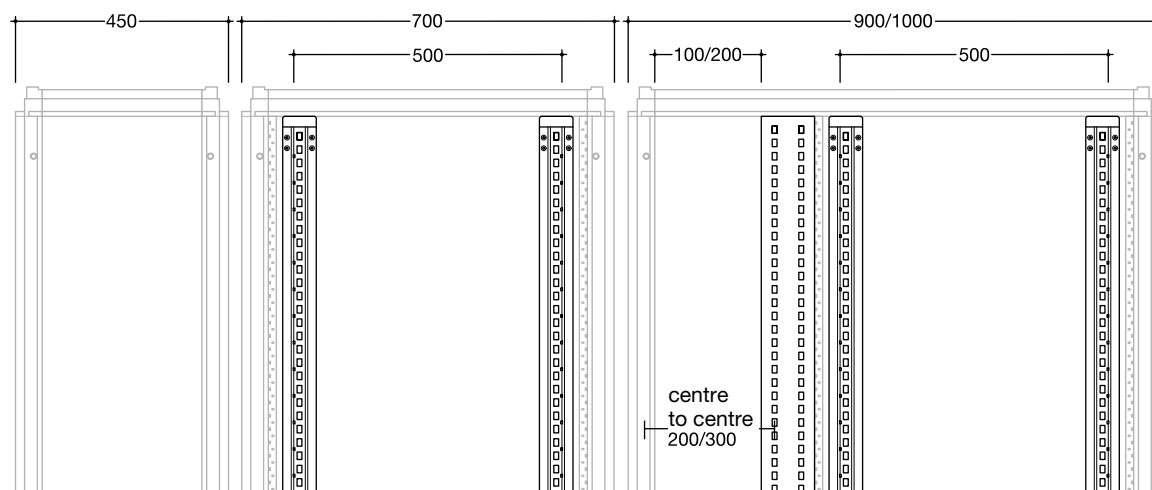
Doors height H1 : 1900 mm

Dimensions in mm

	frame	plinth	side	back	H*	P	L1	H2	L2	P2
L = 450	FN018E	FN438E	FN356E	FN216E	2000	400	288	1900	448	365
L = 700	FN021E	FN441E	FN356E	FN276E	2000	400	538	1900	698	365
L = 900	FN023E	FN443E	FN356E	FN296E	2000	400	738	1900	898	365
L = 1000	FN024E	FN444E	FN356E	FN246E	2000	400	838	1900	998	365
L = 450	FN020E	FN440E	FN366E	FN216E	2000	600	288	1900	448	565
L = 700	FN029E	FN451E	FN366E	FN276E	2000	600	538	1900	698	565
L = 900	FN031E	FN453E	FN366E	FN296E	2000	600	738	1900	898	565
L = 1000	FN032E	FN454E	FN366E	FN246E	2000	600	838	1900	998	565
L = 450	FN022E	FN442E	FN376E	FN216E	2000	800	288	1900	448	765
L = 700	FN013E	FN433E	FN376E	FN276E	2000	800	538	1900	698	765
L = 900	FN017E	FN437E	FN376E	FN296E	2000	800	738	1900	898	765
L = 1000	FN037E	FN459E	FN376E	FN246E	2000	800	838	1900	998	765

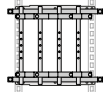
* structure 1900 mm, plinth 100 mm

Back plates quadro+ evo

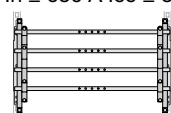


Busbars short-circuits withstand capacity

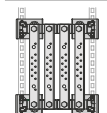
Vertical mounting

Busbars fixing	nominal current	bar sections (mm)	bars supports max. distance depending on short-circuit current (mm)					
			10 kA	15 kA	20kA	25 kA	30 kA	35 kA
 $I_n \leq 630 \text{ A}$ $I_{cc} \leq 35 \text{ kA}$	160A	12 x 5	1000	475	250	650	425	300
	250A	20 x 5	1000	1000	950	650	425	300
	400A	30 x 5	1000	1000	1000	850	550	375
UC820	630A	30 x 10	1000	1000	1000	1000	900	625



Horizontal mounting

Busbars fixing	nominal current	bar sections (mm)	short-circuit current depending on bottom width for quadro4, quadro5 et quadro+	
			250 mm	500 mm
 $I_n \leq 630 \text{ A}$ $I_{cc} \leq 35 \text{ kA}$	160A	12 x 5	20 kA	150kA
	250A	20 x 5	35 kA	30 kA
	400A	30 x 5	45 kA	34 kA
	UC820	630A	30 x 10	55 kA

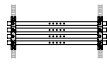
Inclined busbars

Busbars fixing	nominal current	bar sections (mm)	short-circuit current depending on bottom width for quadro4, quadro5 et quadro					
			10 kA	15 kA	20kA	25 kA	30 kA	35 kA
 $I_n \leq 630 \text{ A}$ $I_{cc} \leq 35 \text{ kA}$ UC826	250A	20 x 5	1000	1000	1000	825	650	425
	400A	32 x 5	1000	1000	1000	1000	925	625
	630A	30 x 10	1000	1000	1000	1000	925	650

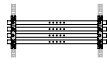
Vertical mounting

Busbars fixing	nominal current	bar sections (mm)	bars supports max. distance depending on short-circuit current (mm)					
			10 kA	15 kA	20kA	25 kA	30 kA	35 kA
 $I_n \leq 250 \text{ A}$ $I_{cc} \leq 25 \text{ kA}$ UC830	250A	20 x 5			300	200		
	 $I_n \leq 400 \text{ A}$ $I_{cc} \leq 35 \text{ kA}$ UC815	250A	20 x 5	1000	1000	925	745	580
400A		32 x 5	1000	1000	895	655	510	385

Horizontal mounting

Busbars fixing	nominal current	bar sections (mm)	short-circuit current depending on bottom width for quadro4, quadro5 et quadro+	
			250 mm	500 mm
 $I_n \leq 630 \text{ A}$ $I_{cc} \leq 35 \text{ kA}$ UC815	250A	20 x 5	35 kA	35 kA
	400A	32 x 5	40 kA	34 kA

Inclined horizontal bars mounting

Busbars fixing	nominal current	bar sections (mm)	short-circuit current depending on bottom width for quadro4, quadro5 et quadro+	
			250 mm	500 mm
 $I_n \leq 630 \text{ A}$ $I_{cc} \leq 35 \text{ kA}$ UC826	250A	20 x 5	35 kA	35 kA
	400A	32 x 5	45 kA	35 kA
	630A	30 x 10	45 kA	35 kA

Fix interphase distance, on edge mounting copper busbar

Vertical or horizontal mounting	nominal current	copper bar cross-sections (mm)	Maximum distance "d" in mm of busbar holders depending on short-circuit current				
			24/12 kA 3P/4P	48/23 kA 3P/4P	63/30 kA 3P/4P	82/39 kA 3P/4P	114/52 kA 3P/4P
	500A	50 x 5	700	350	250	200	130
	630A	63 x 5	800	400	300	225	130
	800A	80 x 5	950	475	350	225	125
	1000A	100 x 5	1000	550	400	225	125
	1250A	80 x 5 x 2	975	475	375	275	200
	1600A	100 x 5 x 2	1000	575	425	325	225

Adjustable interphase distance, on edge mounting copper busbar

Table of interphase distance (in mm) between each busbar holders depending on electro dynamical efforts generated during short-circuit, for different interphase distances for each single pole supports.

5mm thickness copper bars

Cu bars (mm)	IpCr (kA) / Icw (kA) eff 1s (interphase 65 mm) for 1 bar per phase									
	24 / 12	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95
50 x 5	717	398	-	-	-	-	-	-	-	-
63 x 5	900	446	-	-	-	-	-	-	-	-
80 x 5	1000	503	-	-	-	-	-	-	-	-

Cu bars (mm)	IpCr. (kA) / Icw (kA) eff / 1s (interphase 75 mm) for 1 bar per phase									
	24 / 12	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95
50 x 5	801	398	305	234	167	105	-	-	-	-
63 x 5	900	446	342	263	170	105	-	-	-	-
80 x 5	1000	503	386	296	170	105	-	-	-	-
100 x 5	1000	563	431	331	170	105	-	-	-	-
120 x 5	1000	629	482	332	170	105	-	-	-	-

Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 100 mm) for 1 bar per phase									
	24 / 12	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95
50 x 5	925	459	352	270	193	140	128	109	-	-
63 x 5	1000	516	395	304	217	140	128	109	-	-
80 x 5	1000	581	445	342	227	140	128	109	-	-
100 x 5	1000	650	498	383	227	140	128	109	-	-
120 x 5	1000	727	557	428	227	140	128	109	-	-

Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 75 mm) for 1 bar per phase									
	24 / 12	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95
50 x 5	1000	563	431	331	237	187	178	152	118	-
63 x 5	1000	632	484	372	266	197	180	152	118	-
80 x 5	1000	712	546	420	300	197	180	152	118	-
100 x 5	1000	796	610	469	317	197	180	152	118	-
120 x 5	1000	890	682	525	317	197	180	152	118	-

Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 100 mm) for 1 bar per phase									
	24 / 12	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95
50 x 5	1000	650	498	383	274	216	206	190	158	126
63 x 5	1000	730	559	430	308	242	232	203	158	126
80 x 5	1000	822	630	485	347	262	240	203	158	126
100 x 5	1000	920	705	542	388	262	240	203	158	126
120 x 5	1000	1000	788	606	423	262	240	203	158	126

10mm thickness copper bars

Cu bars (mm)	IpCr. (kA) / Icw (kA) eff / 1s (interphase 75 mm) for 1 bar per phase									
	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95	231 / 105
50 x 10	796	610	469	336	244	223	188	146	117	-
63 x 10	872	669	514	368	244	223	188	146	117	-
80 x 10	1000	772	594	393	244	223	188	146	117	-
100 x 10	1000	863	664	393	244	223	188	146	117	-
120 x 10	1000	946	727	393	244	223	188	146	117	-
Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 100 mm) for 1 bar per phase									
	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95	231 / 105
50 x 10	920	705	542	388	305	292	252	196	156	128
63 x 10	1000		594	425	325	297	252	196	156	128
80 x 10	1000		686	491	325	297	252	196	156	128
100 x 10	1000		767	524	325	297	252	196	156	128
120 x 10	1000	1000	840	524	325	297	252	196	156	128
Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 150 mm) for 1 bar per phase									
	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95	231 / 105
50 x 10	1000	863	664	475	374	358	329	290	235	192
63 x 10	1000	946	727	520	410	392	361	294	235	192
80 x 10	1000	1000	840	601	473	447	378	294	235	192
100 x 10	1000	1000	939	672	488	447	378	294	235	192
120 x 10	1000	1000	1000	736	488	447	378	294	235	192
Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 75 mm) for 2 bars per phase									
	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95	231 / 105
50 x 10	1000	863	664	435	270	247	209	162	130	106
63 x 10	1000	946	727	435	270	247	209	162	130	106
80 x 10	1000	1000	840	435	270	247	209	162	130	106
100 x 10	1000	1000	850	435	270	247	209	162	130	106
120 x 10	1000	1000	850	435	270	247	209	162	130	106
Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 100 mm) for 2 bars per phase									
	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95	231 / 105
50 x 10	1000	997	767	549	360	329	279	217	173	142
63 x 10	1000	1000	840	581	360	329	279	217	173	142
80 x 10	1000	1000	970	581	360	329	279	217	173	142
100 x 10	1000	1000	1000	581	360	329	279	217	173	142
120 x 10	1000	1000	1000	581	360	329	279	217	173	142
Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 150 mm) for 2 bars per phase									
	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95	231 / 105
50 x 10	1000	1000	939	672	529	494	418	325	260	213
63 x 10	1000	1000	1000	736	540	494	418	325	260	213
80 x 10	1000	1000	1000	851	540	494	418	325	260	213
100 x 10	1000	1000	1000	871	540	494	418	325	260	213
120 x 10	1000	1000	1000	871	540	494	418	325	260	213
Cu bars	IpCr. (kA) / Icw (kA) eff / 1s (interphase 150 mm) for 3 bars per phase									
	48 / 23	63 / 30	82 / 39	114 / 52	145 / 66	152 / 69	165 / 75	187 / 85	209 / 95	231 / 105
50 x 10	1000	1000	1000	824	649	620	548	427	341	279
63 x 10	1000	1000	1000	902	709	648	548	427	341	279
80 x 10	1000	1000	1000	1000	709	648	548	427	341	279
100 x 10	1000	1000	1000	1000	709	648	548	427	341	279
120 x 10	1000	1000	1000	1000	709	648	548	427	341	279

Dimensions for UC895E, UC896E and UC897E

L (mm)	bar per phase	bar size (mm)	interphase (mm)
75	1 to 4	30 to 125 x 5	75 100
75	1 to 2	30 to 120 x 10	75 100
75	1 to 3	30 to 120 x 10	150

Guide of choice for bars support interphase according to In (A) and cell's depth (mm)

bars type	interphase (mm)	nr. of poles	max. Cu bars height (mm)	Cu bars thickness (mm)	In (A)	cell depth (mm)
A	65	4P	80	5	500 to 800	400
B	75	3P	80	5	500 to 800	400
B	75	3P/4P	63 to 100	5 / 10	630 to 1600	600 - 800
C	100	3P/4P	63 to 80	5 / 10	630 to 1600	600
C	100	3P/4P	63 to 100	5 / 10	630 to 4000	800
C	100	3P/4P	max. 100	10	2500 to 4000	800 - 1000
D	150	3P/4P	max. 120	10	630 to 4000	800 - 1000

Perforated copper bars

- ambient temperature within the framework 35° C
- operating temperature measured on the surface of the bars
- flow rates according to DIN 43671 standards

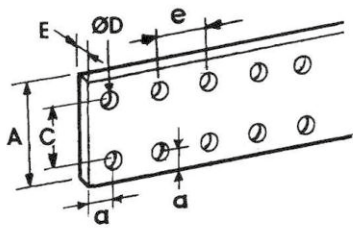
5 mm thickness

cat. ref.	cross-section	nominal current (A)							
		operating temperature 85°C bar				operating temperature 65°C bar			
UC844	50 x 5	772	1317	1670	1870	583	994	1260	1411
UC922	63 x 5	951	1586	1980	2217	718	1197	1494	1673
UC966	80 x 5	1173	1921	2319	2597	885	1450	1750	1960
UC967	100 x 5	1431	2292	2716	3042	1080	1730	2050	2296
UC968	125 x 5	1723	2679	3155	3532	1300	2022	2381	2666

10 mm thickness

cat. ref.	cross-section	nominal current (A)							
		operating temperature 85°C bar				operating temperature 65°C bar			
UC844E	DPCB 50 x 10	1050	1861	2514	-	792	1404	1897	-
UC922E	DPCB 63 x 10	1214	2119	2835	-	916	1600	2139	-
UC966E	DPCB 80 x 10	1528	2600	3438	-	1153	1962	2595	-
UC967E	DPCB 100 x 10	1836	3056	4018	-	1386	2306	3032	-
UC968E	DPCB 125 x 10	2145	3525	4609	-	1618	2660	3478	-

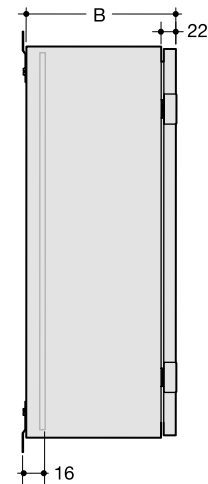
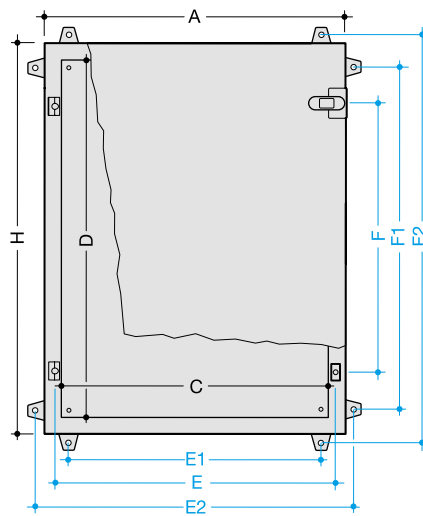
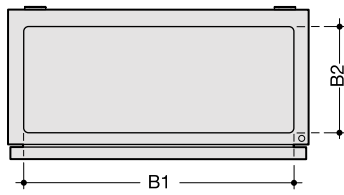
Dimensional data for perforated copper bars



5 mm thickness

cat. ref.	cross-section	A (mm)	C (mm)	a (mm)	e (mm)	ØD (mm)	E (mm)	length (m)	weight (kg)
UC844	50 x 5	50	25	12.5	25	10.5	5	1.75	3.40
UC922	63 x 5	63	38	12.5	25	10.5	5	1.75	4.40
UC966	80 x 5	80	55	12.5	25	10.5	5	1.75	5.70
UC967	100 x 5	100	75	12.5	25	10.5	5	1.75	7.25
UC968	125 x 5	125	100	12.5	25	10.5	5	1.75	9.20

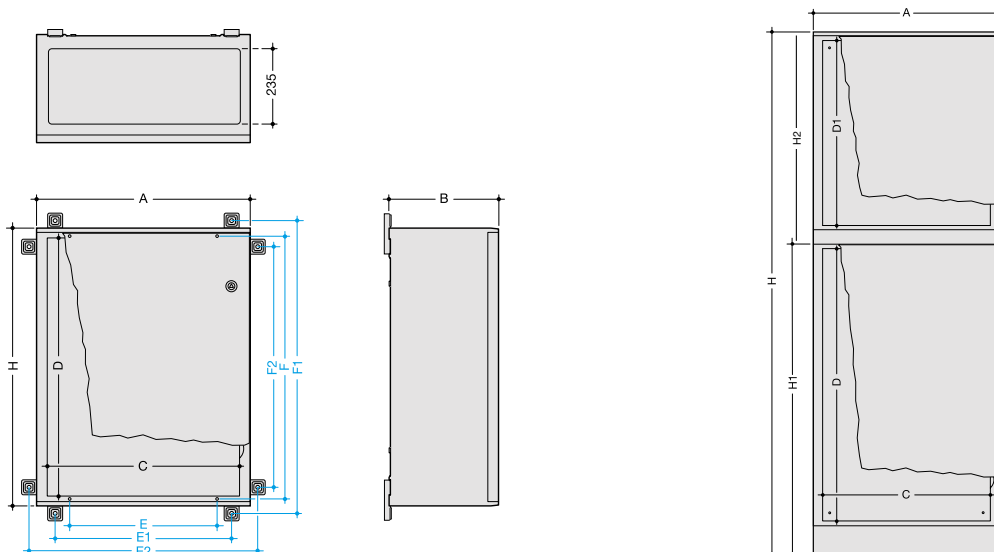
Metal enclosure orion plus



Dimensions

References			enclosure							external fixing			
plain door	transp. door	nr. of rows	A	H	B	B1	B2	C	D	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	FL159A	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

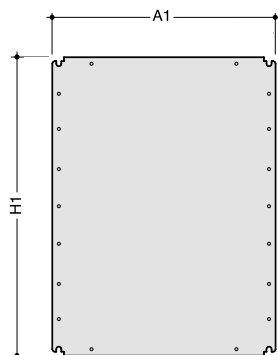
orion plus polyester enclosures



Main switchboards

References		nr of rows	enclosures		int. fixing								external fixing			
plain door	transp. door		A	H	H1	H2	B	C	D	D1	E	F	E1	E2	F1	F2
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 A1	H1	for enclosures	insulated	size A1	H1
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
FL 532E	-	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 by the enclosures

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 (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 has drawn up a series of tables where the maximum power values that can be dissipated P.Max (W) are shown for all the 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 ΔT 0.5 and in the upper part ΔT 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

Power dissipated by the enclosures (CEI EN 60439-1)

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

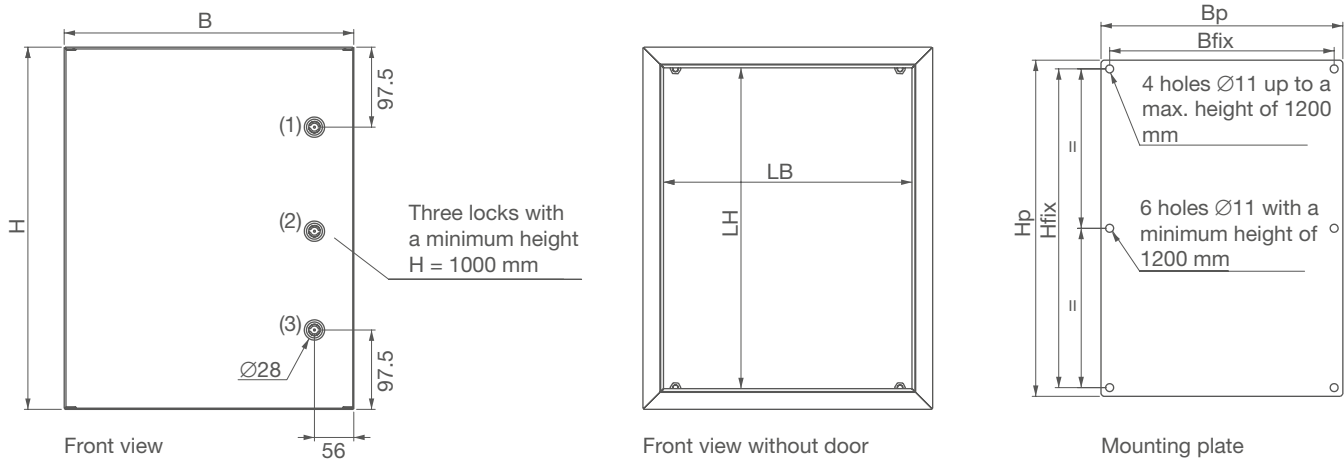
Article		Dimensional data (mm)	Laid	ΔT 0,5 (K)	ΔT 1,0 (K)	P. max (W)
FL320B		600 x 600 x 300	Floor-Walls	40	15	150
FL321B		900 x 600 x 300	Floor-Walls	40	17	167
FL322B		1200 x 600 x 300	Floor-Walls	40	215	205
FL325B		600 x 850 x 300	Floor-Walls	40	180	170
FL326B		900 x 850 x 300	Floor-Walls	40	245	230
FL327B		1200 x 850 x 300	Floor-Walls	40	315	300
FL330B		600 x 1100 x 300	Floor-Walls	40	230	215
FL331B		900 x 1100 x 300	Floor-Walls	40	325	310
FL332B		1200 x 1100 x 300	Floor-Walls	40	420	405

Power dissipated by the enclosures (CEI EN 60439-1)

Polyester panels IP 65 series cupboards

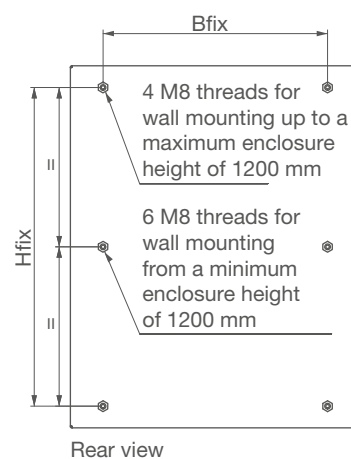
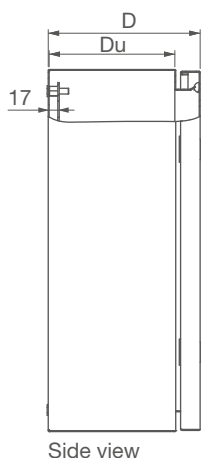
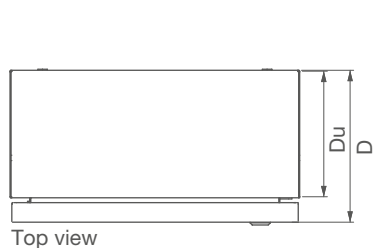
Article	Dimensional data (mm)	Laid	ΔT 0,5 (K)	ΔT 1,0 (K)	P. max (W)
FL340B	1150 x 600 x 300	Floor-Walls	27,5	40	190
FL342B	1450 x 600 x 300	Floor-Walls	26,9	40	240
FL344B	1750 x 600 x 300	Floor-Walls	25,7	40	285
FL346B	1750 x 600 x 300	Floor-Walls	25,7	40	285
FL348B	2050 x 600 x 300	Floor-Walls	25,6	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

Dimensions



- (2) One centered locking system with height H = 300 and 400mm
 (1+3) Two (top and bottom) locks with a minimum height H = 500 to 800mm
 (1+2+3) Three locks with a minimum height H = 1000 mm

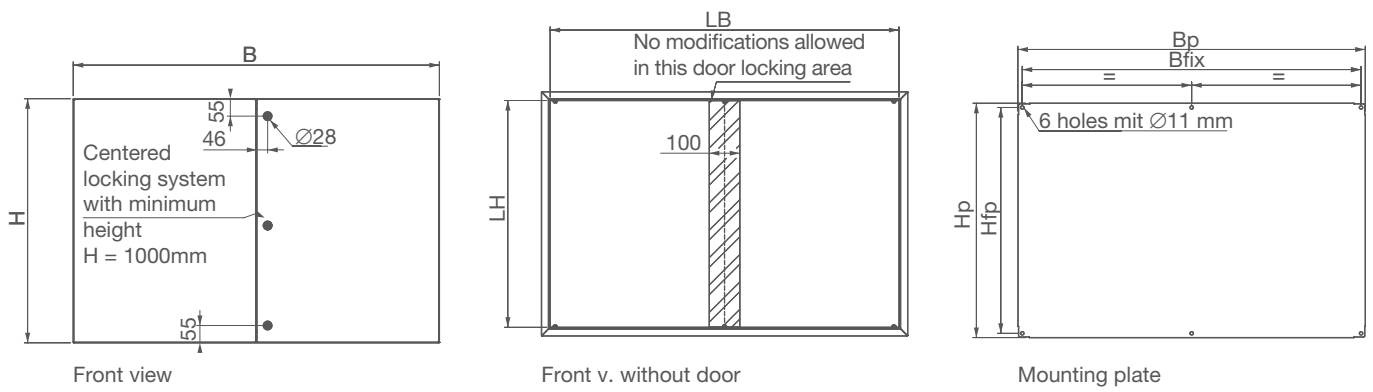
Cat. ref.	Dimensions (mm)			Weight (kg)	Volume (m ³)	Door opening (mm)		Usable depth (mm)
	H	B	D			LB	LH	
FL010BWL	301	201	150	5.91	0.011	151	237	125
FL012BWL	301	301	210	9.71	0.023	251	237	185
FL013BWL	301	401	150	9.39	0.022	351	237	125
FL014BWL	401	301	150	9.31	0.022	251	337	125
FL015BWL	401	301	210	11.53	0.030	251	337	185
FL016BWL	401	401	210	13.87	0.040	351	337	185
FL017BWL	401	601	210	18.56	0.060	551	337	185
FL021BWL	501	401	210	16.14	0.050	351	437	185
FL023BWL	501	501	210	18.94	0.063	451	437	185
FL024BWL	501	501	250	20.91	0.075	451	437	224
FL025BWL	601	401	210	18.41	0.060	351	537	185
FL027BWL	601	501	210	21.66	0.076	451	537	185
FL028BWL	601	601	210	24.92	0.091	551	537	185
FL029BWL	601	601	250	27.09	0.108	551	537	224
FL030BWL	601	601	300	29.95	0.130	551	537	275
FL032BWL	601	801	300	44.14	0.173	751	537	275
FL033BWL	701	501	210	24.39	0.088	951	637	185
FL034BWL	701	501	250	26.56	0.105	451	637	224
FL035BWL	801	601	210	33.05	0.121	451	737	185
FL036BWL	801	601	250	35.42	0.144	551	737	224
FL037BWL	801	601	300	38.52	0.173	551	737	275
FL039BWL	801	801	300	54.18	0.230	551	737	275
FL041BWL	1001	601	300	51.96	0.216	751	937	275
FL042BWL	1001	801	300	64.23	0.288	951	937	275
FL043BWL	1201	601	300	59.94	0.259	1151	1137	275
FL045BWL	1201	801	300	74.27	0.346	551	1137	275
FL049BWL	1401	801	300	84.32	0.336	751	1337	275
FL051BWL	1601	801	300	94.36	0.384	951	1537	275



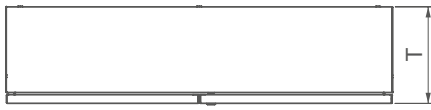
Main switchboards

Mounting plate (mm)		Weight (kg)	Threads for wall mounting / holes for mounting plate / threaded bolts (mm)		Nr. of locking points
Bp	Hp		Bfix	Hfix	
134	264	0.23	110	240	1
234	264	1.51	210	240	1
334	264	2.08	310	240	1
234	364	2.07	210	340	1
234	364	2.07	210	340	1
334	364	2.86	310	340	1
534	364	4.44	510	340	1
334	464	3.64	310	440	2
434	464	4.65	410	440	2
434	464	4.65	410	440	2
334	564	4.42	310	540	2
434	564	5.64	410	540	2
534	564	6.86	510	540	2
534	564	6.86	510	540	2
534	564	6.86	510	540	2
734	564	9.3	710	540	2
434	664	6.64	410	640	2
434	664	6.64	410	640	2
534	764	9.28	510	740	2
534	764	9.28	510	740	2
534	764	9.28	510	740	2
734	764	12.58	710	740	2
534	964	11.7	510	940	3
734	964	15.86	710	940	3
534	1164	14.12	510	1140	3
734	1164	19.14	710	1140	3
700	1382	22.42	672	1340	3
700	1582	25.7	672	1540	3

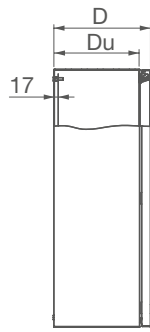
Dimensions



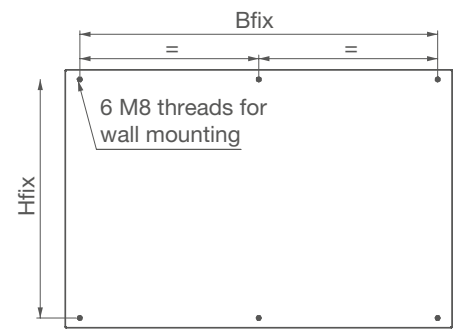
Cat. ref.	Dimensions (mm)			Weight (kg)	Volume (m ³)	Door opening (mm)		Usable depth (mm)
	H	B	T			LB	LH	
FL053BWL	601	1001	300	53.16	0.216	951.5	551.5	275
FL054BWL	801	1001	300	65.55	0.288	951.5	751.5	275
FL055BWL	801	1201	300	75.74	0.346	1151.5	751.5	275
FL056BWL	1001	1001	300	77.95	0.360	951.5	951.5	275
FL058BWL	1201	1001	300	90.34	0.432	951.5	1151.5	275
FL060BWL	1201	1201	300	104.67	0.518	1151.5	1151.5	275
FL062BWL	1401	1001	300	102.73	0.504	951.5	1351.5	275
FL064BWL	1401	1201	300	119.13	0.605	1151.5	1351.5	275



Top view



Side view

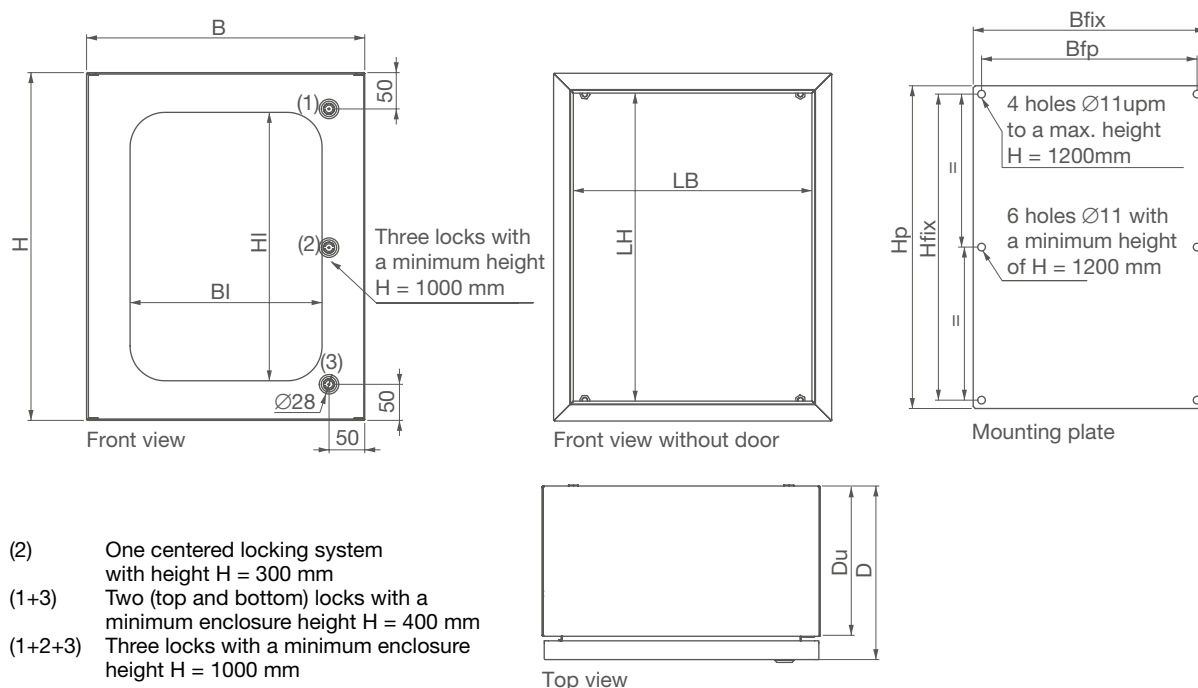


Rear view

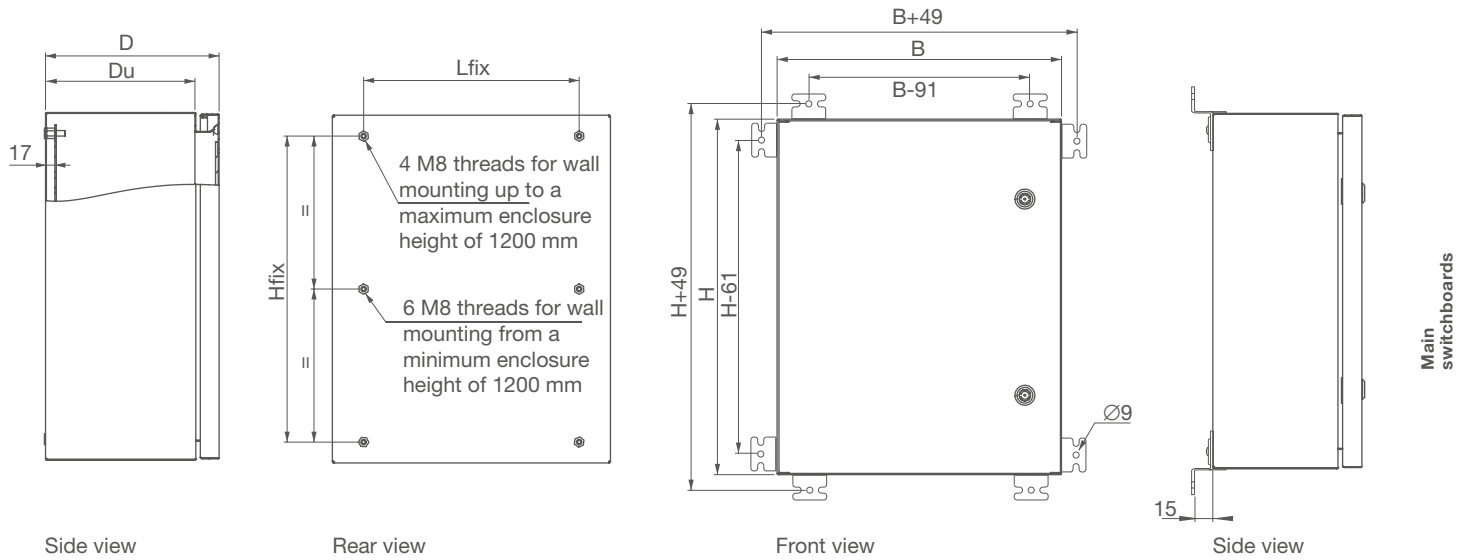
Main
switchboards

Mounting plate (mm)		Weight (kg)	Threads for wall mounting / holes for mounting plate / threaded bolts (mm)		Nr. of locking points
Bp	Hp		Bfix	Hfix	
936	570	11.74	911	541	2
936	770	15.88	911	741	2
1136	770	19.18	1111	741	2
936	970	20.02	911	941	3
936	1170	24.16	911	1141	3
1136	1170	29.18	1111	1141	3
936	1370	28.3	911	1341	3
1136	1370	34.18	1111	1341	3

Dimensions



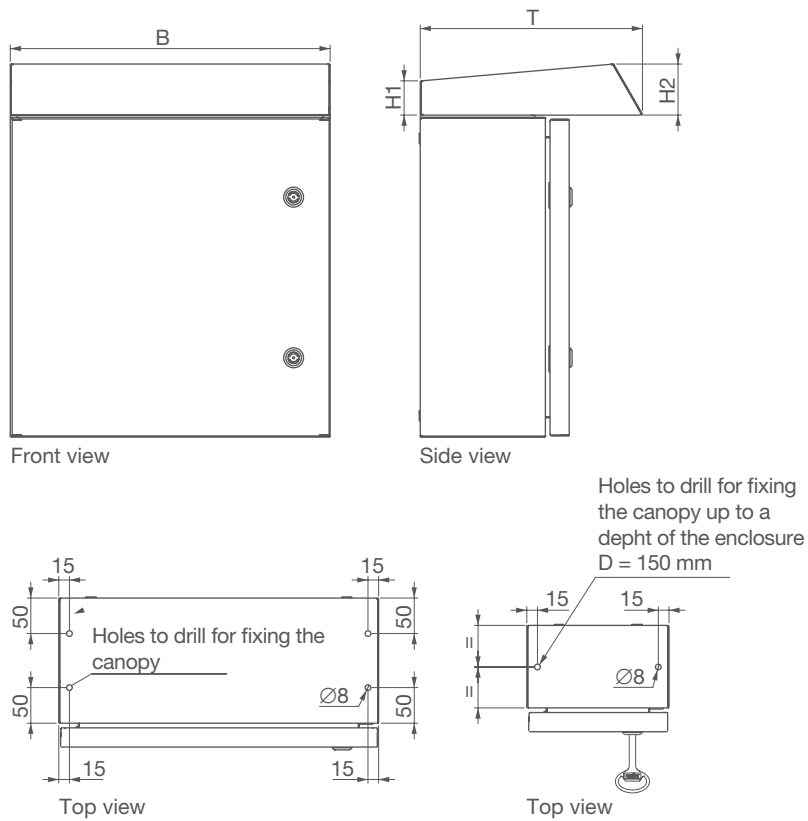
Cat. ref.	Dimensions (mm)			Weight (kg)	Volume (m ³)	Glazed surface (mm)		Usable depth (mm)
	H	B	T			BI	HI	
FL014TWL	400	300	150	9.31	0.022	176	286	116
FL015TWL	400	300	210	11.53	0.030	176	286	176
FL016TWL	400	400	210	13.87	0.040	276	286	176
FL017TWL	400	600	210	18.56	0.060	476	286	176
FL021TWL	500	400	210	16.14	0.050	276	386	176
FL023TWL	500	500	210	18.94	0.063	376	386	176
FL024TWL	500	500	250	20.91	0.075	376	386	216
FL025TWL	600	400	210	18.41	0.060	276	486	176
FL027TWL	600	500	210	21.66	0.076	376	486	176
FL028TWL	600	600	210	24.92	0.091	476	486	176
FL029TWL	600	600	250	27.09	0.108	476	486	216
FL030TWL	600	600	300	29.95	0.130	476	486	266
FL032TWL	600	800	300	44.14	0.173	676	486	266
FL033TWL	700	500	210	24.39	0.088	376	586	176
FL034TWL	700	500	250	26.56	0.105	376	586	216
FL035TWL	800	600	210	33.05	0.121	476	686	176
FL036TWL	800	600	250	35.42	0.144	476	686	216
FL037TWL	800	600	300	38.52	0.173	476	686	266
FL039TWL	800	800	300	54.18	0.230	676	686	266
FL041TWL	1000	600	300	51.96	0.216	476	886	266
FL042TWL	1000	800	300	64.23	0.288	676	886	266
FL043TWL	1200	600	300	59.94	0.259	476	1086	266
FL045TWL	1200	800	300	74.27	0.346	676	1086	266
FL049TWL	1400	800	300	84.32	0.336	620	1300	266
FL051TWL	1600	800	300	94.36	0.384	620	1500	266



Main switchboards

Door opening (mm)		Mounting plate (mm)		Weight (kg)	Threads for wall mounting / holes for mounting plate / threaded bolts (mm)		Nr. of locking points
LB	LH	Bp	Hp		Bfix	Hfix	
243	343	234	364	2.07	210	340	1
243	343	234	364	2.07	210	340	1
343	343	334	364	2.86	310	340	1
543	343	534	364	4.44	510	340	1
343	443	334	464	3.64	310	440	2
443	443	434	464	4.65	410	440	2
443	443	434	464	4.65	410	440	2
343	543	338	564	4.42	310	540	2
443	543	438	564	5.64	410	540	2
543	543	538	564	6.86	510	540	2
543	543	538	564	6.86	510	540	2
543	543	538	564	6.86	510	540	2
743	543	738	564	9.3	710	540	2
443	643	438	664	6.64	410	640	2
443	643	438	664	6.64	410	640	2
543	743	538	764	9.28	510	740	2
543	743	538	764	9.28	510	740	2
543	743	538	764	9.28	510	740	2
743	743	738	764	12.58	710	740	2
543	943	538	968	11.7	510	940	3
743	943	738	968	15.86	710	940	3
543	1143	538	1168	14.12	510	1140	3
743	1143	738	1168	19.12	710	1140	3
710	1343	700	1382	22.42	672	1340	3
710	1543	700	1582	25.7	672	1540	3

Dimensions



Cat. ref.	Dimensions (mm)				Weight (kg)	Volume (m ³)
	H1	H2	B	T		
FZ110CWL	48	72	200	250	1.38	0.003
FZ111CWL	48	72	300	250	1.81	0.005
FZ112CWL	48	72	300	310	2.14	0.006
FZ113CWL	48	72	400	250	2.25	0.006
FZ114CWL	48	72	400	310	2.65	0.007
FZ118CWL	48	72	500	310	3.16	0.009
FZ119CWL	48	72	500	350	3.48	0.011
FZ120CWL	48	72	600	310	3.68	0.011
FZ121CWL	48	72	600	350	4.05	0.013
FZ122CWL	48	72	600	400	4.51	0.014
FZ124CWL	48	72	800	400	5.77	0.019
FZ126CWL	48	72	1000	400	7.04	0.024
FZ128CWL	48	72	1200	400	8.30	0.029

Stainless Steel Enclosures in Industrial Environment

304 : The basic alloy. Type 304 (18-8) is an austenitic steel possessing a minimum of 18% chromium and 8% nickel, combined with a maximum of 0.08% carbon. It is a nonmagnetic steel which cannot be hardened by heat treatment, but instead, must be cold worked to obtain higher tensile strengths.

The stainless alloy resists most oxidizing acids and can withstand all ordinary rusting. It is immune to foodstuffs, sterilizing solutions, most of the organic chemicals and dyestuffs, and a wide variety of inorganic chemicals.

Because of its ability to withstand the corrosive action of various acids found in fruits, meats, milk, and vegetables, Type 304 stainless steel enclosures are widely used for food processing plants. Although Type 304 stainless steel is effective in many food and beverage settings, if the environment is overly chloride-rich or cleaning procedures involve the use of highly corrosive solvents, a switch to a stronger grade of stainless steel may be necessary.

Type 304 stainless steel enclosures are especially suited for all types of dairy equipment - milking machines, containers, homogenizers, sterilizers, and storage and hauling tanks, including piping, valves, milk trucks and railroad cars. This 18-8 alloy is equally serviceable in the brewing industry where it is used in pipelines, yeast pans, fermentation vats, storage and railway cars, etc.

Type analysis of stainless type 304

Carbon	Manganese	Phosphorus	Sulfur	Silicon	Chromium	Nickel
0.08% max.	2.00% max.	0.045% max.	0.030% max.	1.00% max.	18 - 20%	8 - 10.5%

Environment	In-depth	Stainless Steel
Food and beverage	general food processing	304 or 316
	bottling	304 or 316
	milk and dairy	304 or 316
	bakeries	304 or 316
	brewery and wine	304 or 316
Water	distribution	304 or 316
	waste water treatment	304 or 316
	potable water treatment	304 or 316
Mining	ore	304 or 316
	coal	304 or 316
Materials	paper	304 or 316
	plastic	304 or 316

If the condition of installation is not included in the above table, please check with the Manufacturer to determine which additional protection has to be implemented.

Stainless Steel Enclosures in Industrial Environment

316 : Type 316 is also austenitic, non-magnetic, and thermally nonhardenable stainless steel like Type 304. The carbon content is held to 0.08% maximum, while the nickel content is increased slightly. What distinguishes Type 316 from Type 304 is the addition of molybdenum up to a maximum of 3%. Molybdenum increases the corrosion resistance of this chromium-nickel alloy to withstand attack by many industrial chemicals and solvents, and, in particular, inhibits pitting caused by chlorides. As such, molybdenum is one of the single most useful alloying additives in the fight against corrosion.

Due to an increased resistance to chlorides, Type 316 stainless steel is the preferred material of choice for processing plants where enclosures could come into contact with highly acidic chemicals and concentrated chloride salts. Type 316 stainless steel enclosures are also recommended for marine applications such as shipping and offshore drilling and, not surprisingly, in salt mines. Basically, any application where high chloride levels are present or the corrosive environment will continually attack the surface of the enclosure, Type 316 stainless steel is the metal of choice.

By virtue of the molybdenum addition, Type 316 can withstand corrosive attack by sodium and calcium brines, hypochlorite solutions, phosphoric acid; and the sulfite liquors and sulfurous acids used in the paper pulp industry. This alloy, therefore, is specified for industrial equipment that handles the corrosive process chemicals used to produce inks, rayons, photographic chemicals, paper, textiles, bleaches, and rubber.

Type analysis of stainless type 314

Carbon	Manganese	Phosphorus	Sulfur	Silicon	Chromium	Nickel	Molybdenum
0.08% max.	2.00% max.	0.045% max.	0.030% max.	1.00% max.	16 - 18%	10 - 14%	2 - 3%

Environment	In-depth	Stainless Steel
Water	desalination	316
Mining	salt	316
Materials	rubber	316
	pulp	316
Marine	shipping	316
	offshore drilling	316
Chemical	pharmaceutical	316
	petrochemical	316

If the condition of installation is not included in the above table, please check with the Manufacturer to determine which additional protection has to be implemented.

Stainless Steel Enclosures in Industrial Environment

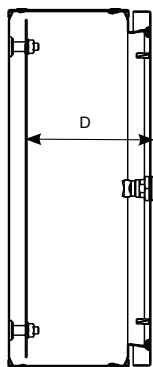
It is important to note that neither Type 304 nor Type 316 stainless steel will resist the chemical corrosion caused by hydrochloric acid. The acid will destroy the passivity, leaving the surface of the metal defenseless. The following chart shows how Type 304 and Type 316 stainless steels react with some of the chemicals present in common application environments.

Chemical Resistance Table (Room Temperature)

Group	Compound	304	316
Inorganic acids	hydrochloric acid	-	-
	sulfuric acid (< 10%)	-	++
	nitric acid	++	++
	phosphoric acid (< 40%)	-	+
	sulfuric acid	++	++
	carbonic acid	++	++
Organic acids	acetic acid	-	++
	formic acid	++	++
	lactic acid	++	++
	citric acid	++	++
	fatty acid	++	++
Bases	ammonium hydroxide	++	++
	sodium hydroxide (50%)	++	++
	potassium hydroxide	++	++
Miscellaneous	fresh water	++	++
	sea water	-	+

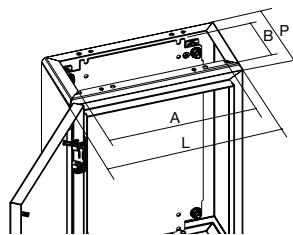
- not recommended
+ good
++ excellent

Usable distances between interior panel and door



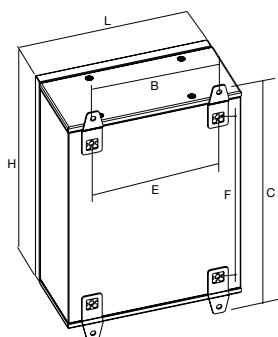
Depth of enclosures (mm)	D (mm)
160	138
200	178
250	228
300	278
400	378

Dimensions of cover (in mm)



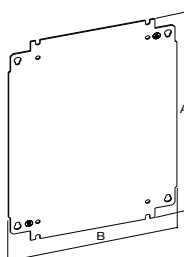
LxP	ext. dimensions		int. dimensions	
	A	B	A	B
200x160	154	88		
250x160	204	88		
300x160	254	88		
300x160	354	128		
400x250	354	178		
500x200	454	128		
500x250	454	178		
600x250	554	178		
600x300	554	228		
800x300	754	228		
800x400	754	228		

Enclosure fixing screw-holes (in mm)



HxL	B	C	E	F
250x200	119	279	119	169
300x250	169	329	169	219
300x300	219	329	219	219
400x300	219	429	219	319
400x400	319	429	319	319
500x400	319	529	319	419
500x500	419	529	419	419
600x400	319	629	319	519
600x600	519	629	519	519
700x500	419	729	419	619
800x600	519	829	219	719
950x600	519	979	519	869
950x800	719	979	719	869
1250x800	719	1279	719	1169

Interior panel dimensions (in mm)

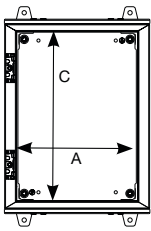


HxL	A	B
250x200	230	145
300x250	280	195
300x300	280	245
400x300	380	245
400x400	380	345
500x400	480	345
500x500	480	445
600x400	580	345
600x600	580	545
700x500	680	445
800x600	780	545
950x600	930	545
950x800	930	745
1250x800	1230	745

Power losses for calibration in accordance with standard
CEI EN 61439-2

Cat. ref.	dimensions (mm)	fixing	ΔT 0.5 (K)	ΔT 1.0 (K)	P. max (W)
FL701L	250x200x160	wall	24.3	30	21
FL702L	300x250x160	wall	25.0	30	28
FL703L	300x300x160	wall			
FL706L	400x300x160	wall	24.7	30	38
FL707L	400x300x200	wall	24.9	30	43
FL708L	400x400x200	wall			
FL712L	500x500x200	wall			
FL713L	500x400x200	wall	24.9	30	60
FL714L	600x400x200	wall	24.6	30	68
FL715L	600x400x250	wall	24.5	30	75
FL716L	600x600x250	wall			
FL721L	600x500x250	wall	25.1	30	94
FL723L	800x600x250	wall			
FL725L	950x600x250	wall			
FL726L	950x600x300	wall			
FL728L	950x800x300	wall			
FL729L	800x600x300	wall	25.1	30	100
FL730L	1250x800x300	wall			
FL731L	1250x800x400	wall			

Interior dimensions (in mm)



Cat. ref. plain door	int. dimensions	
	A	C
FL701L	150	200
FL702L	200	250
FL703L	250	250
FL706L	250	350
FL707L	250	350
FL708L	350	450
FL712L	350	450
FL713L	450	550
FL714L	550	550
FL715L	550	550
FL716L	550	550
FL721L	550	600
FL723L	550	750
FL725L	550	900
FL726L	750	900
FL728L	550	900
FL729L	550	750
FL730L	750	1200
FL731L	750	1200

Short-circuit withstand for calibration in accordance with standard CEI/EN 61439-2

Series	cat. ref.	Maximum short – circuit current kA
orion.tech	FL701L - FL731L	10 kA