Presentation

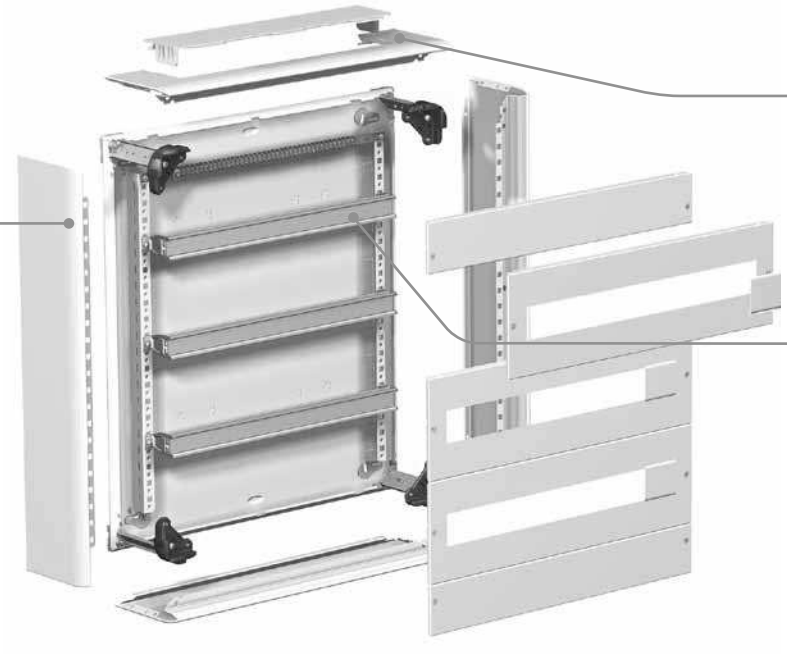
Metallic indoor enclosures, supplied mounted, can be ordered with a single catalogue number.

An enclosure + modular rails + front plates + blanking plates + a plastic gland plate + an earth bar + a template for drilling wall-mounted holes.

1 product reference = a complete modular enclosure ready to be equipped

- 160 A
- IP30
- IK07/08

PD391279



Gland plate
- Removable, easy-to-install and easy-to-cut

Accessibility
- Side panels dismountable for full access

Double rail
- Double rail supplied premounted in the 4-, 5- and 6-row enclosures allowing mixing of devices of different depths



Installation
- Door easy to install without any tool
- Plain or transparent reversible door



PD390161



Main characteristics

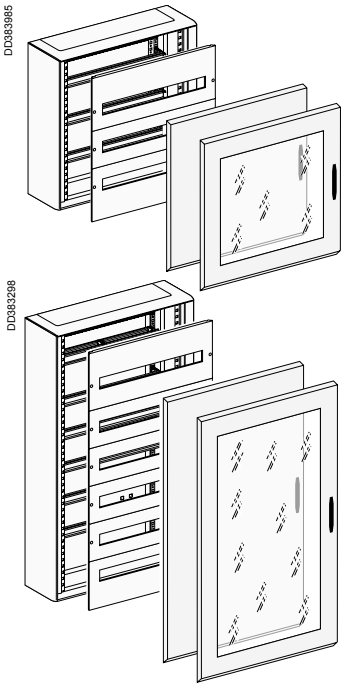
Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:
- width: 555 mm,
- height: 480 to 1080 mm,
- depth: 157 mm without door / 186 mm with door.

Description

Pack enclosures	
Rated operational current	160 A - Icc = 50 kA
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-2, NFC 61-910
Degree of protection	IP30 with or without door
Degree of protection against mechanical impacts	IK08 with door IK07 without door
Isolation	Class 1
Doors	■ Plain or transparent, opening to right or left ■ By design, electrical continuity of moving parts (hinges…) ■ Supplied with a handle and keylock (key 405) ■ No possibility to install push buttons (distance behind door = 42 mm)
Mounting	The Pack enclosures can be built-in easily using its flush mounting kit

The design of Pack enclosures ensures easy device access and mounting. Optimised depth and an extra-thin door ensure perfect integration in all environments.
Models with 4, 5 and 6 rows are particularly well-suited for the incomer function:
- more space available for wiring of the incoming device
- optimised number of front plates.

Pack wall-mounted and flush-mounted enclosures



Wall-mounted enclosures for modular devices

Enclosures include:

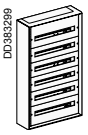
- 1 modular rail per row (L= 24 modules of 18mm).

The recessed rail at the top of 4, 5, 6-row enclosures is for NG160 installation and supplied with another rail + 4 raisers for modular devices.

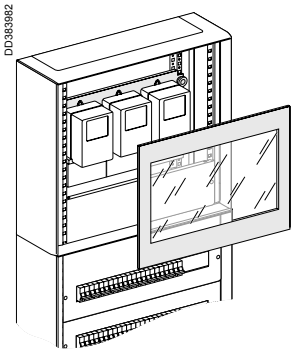
- earth bar,
- 1 front plate with cut-out per row (height depending on model),
- 1 plastic gland plate,
- divisible blanking plates (number depending on model).

Doors are:

- reversible, opening to left or right,
- supplied with a handle and barrel with keylock (key 405),
- **barrel locks and inserts** > see page 100

Nb. of rows	Nb. of vertical modules	Dimensions in mm			Height of front plates (mm)			Nb. of divisible blanking plates	Enclosure	Door	
											
		Height	Width	Depth	Top	Intermediate	Bottom			Plain	Transparent
2	9	480	555	157 without door 175 with door + 11 for handle	225	150	225	3	**08002**	**08082**	**08092**
3	12	630							**08003**	**08083**	**08093**
4	15	780			250		200	6	**08004**	**08084**	**08094**
5	18	930							**08005**	**08085**	**08095**
6	21	1080							**08006**	**08086**	**08096**

Flush-mounting kit > see page 127



Enclosure extension

Meters can be installed at different levels on the functional uprights of enclosures.
Class 1: Depending on preferences and needs, meters can be installed directly on mounting plates equipped with earthing braids and combined with partitioning or front plates.
The mounting plates can be raised using M5 spacers.

Doors are:

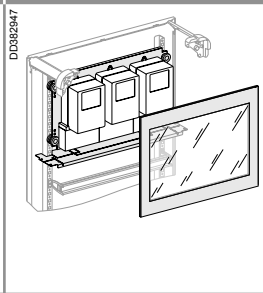
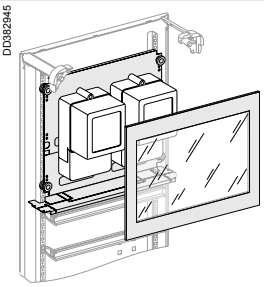
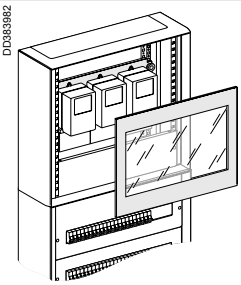
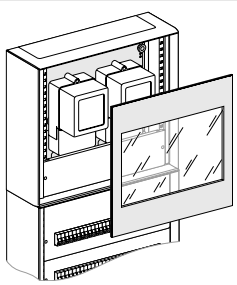
- reversible, opening to left or right,
- supplied with a handle and barrel with keylock (key 405),
- **barrel locks and inserts** > see page 100

Nb. of vertical modules (50 mm)	Dimensions (mm)			Enclosure	Door	
						
	Height	Width	Depth		Plain	Transparent
9	480	555	157 without door 175 with door + 11 for handle	**08012**	**08082**	**08092**
12	630			**08013**	**08083**	**08093**

Kilowatt-hour meters

Kilowatt-hour meters, Class 2

Class 1: Depending on preferences and needs, meters can be installed directly on mounting plates (without insulating plate) equipped with earthing braids of 6 mm^2 (08910) and combined with partitioning or front plates. The mounting plates can be raised using **M5 spacers** > see page 58

Installation	In Pack wall-mounted enclosures		In an enclosure extension	
	 DD082947	 DD082945	 DD083982	 DD083981
Device	**Single-phase meters**	**3-phase meters**	**Single-phase meters**	**3-phase meters**
Nb. of devices per row	3	2	3	2
Nb. of vertical modules	6	9	6	9
Mounting plate	**03157**	**03152**	**03157**	**03152**
Insulating plate	**03154**	**03154**	**03154**	**03154**
Horizontal partitioning **(1)**	**04333**	**04333**	**-**	**-**
Front plate transparent	**03343**	**03344**	**03343**	**03344**
Front plate plain	or **03806**	or **03807**	or **03806**	or **03807**
Enclosure	Pack enclosure	Pack enclosure	**08012**	**08013**
Door	Depending on enclosure	Depending on enclosure	**08092** (transparent) or **08082** (plain)	**08093** (transparent) or **08083** (plain)
Earthing wire 6 mm^2	**08911**	**08911**	**08911**	**08911**
Combination uprights (set of 2)	**-**	**-**	**08817 (2)**	**08817 (2)**

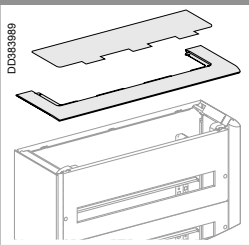
(1) *If not installed at the top of a Pack enclosure, order an addition horizontal partition (04333).*

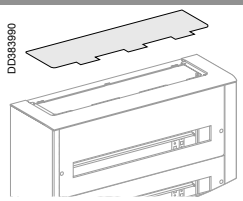
(2) *To make the combination more rigid, particularly during transport, it is mandatory to use a set of combination uprights secured to the rear of the switchboard.*

Accessories

Gland plates

Gland plates

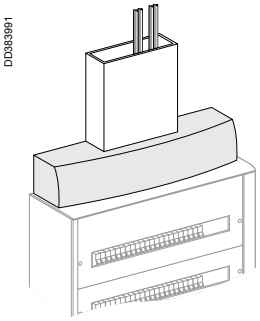




	Top or bottom plate with plastic gland plate	Metal gland plate
Catalogue numbers	**08878**	**08879**
Characteristics	-	Plain metal gland plate

Trunking spreader

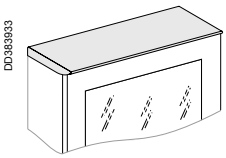
Trunking spreader



Catalogue number	**08821**

Canopy

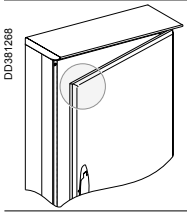
Canopy for IP31



Catalogue number	**08823**
Characteristics	The canopy cannot be mounted on the existing top plate. It therefore comes with a special top plate that must be mounted in place of the existing top plate. The existing top plate is remounted at the bottom of the enclosure to allow cable entry and exit via the bottom. The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.

Gasket

Gasket for IP43

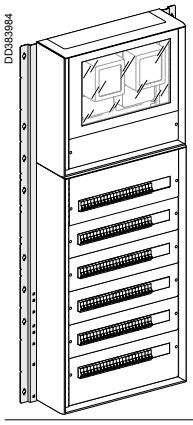


Catalogue number	**08841**
Characteristics	When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5.3 m

Accessories

Combination uprights

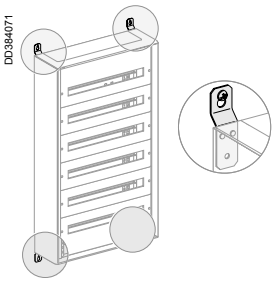
Combination uprights



Catalogue number	**08817**
Characteristics	Set of 2 uprights. Particularly during transport, it is mandatory to use a set of combination uprights secured to the rear of the switchboard, to make the combination more rigid.

Wall mounting

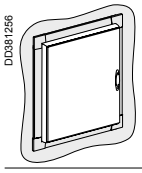
Wall mounting



Catalogue number	**08803**
Characteristics	4 external wall-mounted brackets 08803

Flush-mounting kit

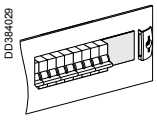
Flush-mount kit



Catalogue number	**08822**

Blanking plates

Blanking plates

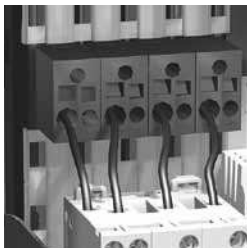


Catalogue numbers	**03220**	**03221**
Characteristics	■ Blanking strip ■ H = 46 mm, L = 1 m	■ Divisible ■ Set of 4 ■ H = 46 mm, L = 90 mm

Finishing parts > see page 63

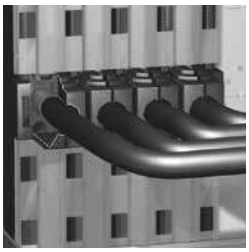
Insulated busbars
power supply of rows from the incoming device

PD390545_SE



Powerclip tap-off blocks with 6 mm² + 10 mm² terminals

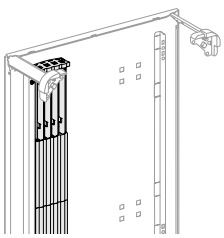
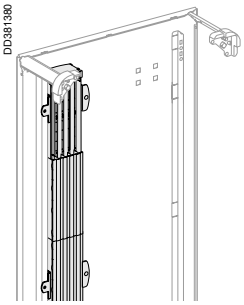
PD390546_SE



Clip-on covers to block off the connected cable lugs.

Powerclip busbars 125 to 160 A

■ **Compact busbars**, fully insulated(IPxxB), ready for installation (supplied with supports and clip-on covers)
■ **Copper bars:**
□ channelled ETPH12,
□ threaded M6 holes every 25 mm,
□ can be cut every 150 mm (125 A) or 200 mm (160 A).
■ Mounted on insulated bases.
■ Delivered with supports that screw to the functional upwrights of enclosures.
■ Large choice of prefabricated and tested connections.
■ Clip-on covers protect against direct contact. Can be easily cut for the connections to the devices.
■ Ends are protected by shutters.

			125 A	160 A
			DD382673 	DD381380 
Powerclip busbars	3P	L = 450 mm	**04103**	-
		L = 750 mm	**04107**	-
		L = 1000 mm	-	**04111**
	4P	L = 450 mm	**04104**	-
		L = 750 mm	**04108**	-
		L = 1000 mm	-	**04121**
Spare parts*	2 busbars supports + 2 end plugs + 2 screws		-	**01210**
	2 IPxxB clip-on cobers, L. 200 mm		-	**01201**

** For more information,* *> see page 103*

Electrical characteristics

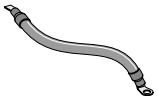
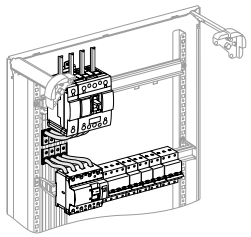
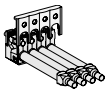
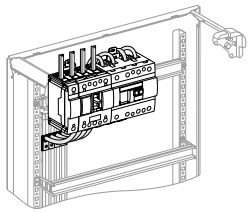
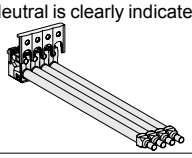
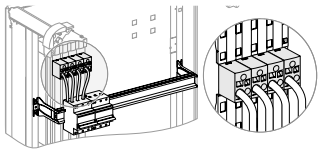
Rating	Rated short-time withstand current Icw (kA rms / 1 s)	Rated peak withstand current Ipk (kÂ)	Rated insulation voltage Ui (V)	Impulse withstand voltage Uimp (kV)
125 A	8,5	20	500	8
160 A	10	30	750	8

Choice of connection / device

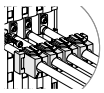
Device to connect			Catalogue numbers (see details on next page)
INS	INS40/125	3P	**04145** + **28947**
		4P	**04145** + **28948**
	INS160		**04147** or **04148**
NG	NG125		**04145** or **04147** or **04148** or **04146**
	NG160		**04147** or **04148** or **04146**
	Vigi NG160		**04148**
NSA 160			**04147** or **04148** or **04146**
C120, iC120			**04147** or **04148**
Multiclip	160 A		**04151** or **04152**
	200 A		**04021**
Modular devices			**04151** or **04152**

Insulated busbars
power supply of rows from the incoming device

Busbar connections

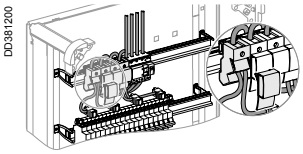
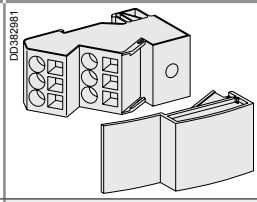
	Description	For the connection of	Catalogue numbers
DD381379 	**Set of four 125 A connections, W = 230 mm** 35 mm² ferrule + 45° ring lug (IPxxB covers **04150**)	NG125, NSA equipped with tunnel terminals or combbusbar INS with tunnel terminals: cat.no. **28947** or **28948**	**04145**
	Set of four 160 A connections, W = 250 mm 45 mm² ferrule + 45° ring lug (IPxxB covers **04150**)	NSA160, INS160, NG160, NG125	**04146**
DD383294 	**One piece connection, 3/4P, 160 A, W = 150 mm** Fast connection to busbars Equipped with male fittings one end for tunnel terminals Respects the degree of protection IPxxB Neutral is clearly indicated (blue) DD383274 	NSA160, INS160, NG160 (located on left-hand side), NG125, C120, iC120	**04147**
DD383295 	**One piece connection, 3/4P, 160 A, W = 150 mm** Fast connection to busbars Equipped with male fittings one end for tunnel terminals Respects the degree of protection IPxxB Neutral is clearly indicated (blue) DD383276 	NSA160, INS160, NG160 (located on left-hand side), Vigi NG160 (located in the middle), NG125, C120, iC120	**04148**
DD383498 	**12 tap-off blocks with 6 mm² and 10 mm² terminals** Respects the degree of protection IPxxB	All device equipped with tunnel terminals Multiclip 160 A	**04151**
	12 tap-off blocks with 16 mm² terminals Respects the degree of protection IPxxB	All device equipped with tunnel terminals Multiclip 160 A	**04152**

Accessories

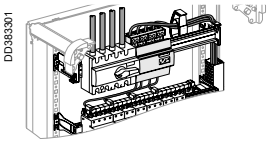
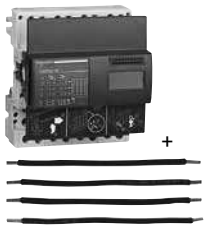
	Description	Catalogue numbers
DD381385 	8 IPxxB **covers** Set of 8 clip-on covers that can be cut as needed Maintain IPxxB with 90° angle lugs and/or cable sizes from 10 to 25 mm²	**04150**
8.8 class mounting hardware	Set of 20 CHC M6 x 12 mm	**04158**

Distribution blocks
power supply of rows from the incoming device

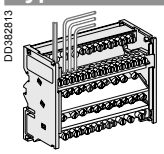
Polybloc 160 A

	Polybloc distribution block 160 A	Set of four 160 A connections, W 380 mm
	 DD381200	 DD382981	
Catalogue numbers	**04031**	**04149**
Characteristics	Installation on a raised modular rail Other characteristics > see page 75	Two 45 mm² end fittings for tunnel terminals For the connection of: INS40/160, NG125, NG160, C120, iC120 with or without Vigi

Distribloc 63, 125 and 160 A

Types		Distribloc 63 A (top connection)	Distribloc 63 A (bottom connection)	Distribloc 125 A (top connection / bottom connection)	Distribloc 160 A (top connection / bottom connection)
		 DD383301	 PB104500	 PB104499	 PG123021 054947	 PD390657
Catalogue numbers	Distribution block 4P	**04040**	**04041**	**04045**	**04046**
	Connections	Supplied	Supplied	**04047**	Supplied
Characteristics		■ Installation on a raised modular rail ■ Width: 4 modules de 18 mm		■ Installation on a modular rail ■ Width: 6 modules of 18 mm ■ Connections L = 210 mm for NG125, INS40/125, C120, iC120	■ Installation on a modular rail ■ Width: 6 modules of 18 mm ■ Connection for NG160, INS100/160 with or without Vigi
		Other characteristics > see page 77			

Multi-stage distribution blocks 40, 100 and 125 A

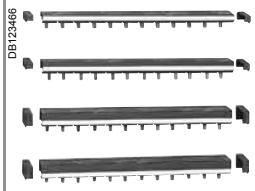
Types		Distribution blocks 2P		Distribution blocks 4P			
		 DD382813	 058923	 058930d			
Rating		**100 A**	**125 A**	**40 A**	**100 A**	**125 A**	**125 A**
Catalogue numbers	Distribution block	**13506**	**13507**	**13508**	**13510**	**13512**	**13514**
	Additional neutral bar	-	-	**13516**	**13515**	**13517**	**13518**
Characteristics		2 x 7 holes	2 x 13 holes	4 x 13 holes	4 x 7 holes	4 x 13 holes	4 x 17 holes
		Other characteristics > see page 78					

Comb busbars, distribution blocks
power supply of a modular devices row

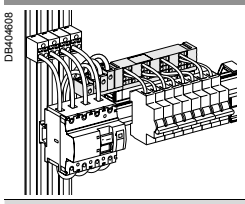
Comb busbars for DPN

		Comb busbars			Lateral bracket	Tooth-caps	Insulated connectors
							
Catalogue numbers	Two-pole	**21086**	**21088**	**21089**	**21094**	**21096**	**21098**
	Four-pole	**21090**	**21092**	**21093**	**21095**	**21096**	**21098**
Characteristics		24 modules of 9 mm 12 modules of 18 mm	48 modules of 9 mm 24 modules of 18 mm	96 modules of 9 mm 48 modules of 18 mm	Set of 40	Set of 12 6 modules of 9 mm 3 modules of 18 mm	Set of 4 For 25 mm² cables
		Rating: 80 A Set of 1					
Supplied accessories		4 lateral bracket		0	-	-	-
		1 tooth-caps	2 tooth-caps				

Comb busbars for C60 and iC60

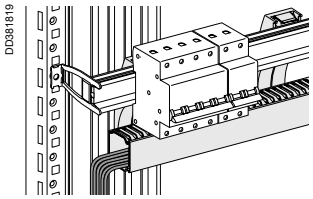
		Comb busbars		Lateral bracket	Tooth-caps	Insulated connectors
						
Catalogue numbers	One-pole	**14881**	**14891**	**14886**	**14888**	**14885**
	Two-pole	**14882**	**14892**	**14886**	**14888**	**14885**
	Three-pole	**14883**	**14893**	**14887**	**14888**	**14885**
	Four-pole	**14884**	**14894**	**14887**	**14888**	**14885**
Characteristics		■ Set of 1 ■ 24 modules of 9 mm ■ 12 modules of 18 mm	■ Set of 2 ■ 48 modules of 9 mm ■ 24 modules of 18 mm	Set of 40	Set of 40	Set of 4 For 25 mm² cables
		Rating: 80 A with 1 feeding point 100 A with 2 feeding points				
Supplied accessories		2 lateral bracket		-	-	-

Multiclip distribution blocks

Distribution blocks Multiclip		
		
Rating	**63 A**	**80 A**
Catalogue numbers	**04008**	**04000**
Characteristics	■ 4 P ■ 24 x 9 mm modules, 12 x 18 mm modules ■ Upstream connection: tunnel terminals for cables up to 25 mm² ■ Downstream connection spring terminals: □ 4 for each phase (2 x 4 mm² + 2 x 6 mm²) □ 8 for the neutral (4 x 4 mm² + 4 x 6 mm²)	■ 4 P ■ 48 x 9 mm modules, 24 x 18 mm modules ■ Upstream connection: tunnel terminals for cables up to 25 mm² ■ Downstream connection spring terminals: □ 6 for each phase (6 mm²) □ 18 for the neutral (6 mm²)
	Clipped onto the rear of modular rail or screwed.	
Supplied accessories	Bared copper connections (L=100 mm) 10 of 4 mm² + 6 of 6 mm²	Bared copper connections 6 mm² (12 blue + 12 black)

Accessories

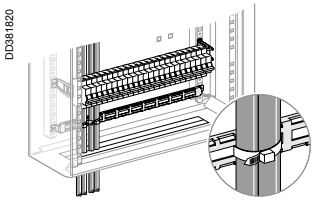
Cable running



Cable straps	Cat. no.
12 horizontal cable straps	**04239**
4 covers for horizontal cable straps, W = 430 mm	**04243**
Trunking	**Cat. no.**
4 horizontal sections, 60 x 30 mm, W = 450 mm + supports	**04257**
12 horizontal trunking supports	**04255**
2 fixing brackets, H = 15 mm (for vertical trunking)	**04206**

Cable-tie supports

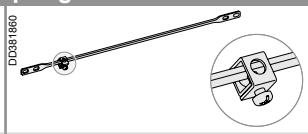
Cable-tie supports

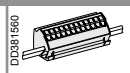


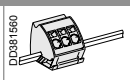
Catalogue number	**08867**
Characteristics	Set of 2 Supplied with hardware for mounting on the functional uprights of the enclosure

Earth and neutral bars

Blocks with spring terminals

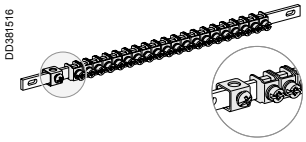






	Bare earth bar	Earth blocks with spring terminals to clip	
Catalogue numbers	**04201**	**04214**	**04215**
Characteristics	■ Size: 12 x 3 mm ■ Connection space: 330 mm Equipped with a 35 mm² tunnel terminal ■ Can receive earth blocks with spring terminals	■ 12 x 4 mm² ■ Set of 4 ■ Length: 75 mm	■ 3 x 16 mm² ■ Set of 4 ■ Length: 37 mm

Earth bar with clamps



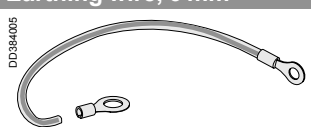
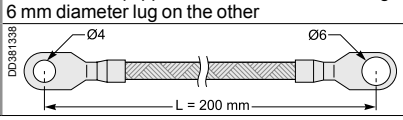
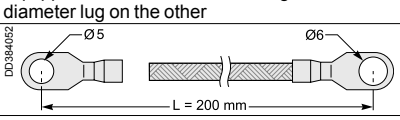
Catalogue number	**04200**
Characteristics	40 clamps and 1 x 35 mm² terminal Length: 450 mm

Accessories installed on the side

Catalogue number	**04206**
Characteristics	H = 15 mm
	Set of 2 brackets
Fixing mode	Vertically on two fixing brackets secured to a functional upright.
Earth bar used	Earth bar with clamps or spring terminals

Earthing braid

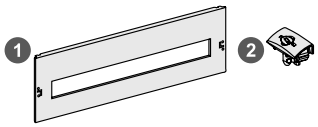
The earthing braid is used to earth a door or wicket door with devices.

	Earthing braid, 6 mm²	Earthing wire, 6 mm²
		
Catalogue numbers	**08910**	**08911**
Characteristics	The braid is equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other	Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other
		

Spare-parts

Front-plate (IP30)

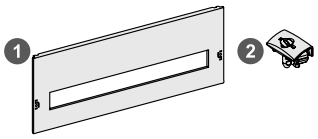
DD384498



4 modules Pack decentered plate **01264**

1. 1 front-plate
2. 2 front-plate locking mechanisms

DD384499

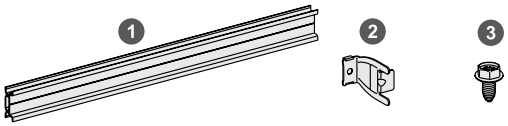


4.5 modules Pack decentered plate **01265**

1. 1 front-plate
2. 2 front-plate locking mechanisms

Modular rail

DD384506

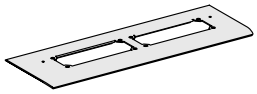


Pack modular device rail **01260**

1. 1 DIN rail 432 mm lenght
2. 2 fixing brackets
3. 2 self threading screws M5 x 10

Gland plate (IP30)

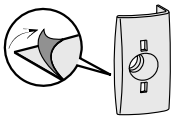
DD384489



FL21 cut-out gland plate for Pack enclosure **01020**

Front-plate accessories

DD384501



20 front-plate locking handles with sticker **01093**

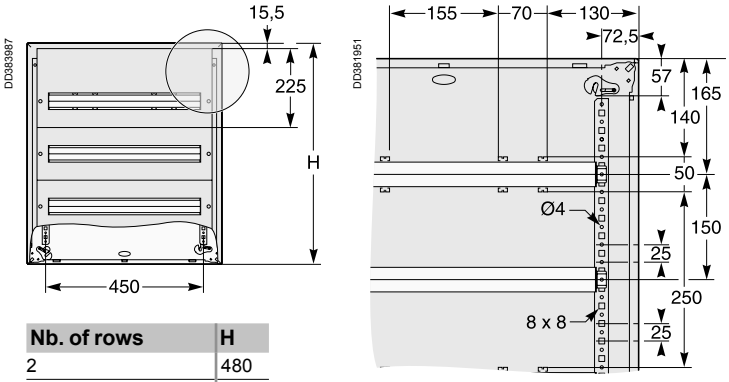
DD384502



10 sets of front-plate locking handles **01094**

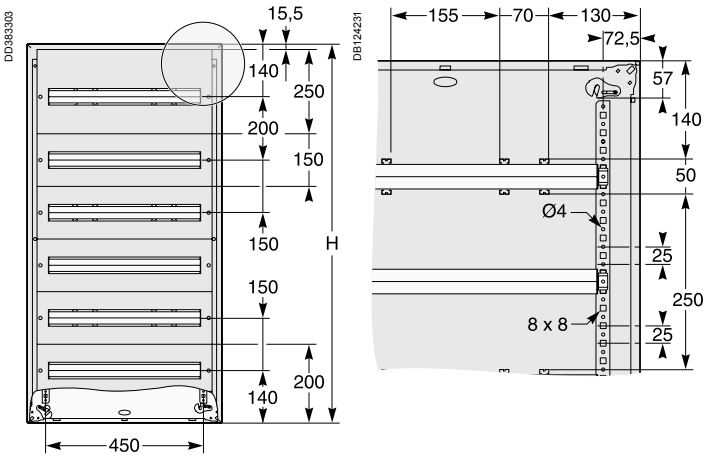
Dimensions

Wall-mounted enclosures of 2 and 3 rows



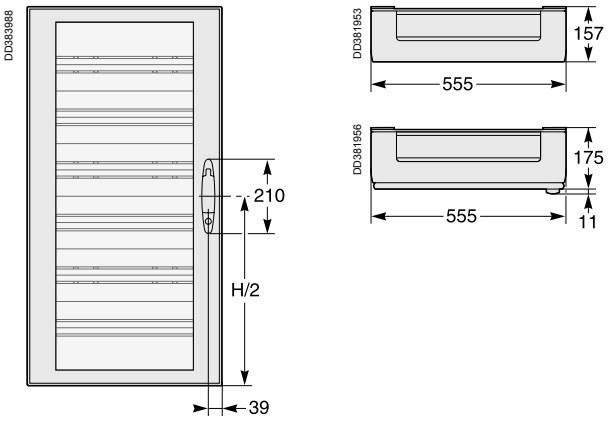
Nb. of rows	H
2	480
3	630

Wall-mounted enclosures of 4, 5 and 6 rows



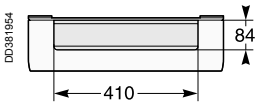
Nb. of rows	H
4	780
5	930
6	1080

Door

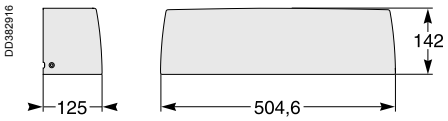


Dimensions

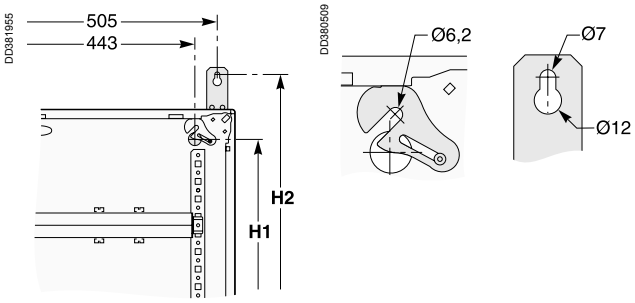
Gland plates



Trunking spreader

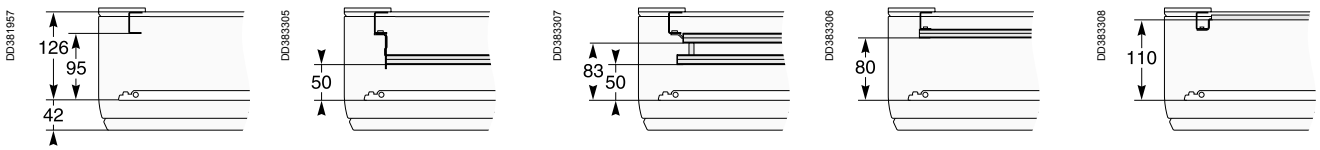


Wall-mounted



Nb. of rows	H1	H2
2	396	546
3	546	696
4	696	846
5	846	996
6	996	1146

Useful depth behind front plate



Supplied modular rail

Upper rail in wall-mounted enclosures of 4, 5 and 6 rows

Rail ref. 03004

Rail ref. 03003