TECHNICAL CATALOGUE

System pro E power

Empty enclosures and 185 mm Busbar System



The ABB range of metal enclosures for main distribution has two fundamental elements with System pro E power Empty and 185 mm Busbar System. The columns have a functional height of 1800, 2100 mm and a functional depth of 300 and 500 mm. Five widths can be selected (functional from 250 mm to 1250 mm, with 250 mm steps) depending on the device type and quantity.

Summary

Empy enclosures and 185mm Busbar System

OUR PRODUCT RANGE 1

EMPTY ENCLOSURES FOR FREE CONSTRUCTION 2

185MM BUSBAR SYSTEM 3

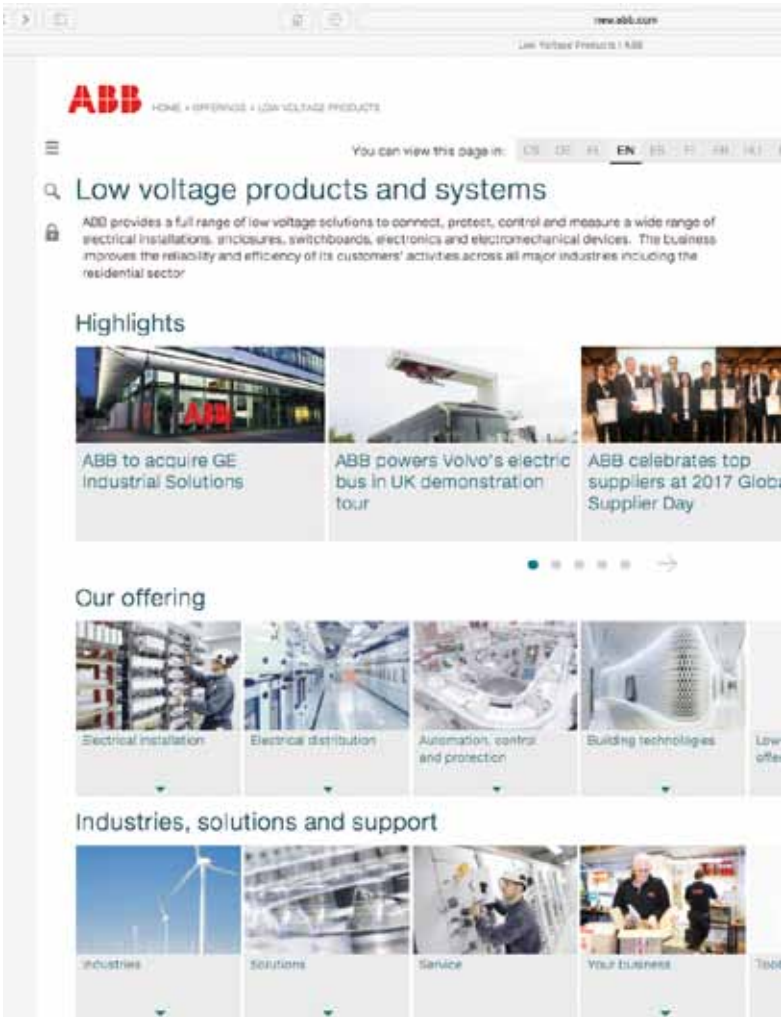
TECHNICAL DETAILS AND CERTIFICATIONS 4

OVERALL DIMENSIONS 5

The ABB SACE website: makes your work easier, develops your business

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www.new.abb.com/low-voltage
The ABB SACE website will help you in your daily work with an innovative approach to the world of low voltage electrical installations and industrial automation.

- News, to keep you up to date about the latest electrical engineering innovations
- Products, just a simple click for an overview of ABB SACE products 24 hours a day
- Catalogues that you can consult, download and request
- Technical documentation where you can check circuit diagrams, dimensional drawings,
- instruction sheets, installation manuals
- Work tools for designing in complete safety
- Training, where you can consult the training catalogue and register for courses online



Technical software Calculation and cost estimate tools

e-Configure Enclosures
Configuration software for System pro E portfolio

e-Configure Enclosures configuration software for System pro E makes light work of planning and calculating ASSEMBLIES: simplicity at the click of a button with unparalleled speed.
e-Configure Enclosures will give the possibility to design any kind of ABB Low Voltage Enclosures:

- System pro E power (Main Distribution Boards)
- System pro E energy (Sub-Distribution Boards)
- System pro E control (Automation Boards)
- System pro E comfort (Consumer Units)

Easy and intuitive to operate, the configuration software offers the user fast, optimum support and maximum planning reliability. The designer will have the perfect drawing in just a few clicks. e-Configure Enclosures creates both part lists and order lists in parallel in the background, all in a convenient, clear and accurate manner.

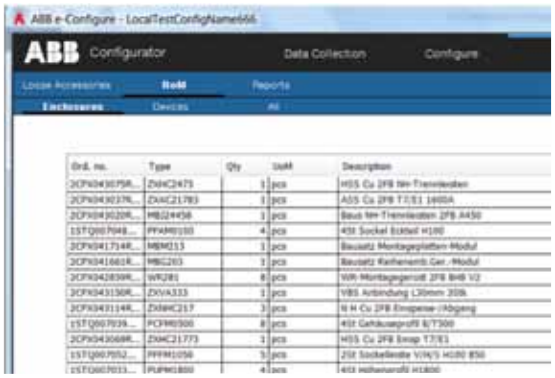
Features
A complete front view in no time at all. Planning an ASSEMBLY in just a few minutes? The exemplary user friendliness of e-Configure Enclosures makes this possible. The idea underlying the new configuration software states „think in terms of functions, not products".



This significantly simplifies the planning phase and saves valuable time.

e-Configure supports the user at the beginning of the planning process by means of a simple, intelligent input mask: the user just has to enter the key data of the distribution, the electrical and mechanical function of the section, and e-Configure takes care of the rest. In the background, parallel to user entries, e-Configure configures an orderable ASSEMBLY from the given characteristics. User will obtain a graphic display of the configured ASSEMBLY in no time at all.

The user will be provided with information about both the price of the ASSEMBLY and the lengths and weights of the copper busbars. Open interfaces guarantee continuity of the data, and further use of the compiled planning data in user's own systems.



The greatest benefit for the user is to save considerable time in the case of subsequent detailed planning.

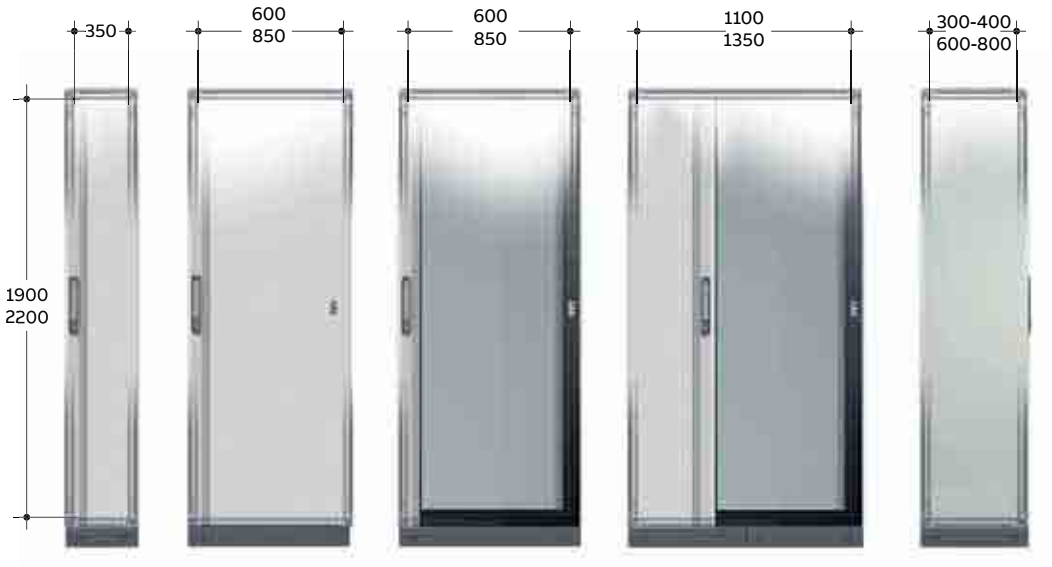


Your key resource

Empty enclosures

A large selection of enclosures in two heights and five widths and four depths opens unlimited possibilities. With selected accessories, all applications can be adapted to your requirements in no time at all.

The use of CombiLine N modules gives you even more flexibility when mounting the equipment. Crossbars on special mounting brackets and in various sizes allow mounting in any position. In addition, various flanges ensure optimum cable entry.



Dimensions	Height [mm]	1900, 2200
	Width [mm]	350, 600, 850, 1100, 1350
	Depth [mm]	300, 400, 600, 800
Cabinet construction		Individual parts pre-assembled fully assemlbed with Combline N modules with mounting plates
Form		Form 1
Protection class		IP 30, 40, 55/54 (with double door)

185mm – Busbar system

With the pro E Power 185 mm busbar system the product portfolio of ABB has been extended by an essential component.

The system tested according to IEC 61439-1/-2, is available in two heights and two depths. Depending on the type and quantity of equipment, four different panel widths are available.



Scope of application		Distribution boards up to 2,000 A at max. 75 kA short-circuit current
Location Main busbar		middle
Dimensions	Height [mm]	1900, 2200 without 100 mm plinth
	Width [mm]	600, 850, 1100, 1350
	Depth [mm]	400 up to 1000 A, 600 up to 2000 A
Cabinet construction		Individual parts, kit, complete delivery with or wthout copper
Form		Form 1
Protection class	Accessible parts	IP 30 (without doors), IP 40, IP 55/54 (with double door)
	For bottom plates	IP00 (without bottom plates), IP40, IP54

System pro E power
User's guide



Chapter 1
Range presentation
Overview, introduction and advantages of the new main distribution switchboard range.



Chapter 4
Technical details, certifications and configuration examples.
Specifications of the new switchboard, regulatory framework, Italian and international certifications.



Chapter 2
Empty enclosures for free constructions
Distinctive features of the new switchboards with selection guides for rapid choice of the structure. Ordering codes for the framework and external covers.city tables.



Chapter 5
Overall dimensions
Overall dimensions of the switchboards and the relative components available.



Chapter 3
185mm busbar system enclosures
Assembly kits for the circuit-breakers and the accessories available for the new switchboard solution.

Chapter 1
Our product range

1–2 **Introduction**

1–4 **Main characteristics of the series**

1–4 **Range presentation**

1–8 **Selection table for solutions**

Range presentation
Introduction

With System pro E power offer ABB provides new solution for main distribution switchboards with rated current up to 6300A and short-circuit current up to 150kA with System Pro E Power Rear Busbar System and 2000A up to 75kA with System Pro E Power 185 mm Busbar System 185mm busbar system. All plant requirements depending on the type of installation, required degree of protection and electrical and mechanical specifications can be achived.

Thanks to the new switchboard, ABB can provide complete solutions for main electric power distribution in infrastructures and industries, in accordance with the regulatory framework. Typical fields of application are airports, subways, hospitals, industrial and residential estates, ports, tunnels, railways, theatres, etc.

In addition, System pro E power guarantees full synergy with all the other ABB apparatus (i.e. modular circuit-breakers, Tmax XT moulded-case circuit-breakers, Emax 2 air circuit-breakers) while being extremely simple to assemble and ensuring ease of wiring.

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System pro E power offers



	Empty enclosures for free construction	185mm busbar system up to 2000A
Range	Empty enclosure for the fitting of Combiline modules or any other devices	Simple energy distribution solution with a main breaker as incomer, Inline II fuses as outgoer with optimized internal copper connections Main characteristics - IEC 61439 1-2 type tested - Rated currents 1000A, 1250A, 1600A, 2000A
Standard	IEC 62208	IEC 61439 1-2 design verified
"Rated current"	-	Up to 2000A
"Short circuit current Icw 1 sec Form Compatibility"	-	up to 75kA
Segregation	-	Form 1 only
Compatibility	Free construction with full range of accessories and mounting plates.	Incomers from XT5 up to Emax2.2; molder case circuit breakers of fusegears cable feeders





Rear busbar system up to 6300A
Complete main distribution solutions to meet all plant requirements depending on the type of installation, required protection class and the electrical and mechanical specifications. **Main characteristics** **- IEC 61439 1-2** design verified **- Rated current: up to 6300A.** **- Segregation forms: up to form 4b**
IEC 61439 1-2 type tested **Seismic widthstand properties** **Vibrations widthstand properties** **Arc fault widthstand properties**
Up to 6300A
Up to 150kA
Up to form 4b
ABB full package of breakers and switches from Din rail solutions to Air Circuit Breakers up to 6300A.

Our product range
Main characteristics of the series

Empty enclosures for free construction



Compliance with Standard		IEC 62208
Approvals		LOVAG
Vibration test		-
Seismic withstand capability test		-
Conditions of installation		Indoor installation
Ambient temperature, average value 24h		-
Ambient temperature, maximum value		-
Ambient temperature, minimum value		-
Pollution degree		3
Protection class		I (earthed)
Rated current In		-
Rated short-time withstand current Icw		-
Rated peak short-circuit current Ipk		-
Rated service voltage Ue		1000V AC - 1500V DC
Rated insulation voltage Ui		1000V AC - 1500V DC
Rated frequency		50-60Hz
Rated impulse withstand voltage Uimp		-
IP protection class		IP30, IP31, IP40, IP41, IP54, IP55
Painting	**Enclosure**	RAL 7035
	Plinth	RAL 7012
Protection against mechanical impact IEC62262	**Glazed door**	IK09
	Blind door, without door	IK10
Functional dimensions. External dimension = functional dimensions + 100mm (see more details in overall dimensions chapter).	**Height (mm) without plinth (+100, 200 mm with plinth)**	1800, 2100
	Width (mm)	250, 500, 750, 1000, 1250
	Depth (mm)	200, 300, 500, 700

185mm Busbar System
Segregation only Form 1



Rear busbar system
Segregation up to Form 4b



IEC 61439-1-2	IEC 61439-1-2
LOVAG	LOVAG
-	In accordance with Standard IEC 60068-2-57
-	In accordance with Standard IEE Std 693
Indoor installation	Indoor installation
+35 °C	+35 °C
+40 °C	+40 °C
-5 °C	-5 °C
3	3
I (earthed)	I (earthed)
up to 2000A	up to 6300A
up to 75kA	up to 150kA
up to 165kA	up to 264kA
415 VAC	1000V AC - 1500V DC
1000V AC	1000V AC - 1500V DC
50-60Hz	50-60Hz
8kV	12kV
IP30, IP40, IP54, IP55	IP30, IP31, IP40, IP41, IP54, IP65
RAL 7035	RAL 7035
RAL 7012	RAL 7012
IK09	IK09
IK10	IK10
1800, 2100	2000
500, 750, 1000	300, 400, 600, 800, 1000, 1250 Internal cable containers 200, 400
300, 500	200, 300, 500, 700, 900

Our product range
Range presentation

The range of System pro E power structures can be used to create lots of switchboard configurations while guaranteeing flexibility and a certified product. Different configurations can be assembled with a just a few part numbers.

This new series features a structure in hot-dip galvanized sheet steel that guarantees equipotential bonding of the switchboard.

IP protection degrees for all types of applications, i.e. up to IP65, can be obtained.
Certification was achieved after stringent tests involving the entire configuration (structure, circuit-breakers and busbar system), thus systems conforming to the new international standard IEC 61439-1-2 can be created by following ABB's instructions.

ABB apparatus can be installed inside the switchboards with high-level integration and optimized use of the available space.

Advantages
The System pro E power switchboard range is based upon three fundamental criteria that define its practical characteristics and advantages for the users.

Flexibility
The structure can be assembled to suit different logic sequences.







Just a few part numbers for different enclosure sizes can be assembled with or without plinth. Upright with two different surface levels per side so that different kits can be installed.

New ergonomic handle allowing the door to be opened towards the right or left.

New busbar systems using the same components: cross-pieces, mounting plates and multifunction insulating supports able to house 10mm thick flat or shaped busbars.

Extensive range of solutions for free mounting to create taylor made solutions. Up to 2000A and Icw up to 75kA.

Velocity
Available as individual parts: as flatpack or as complete assembly. Stand-alone solution and fastest selection of codes.
New handle allowing different inserts to be housed.

Simplicity
New, simple assembly sequence.
Error-free assembly of the structure.
Modular uprights and cross-pieces joined together by means of a patented new system with axial screws. Simple energy distribution solutions for most common applications where fuseholders are used. All this, plus an ultra-sturdy and safe construction, thanks to the new laser-beam welded upright with 13 folds.





General information
Selection table for solutions

Realization of the different IP protection class example

Empty enclosure for CombiLine N and 185mm Busbars System

IP Column	Component	Without gasket	With gasket
IP65	Blind Side		✓
	Blind Rear		✓
	Blind Top		✓
	Blind Bottom		✓
	Open top + flange PFCF....		✓
	Open bottom with plinth + flange PFCF....		✓
	Open bottom with plinth for column D=300mm + flange EV....		✓
	External Single Door *		✓
IP55	Open top + flange TZ...		✓
	Open bottom with plinth + flange TZ...		✓
IP40	Internal blind bottom	✓	
	Internal open bottom + flange	✓	
IP30	Horizontal/Vertical closing profiles	✓	

* External double door IP54.

The Maximum IP degree for the Empty enclosure for CombiLine N and 185mm Busbars System is IP65.
By selecting components belonging to IP55 or IP40 or IP30 list, there will be a de-rating in the IP protection degree.

185mm Busbars System

IP Column	Component	Without gasket	With gasket
IP65	Blind Side		✓
	Blind Rear		✓
	Blind Top		✓
	Blind Bottom		✓
	External Single Door *		✓
IP55	Open top + flange TZ...		✓
	Open bottom with plinth + flange TZ...		✓
IP40	Internal blind bottom	✓	
	Internal open bottom + flange	✓	
	Open bottom with plinth + flange RF...		✓
IP30	Horizontal/Vertical closing profiles	✓	

* External double door IP54.

The Maximum IP degree for the 185mm Busbars System is IP65. By selecting components belonging to IP55 or IP40 or IP30 list, there will be a de-rating in the IP protection degree.

Empty enclosures for Top busbars System

IP Column	Component	Without gasket	With gasket
IP65	Blind Side		✓
	Blind Rear		✓
	Blind Top		✓
	Blind Bottom		✓
	Open top + flange PFCF....		✓
	Open bottom with plinth + flange PFCF....		✓
	External Single Door *		✓
IP40	Blind side	✓	
	Vented side**	✓	
	Blind Rear	✓	
	Vented rear**	✓	
	Blind Top	✓	
	Blind Bottom	✓	
	Internal blind bottom	✓	
	Open top + flange PFCS....	✓	
	Open bottom with plinth + flange PFCS....	✓	
	External Single Door	✓	
IP30	Horizontal/Vertical closing profiles	✓	

* External double door IP54.
** For IP40 it is necessary to use the grates for vented panels.

The Maximum IP degree for the Empty enclosure for Top Busbars System is IP65. By selecting components belonging to IP40 or IP30 list, there will be a de-rating in the IP protection degree.

Chapter 2
Empty enclosures for free construction

Empty enclosures for CombiLine N and 185 mm Busbar System

2–2 **General information**

2–6 **Quik selection guide**

2–6 **Delivery form**

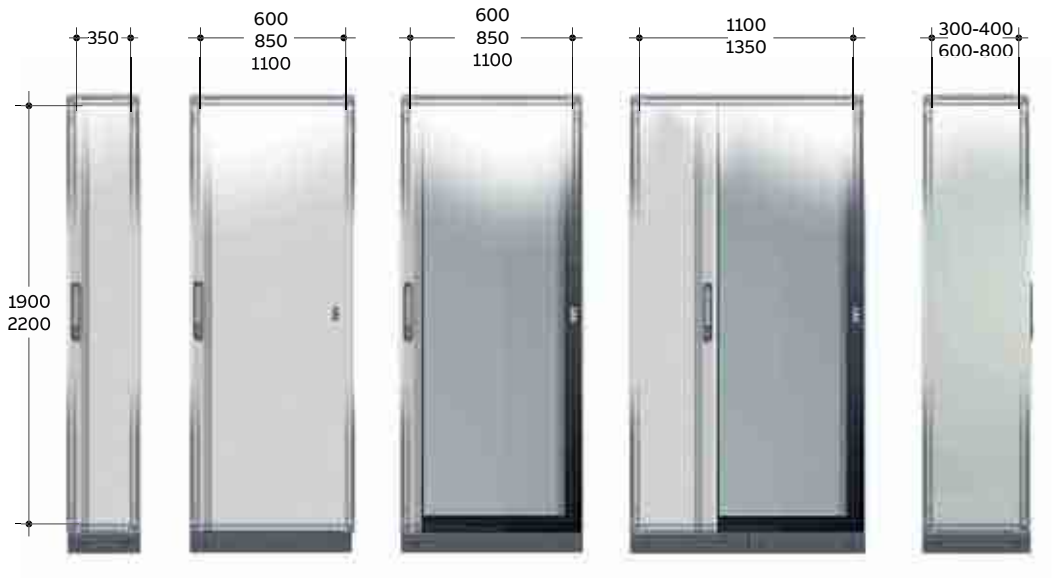
2–8 **Order codes**

Empty enclosures for CombiLine N and 185 mm Busbar System

General information

An extended range of switchgear enclosures with two heights, five widths (functional widths 250, 500, 750, 1000 and 1250 mm) and four depths (functional depths 200, 300, 500 and 700 mm) provide unlimited possibilities.

Selected accessories make it easy to realize all your custom solutions: CombiLine modules for flexibility in the mounting of devices, crosspieces in different sizes accompanied by dedicated brackets for fixing in any position and flanges for optimum cable entry.



Compliance with Standard		IEC 62208
Approvals		LOVAG
Vibration test		-
Seismic withstand capability test		-
Conditions of installation		Indoor installation
Ambient temperature, average value 24h		-
Ambient temperature, maximum value		-
Ambient temperature, minimum value		-
Pollution degree		3
Protection class		I (earthed)
Rated current In		-
Rated short-time withstand current Icw		-
Rated peak short-circuit current Ipk		-
Rated service voltage Ue		1000V AC - 1500V
Rated insulation voltage Ui		1000V AC - 1500V
Rated frequency		50-60Hz
Rated impulse withstand voltage Uimp		-
IP protection class		IP30, IP40, IP54, IP55
Painting	Enclosure	RAL 7035
	Plinth	RAL 7012
Protection against mechanical impact IEC62262	Glazed door	IK09
	Blind door, without door	IK10
Functional dimensions. External dimension = functional dimensions + 100mm (see more details in overall dimensions chapter).	Height (mm) without plinth (+100, 200 mm with plinth)	1800, 2100
	Width (mm)	250, 500, 750, 1000, 1250
	Depth (mm)	200, 300, 500, 700

Accessories for free construction

Brakets and crospieces
Various crosspieces, brackets and parts available for the realization of custom assemblies.

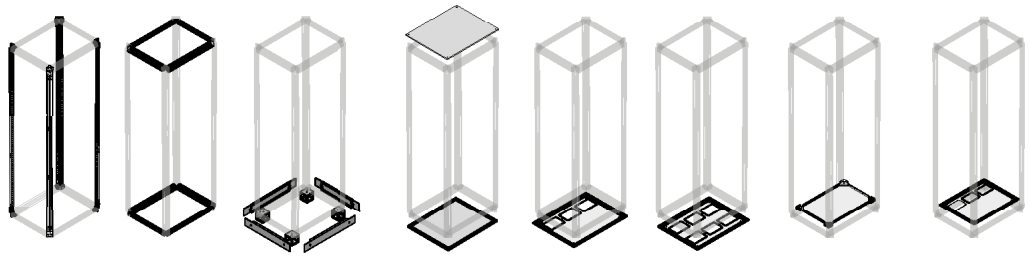


CombiLine Module
Wide range of modules for all power distribution devices and applications up to 800A.

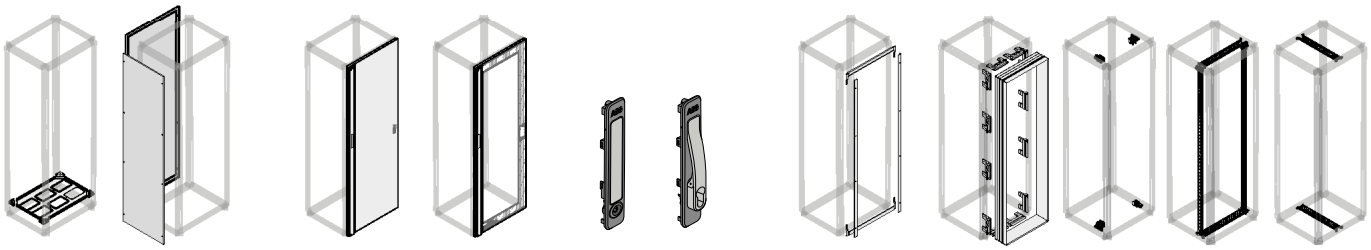


Empty enclosures for CombiLine N and 185 mm Busbar System

Selection guide H=1900/2200mm



Functional dimensions			External dimensions			FRAME - Galvanized sheet metal						EXTERNAL COVERS					
							Structure crosspieces		H=100mm plinth			Top/ Bottom for column with plinth	Top/ Bottom for column with plinth		Internal bottom		
										Plinth flanges							
H (mm)	W (mm)	D (mm)	H (mm)	W (mm)	D (mm)	Uprights	Front/Rear	Sides	Angle pieces	Front/Rear	Sides	Blind with gasket	Open with gasket (one row)	Open with gasket (two rows)	Blind without gasket	Open bottom without gasket (one row)	
1800	250	200	1900	350	300	PUPM1800	PCFM0250	PCFM0200	PPAM0100 + PPIM0100	PPFM1025	PPFM1020	PTBB2526	PTBT2526		PBWP2522	PBWF2526	
		300			400			PCFM0300			PPFM1030	PTBB2536	PTBT2536		PBWP2532	PBWF2536	
		500			600			PCFM0500			PPFM1050	PTBB2556	PTBT2556	PTBT2557	PBWP2552	PBWF2556	
		700			800			PCFM0700			PPFM1070	PTBB2576	PTBT2576	PTBT2577	PBWP2572	PBWF2576	
	500	200		600	300		PCFM0500	PCFM0200		PPFM1050	PPFM1020	PTBB5026	PTBT5026		PBWP5022	PBWF5026	
		300			400			PCFM0300			PPFM1030	PTBB3056	PTBT3056		PBWP3052	PBWF3056	
		500			600			PCFM0500			PPFM1050	PTBB5050	PTBT5050	PTBT5057	PBWP5052	PBWF5050	
		700			800			PCFM0700			PPFM1070	PTBB5076	PTBT5076	PTBT5077	PBWP5072	PBWF5076	
	750	200		850	300		PCFM0750	PCFM0200		PPFM1075	PPFM1020	PTBB7526	PTBT7526		PBWP7522	PBWF7526	
		300			400			PCFM0300			PPFM1030	PTBB7536	PTBT7536		PBWP7532	PBWF7536	
		500			600			PCFM0500			PPFM1050	PTBB7556	PTBT7556	PTBT7557	PBWP7552	PBWF7556	
		700			800			PCFM0700			PPFM1070	PTBB7576	PTBT7576	PTBT7577	PBWP7572	PBWF7576	
	1000	200		1100	300		PCFM1000	PCFM0200		PPFM1010	PPFM1020	PTBB1026	PTBT1026		PBWP1020	PBWF1026	
		300			400			PCFM0300			PPFM1030	PTBB1036	PTBT1036		PBWP1032	PBWF1036	
		500			600			PCFM0500			PPFM1050	PTBB1056	PTBT1056	PTBT1057	PBWP1052	PBWF1056	
		700			800			PCFM0700			PPFM1070	PTBB1076	PTBT1076	PTBT1077	PBWP1072	PBWF1076	
	1250	200		1350	300		PCFM1250	PCFM0200		PPFM1250	PPFM1020	PTBB1220	PTBT1226		PBWP1220	PBWF1226	
		300			400			PCFM0300			PPFM1030	PTBB1236	PTBT1236		PBWP1232	PBWF1236	
		500			600			PCFM0500			PPFM1050	PTBB1256	PTBT1256	PTBT1257	PBWP1252	PBWF1256	
		700			800			PCFM0700			PPFM1070	PTBB1276	PTBT1276	PTBT1277	PBWP1272	PBWF1276	
2100	250	200	2200	350	300	PUPM2100	PCFM0250	PCFM0200	PPAM0100	PPFM1025	PPFM1020	PTBB2526	PTBT2526		PBWP2522	PBWF2526	
		300			400			PCFM0300			PPFM1030	PTBB2536	PTBT2536		PBWP2532	PBWF2536	
		500			600			PCFM0500			PPFM1050	PTBB2556	PTBT2556	PTBT2557	PBWP2552	PBWF2556	
		700			800			PCFM0700			PPFM1070	PTBB2576	PTBT2576	PTBT2577	PBWP2572	PBWF2576	
	500	200		600	300		PCFM0500	PCFM0200		PPFM1050	PPFM1020	PTBB5026	PTBT5026		PBWP5022	PBWF5026	
		300			400			PCFM0300			PPFM1030	PTBB3056	PTBT3056		PBWP3052	PBWF3056	
		500			600			PCFM0500			PPFM1050	PTBB5050	PTBT5050	PTBT5057	PBWP5052	PBWF5050	
		700			800			PCFM0700			PPFM1070	PTBB5076	PTBT5076	PTBT5077	PBWP5072	PBWF5076	
	750	200		850	300		PCFM0750	PCFM0200		PPFM1075	PPFM1020	PTBB7526	PTBT7526		PBWP7522	PBWF7526	
		300			400			PCFM0300			PPFM1030	PTBB7536	PTBT7536		PBWP7532	PBWF7536	
		500			600			PCFM0500			PPFM1050	PTBB7556	PTBT7556	PTBT7557	PBWP7552	PBWF7556	
		700			800			PCFM0700			PPFM1070	PTBB7576	PTBT7576	PTBT7577	PBWP7572	PBWF7576	
	1000	200		1100	300		PCFM1000	PCFM0200		PPFM1010	PPFM1020	PTBB1026	PTBT1026		PBWP1020	PBWF1026	
		300			400			PCFM0300			PPFM1030	PTBB1036	PTBT1036		PBWP1032	PBWF1036	
		500			600			PCFM0500			PPFM1050	PTBB1056	PTBT1056	PTBT1057	PBWP1052	PBWF1056	
		700			800			PCFM0700			PPFM1070	PTBB1076	PTBT1076	PTBT1077	PBWP1072	PBWF1076	
	1250	200		1350	300		PCFM1250	PCFM0200	PPAM0100 + PPIM0100	PPFM1250	PPFM1020	PTBB1220	PTBT1226		PBWP1220	PBWF1226	
		300			400			PCFM0300			PPFM1030	PTBB1236	PTBT1236		PBWP1232	PBWF1236	
		500			600			PCFM0500			PPFM1050	PTBB1256	PTBT1256	PTBT1257	PBWP1252	PBWF1256	
		700			800			PCFM0700			PPFM1070	PTBB1276	PTBT1276	PTBT1277	PBWP1272	PBWF1276	



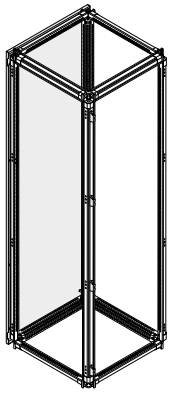
COMBILINE

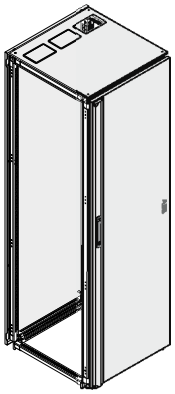
		Front/side panels		Doors without lever						Closing profile						
	Open bottom without gasket (two rows)	Blind rear panel with gasket	Blind side panel with gasket	Blind with gasket	Double blind with gasket	Glazed with gasket	Double glazed with gasket	Lever codes, to be added for each door: Standard lever without push-button	Lever codes, to be added for each door: Lever for semi-cylinder insert	Profile IP30 Vertical	Profile IP30 Horizontal	Touch guard	Bracket	WR frame	Depth support
		PPEB1825	PPEB1828	PDNB1826							PPFH0250	PNTG1825			
			PPEB1837									PNTG1825	2x PBCM0004	2x WR181	
	PBWF2557		PPEB1857									PNTG6825			
	PBWF2577		PPEB1878									PNTG6825			
		PPEB1856	PPEB1828	PDNB1856		PDNG1856					PPFH0500	PNTG1850			
			PPEB1837									PNTG1850	2x PBCM0004	2x WR281	
	PBWF5057		PPEB1857									PNTG6850			
	PBWF5077		PPEB1878									PNTG6850			
		PPEB1875	PPEB1828	PDNB1876		PDNG1876		PHLS0013	PHLS0012	PPFV1800	PPFH0750	PNTG1875			
			PPEB1837									PNTG1875	2x PBCM0004	2x WR381	
	PBWF7557		PPEB1857									PNTG6875			
	PBWF7577		PPEB1878									PNTG6875			
		PPEB1816	PPEB1828		PDLB8127 + PDNB8507		PDLG8127 + PDNG8507				PPFH1000	PNTG1810	2x PBCM0004 RZ1P4	2x WR281	PDFC0200
			PPEB1837									PNTG1810			PDFC0300
	PBWF1057		PPEB1857									PNTG6810			PDFC0500
	PBWF1077		PPEB1878									PNTG6810			PDFC0700
		PPRB1826 PPLB1826	PPEB1828		PDLB8127 + PDNB8407		PDLG8127 + PDNG8407				PPFH1250	PNTG1812	2x PBCM0004 RZ1P4	2x WR381 WR281	PDFC0200
			PPEB1837									PNTG1812			PDFC0300
	PBWF1257		PPEB1857									PNTG6812			PDFC0500
	PBWF1277		PPEB1878									PNTG6812			PDFC0700
		PPEB2125	PPEB1828	PDNB2126							PPFH0250	PNTG2125			
			PPEB1837									PNTG2125	2x PBCM0004	2x WR1101	
	PBWF2557		PPEB1857									PNTG6125			
	PBWF2577		PPEB1878									PNTG6125			
		PPEB2156	PPEB1828	PDNB2156		PDNG2156					PPFH0500	PNTG2150			
			PPEB1837									PNTG2150	2x PBCM0004	2x WR2101	
	PBWF5057		PPEB1857									PNTG6150			
	PBWF5077		PPEB1878									PNTG6150			
		PPEB2175	PPEB1828	PDNB2176		PDNG2176		PHLS0013	PHLS0012	PPFV2100	PPFH0750	PNTG2175			
			PPEB1837									PNTG2175	2x PBCM0004	2x WR3101	
	PBWF7557		PPEB1857									PNTG6175			
	PBWF7577		PPEB1878									PNTG6175			
		PPEB2116	PPEB2127		PDLB1127 + PDNB1507		PDLG1127 + PDNG1507				PPFH1000	PNTG2110	2x PBCM0004 RZ1P4	2x WR2101	PDFC0200
			PPEB2137									PNTG2110			PDFC0300
	PBWF1057		PPEB2157									PNTG6110			PDFC0500
	PBWF1077		PPEB2177									PNTG6110			PDFC0700
		PPRB2126 PPLB2126	PPEB2127		PDLB1127 + PDNB1407		PDLG1127 + PDNG1407				PPFH1250	PNTG2112	2x PBCM0004 RZ1P4	2x WR2101 WR3101	PDFC0200
			PPEB2137									PNTG2112			PDFC0300
	PBWF1257		PPEB2157									PNTG6112			PDFC0500
	PBWF1277		PPEB2177									PNTG6112			PDFC0700

Empty enclosures for CombiLine N and 185 mm Busbar System

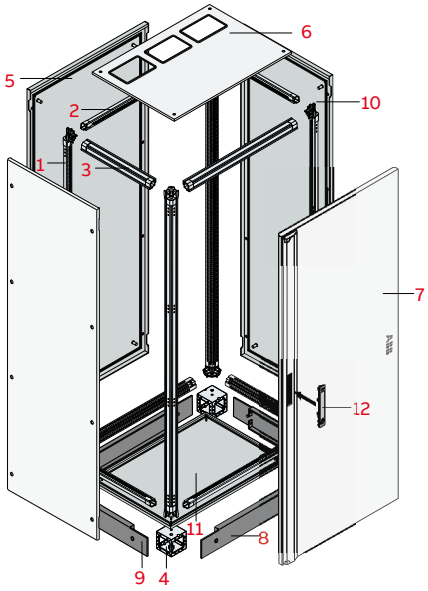
Delivery form

The cabinet can be delivered in kit or preassembled according to the configurations shown below. The other accessories must be ordered separately.



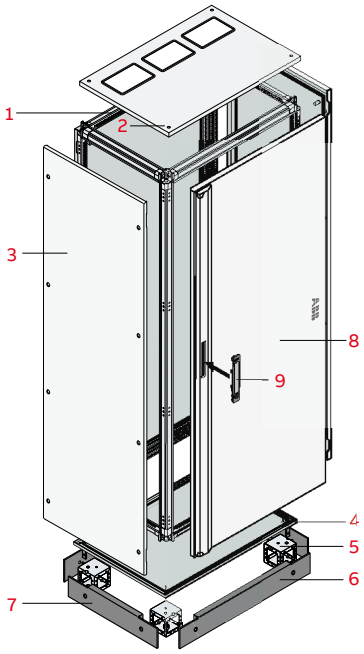


		Cabinet with back panel H=1900mm	Cabinet with back panel H=2200mm	Cabinet with blind door, back and top panel H=1900mm	Cabinet with blind door, back and top panel H=2200mm
External dimensions (mm)					
W	**D**	**ABB Order code**	**ABB Order code**	**ABB Order code**	**ABB Order code**
350	300	1STQ001061M0000	1STQ001081M0000	1STQ001021M0000	1STQ001041M0000
	400	1STQ001062M0000	1STQ001082M0000	1STQ001022M0000	1STQ001042M0000
	600	1STQ001063M0000	1STQ001083M0000	1STQ001023M0000	1STQ001043M0000
	800	1STQ001064M0000	1STQ001084M0000	1STQ001024M0000	1STQ001044M0000
600	300	1STQ001065M0000	1STQ001085M0000	1STQ001025M0000	1STQ001045M0000
	400	1STQ001066M0000	1STQ001086M0000	1STQ001026M0000	1STQ001046M0000
	600	1STQ001067M0000	1STQ001087M0000	1STQ001027M0000	1STQ001047M0000
	800	1STQ001068M0000	1STQ001088M0000	1STQ001028M0000	1STQ001048M0000
850	300	1STQ001069M0000	1STQ001089M0000	1STQ001029M0000	1STQ001049M0000
	400	1STQ001070M0000	1STQ001090M0000	1STQ001030M0000	1STQ001050M0000
	600	1STQ001071M0000	1STQ001091M0000	1STQ001031M0000	1STQ001051M0000
	800	1STQ001072M0000	1STQ001092M0000	1STQ001032M0000	1STQ001052M0000
1100	300	1STQ001073M0000	1STQ001093M0000	1STQ001033M0000	1STQ001053M0000
	400	1STQ001074M0000	1STQ001094M0000	1STQ001034M0000	1STQ001054M0000
	600	1STQ001075M0000	1STQ001095M0000	1STQ001035M0000	1STQ001055M0000
	800	1STQ001076M0000	1STQ001096M0000	1STQ001036M0000	1STQ001056M0000
1350	300	1STQ001077M0000	1STQ001097M0000	1STQ001037M0000	1STQ001057M0000
	400	1STQ001078M0000	1STQ001098M0000	1STQ001038M0000	1STQ001058M0000
	600	1STQ001079M0000	1STQ001099M0000	1STQ001039M0000	1STQ001059M0000
	800	1STQ001080M0000	1STQ001100M0000	1STQ001040M0000	1STQ001060M0000



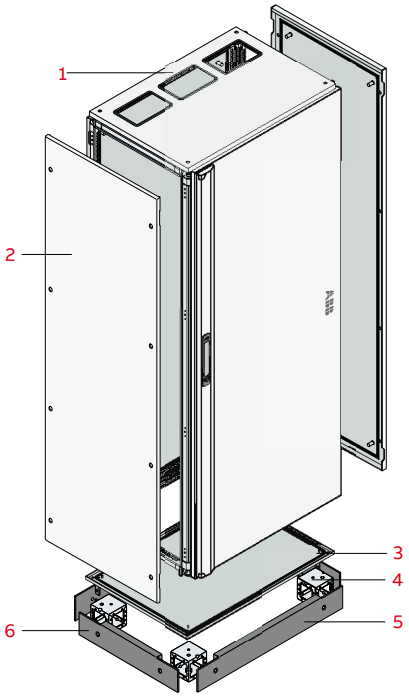
Example order kit configuration 2200x850x600mm (HxWxD) structure

	Description	Type	ABB Order code	Quantity
1	Uprights-Galvanized sheet metal	PUPM2100	1STQ007035A0000	1
2	Width crosspieces	PCFM0750	1STQ007041A0000	1
3	Depth crosspieces	PCFM0500	1STQ007039A0000	1
4	Plinth angle pieces	PPAM0100	1STQ007048A0000	1
5	Rear panel	PPEB2175	1STQ007603A0000	1
6	External top panel	PTBT7558	1STQ002422B0000	1
7	Blind door	PDNB2176	1STQ002269B0000	1
8	Front/rear plinth flanges	PPFM1075	1STQ007054A0000	1
9	Side plinth flanges	PPFM1050	1STQ007052A0000	1
10	External blind side panel	PPEB2156	1STQ002287B0000	2
11	Blind bottom for column with plinth	PTBB7556	1STQ007092A0000	1
12	Lever handle	PHLS0013	1STQ002334B0000	1



Example order assembled configuration 2200x850x600mm (HxWxD) structure (partially assembled)

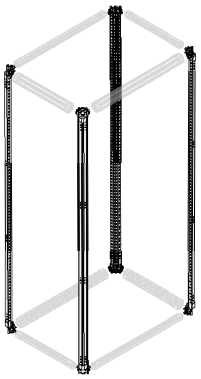
	Description	Type	ABB Order code	Quantity
1	Cabinet with back panel		1STQ001091M0000	1
2	External top panel	PTBT7559	1STQ002423B0000	1
3	External blind side panel	PPEB2156	1STQ002287B0000	2
4	Blind bottom for column with plinth	PTBB7556	1STQ007092A0000	1
5	Plinth angle pieces	PPAM0100A	1STQ002406M0000	1
6	Front/rear plinth flanges	PPFM1075	1STQ007054A0000	1
7	Side plinth flanges	PPFM1050	1STQ007052A0000	1
8	Blind door	PDNB2176	1STQ002269B0000	1
9	Lever handle	PHLS0013	1STQ002334B0000	1



2200x850x600mm (HxWxD) structure (partially assembled)

	Description	Type	ABB Order code	Quantity
1	Cabinet with blind door, back and top panel		1STQ001051M0000	1
2	External blind side panel	PPEB2156	1STQ002287B0000	2
3	Blind bottom for column with plint	PTBB7556	1STQ007092A0000	1
4	Plinth angle pieces	PPAM0100A	1STQ002406M0000	1
5	Front/rear plinth flanges	PPFM1075	1STQ007054A0000	1
6	Side plinth flanges	PPFM1050	1STQ007052A0000	1

Empty enclosures for CombiLine N and 185 mm Busbar System
Order codes



Uprights – Galvanized sheet metal

Upright formed by a closed profile made of galvanized sheet metal. The uprights include 8 already assembled 3-way joints, 8 already assembled axial screws and 16 loose axial screws. For applications with In ≤4000A.

External dimensions	Delivered in kit		Delivered assembled		Package/
H (mm)	Type	Order code	Type	Order code	No. pcs
No.4 galvanized sheet metal uprights					
1900	PUPM1800	1STQ007033A0000	-	-	1/4
2200	PUPM2001	1STQ003353B0000	-	-	1/4

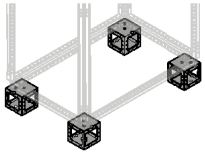


Structure crosspieces – Galvanized sheel metal

Depth and width crosspieces for structures in galvanized sheet metal.

External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
No.4 width crosspieces						
350		PCFM0250	1STQ007036A0000	-	-	1/4
600		PCFM0500	1STQ007039A0000	-	-	1/4
850		PCFM0750	1STQ007041A0000	-	-	1/4
1100		PCFM1000	1STQ007043A0000	-	-	1/4
1350		PCFM1250	1STQ007044A0000	-	-	1/4
No.4 depth crosspieces						
	300	PCFM0200	1STQ007045A0000	-	-	1/4
	400	PCFM0300	1STQ007037A0000	-	-	1/4
	600	PCFM0500	1STQ007039A0000	-	-	1/4
	800	PCFM0700	1STQ007046A0000	-	-	1/4

PPAM0100



Universal angle pieces for plinths in galvanized sheet metal

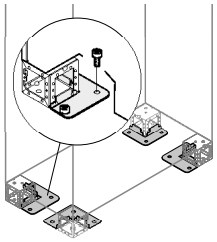
Not pre-assembled to the structure. New angle piece with high mechanical strength. Can be fixed from the outside and from the inside of the structure even at a later date. Equipped with anti-rotation system and bottom that can be transported with a transpallet.

Dimensions	Delivered in kit		Delivered assembled		Package/
H (mm)	Type	Order code	Type	Order code	No. pcs
No.4 plinth angle pieces					
100	PPAM0100	1STQ007048A0000	PPAM0100A	1STQ002406M0000	1/4

Max. plinth height 300mm combining n.3 pieces of 100mm standard plinths.

Empty enclosures for CombiLine N and 185 mm Busbar System

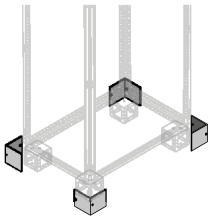
Order codes



Brackets for fixing to the floor

The kit allows the floor fixing of the structure by means of M12 screws.

	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
No.4 floor fixing brackets	ZN1041	1STQ006833A0000	-	-	1/4

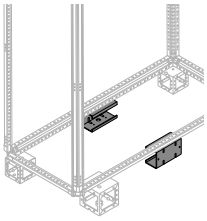


"L" covers for plinth angle-pieces

Used for covering the sides of the plinth when the flanges are not used.

Dimensions	Delivered in kit		Delivered assembled		Package/
H (mm)	Type	Order code	Type	Order code	No. pcs
No.4 angle-piece covers					
100	PCPA0004	1STQ008109A0000	PCPA0004A	1STQ003709M0000	1/4

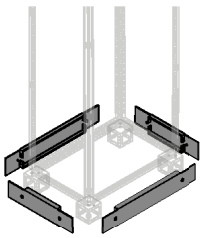
PPIM0100



Intermediate plinth

Intermediate plinth only for structures W=1250mm

Dimensions	Delivered in kit		Delivered assembled		Package/
H (mm)	Type	Order code	Type	Order code	No. pcs
No.2 intermediate plinths					
100	PPIM0100	1STQ007208A0000	PPIM0100A	1STQ002439M0000	1/4



Plinth flanges

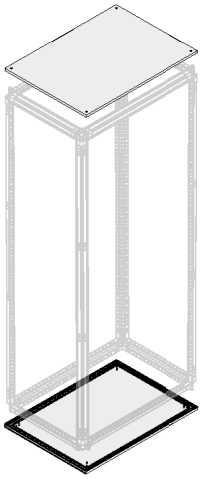
Side and front/rear plinth flanges H=100mm RAL 7012.

Dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
Front/rear plinth flanges						
350		PPFM1025	1STQ007049A0000	PPFM1025A	1STQ002430M0000	1/2
600		PPFM1050	1STQ007052A0000	PPFM1050A	1STQ002433M0000	1/2
850		PPFM1075	1STQ007054A0000	PPFM1075A	1STQ002435M0000	1/2
1100		PPFM1010	1STQ007056A0000	PPFM1010A	1STQ002429M0000	1/2
1350		PPFM1250	1STQ007057A0000	PPFM1250A	1STQ002438M0000	1/4
Side plinth flanges						
	300	PPFM1020	1STQ007058A0000	PPFM1020A	1STQ001106M0000	1/2
	400	PPFM1030	1STQ007050A0000	PPFM1030A	1STQ002431M0000	1/2
	600	PPFM1050	1STQ007052A0000	PPFM1050A	1STQ002433M0000	1/2
	800	PPFM1070	1STQ007059A0000	PPFM1070A	1STQ002434M0000	1/2

To cover plinth higher than 100mm, combine more pieces of 100mm standard flanges.

Empty enclosures for CombiLine N and 185 mm Busbar System

Order codes



Blind top/bottom for column with plinth - with gasket

Pickled sheet steel with IP65 gasket. The article comprises one single component that can be used as either a top or bottom. In order to purchase both the top and the bottom, please order two quantities of the same code or two different top/bottom codes according to the desired design of the structure.

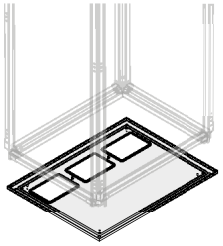
External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
Blind Top/Bottom						
350	300	PTBB2526	1STQ001270B0000	PTBB2526A	1STQ001114M0000	1/1
350	400	PTBB2536	1STQ007071A0000	PTBB2536A	1STQ001115M0000	1/1
350	600	PTBB2556	1STQ007072A0000	PTBB2556A	1STQ002780M0000	1/1
350	800	PTBB2576	1STQ007073A0000	PTBB2576A	1STQ002782M0000	1/1
600	300	PTBB5026	1STQ001284B0000	PTBB5026A	1STQ001118M0000	1/1
600	400	PTBB3056	1STQ007076A0000	PTBB3056A	1STQ001119M0000	1/1
600	600	PTBB5050	1STQ009179A0000	PTBB5050A	1STQ002794M0000	1/1
600	800	PTBB5076	1STQ007085A0000	PTBB5076A	1STQ002799M0000	1/1
850	300	PTBB7526	1STQ001303B0000	PTBB7526A	1STQ001122M0000	1/1
850	400	PTBB7536	1STQ007091A0000	PTBB7536A	1STQ001123M0000	1/1
850	600	PTBB7556	1STQ007092A0000	PTBB7556A	1STQ002810M0000	1/1
850	800	PTBB7576	1STQ007093A0000	PTBB7576A	1STQ002813M0000	1/1
1100	300	PTBB1026	1STQ009178A0000	PTBB1026A	1STQ001126M0000	1/1
1100	400	PTBB1036	1STQ007099A0000	PTBB1036A	1STQ001127M0000	1/1
1100	600	PTBB1056	1STQ007100A0000	PTBB1056A	1STQ002754M0000	1/1
1100	800	PTBB1076	1STQ007101A0000	PTBB1076A	1STQ002757M0000	1/1
1350	300	PTBB1220	1STQ009153A0000	PTBB1220A	1STQ001130M0000	1/1
1350	400	PTBB1236	1STQ002294B0000	PTBB1236A	1STQ001131M0000	1/1
1350	600	PTBB1256	1STQ002295B0000	PTBB1256A	1STQ002772M0000	1/1
1350	800	PTBB1276	1STQ002296B0000	PTBB1276A	1STQ002775M0000	1/1

Empty enclosures for CombiLine N and 185 mm Busbar System

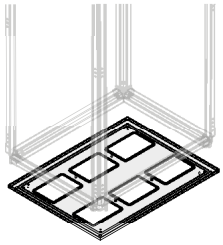
Order codes

Open top/bottom for column with plinth - with gasket

Pickled sheet steel with holes. The code comprises one single component that can be used as bottom. In order to reach IP55 protection degree, use the dedicated fixed cable incoming flanges TZ…. page 2/17 (TZ101 cannot be installed) on the internal side. The use of the single open bottom without flanges does not guarantee any degree of protection IP. The cut out is 197x121mm, the distance between the cut out is 250mm in width.



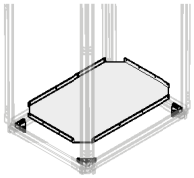
External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
One row						
350	300	PTBT2526	1STQ002309B0000	PTBT2526A	1STQ001134M0000	1/1
350	400	PTBT2536	1STQ002310B0000	PTBT2536A	1STQ001139M0000	1/1
350	600	PTBT2556	1STQ002311B0000	PTBT2556A	1STQ002841M0000	1/1
350	800	PTBT2576	1STQ002313B0000	PTBT2576A	1STQ002845M0000	1/1
600	300	PTBT5026	1STQ002316B0000	PTBT5026A	1STQ001135M0000	1/1
600	400	PTBT3056	1STQ002315B0000	PTBT3056A	1STQ001142M0000	1/1
600	600	PTBT5050	1STQ002317B0000	PTBT5050A	1STQ002849M0000	1/1
600	800	PTBT5076	1STQ002320B0000	PTBT5076A	1STQ002853M0000	1/1
850	300	PTBT7526	1STQ002322B0000	PTBT7526A	1STQ001136M0000	1/1
850	400	PTBT7536	1STQ002323B0000	PTBT7536A	1STQ001145M0000	1/1
850	600	PTBT7556	1STQ002324B0000	PTBT7556A	1STQ002857M0000	1/1
850	800	PTBT7576	1STQ002326B0000	PTBT7576A	1STQ002861M0000	1/1
1100	300	PTBT1026	1STQ002297B0000	PTBT1026A	1STQ001137M0000	1/1
1100	400	PTBT1036	1STQ002298B0000	PTBT1036A	1STQ001148M0000	1/1
1100	600	PTBT1056	1STQ002299B0000	PTBT1056A	1STQ002825M0000	1/1
1100	800	PTBT1076	1STQ002301B0000	PTBT1076A	1STQ002829M0000	1/1
1350	300	PTBT1226	1STQ002303B0000	PTBT1226A	1STQ001138M0000	1/1
1350	400	PTBT1236	1STQ002304B0000	PTBT1236A	1STQ001151M0000	1/1
1350	600	PTBT1256	1STQ002305B0000	PTBT1256A	1STQ002833M0000	1/1
1350	800	PTBT1276	1STQ002307B0000	PTBT1276A	1STQ002837M0000	1/1

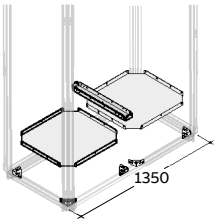


Two rows						
350	600	PTBT2557	1STQ002312B0000	PTBT2557A	1STQ002842M0000	1/1
350	800	PTBT2577	1STQ002314B0000	PTBT2577A	1STQ002846M0000	1/1
600	600	PTBT5057	1STQ002319B0000	PTBT5057A	1STQ002850M0000	1/1
600	800	PTBT5077	1STQ002321B0000	PTBT5077A	1STQ002854M0000	1/1
850	600	PTBT7557	1STQ002325B0000	PTBT7557A	1STQ002858M0000	1/1
850	800	PTBT7577	1STQ002327B0000	PTBT7577A	1STQ002862M0000	1/1
1100	600	PTBT1057	1STQ002300B0000	PTBT1057A	1STQ002826M0000	1/1
1100	800	PTBT1077	1STQ002302B0000	PTBT1077A	1STQ002830M0000	1/1
1350	600	PTBT1257	1STQ002306B0000	PTBT1257A	1STQ002834M0000	1/1
1350	800	PTBT1277	1STQ002308B0000	PTBT1277A	1STQ002838M0000	1/1

Empty enclosures for CombiLine N and 185 mm Busbar System

Order codes





Internal blind bottom for column without plinth - without gasket

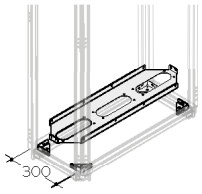
Internal galvanized steel bottom with special brackets kit included (special brackets kit available also as spare part with the code PBRB0004).

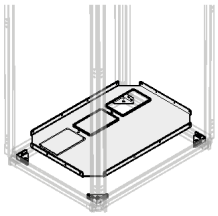
External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
Internal blind bottom						
350	300	PBWP2522	1STQ001810C0000	PBWP2522A	1STQ005364M0000	1/1
350	400	PBWP2532	1STQ001811C0000	PBWP2532A	1STQ005365M0000	1/1
350	600	PBWP2552	1STQ001812C0000	PBWP2552A	1STQ005366M0000	1/1
350	800	PBWP2572	1STQ001813C0000	PBWP2572A	1STQ005367M0000	1/1
600	300	PBWP5022	1STQ001814C0000	PBWP5022A	1STQ005368M0000	1/1
600	400	PBWP3052	1STQ001815C0000	PBWP3052A	1STQ005369M0000	1/1
600	600	PBWP5052	1STQ001816C0000	PBWP5052A	1STQ005370M0000	1/1
600	800	PBWP5072	1STQ001817C0000	PBWP5072A	1STQ005371M0000	1/1
850	300	PBWP7522	1STQ001818C0000	PBWP7522A	1STQ005372M0000	1/1
850	400	PBWP7532	1STQ001819C0000	PBWP7532A	1STQ005373M0000	1/1
850	600	PBWP7552	1STQ001820C0000	PBWP7552A	1STQ005374M0000	1/1
850	800	PBWP7572	1STQ001821C0000	PBWP7572A	1STQ005375M0000	1/1
1100	300	PBWP1020	1STQ002245B0000	PBWP1020A	1STQ001206M0000	1/1
1100	400	PBWP1032	1STQ001822C0000	PBWP1032A	1STQ005376M0000	1/1
1100	600	PBWP1052	1STQ001823C0000	PBWP1052A	1STQ005377M0000	1/1
1100	800	PBWP1072	1STQ001824C0000	PBWP1072A	1STQ005378M0000	1/1
1350 *	300	PBWP1220	1STQ002246B0000	PBWP1220A	1STQ001210M0000	1/1
1350 *	400	PBWP1232	1STQ001825C0000	PBWP1232A	1STQ005379M0000	1/1
1350 *	600	PBWP1252	1STQ001826C0000	PBWP1252A	1STQ005380M0000	1/1
1350 *	800	PBWP1272	1STQ001827C0000	PBWP1272A	1STQ005381M0000	1/1

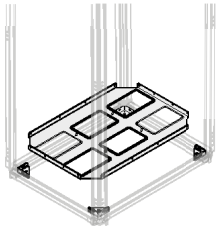
* Made in two pieces.

Empty enclosures for CombiLine N and 185 mm Busbar System

Order codes



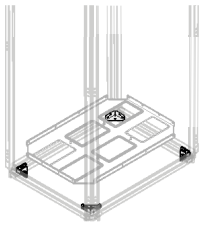




Internal open bottom for column D≥400mm with plinth - without gasket

Internal galvanized steel bottom with special brackets kit included (special brackets kit available also as spare part with the code PBRB0004). The cut out is 197x121mm, the distance between the cut out is 250mm in width. The dedicated fixed cable incoming flanges TZ…. page 2/17 can be mounted on the external side. It is mandatory to use the plinth.

External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
One row						
350	300	PBWF2526	1STQ002226B0000	PBWF2526A	1STQ001214M0000	1/1
350	400	PBWF2536	1STQ002227B0000	PBWF2536A	1STQ001219M0000	1/1
350	600	PBWF2556	1STQ002228B0000	PBWF2556A	1STQ001508M0000	1/1
350	800	PBWF2576	1STQ002230B0000	PBWF2576A	1STQ001510M0000	1/1
600	300	PBWF5026	1STQ002233B0000	PBWF5026A	1STQ001215M0000	1/1
600	400	PBWF3056	1STQ002232B0000	PBWF3056A	1STQ001222M0000	1/1
600	600	PBWF5050	1STQ002234B0000	PBWF5050A	1STQ001512M0000	1/1
600	800	PBWF5076	1STQ002237B0000	PBWF5076A	1STQ001514M0000	1/1
850	300	PBWF7526	1STQ002239B0000	PBWF7526A	1STQ001216M0000	1/1
850	400	PBWF7536	1STQ002240B0000	PBWF7536A	1STQ001225M0000	1/1
850	600	PBWF7556	1STQ002241B0000	PBWF7556A	1STQ001516M0000	1/1
850	800	PBWF7576	1STQ002243B0000	PBWF7576A	1STQ001518M0000	1/1
1100	300	PBWF1026	1STQ002214B0000	PBWF1026A	1STQ001217M0000	1/1
1100	400	PBWF1036	1STQ002215B0000	PBWF1036A	1STQ001228M0000	1/1
1100	600	PBWF1056	1STQ002216B0000	PBWF1056A	1STQ001500M0000	1/1
1100	800	PBWF1076	1STQ002218B0000	PBWF1076A	1STQ001502M0000	1/1
1350	300	PBWF1226	1STQ002220B0000	PBWF1226A	1STQ001218M0000	1/1
1350	400	PBWF1236	1STQ002221B0000	PBWF1236A	1STQ001231M0000	1/1
1350	600	PBWF1256	1STQ002222B0000	PBWF1256A	1STQ001504M0000	1/1
1350	800	PBWF1276	1STQ002224B0000	PBWF1276A	1STQ001506M0000	1/1
Two rows						
350	600	PBWF2557	1STQ002229B0000	PBWF2557A	1STQ001509M0000	1/1
350	800	PBWF2577	1STQ002231B0000	PBWF2577A	1STQ001511M0000	1/1
600	600	PBWF5057	1STQ002236B0000	PBWF5057A	1STQ001513M0000	1/1
600	800	PBWF5077	1STQ002238B0000	PBWF5077A	1STQ001515M0000	1/1
850	600	PBWF7557	1STQ002242B0000	PBWF7557A	1STQ001517M0000	1/1
850	800	PBWF7577	1STQ002244B0000	PBWF7577A	1STQ001519M0000	1/1
1100	600	PBWF1057	1STQ002217B0000	PBWF1057A	1STQ001501M0000	1/1
1100	800	PBWF1077	1STQ002219B0000	PBWF1077A	1STQ001503M0000	1/1
1350	600	PBWF1257	1STQ002223B0000	PBWF1257A	1STQ001505M0000	1/1
1350	800	PBWF1277	1STQ002225B0000	PBWF1277A	1STQ001507M0000	1/1

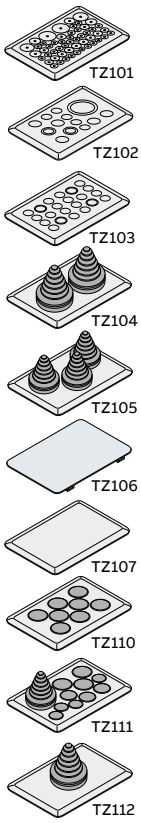


Special brackets kit

	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
No.4 brackets for base without plinth	PBRB0004	1STQ008127A0000	PBRB0004A	1STQ003401M0000	1/4

Empty enclosures for CombiLine N and 185 mm Busbar System

Order codes

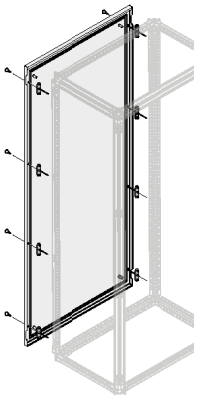


IP55 flanges for open bottom/top

The flanges can be fitted into top/bottom panel with cut out 197x121mm. The cable glands allow to install several cables and ensure the protection of the components within the enclosures. The plastic ones can be easily perforated.

	Delivered in kit		Delivered assembled		Package/
Description	**Type**	**Order code**	**Type**	**Order code**	**No. pcs**
Plastic flange					
For 52 entries	TZ101	2CPX010450R9999	-	-	1/1
For 52 entries 10pcs	TZ101P10	2CPX010451R9999	-	-	1/10
1M63/50 2M32/20	TZ102	2CPX010452R9999	-	-	1/1
1M63/50 2M32/20 10psc	TZ102P10	2CPX010453R9999	-	-	1/10
4xM20/M25 18xM20	TZ103	2CPX010454R9999	-	-	1/1
4xM20/M25 18xM20 10pcs	TZ103P10	2CPX010455R9999	-	-	1/10
With 2 cable sleeves	TZ104*	2CPX010456R9999	-	-	1/1
With 2 cable sleeves 10pcs	TZ104P10*	2CPX010932R9999	-	-	1/10
With 3 cable sleeves	TZ105	2CPX010457R9999	-	-	1/1
With 3 cable sleeves 10pcs	TZ105P10	2CPX010933R9999	-	-	1/10
Closing flange	TZ107	2CPX010460R9999	-	-	1/1
Closing flange 10pcs	TZ107P10	2CPX010461R9999	-	-	1/10
8x13-34mm	TZ110	2CPX010850R9999	-	-	1/1
8x13-34mm 10pcs	TZ110P10	2CPX010934R9999	-	-	1/10
For 11 entries	TZ111	2CPX010851R9999	-	-	1/1
For 11 entries 10pcs	TZ111P10	2CPX010935R9999	-	-	1/10
For 1 cable sl. 14-68mm	TZ112*	2CPX010852R9999	-	-	1/1
Sheet steel flange					
Metal flange plate	TZ106	2CPX010458R9999	-	-	1/1
Metal gland plate 10pcs	TZ106P10	2CPX010459R9999	-	-	1/10

* These flanges have an height greater than the plinth 100mm.



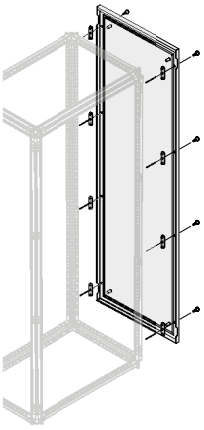
External blind front/rear panel - with gasket

Pickled sheet steel with gasket and plugs.

External dimensions (mm)			Delivered in kit		Delivered assembled		Package/
H	**W**		**Type**	**Order code**	**Type**	**Order code**	**No. pcs**
Blind front/rear panel							
1900	350		PPEB1825	1STQ007576A0000	-	-	1/1
	600		PPEB1856	1STQ007579A0000	-	-	1/1
	850		PPEB1875	1STQ007582A0000	-	-	1/1
	1100		PPEB1816	1STQ007585A0000	-	-	1/1
	1250	Left (675mm)	PPLB1826	1STQ002290B0000	-	-	1/1
		Right (675mm)	PPRB1826	1STQ002292B0000	-	-	1/1
2200	350		PPEB2125	1STQ007599A0000	-	-	1/1
	600		PPEB2156	1STQ002287B0000	-	-	1/1
	850		PPEB2175	1STQ007603A0000	-	-	1/1
	1100		PPEB2116	1STQ002284B0000	-	-	1/1
	1250	Left (675mm)	PPLB2126	1STQ002291B0000	-	-	1/1
		Right (675mm)	PPRB2126	1STQ002293B0000	-	-	1/1

Empty enclosures for CombiLine N and 185 mm Busbar System

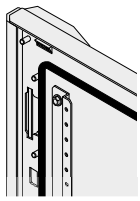
Order codes

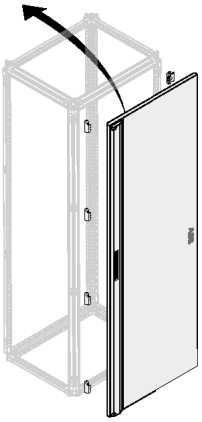


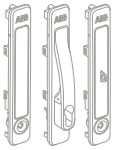
External blind side panel - with gasket

Pickled sheet steel with gasket and plugs. The code refers to one single side panel, only for delivery form assembled.

External dimensions		Delivered in kit		Package/	Delivered assembled		Package/
H (mm)	D (mm)	Type	Order code	No. pcs	Type	Order code	No. pcs
Blind side panel							
1900	300	PPEB1828	1STQ001622C0000	1/2	PPEB1826A	1STQ001246M0000	1/1
	400	PPEB1837	1STQ001623C0000	1/2	PPEB1836A	1STQ001247M0000	1/1
	600	PPEB1857	1STQ001624C0000	1/2	PPEB1856A	1STQ001244M0000	1/1
	800	PPEB1878	1STQ001625C0000	1/2	PPEB1876A	1STQ001248M0000	1/1
2200	300	PPEB2127	1STQ001626C0000	1/2	PPEB2126A	1STQ001249M0000	1/1
	400	PPEB2137	1STQ001627C0000	1/2	PPEB2136A	1STQ001250M0000	1/1
	600	PPEB2157	1STQ001628C0000	1/2	PPEB2156A	1STQ001245M0000	1/1
	800	PPEB2177	1STQ001629C0000	1/2	PPEB2176A	1STQ001251M0000	1/1







PHLS0013
PHLS0012
PHLS0011

Blind door - with gasket (without lever)

Pickled sheet steel with gasket. Opens through 135° (single column), 105° for 2+ side by side columns. Complete with 4 hinges to be screwed onto the uprights, 4 door closing brackets. Doors can be mounted both on the front and on the back of the enclosures. Can be hanged on both, left and right side. Reinforcing tubes for W>400mm.

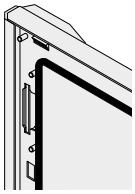
External dimensions (mm)			Delivered in kit		Delivered assembled		Package/
H	W		Type	Order code	Type	Order code	No. pcs
Blind door							
1900	350		PDNB1826	1STQ002263B0000	PDNB1826A	1STQ001252M0000	1/1
	600		PDNB1856	1STQ002264B0000	PDNB1856A	1STQ001253M0000	1/1
	850		PDNB1876	1STQ002265B0000	PDNB1876A	1STQ001254M0000	1/1
	1100*	550 (mm)	PDLB8127	1STQ008528B0000	PDLB8127A	1STQ004811M0000	1/1
		550 (mm)	PDNB8507	1STQ008536B0000	PDNB8507A	1STQ004819M0000	1/1
	1350*	550 (mm)	PDLB8127	1STQ008528B0000	PDLB8127A	1STQ004811M0000	1/1
		800 (mm)	PDNB8407	1STQ008537B0000	PDNB8407A	1STQ004820M0000	1/1
2200	350		PDNB2126	1STQ002267B0000	PDNB2126A	1STQ001259M0000	1/1
	600		PDNB2156	1STQ002268B0000	PDNB2156A	1STQ001260M0000	1/1
	850		PDNB2176	1STQ002269B0000	PDNB2176A	1STQ001261M0000	1/1
	1100*	550 (mm)	PDLB1127	1STQ008526B0000	PDLB1127A	1STQ004809M0000	1/1
		550 (mm)	PDNB1507	1STQ008538B0000	PDNB1507A	1STQ004821M0000	1/1
	1350*	550 (mm)	PDLB1127	1STQ008526B0000	PDLB1127A	1STQ004809M0000	1/1
		800 (mm)	PDNB1407	1STQ008539B0000	PDNB1407A	1STQ004822M0000	1/1

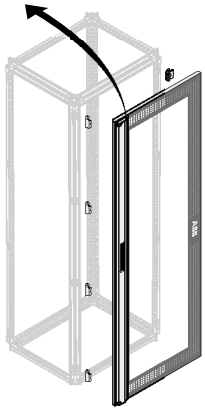
Handles to be ordered separately , see page 3-25.

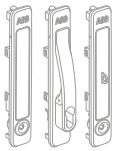
* for 1000/1250mm width configurations ordered PDLB.... + PDNB....

Empty enclosures for CombiLine N and 185 mm Busbar System

Order codes







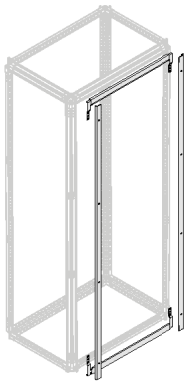
PHLS0013
PHLS0012
PHLS0011

Glazed door - without gasket (without lever)

Pickled sheet steel with gasket. Opens through 135° (single column), 105° for 2+ side by side columns. Complete with 4 hinges to be screwed onto the uprights, 4 door closing brackets. Doors can be mounted both on the front and on the back of the enclosures. Can be hinged on both, left and right side. Without reinforcing tubes.

External dimensions (mm)			Delivered in kit		Delivered assembled		Package/
H	W		Type	Order code	Type	Order code	No. pcs
Glazed door							
1900	600		PDNG1856	1STQ002275B0000	PDNG1856A	1STQ001266M0000	1/1
	850		PDNG1876	1STQ002276B0000	PDNG1876A	1STQ001267M0000	1/1
	1100	550 (mm)	PDLG8127	1STQ008531B0000	PDLG8127A	1STQ004814M0000	1/1
		550 (mm)	PDNG8507	1STQ008532B0000	PDNG8507A	1STQ004815M0000	1/1
	1350	550 (mm)	PDLG8127	1STQ008531B0000	PDLG8127A	1STQ004814M0000	1/1
		800 (mm)	PDNG8407	1STQ008533B0000	PDNG8407A	1STQ004816M0000	1/1
2200	600		PDNG2156	1STQ002278B0000	PDNG2156A	1STQ001272M0000	1/1
	850		PDNG2176	1STQ002279B0000	PDNG2176A	1STQ001273M0000	1/1
	1100	550 (mm)	PDLG1127	1STQ008529B0000	PDLG1127A	1STQ004812M0000	1/1
		550 (mm)	PDNG1507	1STQ008534B0000	PDNG1507A	1STQ004817M0000	1/1
	1350	550 (mm)	PDLG1127	1STQ008529B0000	PDLG1127A	1STQ004812M0000	1/1
		800 (mm)	PDNG1407	1STQ008535B0000	PDNG1407A	1STQ004818M0000	1/1

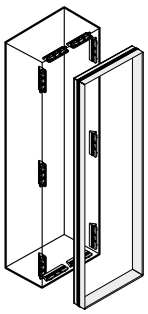
Handles to be ordered separately , see page 3-25.
* for 1100/1250mm width configurations ordered PDLG.... + PDNG....



Horizontal/vertical front closing profiles IP30

Pickled sheet painted RAL 7012 for applications without external door.

External dimensions		Delivered in kit		Delivered assembled		Package/
H (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
No.2 finishing profiles vertical structure						
1900		PPFV1800	1STQ008059A0000	PPFV1800A	1STQ001278M0000	1/2
2200		PPFV2100	1STQ002289B0000	PPFV2100A	1STQ001279M0000	1/2
No.2 finishing profiles horizontal structure						
	350	PPFH0250	1STQ009378A0000	PPFH0250A	1STQ001280M0000	1/2
	600	PPFH0500	1STQ009416A0000	PPFH0500A	1STQ001281M0000	1/2
	850	PPFH0750	1STQ009398A0000	PPFH0750A	1STQ001282M0000	1/2
	1100	PPFH1000	1STQ008057A0000	PPFH1000A	1STQ001283M0000	1/2
	1350	PPFH1250	1STQ008058A0000	PPFH1250A	1STQ001284M0000	1/2



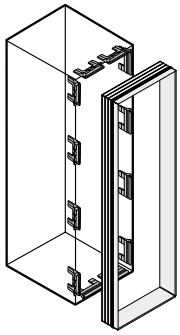
Touchguard profile - dedicated solution for CombiLine N

Profile to guarantee IP30 touch protection with Combiline N modules installed in structures with D=300 or D=400mm.

External dimensions		Delivered in kit		Delivered assembled		Package/
H (mm)	W (mm)	Type	Order code	Type	Order code	No. pcs
1900	350	PNTG1825	1STQ007322B0000	PNTG1825A	1STQ003666M0000	1/1
1900	600	PNTG1850	1STQ007323B0000	PNTG1850A	1STQ003667M0000	1/1
1900	850	PNTG1875	1STQ007324B0000	PNTG1875A	1STQ003668M0000	1/1
1900	1100	PNTG1810	1STQ007325B0000	PNTG1810A	1STQ003669M0000	1/1
1900	1350	PNTG1812	1STQ007326B0000	PNTG1812A	1STQ003670M0000	1/1
2200	350	PNTG2125	1STQ007332B0000	PNTG2125A	1STQ003671M0000	1/1
2200	600	PNTG2150	1STQ007333B0000	PNTG2150A	1STQ003672M0000	1/1
2200	850	PNTG2175	1STQ007334B0000	PNTG2175A	1STQ003673M0000	1/1
2200	1100	PNTG2110	1STQ007335B0000	PNTG2110A	1STQ003674M0000	1/1
2200	1350	PNTG2112	1STQ007336B0000	PNTG2112A	1STQ003675M0000	1/1

Empty enclosures for CombiLine N and 185 mm Busbar System

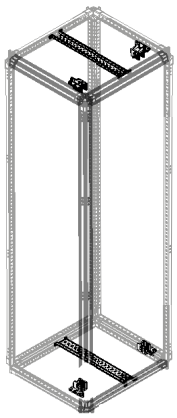
Order codes



Touchguard profile - dedicated solution for CombiLine N

Profile to guarantee IP30 touch protection with CombiLine N modules installed in structure with D=600mm or D=800mm.

External dimensions		Delivered in kit		Delivered assembled		Package/
H (mm)	W (mm)	Type	Order code	Type	Order code	No. pcs
1900	350	PNTG6825	1STQ007337B0000	PNTG6825A	1STQ003676M0000	1/1
1900	600	PNTG6850	1STQ007338B0000	PNTG6850A	1STQ003677M0000	1/1
1900	850	PNTG6875	1STQ007339B0000	PNTG6875A	1STQ003678M0000	1/1
1900	1100	PNTG6810	1STQ007340B0000	PNTG6810A	1STQ003679M0000	1/1
1900	1350	PNTG6812	1STQ007341B0000	PNTG6812A	1STQ003680M0000	1/1
2200	350	PNTG6125	1STQ007347B0000	PNTG6125A	1STQ003686M0000	1/1
2200	600	PNTG6150	1STQ007348B0000	PNTG6150A	1STQ003687M0000	1/1
2200	850	PNTG6175	1STQ007349B0000	PNTG6175A	1STQ003688M0000	1/1
2200	1100	PNTG6110	1STQ007350B0000	PNTG6110A	1STQ003689M0000	1/1
2200	1350	PNTG6112	1STQ007351B0000	PNTG6112A	1STQ003690M0000	1/1



Fixing set - dedicated solution for CombiLine N

Fixed set for the installation of standard WR frame on System pro E power structure.

	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
CombiLine N fixing set [1]	PBCM0004	1STQ009354A0000	PBCM0004A	1STQ001318M0000	1/4
Depth support [1]					
No.2 Crosspieces D=300mm	PDFC0200	1STQ001929B0000	PDFC0200A	1STQ001296M0000	1/2
No.2 Crosspieces D=400mm	PDFC0300	1STQ001930B0000	PDFC0300A	1STQ001297M0000	1/2
No.2 Crosspieces D=600mm	PDFC0500	1STQ001931B0000	PDFC0500A	1STQ001800M0000	1/2
No.2 Crosspieces D=800mm	PDFC0700	1STQ001932B0000	PDFC0700A	1STQ001801M0000	1/2
No.4 WR mounting frame holder	RZ1P4	2CPX045950R9999	RZ1P4A	2CPX023978R9999	1/4

[1] It allows the fixing of WR frame at the outer position of the column. It must be ordered 2 quantites for each section to install front and back WR frame

[2] It allows the fixing of WR frame at the intermediate positions in width, PDFC.... to be ordered together with RZ1P4.

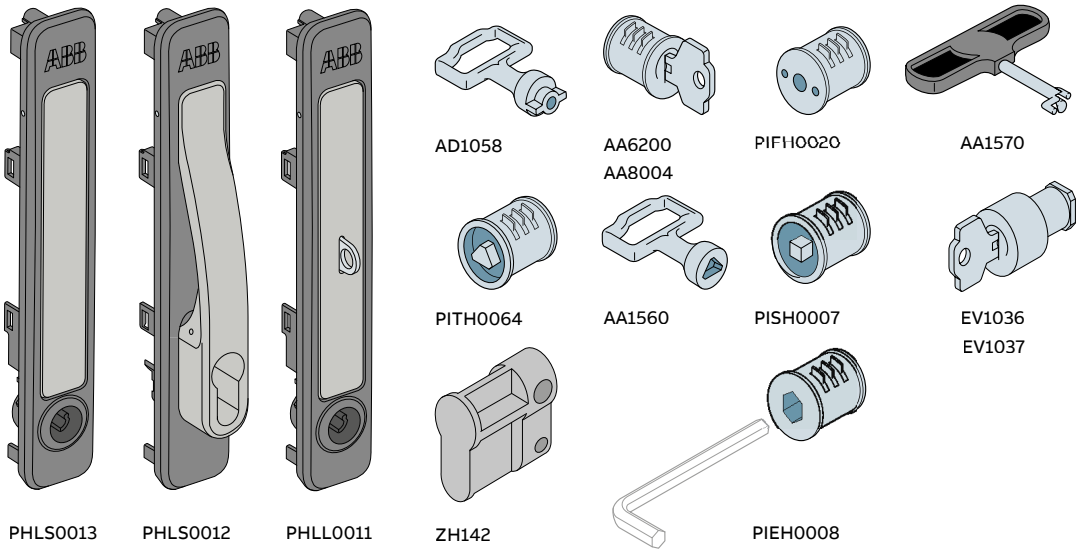
Full height mouting plate

	External dimensions		Delivered in kit		Delivered assembled		Package/
Description	H (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
Mounting Plate							
W1/H8	1900	300	RM18	2CPX045909R9999			1/1
W2/H8		400	RM28	2CPX045910R9999			1/1
W3/H8		600	RM38	2CPX045911R9999			1/1
W4/H8		800	RM48	2CPX045912R9999			1/1
W1/H10	2200	300	RM110	2CPX045913R9999			1/1
W2/H10		400	RM210	2CPX045914R9999			1/1
W3/H10		600	RM310	2CPX045915R9999			1/1
W4/H10		800	RM410	2CPX045916R9999			1/1

For width 1250 mm it must be ordered one quantity W 500 mm + one quantity for W 750 mm

Empty enclosures for CombiLine N and 185 mm Busbar System

Order codes



Levers and inserts

The lever is not included in the door's code, it must be always ordered in addition to the door. The inserts are interchangeable and can be easily replaced.

Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
Handle					
Lever handle [1]	PHLS0013	1STQ002334B0000	PHLS0013A	1STQ001915M0000	1/1
Lever semicylinder inserts (40mm)	PHLS0012	1STQ002283B0000	PHLS0012A	1STQ001914M0000	1/1
Padlockable lever handle [2]	PHLS0011	1STQ002282B0000	PHLS0011A	1STQ001913M0000	1/1
Inserts and keys that can be fitted into PHLS0013, PHLS0011					
Yale insert+key for external door, single door version	AA6200	1STQ009135A0000	-	-	1/1
E739 ronis insert+key for external door, single door version	AA8004	1STQ009136A0000	-	-	1/1
FIAT type insert for lever handle	PIFH0020	1STQ008122A0000	-	-	1/1
FIAT key	AA1570	1STQ009137A0000	-	-	1/1
6.4 triangular male insert on Ø 7.6 for external door, single door version	PITH0064	1STQ008119A0000	-	-	1/1
Key for triangular insert	AA1560	1STQ009138A0000	-	-	1/1
7 square male insert for external door, single door version	PISH0007	1STQ008120A0000	-	-	1/1
Insert 8mm hex socket type for standard handle (Key not available)	PIEH0008	1STQ008121A0000	-	-	1/1
Double tab insert for closing handle/box (spare) [3]	PIDH0010	1STQ008118A0000	-	-	1/1
Key zama for double tab insert (spare) [4]	AD1058	1STQ009134A0000	-	-	1/1
Ronis 405 insert and key for standard handle	PIRH0405	1STQ008123A0000	-	-	1/1
Ronis insert 2432 and key for standard handle	PIRH2432	1STQ002030B0000	-	-	1/1
Ronis 455 insert and key for standard handle	PIRH0455	1STQ008124A0000	-	-	1/1
Ronis 1242 insert and key for standard handle	PIRH1242	1STQ008125A0000	-	-	1/1
Insert that can be fitted into PHLS0012					
Dummy insert (instead of a semi-cylinder)	ZH142	2CPX060502R9999	-	-	1/1

[1] The lever can be operated only using the key. With 3 mm double bit insert included.

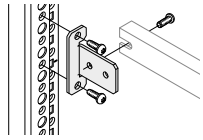
[2] For padlok up to 8 mm diameter. With 3 mm double bit insert included.

[3] This insert is the one already included in PHLS0013 and PHLS0011.

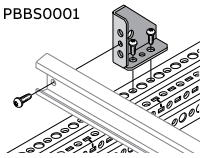
[4] This key is the one already included in PHLS0013 and PHLS0011.

Empty enclosures for CombiLine N and 185 mm Busbar System

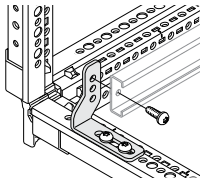
Order codes



PBBS0001



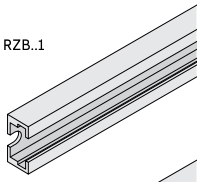
PBBS0020



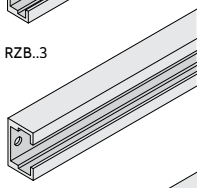
1STQ005272B0000

Brackets to fix profile rails

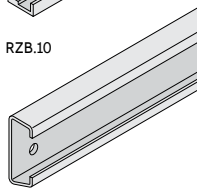
Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
No.2 brackets					
for profiles type RZ... and XZ3..	PBBS0001	1STQ002146B0000	-	-	1/2
for profiles only for type XZ3..	PBBS0020	1STQ002333B0000	-	-	1/2
for profiles type RZBA....	PPZX0003	1STQ005272B0000	-	-	1/2



RZB..1



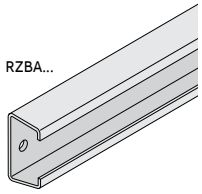
RZB..3



RZB.10

Profile rails that can be mounted with PBBS0001

Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
Width profile rail no. 1 - 25 x 14mm for mounting between cabinet profiles					
Cabinet 1 panel wide - 250 mm	RZB11	2CPX046021R9999	-	-	1/1
Cabinet 2 panel wide - 500 mm	RZB21	2CPX046022R9999	-	-	1/1
Cabinet 3 panel wide - 750 mm	RZB31	2CPX046023R9999	-	-	1/1
Cabinet 4 panel wide - 1000 mm	RZB41	2CPX046024R9999	-	-	1/1
Cabinet 5 panel wide - 1250 mm	RZB51	2CPX046025R9999	-	-	1/1
Depth profile rail no. 3 - 32 x 25 mm for mounting between cabinet profiles					
Cabinet depth 200 mm	RZT33	2CPX046026R9999	-	-	1/1
Cabinet depth 300 mm	RZT43	2CPX046027R9999	-	-	1/1
Cabinet depth 500 mm	RZT63	2CPX046028R9999	-	-	1/1
Cabinet depth 700 mm	RZT83	2CPX046029R9999	-	-	1/1
Width profile rail no. 3 - 32 x 25 mm for mounting between cabinet profiles					
Cabinet 1 panel wide - 250 mm	RZB13	2CPX046030R9999	-	-	1/1
Cabinet 2 panel wide - 500 mm	RZB23	2CPX046031R9999	-	-	1/1
Cabinet 3 panel wide - 750 mm	RZB33	2CPX046032R9999	-	-	1/1
Cabinet 4 panel wide - 1000 mm	RZB43	2CPX046033R9999	-	-	1/1
Cabinet 5 panel wide - 1250 mm	RZB53	2CPX046034R9999	-	-	1/1
Depth profile rail no. 10 - 35 x 19 mm for mounting between cabinet profiles					
Cabinet depth 200 mm	RZT310	2CPX046035R9999	-	-	1/1
Cabinet depth 300 mm	**RZT410**	**2CPX046036R9999**	**-**	**-**	**1/1**
Cabinet depth 500 mm	**RZT610**	**2CPX046037R9999**	**-**	**-**	**1/1**
Cabinet depth 700 mm	RZT810	2CPX046038R9999	-	-	1/1
Width profile rail no. 10 - 35 x 19 mm for mounting between cabinet profiles					
Cabinet 1 panel wide - 250 mm	RZB110	2CPX046039R9999	-	-	1/1
Cabinet 2 panel wide - 500 mm	RZB210	2CPX046040R9999	-	-	1/1
Cabinet 3 panel wide - 750 mm	RZB310	2CPX046041R9999	-	-	1/1
Cabinet 4 panel wide - 1000 mm	RZB410	2CPX046042R9999	-	-	1/1
Cabinet 5 panel wide - 1250 mm	RZB510	2CPX046043R9999	-	-	1/1



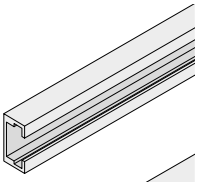
RZBA...

Profile rails that can be mounted with PPZX0003

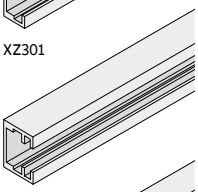
Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
Width profile rail no. 10 - 35 x 19 mm for mounting on					
Cabinet 1 panel wide - 250 mm	RZBA110	2CPX046049R9999	-	-	1/1
Cabinet 2 panel wide - 500 mm	RZBA210	2CPX046050R9999	-	-	1/1
Cabinet 3 panel wide - 750 mm	RZBA310	2CPX046051R9999	-	-	1/1
Cabinet 4 panel wide - 1000 mm	RZBA410	2CPX046052R9999	-	-	1/1
Cabinet 5 panel wide - 1250 mm	RZBA510	2CPX046053R9999	-	-	1/1

Empty enclosures for CombiLine N and 185 mm Busbar System

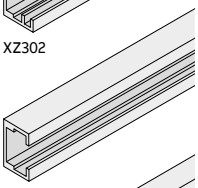
Order codes



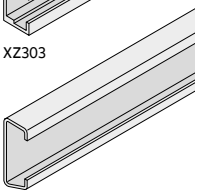
XZ301



XZ302



XZ303

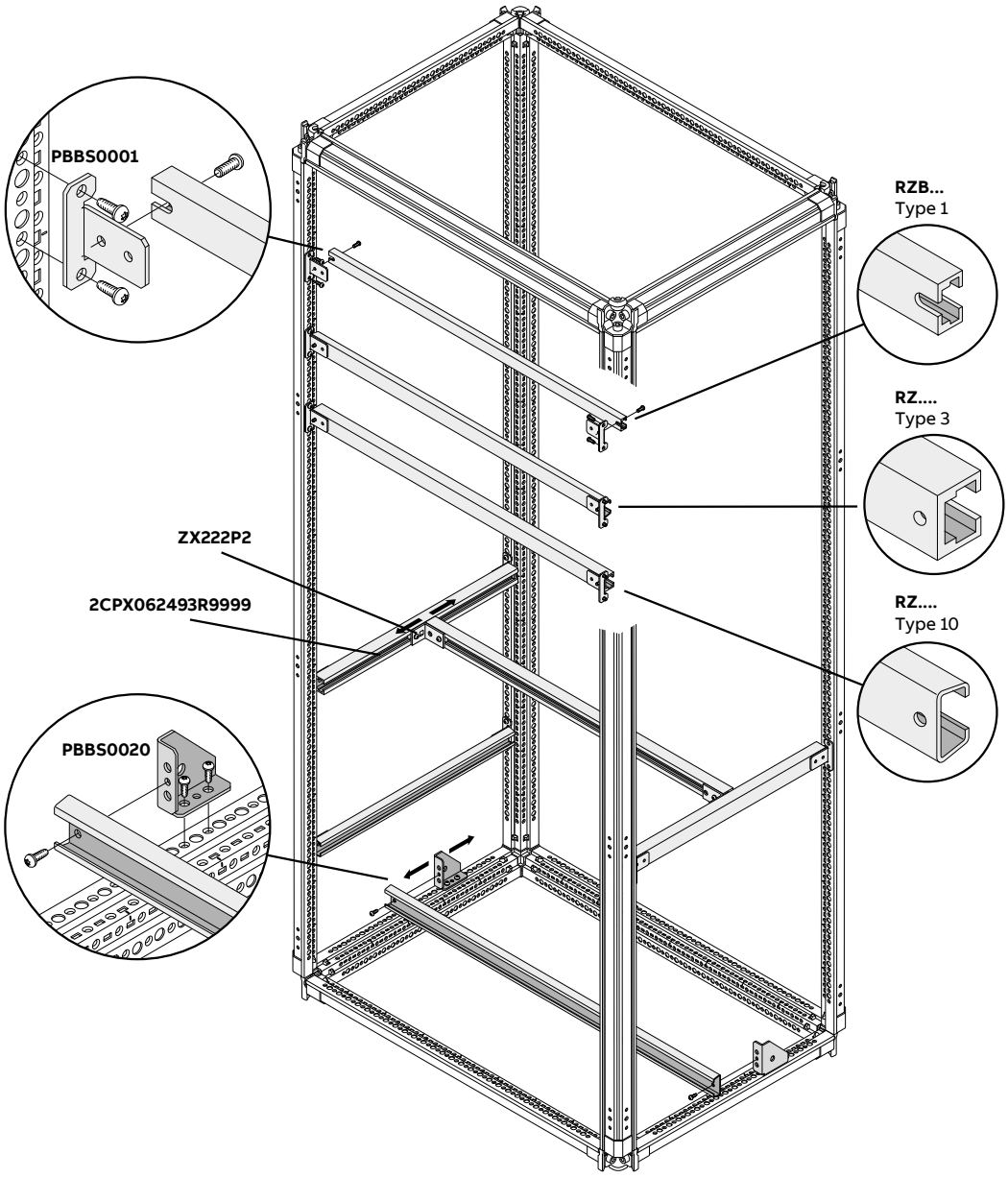


XZ310

Profile rails (to be cut) that can be mounted with PBBS0001, PBBS0020 and 1STQ005272B0000

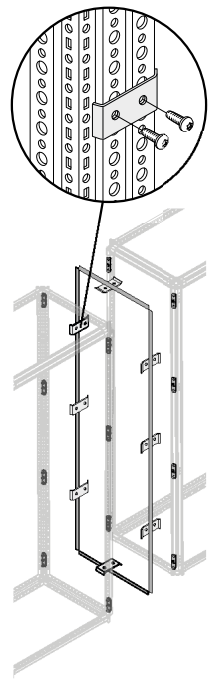
Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
By the metre, 6 m supply length					
Profile rail no.1 - 25 x 14 mm	XZ301P8	1STQ002823C0000	-	-	8/1
Profile rail no. 2 - 25 x 20 mm	XZ302P6	1STQ002824C0000	-	-	6/1
Profile rail no. 3 - 32 x 25 mm	XZ303P4	1STQ002825C0000	-	-	4/1
Profile rail no.10 - 35 x 19 mm	XZ310P3	1STQ002826C0000	-	-	3/1

Example use brackets and crosspieces



Empty enclosures for CombiLine N and 185 mm Busbar System

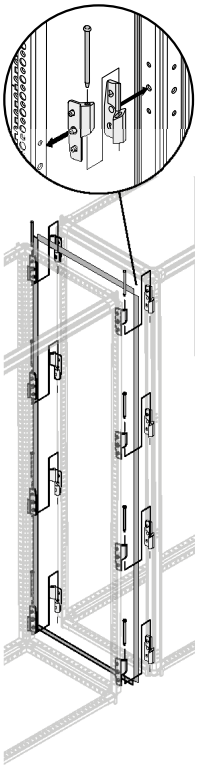
Order codes



Kit for joining structures

The kit for joining structures is composed by different brackets and a gasket for the maintenance of the IP protection degree and allows both a side-by-side and a back-to-back joining of structures.

	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
Kit for joining structures side by side / back to back	PSBS0065	1STQ008113A0000	-	-	1/8
Kit for joining corner structures	PSCS0579	1STQ009185A0000	-	-	1/12



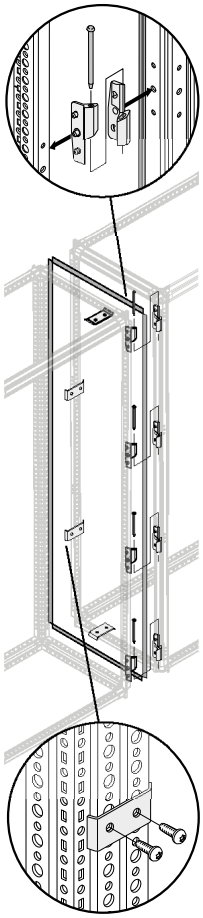
External kit for joining structures

The kit for joining structures is composed of different brackets and a gasket for the maintenance of the IP protection degree and allows both a side-by-side and a back-to-back joining of structures.

	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
External kit for joining structures	PSES0008	1STQ001589B0000	PEBL0004A	1STQ003710M0000	1/16

Empty enclosures for CombiLine N and 185 mm Busbar System

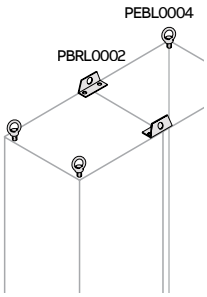
Order codes



Mixed kit for joining structures

The kit for joining structures is composed of different brackets and a gasket for the maintenance of the IP protection degree and allows both a side-by-side and a back-to-back joining of structures with front access.

	Delivered in kit		Delivered assembled		Package/
Description	**Type**	**Order code**	**Type**	**Order code**	**No. pcs**
Mixed kit for joining structures	PSES0009	1STQ005273B0000	-	-	1/16



Eyebolts for lifting

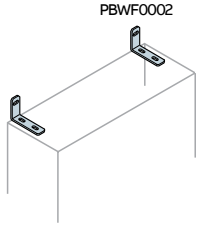
Allow wired switchboards to be lifted. Made of steel treated with a white passivated galvanizing process.

	Delivered in kit		Delivered assembled		Package/
Description	**Type**	**Order code**	**Type**	**Order code**	**No. pcs**
No.4 steel M12 eyebolts	PEBL0004	1STQ008112A0000	PEBL0004A	1STQ003710M0000	1/4

Lifting reinforcements

Used for handling several adjacent switchboards.

	Delivered in kit		Delivered assembled		Package/
Description	**Type**	**Order code**	**Type**	**Order code**	**No. pcs**
No.2 lifting reinforcements for adjacent switchboards	PBRL0002	1STQ008116A0000	-	-	1/2



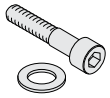
Wall-mounting brackets

Allow the switchboards to be fixed to a wall

	Delivered in kit		Delivered assembled		Package/
Description	**Type**	**Order code**	**Type**	**Order code**	**No. pcs**
No.2 wall-mounting brackets	PBWF0002	1STQ008115A0000	-	-	1/2

Empty enclosures for CombiLine N and 185 mm Busbar System

Order codes



Screws

Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
No.1000 self-perforating 4.2x13mm cross-head screws	EV1100	1STQ001005A0000	-	-	1/1000
No.1000 self-perforating 4.2x19mm cross-head screws	EV1101	1STQ001006A0000	-	-	1/1000
No.24 screws Torx 30 for side/rear panels	PSCP0024	1STQ009182A0000	-	-	1/24
No.24 screws Torx 30 1/4 turn with washers	PCSS0024	1STQ009183A0000	-	-	1/24
No.20 M5 Torx screws and nylon washers L=16mm	EV0103	1STQ006608A0000	-	-	1/20
No.20 M6 Torx screws and nylon washers L=16mm	EV0104	1STQ006609A0000	-	-	1/20

Axial screws for uprights

Axial screws for 3 way joint uprights.

Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
No.16 axial screws for uprights	PSAF0016	1STQ008110A0000	-	-	1/16

Hinges for standard doors

Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
No.4 hinges for standard door	PHDR0004	1STQ009159A0000	-	-	1/4
No.4 180° opening hinges	PHFR4180	1STQ009158A0000	PHFR4180A	1STQ003711M0000	1/4

Chapter 3
185 mm Busbar System

3–2 **General information**

3–8 **Selection guide**

3–10 **Order codes**

185 mm Busbar System
General information

The ABB range of metal enclosures for main distribution is now enhanced with the new System pro E power 185mm busbar system. The columns have a functional height of 1800, 2100 mm and a functional depth of 300 and 500 mm.
Four widths can be selected (functional 500, 750, 1000 and 1250mm) depending on the device type and quantity.

Security
- Tested to IEC 61439-1/-2
- Installation of the surge arrester in compliance with IEC 61439-1/-2
- IP30 touch guard covers

Modularity
- Installation to different cabinet size
- Assembly to WR mounting frame
- Rated current up to 2000A, short-time withstand current up to 75 kA

Efficiency
- MBB and DBB in one system
- High packing density
- Compact design
- Save at least 50% of copper

Compatibility
- Combination possible with standard Combi-Line N modules
- Easy connection between equipment and the 185 mm busbar system
- Installation of MCCBs Tmax XT and ACBs Emax 2
- Installation of fuse switch disconnectors InLine II and switch disconnectors fuse Slimline XRG

Circuit breaker zone
System to connect breakers and MBB
- Connection points are prepared before and behind the breaker
- Possible installation of the CT's before or behind the breaker

Also available: multi-breaker panels
- Also available: outgoing modules for multiple breakers

Surge arrester device
Prefuse
- It is possible to assemble the prefuse for the surge arrester device directly and without further wiring to the busbar system

Varistor replacement at the surge arrester device
- Replacement is possible without the need to remove the cover Function display of the surge arrester
- Visible through the cover

Assembling the surge arrester
- Vertical assembly for optimum cable routing

Customer wiring space
Wiring options
- Optimal space for cable connections
- Generous wiring space
- Rails with high short circuit withstand strength

Central earthing point (CEP)
- Standard-compliant central earthing point
- Possib ility to integrate current transoformers

Outgoing sections
Blind covers
- Blind covers for reserve spaces - 50 mm and 100 mm wide

High packing density
- Increased packing density for outgoing sections
- Cut-out in the covers

Partitions / touch guard
Vertical cabinet to cabinet separation walls
- To separate the sections

Horizontal touch guard
- Touch guard to the main busbar system

Busbar guide
Cabinet to cabinet connection
- Good accessibility for the connecting bolts
- Easy cabinet to cabinet connectors
- Corner section to optimize the layout

Compact design of the coupler section
- Busbar set up on the same level

N/PE busbar guide
Horizontal busbar guide
- N/PE connections in staggered arrangement
- Optimal connecting possibilities
- Connection space above and beneath equipment available

Vertical busbar guide
- Connection busbars from the top to the bottom

Space saving
Footprint optimization thanks to width section designed to optimize breaker dimensions

Speed up your projects
Easy to be configurated with full compatibility with ABB devices.

Safety and protection
Design verified solution up to 2000A and 75 kA



185 mm Busbar System
General information



— 01 Tmax XT and Emax 2 circuit breakers

— 02 SlimLine XRG fuse switch-disconnector

— 03 Fuse switch-disconnectors

— 04 Horizontal N/PE busbar system

— 05 Horizontal partitions

— 06 Vertical partitions

— 07 Frame structure

— 08 XLP fuse switch-disconnector

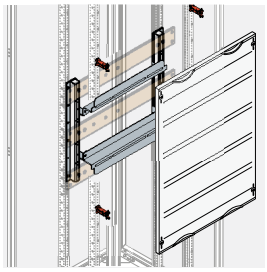
— 09 Recessed unit in series

— 10 Discharge protection

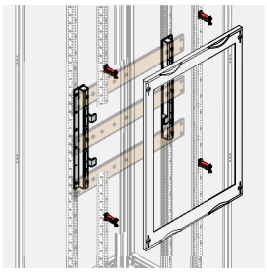
— 11 Mounting plate

— 12 Terminals in series

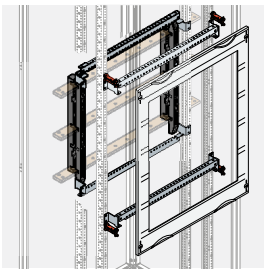
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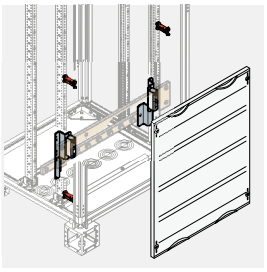
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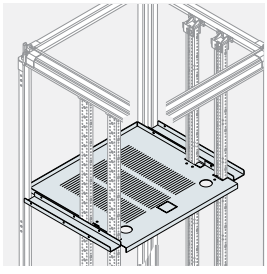
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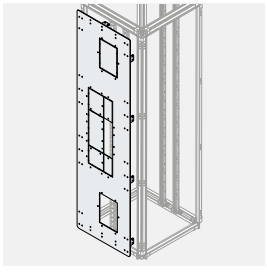
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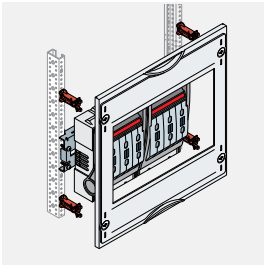
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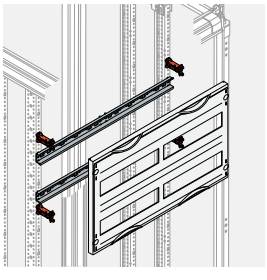
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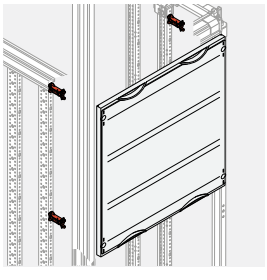
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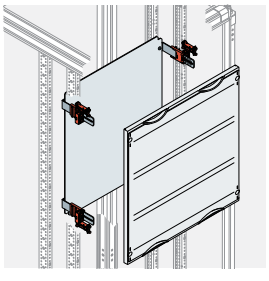
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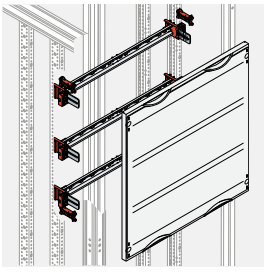
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— 11



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01 Main busbar system

—
02 Connection supporting set

—
03 Copper spacer for connection

—
04 Connection to main busbar system

—
05 Connection supporting set

—
06 Connection to cables

—
07 Neutral busbar (N)

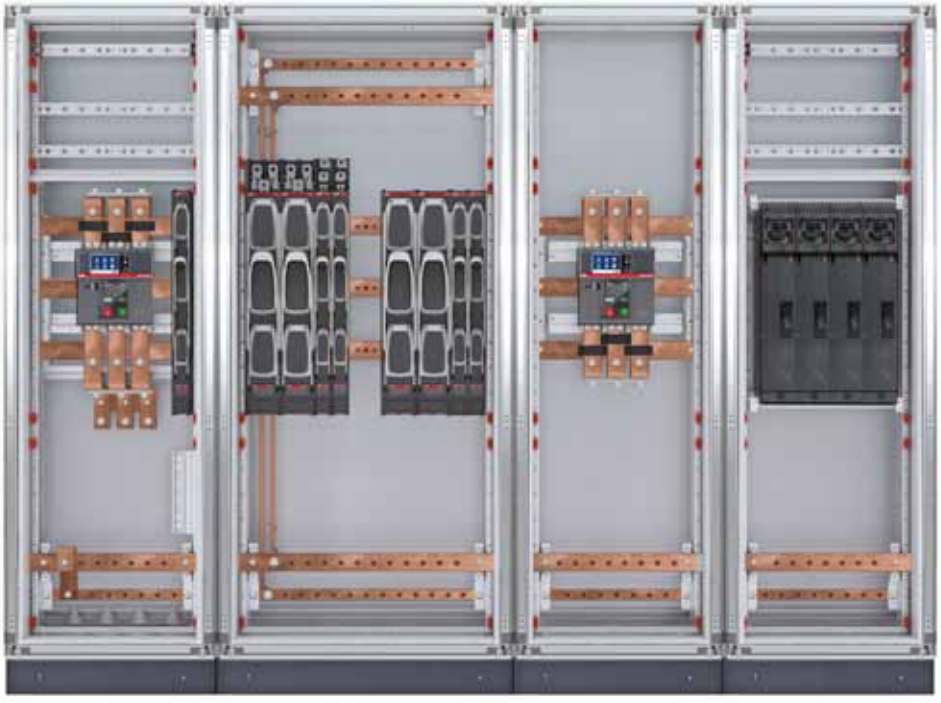
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08 Earth busbar (PE)

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09 Vertical N/PE supporting set

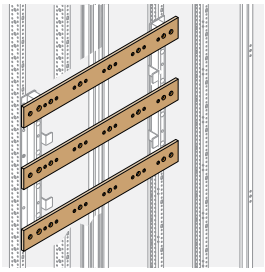
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10 Vertical offset N/PE busbar system

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11 Section to section copper connection

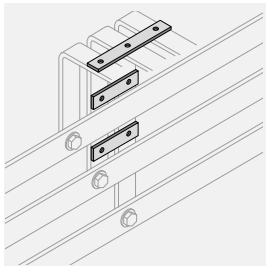
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12 Central earthing point



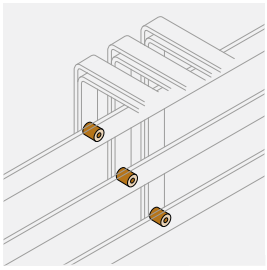
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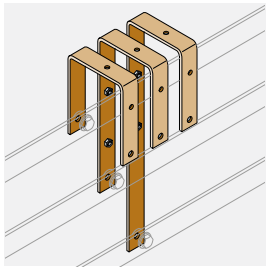
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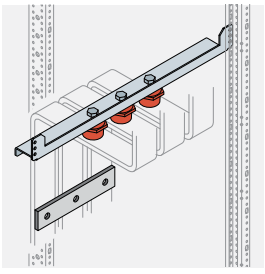
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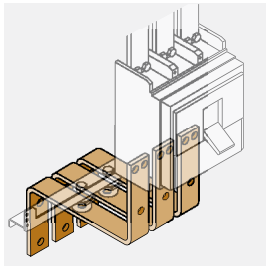
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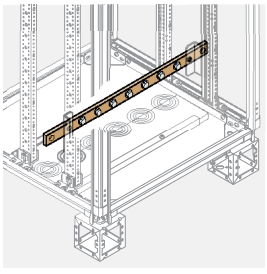
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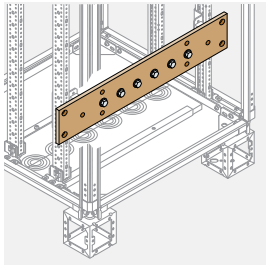
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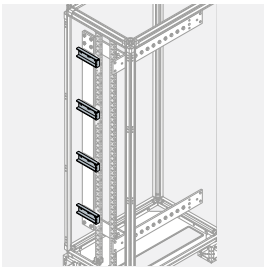
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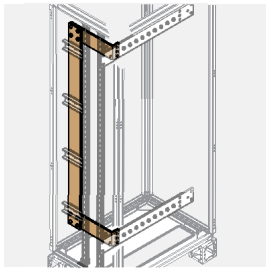
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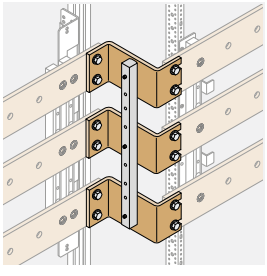
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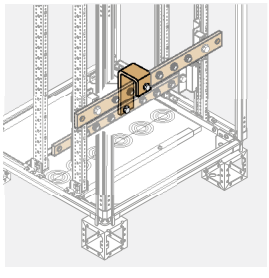
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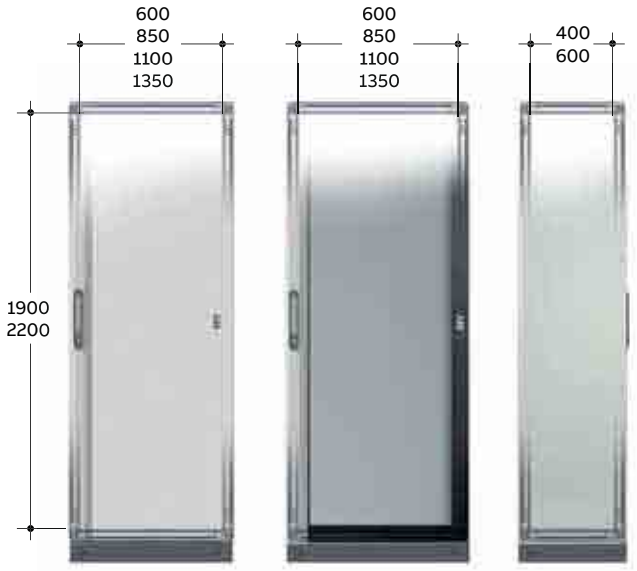


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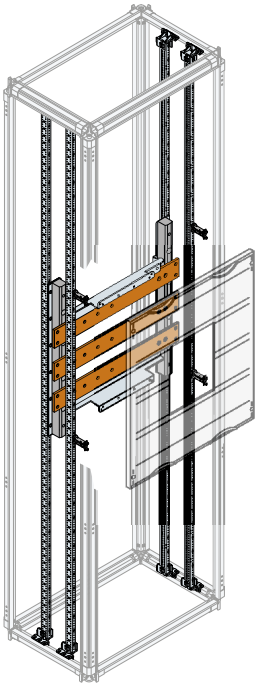
185 mm Busbar System
General information

The solutions are composed by an incoming section with a main circuit breaker combined with a selection of outgoing sections for fuse switch disconnectors or CombiLine modular distribution panel system with modules for a wide range of devices. The columns have a functional height of 1800 or 2100 mm and a functional depth of 400 or 600 mm. Four widths can be selected (functional widths 500, 750, 1000 and 1250 mm) depending on the device type and quantity.

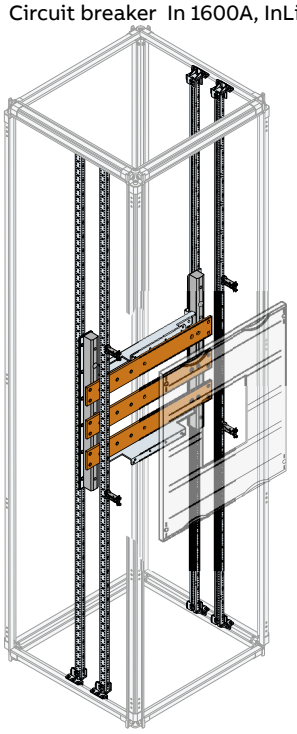


Compliance with Standard		IEC 61439-1-2
Approvals		LOVAG
Vibration test		-
Seismic withstand capability test		-
Conditions of installation		Indoor installation
Ambient temperature, average value 24h		+35 °C
Ambient temperature, maximum value		+40 °C
Ambient temperature, minimum value		-5 °C
Pollution degree		3
Protection class		I (earthed)
Rated current In		up to 2000A
Rated short-time withstand current Icw		up to 75kA
Rated peak short-circuit current Ipk		up to 165kA
Rated service voltage Ue		415 VAC
Rated insulation voltage Ui		1000V AC
Rated frequency		50-60Hz
Rated impulse withstand voltage Uimp		8kV
IP protection class		IP30, IP40, IP54 and IP55
Painting	Enclosure	RAL 7035
	Plinth	RAL 7012
Protection against mechanical impact IEC62262	Glazed door	IK09
	Blind door, without door	IK10
Functional dimensions. External dimension = functional dimensions + 100mm (see more details in overall dimensions chapter).	Height (mm) without plinth (+100, 200 mm with plinth)	1800, 2100
	Width (mm)	500, 750, 1000, 1250
	Depth (mm)	300, 500

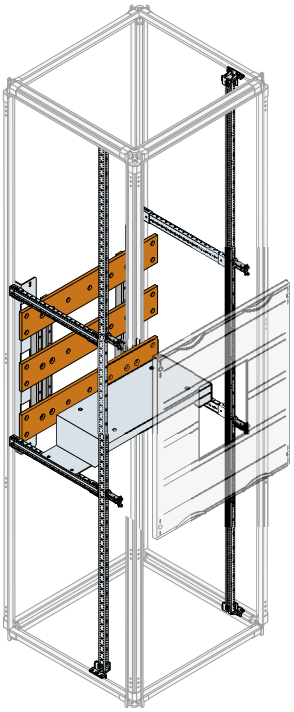
D=400mm
Circuit breaker In ≤ 1000A



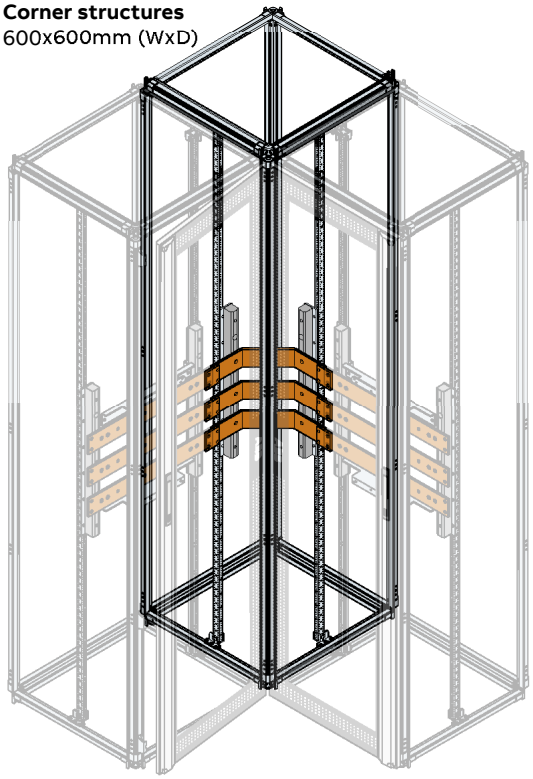
D=600mm
Circuit breaker In 1600A, InLine and corner structure



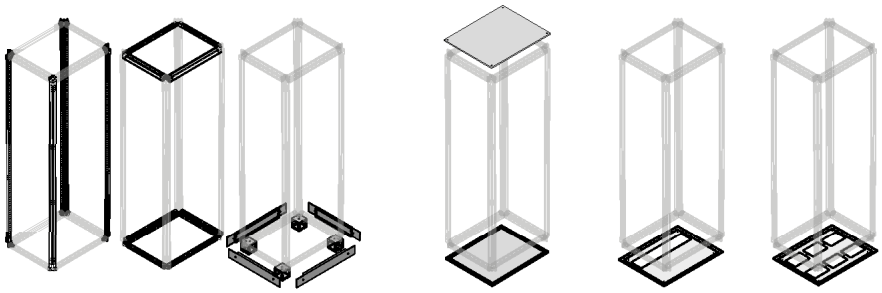
D=600mm
Circuit breaker In 2000A



Corner structures
600x600mm (WxD)

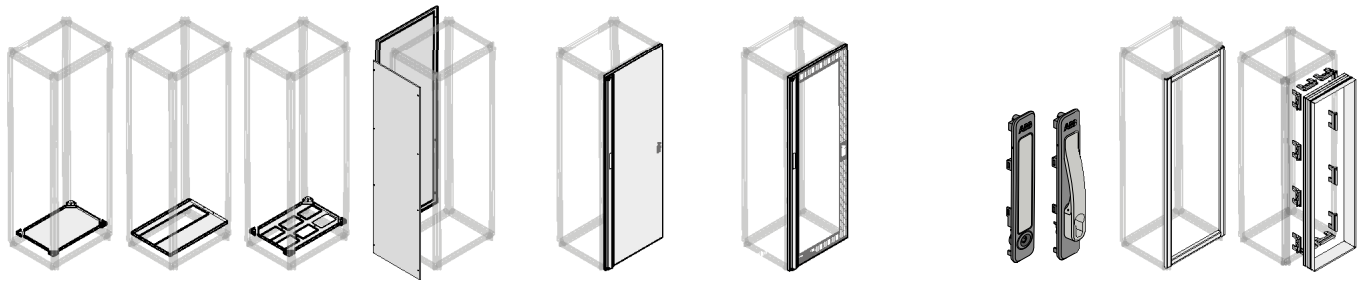


185 mm Busbar System
Selection guide



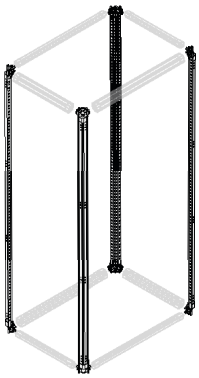
STRUCTURE

Functional dimensions			External dimensions			FRAME - Galvanized sheet metal					EXTERNAL COVERS				
						Structure crosspieces		H=100mm plinth			Bottom for column				
H (mm)	W (mm)	D (mm)	H (mm)	W (mm)	D (mm)	Uprights	Front/ Rear	Sides	Angle pieces	Plinth flanges Front/ Rear	Sides	Top/bottom for column with plinth Blind with gasket	Open without gasket	Open with gasket one row	Open with gasket two row	
1800	500	300	1900	600	400	PUPM1800	PCFM0500	PCFM0300	PPAM0100	PPFM1050	PPFM1030	PTBB3056	PTBT5031	PTBT3056		
	750			850			PCFM0750			PPFM1075		PTBB7536		PTBT7536		
	1000			1100			PCFM1000			PPFM1010		PTBB1036		PTBT1036		
	1250			1350			PCFM1250			PPFM1250		PTBB1236		PTBT1236		
	500	500		600	600	PUPM1800	PCFM0500	PCFM0500	PPAM0100	PPFM1050	PPFM1050	PTBB5050	PTBT5051	PTBT5050	PTBT5057	
	750			850			PCFM0750			PPFM1075		PTBB7556		PTBT7556	PTBT7557	
	1000			1100			PCFM1000			PPFM1010		PTBB1056		PTBT1056	PTBT1057	
	1250			1350			PCFM1250		PPAM0100 + PPIM0100	PPFM1250		PTBB1256		PTBT1256	PTBT1257	
2100	500	300	2200	600	400	PUPM2100	PCFM0500	PCFM0300	PPAM0100	PPFM1050	PPFM1030	PTBB3056	PTBT5031	PTBT3056		
	750			850			PCFM0750			PPFM1075		PTBB7536		PTBT7536		
	1000			1100			PCFM1000			PPFM1010		PTBB1036		PTBT1036		
	1250			1350			PCFM1250			PPFM1250		PTBB1236		PTBT1236		
	500	500	2200	600	600	PUPM2100	PCFM0500	PCFM0500	PPAM0100	PPFM1050	PPFM1050	PTBB5050	PTBT5051	PTBT5050	PTBT5057	
	750			850			PCFM0750			PPFM1075		PTBB7556		PTBT7556	PTBT7557	
	1000			1100			PCFM1000			PPFM1010		PTBB1056		PTBT1056	PTBT1057	
	1250			1350			PCFM1250		PPAM0100 + PPIM0100	PPFM1250		PTBB1256		PTBT1256	PTBT1257	



	Internal bottom				Rear/Side panels		Doors without lever				Lever codes		Front profiles IP30		COMBILINE AND KITS
	Blind without gasket	Open without gasket	Open without gasket one row	Open without gasket two row	Rear panels Blind with gasket	Side panels Blind with gasket	Blind door with gasket	Double blind with gasket	Glazed door with gasket	Double glazed with gasket	Standard lever without push-button	Lever for semi-cylinder insert	Vertical profile	Horizontal profile	Touchguard
	PBWP3052	PBWF5031	PBWF3056		PPEB1856		PDNB1856		PDNG1856					PPFH0500	PNTG1850
	PBWP7532		PBWF7536		PPEB1875		PDNB1876		PDNG1876					PPFH0750	PNTG1875
	PBWP1032		PBWF1036		PPEB1816	PPEB1828	PDNB1816	PDLB8127+ PDNB8507	PDNG1816	PDLG8127+ PDNG8507	PHLS0013	PHLS0012	PPFV1800	PPFH1000	PNTG1810
	PBWP1232		PBWF1236		PPRB1826 PPLB1826			PDLB8127+ PDNB8407		PDLG8127+ PDNG8407				PPFH1250	PNTG1812
	PBWP5052	PBWF5051	PBWF5050	PBWF5057	PPEB1856		PDNB1856		PDNG1856					PPFH0500	PNTG6850
	PBWP7552		PBWF7556	PBWF7557	PPEB1875		PDNB1876		PDNG1876					PPFH0750	PNTG6875
	PBWP1052		PBWF1056	PBWF1057	PPEB1816	PPEB1857	PDNB1816	PDLB8127+ PDNB8507	PDNG1816	PDLG8127+ PDNG8507	PHLS0013	PHLS0012	PPFV1800	PPFH1000	PNTG6810
	PBWP1252		PBWF1256	PBWF1257	PPRB1826 PPLB1826			PDLB8127+ PDNB8407		PDLG8127+ PDNG8407				PPFH1250	PNTG6812
	PBWP3052	PBWF5031	PBWF3056		PPEB2156		PDNB2156		PDNG2156					PPFH0500	PNTG2150
	PBWP7532		PBWF7536		PPEB2175		PDNB2176		PDNG2176					PPFH0750	PNTG2175
	PBWP1032		PBWF1036		PPEB2116	PPEB2137	PDNB2116	PDLB1127+ PDNB1507	PDNG2116	PDLG1127+ PDNG1507	PHLS0013	PHLS0012	PPFV2100	PPFH1000	PNTG2110
	PBWP1232		PBWF1236		PPRB1826 PPLB1826			PDLB1127+ PDNB1407		PDLG1127+ PDNG1407				PPFH1250	PNTG2112
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	PBWP1252		PBWF1256	PBWF1257	PPRB1826 PPLB1826			PDLB1127+ PDNB1407		PDLG1127+ PDNG1407				PPFH1250	PNTG6112

185 mm Busbar System
Order codes



Uprights – Galvanized sheet metal

Upright formed by a closed profile made of galvanized sheet metal. The uprights include 8 already assembled 3-way joints, 8 already assembled axial screws and 16 loose axial screws.

External dimensions	Delivered in kit		Delivered assembled		Package/
H (mm)	Type	Order code	Type	Order code	No. pcs
No.4 galvanized sheet metal uprights					
1900	PUPM1800	1STQ007033A0000	-	-	1/4
2200	PUPM2100	1STQ007035A0000	-	-	1/4

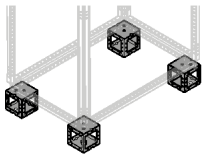


Structure crosspieces – Galvanized sheel metal

Depth and width crosspieces for structures in galvanized sheet metal.

External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
No.4 width crosspieces						
600		PCFM0500	1STQ007039A0000	-	-	1/4
850		PCFM0750	1STQ007041A0000	-	-	1/4
1100		PCFM1000	1STQ007043A0000	-	-	1/4
1350		PCFM1250	1STQ007044A0000	-	-	1/4
No.4 depth crosspieces						
	400	PCFM0300	1STQ007037A0000	-	-	1/4
	600	PCFM0500	1STQ007039A0000	-	-	1/4

PPAM0100

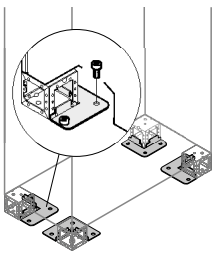


Universal angle pieces for plinths in galvanized sheet metal

Not pre-assembled to the structure. New angle piece with high mechanical strength. Can be fixed from the outside and from the inside of the structure even at a later date. Equipped with anti-rotation system and bottom that can be transported with a transpallet.

Dimensions	Delivered in kit		Delivered assembled		Package/
H (mm)	Type	Order code	Type	Order code	No. pcs
No.4 plinth angle pieces					
100	PPAM0100	1STQ007048A0000	PPAM0100A	1STQ002406M0000	1/4

Max. plinth height 300mm combining n.3 pieces of 100mm standard plinths.



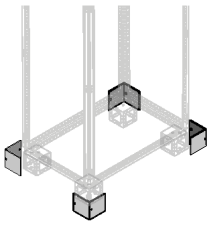
Brackets for fixing to the floor

The kit allows the floor fixing of the structure by means of M12 screws.

	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
No.4 floor fixing brackets	ZN1041	1STQ006833A0000	-	-	1/4

185 mm Busbar System

Order codes

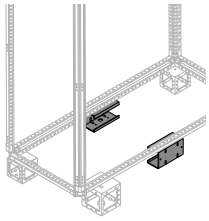


"L" covers for plinth angle-pieces

Used for covering the sides of the plinth when the flanges are not used.

Dimensions	Delivered in kit		Delivered assembled		Package/
H (mm)	Type	Order code	Type	Order code	No. pcs
No.4 angle-piece covers					
100	PCPA0004	1STQ008109A0000	PCPA0004A	1STQ003709M0000	1/4

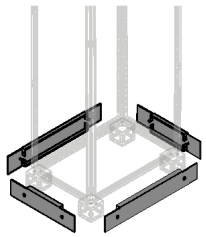
PPIM0100



Intermediate plinth

Intermediate plinth only for structures W=1250mm

Dimensions	Delivered in kit		Delivered assembled		Package/
H (mm)	Type	Order code	Type	Order code	No. pcs
No.2 intermediate plinths					
100	PPIM0100	1STQ007208A0000	PPIM0100A	1STQ002439M0000	1/4

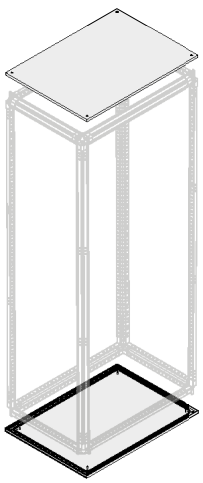


Plinth flanges

Side and front/rear plinth flanges H=100mm RAL 7012.

Dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
Front/rear plinth flanges						
600		PPFM1050	1STQ007052A0000	PPFM1050A	1STQ002433M0000	1/2
850		PPFM1075	1STQ007054A0000	PPFM1075A	1STQ002435M0000	1/2
1100		PPFM1010	1STQ007056A0000	PPFM1010A	1STQ002429M0000	1/2
1350		PPFM1250	1STQ007057A0000	PPFM1250A	1STQ002438M0000	1/4
Side plinth flanges						
	400	PPFM1030	1STQ007050A0000	PPFM1030A	1STQ002431M0000	1/2
	600	PPFM1050	1STQ007052A0000	PPFM1050A	1STQ002433M0000	1/2

To cover plinth higher than 100mm, combine more pieces of 100mm standard flanges.



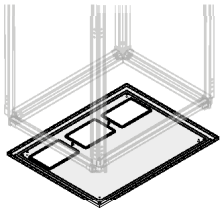
Blind top/bottom for column with plinth - with gasket

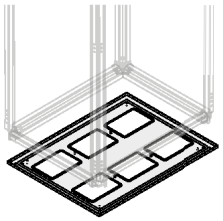
Pickled sheet steel with gasket. The article comprises one single component that can be used as either a top or bottom. In order to purchase both the top and the bottom, please order two quantities of the same code or two different top/bottom codes according to the desired design of the structure. The code includes four M12x20 screws.

External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
Blind Top/Bottom						
600	400	PTBB3056	1STQ007076A0000	PTBB3056A	1STQ001119M0000	1/1
600	600	PTBB5050	1STQ009179A0000	PTBB5050A	1STQ002794M0000	1/1
850	400	PTBB7536	1STQ007091A0000	PTBB7536A	1STQ001123M0000	1/1
850	600	PTBB7556	1STQ007092A0000	PTBB7556A	1STQ002810M0000	1/1
1100	400	PTBB1036	1STQ007099A0000	PTBB1036A	1STQ001127M0000	1/1
1100	600	PTBB1056	1STQ007100A0000	PTBB1056A	1STQ002754M0000	1/1
1350	400	PTBB1236	1STQ002294B0000	PTBB1236A	1STQ001131M0000	1/1
1350	600	PTBB1256	1STQ002295B0000	PTBB1256A	1STQ002772M0000	1/1

185 mm Busbar System

Order codes

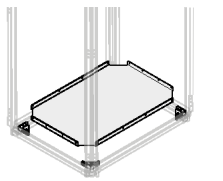


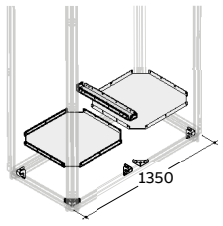


Open top/bottom for column with plinth - with gasket

Pickled sheet steel with holes. The code comprises one single component that can be used as bottom. In order to reach IP55 protection degree, use the dedicated fixed cable incoming flanges TZ…. page 3-14 on the internal side. The use of the single open bottom without flanges does not guarantee any degree of protection IP. The cut out 197x121mm, the distance between the cut out is 250mm in width and 250mm in depth (for two rows type).

External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
One row						
600	400	PTBT3056	1STQ002315B0000	PTBT3056A	1STQ001142M0000	1/1
600	600	PTBT5050	1STQ002317B0000	PTBT5050A	1STQ002849M0000	1/1
850	400	PTBT7536	1STQ002323B0000	PTBT7536A	1STQ001145M0000	1/1
850	600	PTBT7556	1STQ002324B0000	PTBT7556A	1STQ002857M0000	1/1
1100	400	PTBT1036	1STQ002298B0000	PTBT1036A	1STQ001148M0000	1/1
1100	600	PTBT1056	1STQ002299B0000	PTBT1056A	1STQ002825M0000	1/1
1350	400	PTBT1236	1STQ002304B0000	PTBT1236A	1STQ001151M0000	1/1
1350	600	PTBT1256	1STQ002305B0000	PTBT1256A	1STQ002833M0000	1/1
Two rows						
600	600	PTBT5057	1STQ002319B0000	PTBT5057A	1STQ002850M0000	1/1
850	600	PTBT7557	1STQ002325B0000	PTBT7557A	1STQ002858M0000	1/1
1100	600	PTBT1057	1STQ002300B0000	PTBT1057A	1STQ002826M0000	1/1
1350	600	PTBT1257	1STQ002306B0000	PTBT1257A	1STQ002834M0000	1/1





Internal blind bottom for column without plinth - without gasket

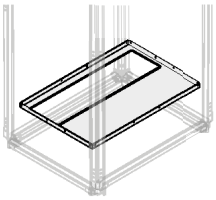
Internal galvanized steel bottom with special brackets kit included (special brackets kit available also as spare part with the code PBRB0004).

External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
Internal blind bottom						
600	400	PBWP3052	1STQ001815C0000	PBWP3052A	1STQ005369M0000	1/1
600	600	PBWP5052	1STQ001816C0000	PBWP5052A	1STQ005370M0000	1/1
850	400	PBWP7532	1STQ001819C0000	PBWP7532A	1STQ005373M0000	1/1
850	600	PBWP7552	1STQ001820C0000	PBWP7552A	1STQ005374M0000	1/1
1100	400	PBWP1032	1STQ001822C0000	PBWP1032A	1STQ005376M0000	1/1
1100	600	PBWP1052	1STQ001823C0000	PBWP1052A	1STQ005377M0000	1/1
1350	400	PBWP1232	1STQ001825C0000	PBWP1232A	1STQ005379M0000	1/1
1350	600	PBWP1252	1STQ001826C0000	PBWP1252A	1STQ005380M0000	1/1

* Made in two pieces.

185 mm Busbar System

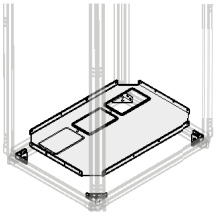
Order codes



Internal open bottom for column with plinth - without gasket

Internal galvanized steel bottom. The dedicated fixed cable incoming flanges RF... can be mounted. The cut out is 450x180mm for 500mm deep panel and 345x180mm for 300mm deep panel.

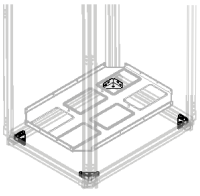
External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
Internal blind bottom						
600	400	PBWF5031	1STQ005095B0000	PBWF5031A	1STQ001305M0000	1/1
600	600	PBWF5051	1STQ002235B0000	PBWF5051A	1STQ001306M0000	1/1



Internal open bottom for column D≥400mm without plinth - without gasket

Internal galvanized steel bottom with special brackets kit included (special brackets kit available also as spare part with the code PBRB0004). The cut out is197x121mm, the distance between the cut out is 250mm in width and 200mm in depth (for two rows type). The dedicated fixed cable incoming flanges TZ... can be mounted om the external side.It is mandatory to use the plinth.

External dimensions		Delivered in kit		Delivered assembled		Package/
W (mm)	D (mm)	Type	Order code	Type	Order code	No. pcs
One row						
600	400	PBWF3056	1STQ002232B0000	PBWF3056A	1STQ001222M0000	1/1
600	600	PBWF5050	1STQ002234B0000	PBWF5050A	1STQ001512M0000	1/1
850	400	PBWF7536	1STQ002240B0000	PBWF7536A	1STQ001225M0000	1/1
850	600	PBWF7556	1STQ002241B0000	PBWF7556A	1STQ001516M0000	1/1
1100	400	PBWF1036	1STQ002215B0000	PBWF1036A	1STQ001228M0000	1/1
1100	600	PBWF1056	1STQ002216B0000	PBWF1056A	1STQ001500M0000	1/1
1350	400	PBWF1236	1STQ002221B0000	PBWF1236A	1STQ001231M0000	1/1
1350	600	PBWF1256	1STQ002222B0000	PBWF1256A	1STQ001504M0000	1/1
Two rows						
600	600	PBWF5057	1STQ002236B0000	PBWF5057A	1STQ001513M0000	1/1
850	600	PBWF7557	1STQ002242B0000	PBWF7557A	1STQ001517M0000	1/1
1100	600	PBWF1057	1STQ002217B0000	PBWF1057A	1STQ001501M0000	1/1
1350	600	PBWF1257	1STQ002223B0000	PBWF1257A	1STQ001505M0000	1/1



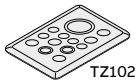
Special brackets kit

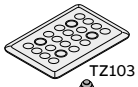
	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
No.4 brackets for base without plinth	PBRB0004	1STQ008127A0000	-	-	1/4

185 mm Busbar System

Order codes

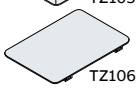

TZ101

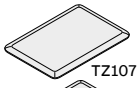

TZ102

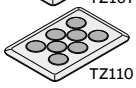

TZ103


TZ104

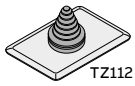

TZ105


TZ106


TZ107


TZ110


TZ111

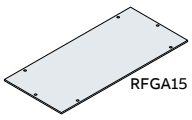

TZ112

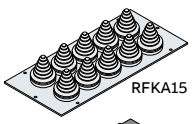
IP55 flanges for open bottom/top

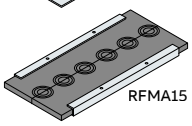
The flanges can be fitted into top/bottom panel with cut out 197x121mm. The cable glands allow to install several cables and ensure the protection of the components within the enclosures. The plastic ones can be easily perforated.

Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
Plastic flange					
For 52 entries	TZ101	2CPX010450R9999	-	-	1/1
For 52 entries 10pcs	TZ101P10	2CPX010451R9999	-	-	1/10
1M63/50 2M32/20	TZ102	2CPX010452R9999	-	-	1/1
1M63/50 2M32/20 10psc	TZ102P10	2CPX010453R9999	-	-	1/10
4xM20/M25 18xM20	TZ103	2CPX010454R9999	-	-	1/1
4xM20/M25 18xM20 10pcs	TZ103P10	2CPX010455R9999	-	-	1/10
With 2 cable sleeves	TZ104*	2CPX010456R9999	-	-	1/1
With 2 cable sleeves 10pcs	TZ104P10*	2CPX010932R9999	-	-	1/10
With 3 cable sleeves	TZ105	2CPX010457R9999	-	-	1/1
With 3 cable sleeves 10pcs	TZ105P10	2CPX010933R9999	-	-	1/10
Closing flange	TZ107	2CPX010460R9999	-	-	1/1
Closing flange 10pcs	TZ107P10	2CPX010461R9999	-	-	1/10
8x13-34mm	TZ110	2CPX010850R9999	-	-	1/1
8x13-34mm 10pcs	TZ110P10	2CPX010934R9999	-	-	1/10
For 11 entries	TZ111	2CPX010851R9999	-	-	1/1
For 11 entries 10pcs	TZ111P10	2CPX010935R9999	-	-	1/10
For 1 cable sl. 14-68mm	TZ112*	2CPX010852R9999	-	-	1/1
Sheet steel flange					
Metal flange plate	TZ106	2CPX010458R9999	-	-	1/1
Metal gland plate 10pcs	TZ106P10	2CPX010459R9999	-	-	1/10

* These flanges have an height greater than the plinth 100mm.


RFGA15


RFKA15

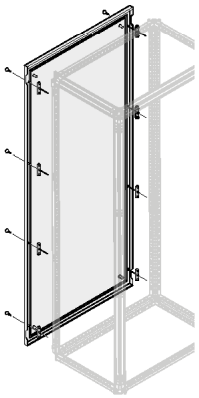

RFMA15

IP40 flanges for open bottom/top

Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
For bottom with cut out 450x180mm (for 600mm deep panel)					
Closed flanges	RFGA2	2CPX021408R9999	-	-	1/1
Aluminium flanges with cable sleeves 14-68mm	RFKA2	2CPX021414R9999	-	-	1/1
Flanges with rubber for cables	RFMA2	2CPX021420R9999	-	-	1/1
For bottom with cut out 345x180mm (for 400 mm deep panel)					
Closed flanges	RFGA15	2CPX021407R9999	-	-	1/1
Aluminium flanges with cable sleeves 14-68mm	RFKA15	2CPX021413R9999	-	-	1/1
Flanges with rubber for cables	RFMA15	2CPX021419R9999	-	-	1/1

185 mm Busbar System

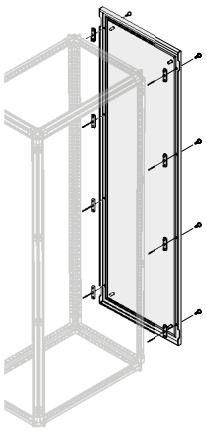
Order codes



External blind front/rear panel - with gasket

Pickled sheet steel with gasket and plugs.

External dimensions (mm)			Delivered in kit		Delivered assembled		Package/ No. pcs
H	W		Type	Order code	Type	Order code	
Blind front/rear panel							
1900	600		PPEB1856	1STQ007579A0000	-	-	1/1
	850		PPEB1875	1STQ007582A0000	-	-	1/1
	1100		PPEB1816	1STQ007585A0000	-	-	1/1
	1250	Left (675mm)	PPLB1826	1STQ002290B0000	-	-	1/1
		Right (675mm)	PPRB1826	1STQ002292B0000	-	-	1/1
2200	600		PPEB2156	1STQ002287B0000	-	-	1/1
	850		PPEB2175	1STQ007603A0000	-	-	1/1
	1100		PPEB2116	1STQ002284B0000	-	-	1/1
	1250	Left (675mm)	PPLB2126	1STQ002291B0000	-	-	1/1
		Right (675mm)	PPRB2126	1STQ002293B0000	-	-	1/1



External blind side panel - with gasket

Pickled sheet steel with gasket and plugs. The code refers to one single side panel.

External dimensions		Delivered in kit		Delivered assembled		Package/ No. pcs
H (mm)	D (mm)	Type	Order code	Type	Order code	
Blind side panel						
1900	400	PPEB1836	1STQ007577A0000	-	1STQ001247M0000	1/1
	600	PPEB1856	1STQ007579A0000	-	1STQ001244M0000	1/1
2200	400	PPEB2136	1STQ002286B0000	-	1STQ001250M0000	1/1
	600	PPEB2156	1STQ002287B0000	-	1STQ001245M0000	1/1

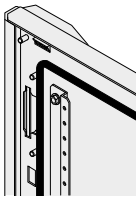
External blind side panel - with gasket

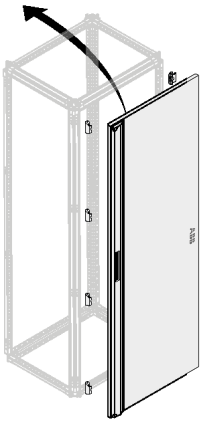
Pickled sheet steel with gasket and plugs. The code refers to one single side panel, only for delivery form assembled.

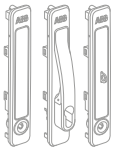
External dimensions		Delivered in kit		Delivered assembled		Package/ No. pcs
H (mm)	D (mm)	Type	Order code	Type	Order code	
Blind side panel						
1900	400	PPEB1836	1STQ007577A0000	PPEB1836A	1STQ001247M0000	1/1
	600	PPEB1856	1STQ007579A0000	PPEB1856A	1STQ001244M0000	1/1
2200	400	PPEB2136	1STQ002286B0000	PPEB2136A	1STQ001250M0000	1/1
	600	PPEB2156	1STQ002287B0000	PPEB2156A	1STQ001245M0000	1/1

185 mm Busbar System

Order codes







PHLS0013
PHLS0012
PHLS0011

Blind door - with gasket (without lever)

Pickled sheet steel with gasket. Opens through 135° (single column), 105° for 2+ side by side columns. Complete with 4 hinges to be screwed onto the uprights, 4 door closing brackets. Doors can be mounted both on the front and on the back of the enclosures. Can be hanged on both, left and right side. Reinforcing tubes for W>400mm.

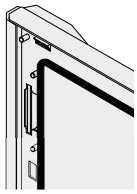
External dimensions (mm)			Delivered in kit		Delivered assembled		Package/
H	W		Type	Order code	Type	Order code	No. pcs
Blind door							
1900	600		PDNB1856	1STQ002264B0000	PDNB1856A	1STQ001253M0000	1/1
	850		PDNB1876	1STQ002265B0000	PDNB1876A	1STQ001254M0000	1/1
	1100		PDNB1816	1STQ002262B0000	PDNB1816A	1STQ001255M0000	1/1
	1100*	550 (mm)	PDLB1127	1STQ008526B0000			1/1
		550 (mm)	PDNB1507	1STQ008538B0000			1/1
	1350*	550 (mm)	PDLB1127	1STQ008526B0000			1/1
		800 (mm)	PDNB1407	1STQ008539B0000			1/1
2200	600		PDNB2156	1STQ002268B0000	PDNB2156A	1STQ001260M0000	1/1
	850		PDNB2176	1STQ002269B0000	PDNB2176A	1STQ001261M0000	1/1
	1100		PDNB2116	1STQ002266B0000	PDNB2116A	1STQ001262M0000	1/1
	1100*	550 (mm)	PDLB1127	1STQ008526B0000			1/1
		550 (mm)	PDNB1507	1STQ008538B0000			1/1
	1350*	550 (mm)	PDLB1127	1STQ008526B0000			1/1
		800 (mm)	PDNB1407	1STQ008539B0000			1/1

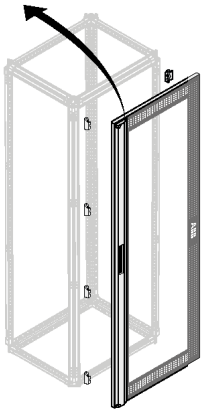
Handles to be ordered separately , see page 3-69.

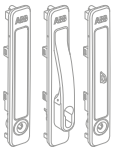
* for 1000/1250mm width configurations ordered PDLB.... + PDNB....

185 mm Busbar System

Order codes







PHLS0013
PHLS0012
PHLS0011

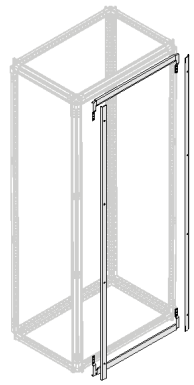
Glazed door - with gasket (without lever)

Pickled sheet steel with gasket. Opens through 135° (single column), 105° for 2+ side by side columns. Complete with 4 hinges to be screwed onto the uprights, 4 door closing brackets. Doors can be mounted both on the front and on the back of the enclosures. Can be hinged on both, left and right side. Without reinforcing tubes.

External dimensions (mm)			Delivered in kit		Delivered assembled		Package/
H	W		Type	Order code	Type	Order code	No. pcs
Glazed door							
1900	600		PDNG1856	1STQ002275B0000	PDNG1856A	1STQ001266M0000	1/1
	850		PDNG1876	1STQ002276B0000	PDNG1876A	1STQ001267M0000	1/1
	1100		PDNG1816	1STQ002274B0000	PDNG1816A	1STQ001268M0000	1/1
	1100*	550 (mm)	PDLG8127	1STQ008531B0000			1/1
		550 (mm)	PDNG8507	1STQ008532B0000			1/1
	1350*	550 (mm)	PDLG8127	1STQ008531B0000			1/1
		800 (mm)	PDNG8407	1STQ008533B0000			1/1
2200	600		PDNG2156	1STQ002278B0000	PDNG2156A	1STQ001272M0000	1/1
	850		PDNG2176	1STQ002279B0000	PDNG2176A	1STQ001273M0000	1/1
	1100		PDNG2116	1STQ002277B0000	PDNG2116A	1STQ001274M0000	1/1
	1100*	550 (mm)	PDLG1127	1STQ008529B0000			1/1
		550 (mm)	PDNG1507	1STQ008534B0000			1/1
	1350*	550 (mm)	PDLG1127	1STQ008529B0000			1/1
		800 (mm)	PDNG1407	1STQ008535B0000			1/1

Handles to be ordered separately , see page 3-69.

* for 1100/1250mm width configurations ordered PDLG.... + PDNG....



Fixing set - dedicated solution for CombiLine N

Fixed set for the installation of standard WR frame on System pro E power structure.

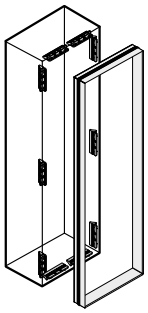
	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
CombiLine N fixing set [1]	PBCM0004	1STQ009354A0000	PBCM0004A	1STQ001318M0000	1/4
Depth support [1]					
No.2 Crosspieces D=300mm	PDFC0200	1STQ001929B0000	PDFC0200A	1STQ001296M0000	1/2
No.2 Crosspieces D=400mm	PDFC0300	1STQ001930B0000	PDFC0300A	1STQ001297M0000	1/2
No.2 Crosspieces D=600mm	PDFC0500	1STQ001931B0000	PDFC0500A	1STQ001800M0000	1/2
No.2 Crosspieces D=800mm	PDFC0700	1STQ001932B0000	PDFC0700A	1STQ001801M0000	1/2
No.4 WR mounting frame holder	RZ1P4	2CPX045950R9999	RZ1P4A	2CPX023978R9999	1/4

[1] It allows the fixing of WR frame at the outer position of the column. It must be ordered 2 quantites for each section to install front and back WR frame

[2] It allows the fixing of WR frame at the intermediate positions in width, PDFC.... to be ordered together with RZ1P4.

185 mm Busbar System

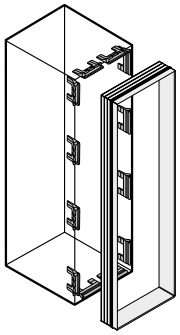
Order codes



Touchguard profile - dedicated solution for CombiLine N

Profile to guarantee IP30 touch protection with Combiline N modules installed in structures with D=300 or D=400mm or with E2.2 breaker in D=600mm structure.

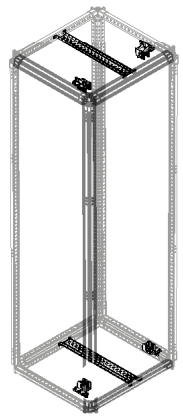
External dimensions		Delivered in kit		Delivered assembled		Package/
H (mm)	W (mm)	Type	Order code	Type	Order code	No. pcs
1900	350	PNTG1825	1STQ007322B0000	PNTG1825A	1STQ003666M0000	1/1
1900	600	PNTG1850	1STQ007323B0000	PNTG1850A	1STQ003667M0000	1/1
1900	850	PNTG1875	1STQ007324B0000	PNTG1875A	1STQ003668M0000	1/1
1900	1100	PNTG1810	1STQ007325B0000	PNTG1810A	1STQ003669M0000	1/1
1900	1350	PNTG1812	1STQ007326B0000	PNTG1812A	1STQ003670M0000	1/1
2200	350	PNTG2125	1STQ007332B0000	PNTG2125A	1STQ003671M0000	1/1
2200	600	PNTG2150	1STQ007333B0000	PNTG2150A	1STQ003672M0000	1/1
2200	850	PNTG2175	1STQ007334B0000	PNTG2175A	1STQ003673M0000	1/1
2200	1100	PNTG2110	1STQ007335B0000	PNTG2110A	1STQ003674M0000	1/1
2200	1350	PNTG2112	1STQ007336B0000	PNTG2112A	1STQ003675M0000	1/1



Touchguard profile - dedicated solution for CombiLine N

Profile to guarantee IP30 touch protection with CombiLine N modules installed in structure with D=600mm (not for E2.2 column)

External dimensions		Delivered in kit		Delivered assembled		Package/
H (mm)	W (mm)	Type	Order code	Type	Order code	No. pcs
1900	350	PNTG6825	1STQ007337B0000	PNTG6825A	1STQ003676M0000	1/1
1900	600	PNTG6850	1STQ007338B0000	PNTG6850A	1STQ003677M0000	1/1
1900	850	PNTG6875	1STQ007339B0000	PNTG6875A	1STQ003678M0000	1/1
1900	1100	PNTG6810	1STQ007340B0000	PNTG6810A	1STQ003679M0000	1/1
1900	1350	PNTG6812	1STQ007341B0000	PNTG6812A	1STQ003680M0000	1/1
2200	350	PNTG6125	1STQ007347B0000	PNTG6125A	1STQ003686M0000	1/1
2200	600	PNTG6150	1STQ007348B0000	PNTG6150A	1STQ003687M0000	1/1
2200	850	PNTG6175	1STQ007349B0000	PNTG6175A	1STQ003688M0000	1/1
2200	1100	PNTG6110	1STQ007350B0000	PNTG6110A	1STQ003689M0000	1/1
2200	1350	PNTG6112	1STQ007351B0000	PNTG6112A	1STQ003690M0000	1/1



Fixing set - dedicated solution for CombiLine N

Fixed set for the installation of standard WR frame on System pro E power structure.

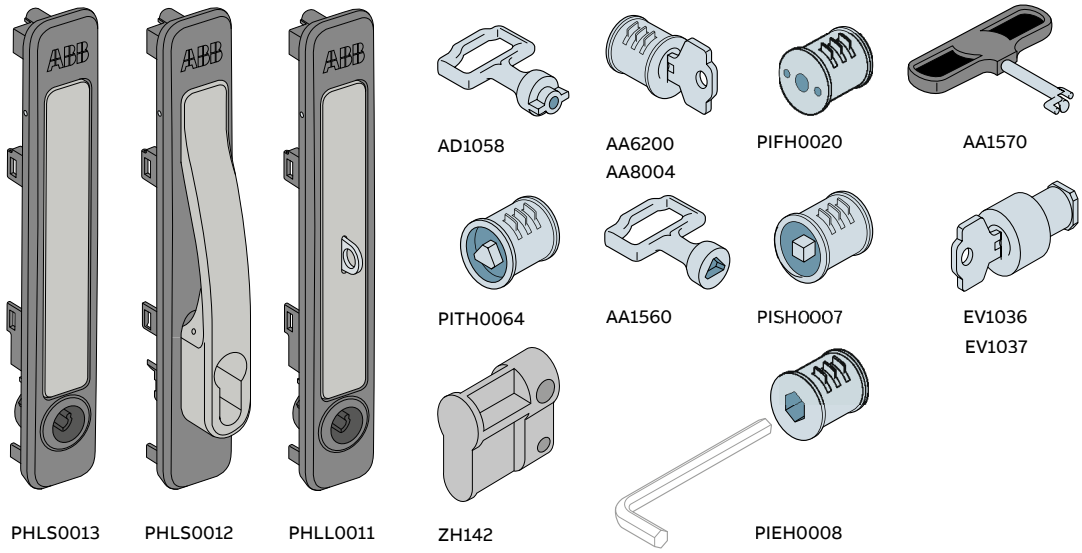
	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
CombiLine N fixing set [1]	PBCM0004	1STQ009354A0000	-	1STQ001318M0000	1/4
Depth support [1]					
No.2 Crosspieces D=400mm	PDFC0300	1STQ001930B0000	-	1STQ001297M0000	1/2
No.2 Crosspieces D=600mm	PDFC0500	1STQ001931B0000	-	1STQ001800M0000	1/2
No.4 WR mounting frame holder	RZ1P4	2CPX045950R9999	-	2CPX023978R9999	1/4

[1] It allows the fixing of WR frame at the outer position of the column.

[2] It allows the fixing of WR frame at the intermediate positions in width, PDFC.... to be ordered together with RZ1P4.

185 mm Busbar System

Order codes



Levers and inserts

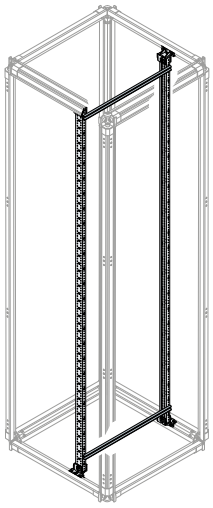
The lever is not included in the door's code, it must be always ordered in addition to the door. The inserts are interchangeable and can be easily replaced.

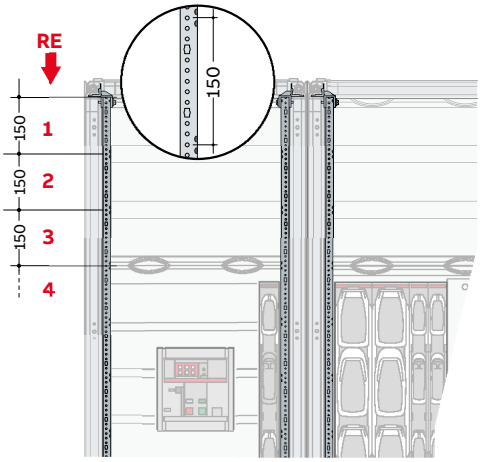
Description	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
Handle					
Lever handle [1]	PHLS0013	1STQ002334B0000	PHLS0013A	1STQ001915M0000	1/1
Lever semicylinder inserts (40mm)	PHLS0012	1STQ002283B0000	PHLS0012A	1STQ001914M0000	1/1
Padlockable lever handle [2]	PHLS0011	1STQ002282B0000	PHLS0011A	1STQ001913M0000	1/1
Inserts and keys that can be fitted into PHLS0013, PHLS0011					
Yale insert+key for external door, single door version	AA6200	1STQ009135A0000	-	-	1/1
E739 ronis insert+key for external door, single door version	AA8004	1STQ009136A0000	-	-	1/1
FIAT type insert for lever handle	PIFH0020	1STQ008122A0000	-	-	1/1
FIAT key	AA1570	1STQ009137A0000	-	-	1/1
6.4 triangular male insert on Ø 7.6 for external door, single door version	PITH0064	1STQ008119A0000	-	-	1/1
Key for triangular insert	AA1560	1STQ009138A0000	-	-	1/1
7 square male insert for external door, single door version	PISH0007	1STQ008120A0000	-	-	1/1
Insert 8mm hex socket type for standard handle (Key not available)	PIEH0008	1STQ008121A0000	-	-	1/1
Double tab insert for closing handle/box (spare) [3]	PIDH0010	1STQ008118A0000	-	-	1/1
Key zama for double tab insert (spare) [4]	AD1058	1STQ009134A0000	-	-	1/1
Ronis 405 insert and key for standard handle	PIRH0405	1STQ008123A0000	-	-	1/1
Ronis insert 2432 and key for standard handle	PIRH2432	1STQ002030B0000	-	-	1/1
Ronis 455 insert and key for standard handle	PIRH0455	1STQ008124A0000	-	-	1/1
Ronis 1242 insert and key for standard handle	PIRH1242	1STQ008125A0000	-	-	1/1
Insert that can be fitted into PHLS0012					
Dummy insert (instead of a semi-cylinder)	ZH142	2CPX060502R9999	-	-	1/1

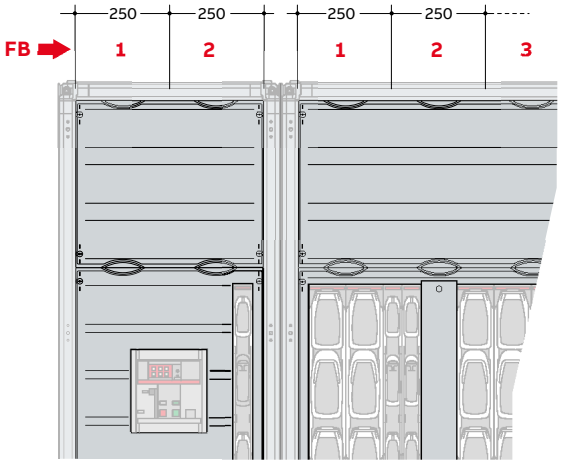
[1] The lever can be operated only using the key. With 3 mm double bit insert included.
[2] For padlok up to 8 mm diameter. With 3 mm double bit insert included.
[3] This insert is the one already included in PHLS0013 and PHLS0011.
[4] This key is the one already included in PHLS0013 and PHLS0011.

185 mm Busbar System

Order codes





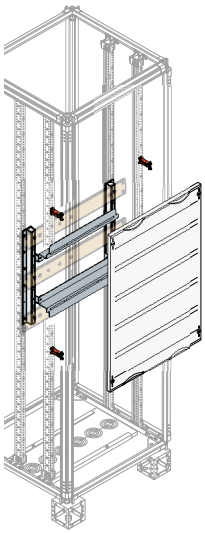


Mounting frame

Mounting frame is necessary to fix modules and busbars.
To be ordered twice for section with Tmax XTs, Emax E1.2, Fuse switch disconnector, switch disconnector fuse and corner structure ≤1600A. To be ordered one frame with 2000A column and 2000A corner structure.

External dimensions (mm)					Delivered in kit		Delivered assembled		Package/
H	RE	W	FB	D	Type	Order code	Type	Order code	No. pcs
1900	12	600	2	400	WR281	2CPX042859R9999	WRM281	2CPX042850R9999	1/1
		850	3	400	WR381	2CPX042860R9999	WRM381	2CPX042851R9999	1/1
2200	14	600	2	400	WR2101	2CPX042863R9999	WRM2101	2CPX042854R9999	1/1
		850	3	400	WR3101	2CPX042864R9999	WRM3101	2CPX042855R9999	1/1

Tmax/Emax circuit-breakers



Tmax XT4/XT5/XT6 - In 1000 A

Incoming/outgoing module for installation of multiple side by side breakers.
Tmax T4, T5 and T6, 3 poles, front terminals (F) and fixed execution installable.
The module includes all the metal parts required, 2 busbar holders and the blind front panel (to be cut by the customer).

No. circuit-breakers side by side installed				
	External dimensions (mm)			
	W	FB	W	FB
Circit-breakers	600	2	850	3
Tmax XT4 3P		4		6
Tmax XT5 3P		2		4
Tmax XT6 3P		1		2

185 mm Busbar System

Order codes

Maximum amount of devices

Circuit-breakers	W=600mm	Max. amount of devices	W=800mm	Max. amount of devices
Tmax XT4	PMBX4760	4	PMBX4785	6
Tmax XT5	PMBX5756	2	PMBX5758	4
Tmax XT6	PMBX6756	1	PMBX6758	2

Tmax XT4

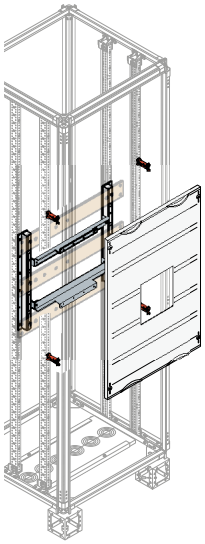
Incoming/outgoing module for installation of multiple side by side breakers

External dimensions (mm)					Delivered in kit		Delivered assembled		Package/
Kit H	RE	W	FB	D	Type	Order code	Type	Order code	No. pcs
750	5	600	2	400	PMBX4760	1STQ007069B0000	PMBX4760A	1STQ003538M0000	1/1
		850	3	400	PMBX4785	1STQ007070B0000	PMBX4785A	1STQ003539M0000	1/1

Tmax XT5

Incoming/outgoing module for installation of multiple side by side breakers

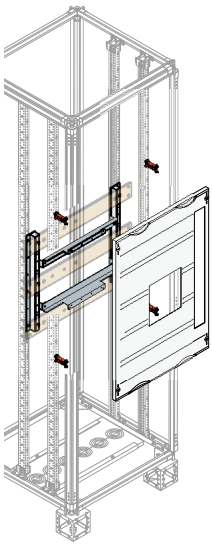
External dimensions (mm)					Delivered in kit		Delivered assembled		Package/
Kit H	RE	W	FB	D	Type	Order code	Type	Order code	No. pcs
750	5	600	2	400	PMBX5756	1STQ007170B0000	PMBX5756A	1STQ003534M0000	1/1
		850	3	400	PMBX5758	1STQ007171B0000	PMBX5758A	1STQ003535M0000	1/1



Tmax XT6

Incoming/outgoing module for installation of multiple side by side breakers

External dimensions (mm)					Delivered in kit		Delivered assembled		Package/
Kit H	RE	W	FB	D	Type	Order code	Type	Order code	No. pcs
750	5	600	2	400	PMBX6756	1STQ008517B0000	PMBX6756A	1STQ008517M0000	1/1
		850	3	400	PMBX6758	1STQ008518B0000	PMBX6758A	1STQ008518M0000	1/1



Tmax XT7, Emax E1.2 - In up to 1600A

Incoming/outgoing module for installation of single breaker.
Tmax XT7 or Emax E1.2, 3 poles, front terminals (F) and fixed execution installable.
The module includes all the metal parts required, 2 busbar holders and the front panel with a proper cut-out (plastic flange of the breaker cannot be fitted).

External dimensions (mm)					Delivered in kit		Delivered assembled		Package/
Kit H	RE	W	FB	D min.	Type	Order code	Type	Order code	No. pcs
750	5	600	2	400	MBA211751	2CPX043005R9999	MA211751	2CPX043000R9999	1/1

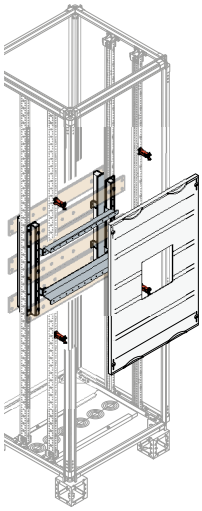
Tmax XT7, Emax E1.2 - In up to 1600A with fuse switch disconnector beside

Incoming/outgoing module for installation of single breaker.
Tmax XT7 or Emax E1.2, 3 poles, front terminals (F) and fixed execution installable.
In conjunction with InLine II size 00 fuse switch disconnector as input fuse for overvoltage protection.
The module includes all the metal parts required, 2 busbar holders and the front panel with a proper cut-out (plastic flange of the breaker cannot be fitted).

External dimensions (mm)					Delivered in kit		Delivered assembled		Package/
Kit H	RE	W	FB	D min.	Type	Order code	Type	Order code	No. pcs
750	5	600	2	400	MBA211759	2CPX043006R9999	MA211759	2CPX043001R9999	1/1

185 mm Busbar System

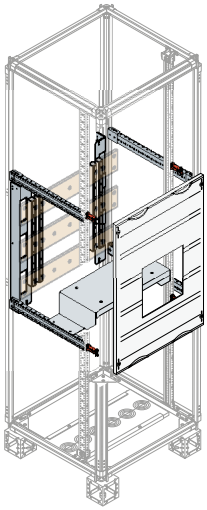
Order codes



Tmax XT7, Emax E1.2 - In up to 1600A as a coupler

Incoming/outgoing module for installation of single breaker.
Tmax XT7 or Emax E1.2, 3 poles, front terminals (F) and fixed execution installable.
The module includes all the metal parts required, 4 busbar holders and the front panel with a proper cut-out (plastic flange of the breaker cannot be fitted).

External dimensions (mm)					Delivered in kit		Delivered assembled		
Kit H	RE	W	FB	D min.	Type	Order code	Type	Order code	Package/ No. pcs
750	5	600	2	400	MBA231751	2CPX043009R9999	MA231751	2CPX043004R9999	1/1



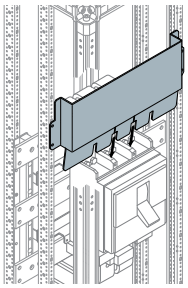
Emax E.2.2 - In up to 2000A

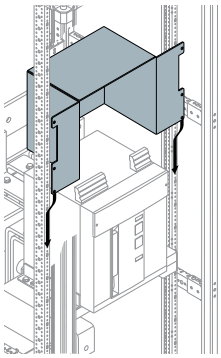
Incoming module for installation of single breaker.
Emax E2.2, 3 poles, rear terminals (HR) and fixed execution installable.
The module includes all the metal parts required, 2 busbar holders and the front panel with a proper cut-out (plastic flange of the breaker to be fitted).

External dimensions (mm)					Delivered in kit		Delivered assembled		
Kit H	RE	W	FB	D min.	Type	Order code	Type	Order code	Package/ No. pcs
750	5	600	2	600	PMBA7550	1STQ005096B0000	PMAS7550	1STQ005097B0000	1/1

185 mm Busbar System

Order codes

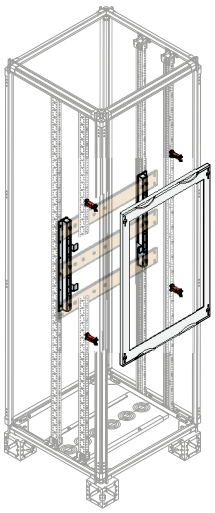




Deviaton panel

To be ordered together with the modules for breaker installation.

	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
For Emax E2.2 circuit-breakers	PPZX9271	1STQ005098B0000	PPZX9271A	1STQ003712M0000	1/1
For Tmax T7 and Emax E1.2 circuit-breakers	ZX971	2CPX043261R9999	ZX971A	1STQ003713M0000	1/1



Fuse switch-disconnector modules

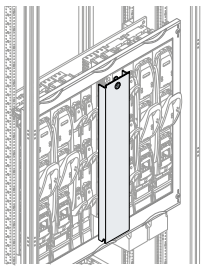
InLine II ZHBM 00-1-2-3

Outgoing module for installation of multiple fuse switch disconnector InLine II ZHBM (compatible also with EFEN etc.....). The module includes all the metal parts required, 2 busbar holders and the front panel with a proper cut-out.

External dimensions (mm)						Delivered in kit		Delivered assembled		
Kit H	RE	W	FB	Useful	D min	Type	Order code	Type	Order code	Package/ No. pcs
750	5	600	2	450	400	MBJ24458	2CPX043020R9999	MJ24458	2CPX043018R9999	1/1
		850	3	700	400	MBJ34708	2CPX043021R9999	MJ34708	2CPX043019R9999	1/1

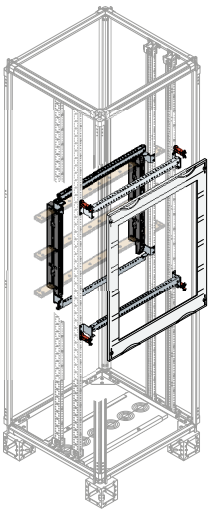
Covers to close reserve slots

	Delivered in kit		Delivered assembled		Package/
Description	Type	Order code	Type	Order code	No. pcs
Width 50 mm for covering NH00 modules	ZX960	2CPX043180R9999	-	-	1/1
Width 100 mm for covering NH1-3 modules	ZX961	2CPX043181R9999	-	-	1/1



185 mm Busbar System

Order codes



Switch-disconnector fuse modules

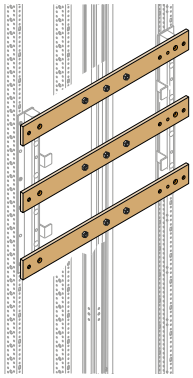
SlimLine XR

Outgoing module for installation of multiple switch disconnector fuse SlimLine XR (compatible also with Jean Muller etc.....). The module includes all the metal parts required, 2 busbar holders according to the dimension of the bar (ZX550, ZX551, ZX555, ZX559) and the front panel with a proper cut-out. No covers for empty slot available.

External dimensions (mm)							Delivered in kit		Delivered assembled		
Kit H	RE	W	FB	Useful	D min.	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
750	5	600	2	400	600	1000	MBJ25406	2CPX043028R9999	MJ25406	2CPX043022R9999	1/1
						1250	MBJ25407	2CPX043029R9999	MJ25407	2CPX043023R9999	1/1
						1600	MBJ25408	2CPX043030R9999	MJ25408	2CPX043024R9999	1/1
						2000	PMBJ5409	1STQ005100B0000	PMJS5409	1STQ005101B0000	1/1
750	5	850	3	650	600	1000	MBJ35656	2CPX043031R9999	MJ35656	2CPX043025R9999	1/1
						1250	MBJ35657	2CPX043032R9999	MJ35657	2CPX043026R9999	1/1
						1600	MBJ35658	2CPX043033R9999	MJ35658	2CPX043027R9999	1/1
						2000	PMBJ5659	1STQ005102B0000	PMJS5659	1STQ005103B0000	1/1

185 mm Busbar System

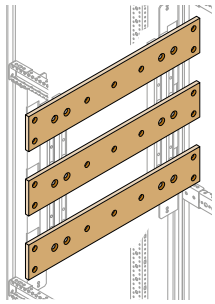
Order codes



Main busbar system, 3 poles, Tmax XT7 and Emax E1.2

For single breaker installation
Pre-engineered to fix the connections and the fuse switch disconnector for surge arrester beside the breaker. Installed on the mounting frame.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
3 x 570	2	50 x 10	1000	ZXHC21763	2CPX043068R9999	ZXMHC21763	2CPX043038R9999	1/3
		60 x 10	1250	ZXHC21773	2CPX043069R9999	ZXMHC21773	2CPX043039R9999	1/3
		80 x 10	1600	ZXHC21783	2CPX043070R9999	ZXMHC21783	2CPX043040R9999	1/3
		100 x 10	2000	PPHC1793	1STQ005106B0000	PPMC1793	1STQ005107B0000	1/3



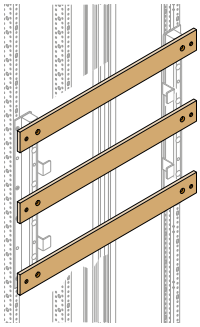
Main busbar system, 3 poles, Emax E2.2

For single breaker installation
Pre-engineered to fix the connections.
Installed on the back uprights of the structure.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
3x570	2	100 x 10	2000	PPHC1020	1STQ005104B0000	PPHC1021	1STQ005105B0000	1/3

185 mm Busbar System

Order codes

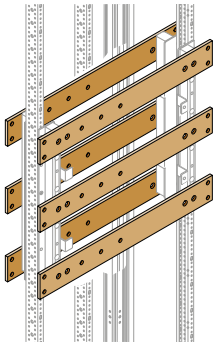


Main busbar system, 3 poles, universal

For multiple side by side breaker installation
The connection holes must be done by the customer according to number and postion of the breakers.
Installed on the mountig frame.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
3 x 570	2	50 x 10	1000	ZXHC2563	2CPX043086R9999	ZXMHC2563	2CPX043056R9999	1/3
		60 x 10	1250	ZXHC2573	2CPX043087R9999	ZXMHC2573	2CPX043057R9999	1/3
		80 x 10	1600	ZXHC2583	2CPX043088R9999	ZXMHC2583	2CPX043058R9999	1/3
		100 x 10	2000	PPHC2593	1STQ005108B0000	PPMC2593	1STQ005109B0000	1/3
3 x 820	3	3 x 820	1000	ZXHC3563	2CPX043089R9999	ZXMHC3563	2CPX043059R9999	1/3
		3 x 820	1250	ZXHC3573	2CPX043090R9999	ZXMHC3573	2CPX043060R9999	1/3
		3 x 820	1600	ZXHC3583	2CPX043091R9999	ZXMHC3583	2CPX043061R9999	1/3
		3 x 820	2000	PPHC3593	1STQ005110B0000	PPMC3593	1STQ005111B0000	1/3
3 x 1070	4 (1)	3 x 1070	1000	ZXHC4563	2CPX043092R9999	ZXMHC4563	2CPX043062R9999	1/3
		3 x 1070	1250	ZXHC4573	2CPX043093R9999	ZXMHC4573	2CPX043063R9999	1/3
		3 x 1070	1600	ZXHC4583	2CPX043094R9999	ZXMHC4583	2CPX043064R9999	1/3
		3 x 1070	2000	PPHC4593	1STQ005112B0000	PPMC4593	1STQ005113B0000	1/3
3 x 1320	5 (2)	50 x 10	1000	ZXHC5563	2CPX043095R9999	ZXMHC5563	2CPX043065R9999	1/3
		60 x 10	1250	ZXHC5573	2CPX043096R9999	ZXMHC5573	2CPX043066R9999	1/3
		80 x 10	1600	ZXHC5583	2CPX043097R9999	ZXMHC5583	2CPX043067R9999	1/3
		100 x 10	2000	PPHC5593	1STQ005114B0000	PPMC5593	1STQ005115B0000	1/3

(1) 2 FB + 2FB
(2) 3 FB + 2FB



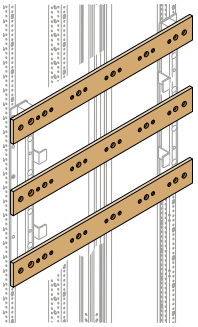
Main busbar system, 3 poles, coupler section

Two levels in depth for single breaker installation, X T7 and E1.2 as coupler
Pre-engineered to fix the connections.
Installed on the mounting frame.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
6 x 523	2	50 x 10	1000	ZXHC23763	2CPX043071R9999	ZXMHC23763	2CPX043041R9999	1/3
		60 x 10	1250	ZXHC23773	2CPX043072R9999	ZXMHC23773	2CPX043042R9999	1/3
		80 x 10	1600	ZXHC23783	2CPX043073R9999	ZXMHC23783	2CPX043043R9999	1/3

185 mm Busbar System

Order codes



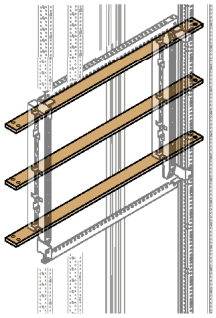
Main busbar system, 3 poles, InLine II ZHBM

For multiple side by side fuse switch disconnector installation

Pre engineered to screw size 00 (M8 bolt) and size 1-2-3 (M12 bolt) devices.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
3 x 570	2	50 x 10	1000	ZXHC2463	2CPX043074R9999	ZXMHC2463	2CPX043044R9999	1/3
		60 x 10	1250	ZXHC2473	2CPX043075R9999	ZXMHC2473	2CPX043045R9999	1/3
		80 x 10	1600	ZXHC2483	2CPX043076R9999	ZXMHC2483	2CPX043046R9999	1/3
		100 x 10	2000	PPHC2493	1STQ005116B0000	PPMC2493	1STQ005117B0000	1/3
3 x 820	3	3 x 820	1000	ZXHC3463	2CPX043077R9999	ZXMHC3463	2CPX043047R9999	1/3
		3 x 820	1250	ZXHC3473	2CPX043078R9999	ZXMHC3473	2CPX043048R9999	1/3
		3 x 820	1600	ZXHC3483	2CPX043079R9999	ZXMHC3483	2CPX043049R9999	1/3
		3 x 820	2000	PPHC3493	1STQ005118B0000	PPMC3493	1STQ005119B0000	1/3
3 x 1070	4[1]	3 x 1070	1000	ZXHC4463	2CPX043080R9999	ZXMHC4463	2CPX043050R9999	1/3
		3 x 1070	1250	ZXHC4473	2CPX043081R9999	ZXMHC4473	2CPX043051R9999	1/3
		3 x 1070	1600	ZXHC4483	2CPX043082R9999	ZXMHC4483	2CPX043052R9999	1/3
		3 x 1070	2000	PPHC4493	1STQ005120B0000	PPMC4493	1STQ005121B0000	1/3
3 x 1320	5[2]	50 x 10	1000	ZXHC5463	2CPX043083R9999	ZXMHC5463	2CPX043053R9999	1/3
		60 x 10	1250	ZXHC5473	2CPX043084R9999	ZXMHC5473	2CPX043054R9999	1/3
		80 x 10	1600	ZXHC5483	2CPX043085R9999	ZXMHC5483	2CPX043055R9999	1/3
		100 x 10	2000	PPHC5493	1STQ005122B0000	PPMC5493	1STQ005123B0000	1/3

[1] 2 FB + 2FB
[2] 3 FB + 2FB



Main busbar system, 3 poles, SlimLine XRG

For multiple side by side switch disconnector fuse installation

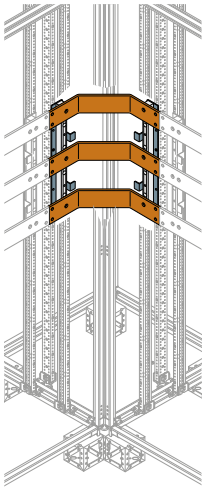
Devices plugged directly on the bars.ces.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
3 x 570	2	50 x 10	1000	ZXHC2563	2CPX043086R9999	ZXMHC2563	2CPX043056R9999	1/3
		60 x 10	1250	ZXHC2573	2CPX043087R9999	ZXMHC2573	2CPX043057R9999	1/3
		80 x 10	1600	ZXHC2583	2CPX043088R9999	ZXMHC2583	2CPX043058R9999	1/3
		100 x 10	2000	PPHC2593	1STQ005108B0000	PPMC2593	1STQ005109B0000	1/3
3 x 820	3	3 x 820	1000	ZXHC3563	2CPX043089R9999	ZXMHC3563	2CPX043059R9999	1/3
		3 x 820	1250	ZXHC3573	2CPX043090R9999	ZXMHC3573	2CPX043060R9999	1/3
		3 x 820	1600	ZXHC3583	2CPX043091R9999	ZXMHC3583	2CPX043061R9999	1/3
		3 x 820	2000	PPHC3593	1STQ005110B0000	PPMC3593	1STQ005111B0000	1/3
3 x 1070	4[1]	3 x 1070	1000	ZXHC4563	2CPX043092R9999	ZXMHC4563	2CPX043062R9999	1/3
		3 x 1070	1250	ZXHC4573	2CPX043093R9999	ZXMHC4573	2CPX043063R9999	1/3
		3 x 1070	1600	ZXHC4583	2CPX043094R9999	ZXMHC4583	2CPX043064R9999	1/3
		3 x 1070	2000	PPHC4593	1STQ005112B0000	PPMC4593	1STQ005113B0000	1/3
3 x 1320	5[2]	50 x 10	1000	ZXHC5563	2CPX043095R9999	ZXMHC5563	2CPX043065R9999	1/3
		60 x 10	1250	ZXHC5573	2CPX043096R9999	ZXMHC5573	2CPX043066R9999	1/3
		80 x 10	1600	ZXHC5583	2CPX043097R9999	ZXMHC5583	2CPX043067R9999	1/3
		100 x 10	2000	PPHC5593	1STQ005114B0000	PPMC5593	1STQ005115B0000	1/3

[1] 2 FB + 2FB, [2] 3 FB + 2FB

185 mm Busbar System

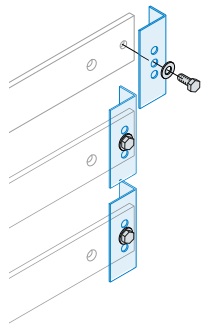
Order codes



Main busbar system , 3 poles, corner section

Installed on the mounting frame in the corner section.

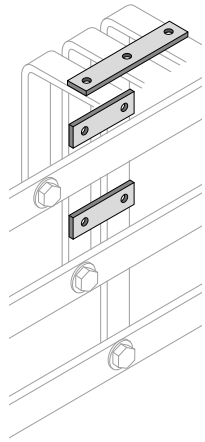
Dimensions (mm)				Delivered in kit		Delivered assembled		
W	D	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
3 x 570	2	50 x 10	1000	PPMB5010	1STQ005136B0000	PPMB5110	1STQ005140B0000	1/3
		60 x 10	1250	PPMB6015	1STQ005137B0000	PPMB6112	1STQ005141B0000	1/3
		80 x 10	1600	PPMB8016	1STQ005138B0000	PPMB8116	1STQ005142B0000	1/3
		100 x 10	2000	PPMB1020	1STQ005139B0000	PPMB1120	1STQ005143B0000	1/3



Main busbar system, 3 poles, insulation accessory

For maintaining air and and creepage distance between the copper busbars of the main busbar system (L1-L3 + N) and side walls, sufficient for left and right installation, including fastening elements.

	Delivered in kit		Delivered assembled		
Description	Type	Order code	Type	Order code	Package/ No. pcs
Mounting bracket	ZX970P4	1STQ008167B0000	ZX970P4A	1STQ003714M0000	1/8



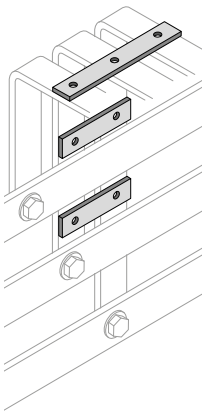
Supporting set for connection busbar system

Connection of incoming/outgoing module for main busbar system ABB Tmax T5 circuit-breaker, 3 poles, fixed assembly with connection on front side. Connection of incoming/outgoing module for main busbar system. Compatible with ABB Tmax T5 circuit-breaker, 3 poles, fixed assembly with connection on front side. The connection center distance is 46.5 mm. Material: GFK insulation panels.

Dimensions (mm)		Delivered in kit		Delivered assembled		
For Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
1x30x5 / 1x30x10	400/630	ZXVH13	2CPX043241R9999	ZXMVH13	2CPX043239R9999	1/3

185 mm Busbar System

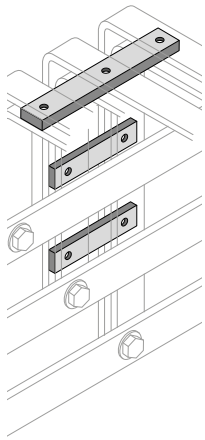
Order codes



Supporting set for connection busbar system

Connection of incoming/outgoing module for main busbar system.
Compatible with ABB Tmax T6 circuit-breaker, 3 poles, fixed assembly with connection on front side.
The connection center distance is 70mm.
Material: GFK insulation panels.

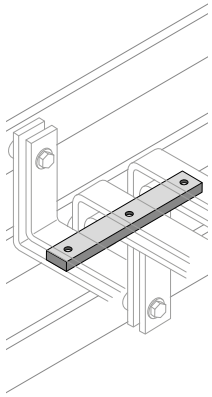
Dimensions (mm)		Delivered in kit		Delivered assembled		
For Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
1x50x10	800	ZXVH23	2CPX043242R9999	ZXMVH23	2CPX043240R9999	1/3
1x50x10	1000					



Supporting set for connection busbar system

Connection of incoming/outgoing module for main busbar system required once.
Compatible with ABB Tmax T7, Emax E1.2 circuit-breaker, 3 poles, fixed assembly with connection on front side. The connection center distance is 70mm.
Material: GFK insulation panels. Important: 2 of these sets are required for the bus-tie unit.

Dimensions (mm)		Delivered in kit		Delivered assembled		
For Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
1x50x10	800	ZXVH23	2CPX043242R9999	ZXMVH23	2CPX043240R9999	1/3
1x50x10	1000					
	1250					



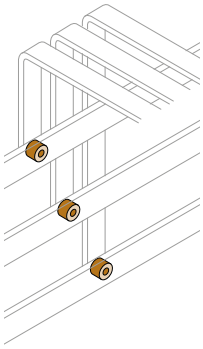
Supporting set for connection busbar system

Connection of incoming/outgoing module for main busbar system required once.
Compatible with ABB Emax E2.2 circuit-breaker, 3 poles, fixed assembly with connection on rear terminals.
The connection centre distance is 90mm.
Material: GFK insulation panels.

Dimensions (mm)		Delivered in kit		Delivered assembled		
For Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
2x60x10	2000	PPVH2024	1STQ005124B0000	PPMH2024	1STQ005125B0000	1/1

185 mm Busbar System

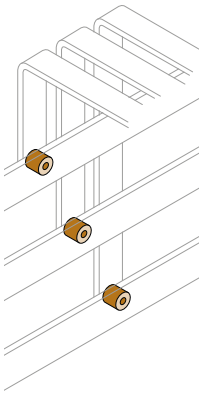
Order codes



Connection accessory for copper connection set

Connection of incoming/outgoing circuit-breaker for main busbar system.
Compatible with ABB Tmax T5 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 46.5 mm.
Cu spacers included.

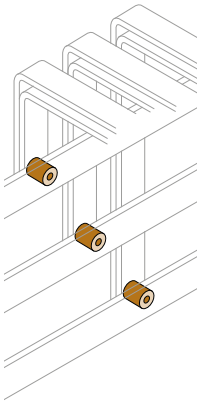
Dimensions (mm)				Delivered in kit		Delivered assembled		
Ø Cu spacer	Length Cu spacer	Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
30	40	1x30x5 1x30x10	400 630	ZXVA343	2CPX043151R9999	ZXMVA343	2CPX043149R9999	1/3



Connection accessory for copper connection set

Compatible with ABB Tmax T6 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 70mm.
Cu spacers included.

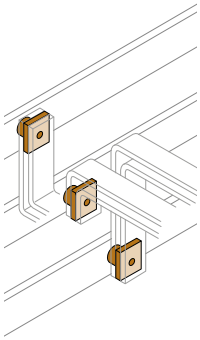
Dimensions (mm)				Delivered in kit		Delivered assembled		
Ø Cu spacer	Length Cu spacer	Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
30	40	1x40x5 1x40x10	800 1000	ZXVA343	2CPX043151R9999	ZXMVA343	2CPX043149R9999	1/3



Connection accessory for copper connection set

Compatible with ABB Tmax T7, Emax E1.2 circuit-breaker, 3 poles, fixed assembly with connections on front side. The connection center distance is 70mm.
Cu spacers included. Important: 2 of these sets are required for the bus-tie unit.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Ø Cu spacer	Length Cu spacer	Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
30	30	1x50x5 1x50x10	800 1000	ZXVA333	2CPX043150R9999	ZXMVA333	2CPX043148R9999	1/3



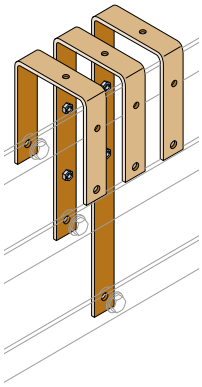
Connection accessory for copper connection set

Compatible with ABB Emax E2.2 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 90mm.
Cu spacers included.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Ø Cu spacer	Length Cu spacer	Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
30	20	2 x 60 x 10	2000	PPVA3033	1STQ005126B0000	PPMA3033	1STQ005127B0000	1/3
	10	2 x 60 x 10	2000	PPVA3133	1STQ005128B0000	PPMA3133	1STQ005129B0000	1/3

185 mm Busbar System

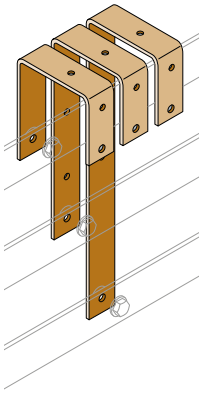
Order codes



Connection set to main busbar system

Connection of incoming/outgoing circuit-breaker for main busbar system.
Compatible with ABB Tmax XT5 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 46.5 mm. 2 per pole possible for transformer assembly.
M8 voltage socket per phase including fastening elements.
The codes include all fastening screws for connecting the circuit-breaker and supporting set.

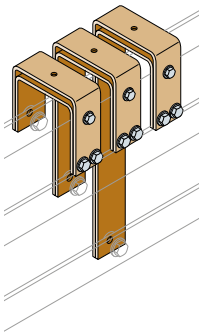
Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
1 x 30 x 5	400	PPVC1533				1/3
1 x 30 x 10	630	PPVC1543				1/3



Connection set to main busbar system

Connection of incoming/outgoing module for main busbar system.
Compatible with ABB Tmax XT6 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 70mm.
2 per pole possible for transformer assembly.
M8 voltage socket per phase including fastening elements. The codes include all fastening screws for connecting the circuit-breaker and supporting set.

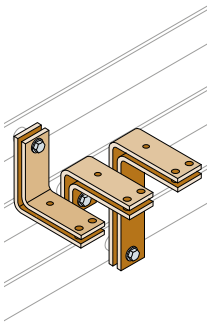
Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
1 x 40 x 10	800	ZXVC1653	2CPX043162R9999	ZXMVC1653	2CPX043154R9999	1/3
1 x 50 x 10	1000	ZXVC1663	2CPX043163R9999	ZXMVC1663	2CPX043155R9999	1/3



Connection set to main busbar system

Connection of incoming/outgoing module for main busbar system compatible with ABB Tmax XT7, Emax E1.2 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 70mm.
2 per pole possible for transformer assembly.
M8 voltage socket per phase including fastening elements.the codes include all fastening screws for connecting the circuit-breaker and supporting set.

Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
1 x 50 x 10	1000	ZXVC1763	2CPX043164R9999	ZXMVC1763	2CPX043156R9999	1/3
2 x 50 x 10	1250 / 1600	ZXVC1783	2CPX043165R9999	ZXMVC1783	2CPX043157R9999	1/3



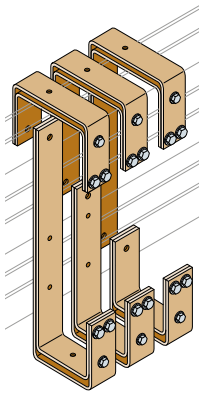
Connection set to main busbar system

Connection of incoming/outgoing module for main busbar system compatible with ABB Emax E2.2 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 90mm.
the codes include all fastening screws for connecting the circuit-breaker and supporting set.

Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
2 x 60 x 10	2000	PPVC1623	1STQ005130B0000	PPMC1623	1STQ005131B0000	1/3

185 mm Busbar System

Order codes



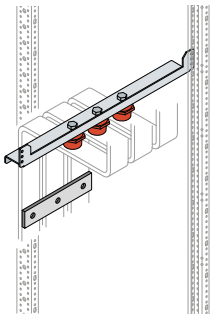
Connection set to main busbar system

Connection of connection module for main busbar system compatible with ABB Tmax XT7, Emax E1.2 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 70mm.
2 per pole possible for transformer assembly.
M8 voltage socket per phase including fastening elements.
The codes include all fastening screws for connecting the circuit-breaker and supporting set.

Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
1 x 50 x 10	1000	ZXVC3763	2CPX043166R9999	ZXMVC3763	2CPX043158R9999	1/3
2 x 50 x 10	1250 / 1600	ZXVC3783	2CPX043167R9999	ZXMVC3783	2CPX043159R9999	1/3

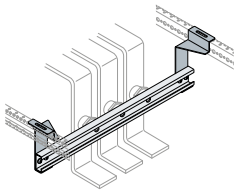
185 mm Busbar System

Order codes



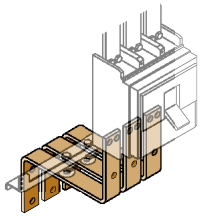
Supporting set / in copper for busbar system
Supporting set for busbar system.
Circuit-breaker connection for connection on site.
Compatible with ABB Tmax XT7, Emax E1.2 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 70mm.
GFK insulating plates, support insulators and mounting cross member included in fastening elements.

Dimensions (mm)			Delivered in kit		Delivered assembled		
Cu busbars	FB	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
1 x 50 x 10 2 x 50 x 10	2	1000 1250 / 1600	ZXAH2122	2CPX043234R9999	ZXMAH2122	2CPX043233R9999	1/1



Supporting set / in copper for busbar system
Supporting set for busbar system.
Circuit-breaker connection for connection on site.
Compatible with ABB Emax E2.2 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 90mm.
GFK insulating plates, support insulators and mounting cross member included in fastening elements.
In case of incoming from the top, both codes below are required.

Dimensions (mm)			Delivered in kit		Delivered assembled		
Cu busbars	FB	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
2 x 60 x 10	2	1000	PPAC6020	1STQ005132B0000	PPMC6020	1STQ005133B0000	1/1
2 x 60 x 10	2	2000 from top	PPAC6021	1STQ005134B0000	PPMC6021	1STQ005135B0000	1/1

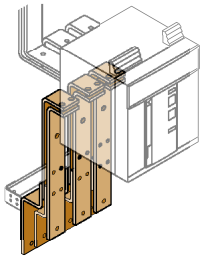


Connection set to cables
Circuit-breaker connection for connection on site compatible with ABB Tmax T7, Emax E1.2 circuit-breaker, 3 poles, fixed assembly with connections on front side.
The connection center distance is 70mm.
M8 voltage socket per phase including fastening elements.
the codes include all fastening screws for connecting the circuit-breaker and supporting set.
It cannot be used in a 400mm deep cabinet.

Dimensions (mm)			Delivered in kit		Delivered assembled		
Cu busbars	FB	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
Connections in cable possible max. size 2x240mm² (M10)							
1 x 50 x 10	2	1000	ZXAC21763	2CPX043036R9999	ZXMAC21763	2CPX043034R9999	1/1
Connections in cable possible max. size 4x240mm² (M10)							
2 x 50 x 10	2	1250/1600	ZXAC21783	2CPX043037R9999	ZXMAC21783	2CPX043035R9999	1/1

185 mm Busbar System

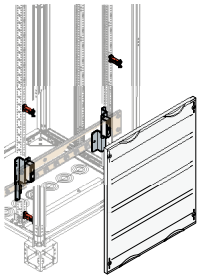
Order codes



Connection set to cables

Copper busbar system.
Circuit-breaker connection for connection on site compatible with ABB Emax E2.2 circuit-breaker, 3 poles, fixed assembly with connections on rear terminals.
The connection center distance is 90mm.
The codes include all fastening screws for connecting the circuit-breaker and supporting set.

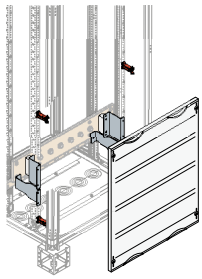
Dimensions (mm)			Delivered in kit		Delivered assembled		
Cu busbars	FB	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
Connections in cable possible max. size 6x240mm² (M10)							
2 x 60 x 10	2	2000	PPAC1220	1STQ005144B0000	PPMC1220	1STQ005145B0000	1/1



N/PE horizontal busbars

Horizontal N/PE busbar module with all cross profiles required and busbar holder support ZX563.
The panels are without cut-out.
The mounting frame must be ordered separately.

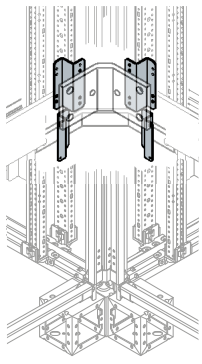
External dimensions (mm)					Delivered in kit		Delivered assembled		
Kit H	RE	W	FB	D min.	Type	Order code	Type	Order code	Package/ No. pcs
450	2	600	2	400	MBNH23	2CPX043010R9999	MNH23	2CPX043014R9999	1/1
	3	850	3	400	MBNH33	2CPX043011R9999	MNH33	2CPX043015R9999	1/1
600	2	600	2	400	MBNH24	2CPX043012R9999	MNH24	2CPX043016R9999	1/1
	3	850	3	400	MBNH34	2CPX043013R9999	MNH34	2CPX043017R9999	1/1



N/PE horizontal horizontal 2000A section

Horizontal N/PE busbar module with all cross profiles required and busbar holder support ZX563.
The panels are without cut-out.
The mounting frame must be ordered separately.

External dimensions (mm)					Delivered in kit		Delivered assembled		
Kit H	RE	W	FB	D min.	Type	Order code	Type	Order code	Package/ No. pcs
450	3	600	2	600	PPNH5043	1STQ005146B0000	PPNH5143	1STQ005147B0000	1/1
600	3	600	2	600	PPNH5053	1STQ005148B0000	PPNH5153	1STQ005149B0000	1/1



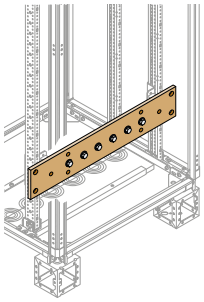
N/PE horizontal horizontal 2000A section

Horizontal N/PE busbar module with all cross profiles required and busbar holder support ZX563.
The panels are without cut-out.
The mounting frame must be ordered separately.

External dimensions (mm)			Delivered in kit		Delivered assembled		
H	W	D	Type	Order code	Type	Order code	Package/ No. pcs
450/600	600	600	-	1STQ005411B0000	-	1STQ001309M0000	1/1

185 mm Busbar System

Order codes

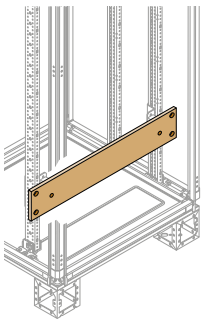


Horizontal N busbar system

For horizontal cable compartment and for incoming/outgoing modules.
Copper busbars included in fastening elements and fastening screws.
100% current carrying capacity of main busbar system phases.

Dimensions (mm)			Delivered in kit		Delivered assembled		
Length	FB	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
Connections in cable possible max. size 7x240mm² (M10)							
578	2	1000	ZXNHC216	2CPX043113R9999	ZXMNHC216	2CPX043098R9999	1/1
		1250	ZXNHC217	2CPX043114R9999	ZXMNHC217	2CPX043099R9999	1/1
		1600	ZXNHC218	2CPX043115R9999	ZXMNHC218	2CPX043100R9999	1/1
		2000	PPHC2119	1STQ005150B0000	PPMC2119	1STQ005154B0000	1/1
Connections in cable possible max. size 12x240mm² (M10)							
828	3	1000	ZXNHC316	2CPX043116R9999	ZXMNHC316	2CPX043101R9999	1/1
		1250	ZXNHC317	2CPX043117R9999	ZXMNHC317	2CPX043102R9999	1/1
		1600	ZXNHC318	2CPX043118R9999	ZXMNHC318	2CPX043103R9999	1/1
		2000	PPHC3119	1STQ005151B0000	PPMC3119	1STQ005155B0000	1/1
Connections in cable possible max. size 14x240mm² (M10)							
1078	4 [1]	1000	ZXNHC416	2CPX043119R9999	ZXMNHC416	2CPX043104R9999	1/1
		1250	ZXNHC417	2CPX043120R9999	ZXMNHC417	2CPX043105R9999	1/1
		1600	ZXNHC418	2CPX043121R9999	ZXMNHC418	2CPX043106R9999	1/1
		2000	PPHC4119	1STQ005152B0000	PPMC4119	1STQ005156B0000	1/1
Connections in cable possible max. size 19x240mm² (M10)							
1328	5 [2]	1000	ZXNHC516	2CPX043122R9999	ZXMNHC516	2CPX043107R9999	1/1
		1250	ZXNHC517	2CPX043123R9999	ZXMNHC517	2CPX043108R9999	1/1
		1600	ZXNHC518	2CPX043124R9999	ZXMNHC518	2CPX043109R9999	1/1
		2000	PPHC5119	1STQ005153B0000	PPMC5119	1STQ005157B0000	1/1

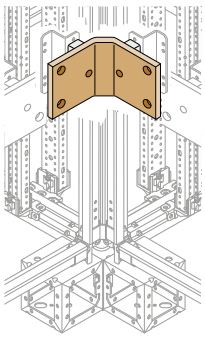
[1] 2 FB + 2FB
[2] 3 FB + 2FB



Horizontal N busbar system

For horizontal cable compartment and for coupler section.
Passing copper busbars included in fastening elements.
100% current carrying capacity of main busbar system phases.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
578	2	50 x 10	1000	ZXNHC236	2CPX043125R9999	ZXMNHC236	2CPX043110R9999	1/3
		60 x 10	1250	ZXNHC237	2CPX043126R9999	ZXMNHC237	2CPX043111R9999	1/3
		80 x 10	1600	ZXNHC238	2CPX043127R9999	ZXMNHC238	2CPX043112R9999	1/3
		100 x 10	2000	PPHC2239	1STQ005158B0000	PPMC2239	1STQ005159B0000	1/3



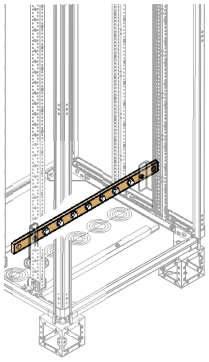
Horizontal N busbar system

For corner section.
Passing copper busbars included in fastening elements.
100% current carrying capacity of main busbar system phases.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
578	2	50 x 10		PPHN5010	1STQ005160B0000	PPMN5010	1STQ005164B0000	1/3
		60 x 10		PPHN6012	1STQ005161B0000	PPMN6012	1STQ005165B0000	1/3
		80 x 10		PPHN8016	1STQ005162B0000	PPMN8016	1STQ005166B0000	1/3
		100 x 10		PPHN1020	1STQ005163B0000	PPMN1020	1STQ005167B0000	1/3

185 mm Busbar System

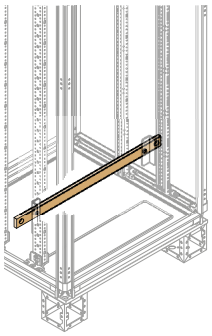
Order codes



Horizontal PE busbar system

For horizontal cable compartment and for incoming/outgoing modules.
Copper busbars included in fastening elements and fastening screws.

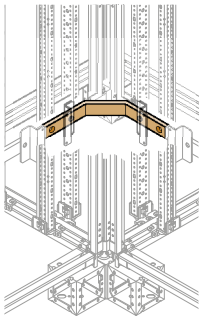
Dimensions (mm)			Delivered in kit		Delivered assembled		
Length	FB	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
Connections in cable possible max. size 8x240mm² (M10)							
578	2	1000/1250	ZXPHC217	2CPX043138R9999	ZXMPHC217	2CPX043128R9999	1/1
		1600/2000	ZXPHC218	2CPX043139R9999	ZXMPHC218	2CPX043129R9999	1/1
Connections in cable possible max. size 13x240mm² (M10)							
828	3	1000/1250	ZXPHC317	2CPX043140R9999	ZXMPHC317	2CPX043130R9999	1/1
		1600/2000	ZXPHC318	2CPX043141R9999	ZXMPHC318	2CPX043131R9999	1/1
Connections in cable possible max. size 16x240mm² (M10)							
1078	4 (1)	1000/1250	ZXPHC417	2CPX043142R9999	ZXMPHC417	2CPX043132R9999	1/1
		1600/2000	ZXPHC418	2CPX043143R9999	ZXMPHC418	2CPX043133R9999	1/1
Connections in cable possible max. size 21x240mm² (M10)							
1328	5 (2)	1000/1250	ZXPHC517	2CPX043144R9999	ZXMPHC517	2CPX043134R9999	1/1
		1600/2000	ZXPHC518	2CPX043145R9999	ZXMPHC518	2CPX043135R9999	1/1



Horizontal PE busbar system

For horizontal cable compartment and for coupler section.
Passing copper busbars included in fastening elements.
50% current carrying capacity of conductors outside main busbar system.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
570	2	30 x 10	1000 1250	ZXPHC237	2CPX043146R9999	ZXMPHC237	2CPX043136R9999	1/1
		40x 10	1600 2000	ZXPHC238	2CPX043147R9999	ZXMPHC238	2CPX043137R9999	1/1



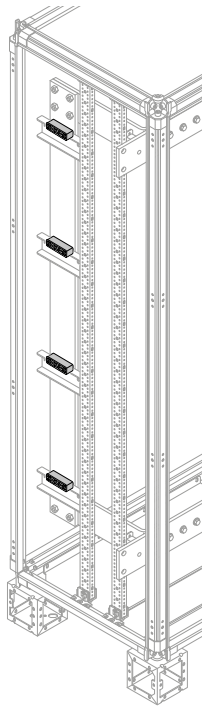
Horizontal PE busbar system

For corner section and for connection module.
Passing copper busbars included in fastening elements.
50% current carrying capacity of conductors outside main busbar system.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Length	FB	Cu busbar	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
570	2	30 x 10	1000 1250	PPHC3039	1STQ005168B0000	PPMC3039	1STQ005170B0000	1/1
		40x 10	1600 2000	PPHC4039	1STQ005169B0000	PPMC4039	1STQ005171B0000	1/1

185 mm Busbar System

Order codes



Vertical N supporting set

Vertical N busbar system supporting set for N connection of top / bottom connection compartment.
Mounting bracket for ZX563 busbar support included in fastening elements.
It can be installed only in the fuse switch disconnector section.

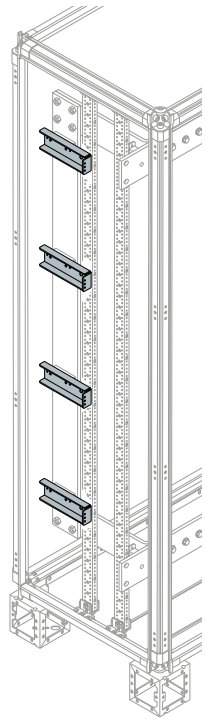
Dimensions (mm)			Delivered in kit		Delivered assembled		
Cu busbars	In (A)	D cabinet	Type	Order code	Type	Order code	Package/ No. pcs
Up to 100x10	up to 2000	600	ZXNVH4	2CPX043237R9999	ZXMNVH4	2CPX043235R9999	1/4

Offset N Connection

Section (mm)	RE	D (mm)	Delivered in kit		Delivered assembled		Package/ No. pcs
			Type	Order code	Type	Order code	
50x10	12	400	PNVC1129	1STQ007054B0000	PNVC1129A	1STQ003438M0000	1/1
50x10	14	400	PNVC1149	1STQ007055B0000	PNVC1149A	1STQ003439M0000	1/1

Mounting support for Offset N/PE

Description	Delivered in kit		Delivered assembled		Package/ No. pcs
	Type	Order code	Type	Order code	
Mounting support for Offset N/PE D400mm	PPZX0004	1STQ007058B0000	PPZX0004A	1STQ003442M0000	1/1



Vertical PE supporting set

Vertical PE busbar system supporting set for PE connection of top / bottom connection compartment.
Mounting bracket included in fastening elements.
It can be installed only in the fuse switch disconnector section.

Dimensions (mm)			Delivered in kit		Delivered assembled		
Cu busbars	In (A)	D cabinet	Type	Order code	Type	Order code	Package/ No. pcs
Up to 40x10	up to 2000	600	ZXPVH4	2CPX043238R9999	ZXMPVH4	2CPX043236R9999	1/4

Offset PE Connection

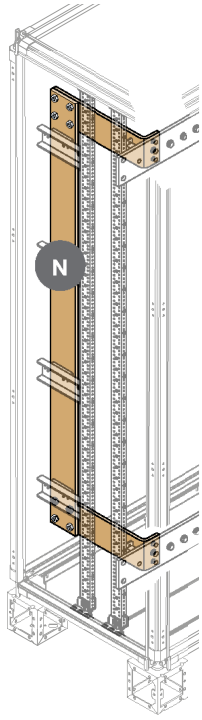
Section (mm)	RE	D (mm)	Delivered in kit		Delivered assembled		Package/ No. pcs
			Type	Order code	Type	Order code	
30x10	12	400	PPVC1129	1STQ007056B0000	PPVC1129A	1STQ003440M0000	1/1
30x10	14	400	PPVC1149	1STQ007057B0000	PPVC1149A	1STQ003441M0000	1/1

Mounting support for Offset N/PE

Description	Delivered in kit		Delivered assembled		Package/ No. pcs
	Type	Order code	Type	Order code	
Mounting support for Offset N/PE D400mm	PPZX0004	1STQ007058B0000	PPZX0004A	1STQ003442M0000	1/1

185 mm Busbar System

Order codes



Vertical N busbar system

For N connection of top / bottom connection compartment.
Passing copper busbars included in fastening elements.
100% current carrying capacity of main busbar system phases.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Unit RE	D cabinet	Type	Order code	Type	Order code	Package/ No. pcs
50 x 10	1000	12	600	ZXNVC2126	2CPX043199R9999	ZXMNVC2126	2CPX043189R9999	1/1
60 x 10	1250	12	600	ZXNVC2127	2CPX043200R9999	ZXMNVC2127	2CPX043190R9999	1/1
80 x 10	1600	12	600	ZXNVC2128	2CPX043201R9999	ZXMNVC2128	2CPX043191R9999	1/1
100 x 10	2000	12	600	PNVC2129	1STQ005172B0000	PNNC2129	1STQ005173B0000	1/1
50 x 10	1000	14	600	ZXNVC2146	2CPX043202R9999	ZXMNVC2146	2CPX043192R9999	1/1
60 x 10	1250	14	600	ZXNVC2147	2CPX043203R9999	ZXMNVC2147	2CPX043193R9999	1/1
80 x 10	1600	14	600	ZXNVC2148	2CPX043204R9999	ZXMNVC2148	2CPX043194R9999	1/1
100 x 10	2000	14	600	PNVC2149	1STQ005174B0000	PNNC2149	1STQ005175B0000	1/1

Offset N Connection

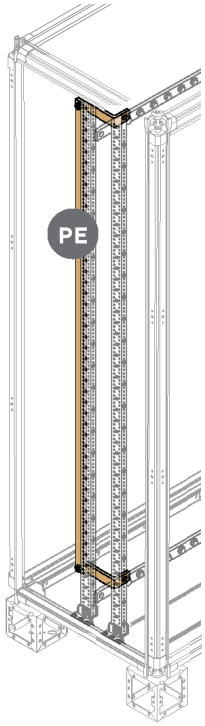
Section (mm)	RE	D (mm)	Delivered in kit		Delivered assembled		Package/ No. pcs
			Type	Order code	Type	Order code	
50x10	12	400	PNVC1129	1STQ007054B0000	PNVC1129A	1STQ003438M0000	1/1
50x10	14	400	PNVC1149	1STQ007055B0000	PNVC1149A	1STQ003439M0000	1/1

Mounting support for Offset N/PE

Description	Delivered in kit		Delivered assembled		Package/ No. pcs
	Type	Order code	Type	Order code	
Mounting support for Offset N/PE D400mm	PPZX0004	1STQ007058B0000	PPZX0004A	1STQ003442M0000	1/1

185 mm Busbar System

Order codes



Vertical PE busbar system

For PE connection of top / bottom connection compartment.
Copper busbars included in fastening elements and fastening screws.
50% current carrying capacity of conductors outside main busbar system.

Dimensions (mm)				Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Unit RE	D cabinet	Type	Order code	Type	Order code	Package/ No. pcs
30 x 10	1000 1250	12	600	ZXPVC2127	2CPX043205R9999	ZXMPVC2127	2CPX043195R9999	1/1
40 x 10	1600 2000	12	600	ZXPVC2128	2CPX043206R9999	ZXMPVC2128	2CPX043196R9999	1/1
30 x 10	1000 1250	14	600	ZXPVC2147	2CPX043207R9999	ZXMPVC2147	2CPX043197R9999	1/1
40 x 10	1600 2000	14	600	ZXPVC2148	2CPX043208R9999	ZXMPVC2148	2CPX043198R9999	1/1

Offset PE Connection

Section (mm)	RE	D (mm)	Delivered in kit		Delivered assembled		Package/ No. pcs
			Type	Order code	Type	Order code	
30x10	12	400	PPVC1129	1STQ007056B0000	PPVC1129A	1STQ003440M0000	1/1
30x10	14	400	PPVC1149	1STQ007057B0000	PPVC1149A	1STQ003441M0000	1/1

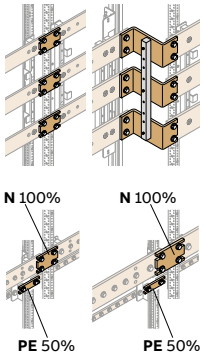
Mounting support for Offset N/PE

Description	Delivered in kit		Delivered assembled		Package/ No. pcs
	Type	Order code	Type	Order code	
Mounting support for Offset N/PE D400mm	PPZX0004	1STQ007058B0000	PPZX0004A	1STQ003442M0000	1/1

185 mm Busbar System

Order codes

ZXFC118 PPFC1120

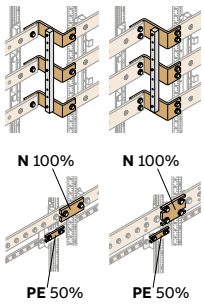


Copper section to section connection

For vertical copper busbars on the same level.
PPFC1120 to be used for E2.2 section.
L1, L2, L3, N 100% and PE 50%.

Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
50 x 10	1000	ZXFC116	2CPX043243R9999	-	-	1/1
60 x 10	1250	ZXFC117	2CPX043244R9999	-	-	1/1
80 x 10	1600	ZXFC118	2CPX043245R9999	-	-	1/1
100 x 10 flat	2000	PPFC1119	1STQ005176B0000	-	-	1/1
100 x 10 shaped	2000	PPFC1120	1STQ005177B0000	-	-	1/1

ZXFC127 ZXFC128

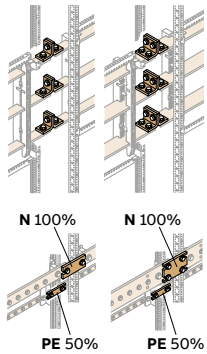


Copper section to section connection

For vertical copper busbars - back row to front row.
L1, L2, L3, N 100% and PE 50%.

Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
50 x 10	1000	ZXFC126	2CPX043249R9999	-	-	1/1
60 x 10	1250	ZXFC127	2CPX043250R9999	-	-	1/1
80 x 10	1600	ZXFC128	2CPX043251R9999	-	-	1/1

ZXFC137 ZXFC138



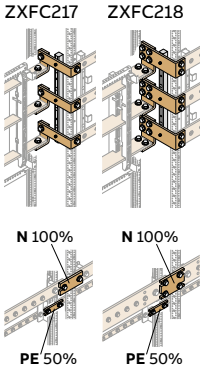
Copper section to section connection

Copper panel-panel connector for copper busbars, horizontal on horizontal (for switch disconnector fuse). L1, L2, L3, N 100% and PE 50%.

Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
50 x 10	1000	ZXFC136	2CPX043258R9999	-	-	1/1
60 x 10	1250	ZXFC137	2CPX043259R9999	-	-	1/1
80 x 10	1600	ZXFC138	2CPX043260R9999	-	-	1/1
100 x 10	2000	PPFC1139	1STQ005180B0000	-	-	1/1

185 mm Busbar System

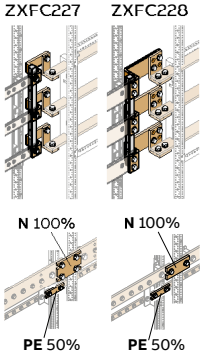
Order codes



Copper section to section connection

For vertical copper busbars - front row to horizontal position.
PPFC2220 to be used for E2.2 section.
L1, L2, L3, N 100% and PE 50%.

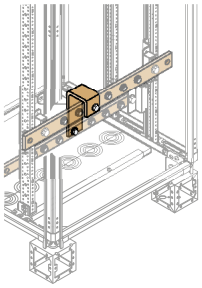
Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
50 x 10	1000	ZXFC216	2CPX043246R9999	-	-	1/1
60 x 10	1250	ZXFC217	2CPX043247R9999	-	-	1/1
80 x 10	1600	ZXFC218	2CPX043248R9999	-	-	1/1
100 x 10 flat	2000	PPFC2219	1STQ005182B0000	-	-	1/1
100 x 10 shaped	2000	PPFC2220	1STQ005183B0000	-	-	1/1



Copper section to section connection

Copper panel-panel connector for vertical copper busbars - back row to horizontal position.
L1, L2, L3, N 100% and PE 50%.

Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
50 x 10	1000	ZXFC226	2CPX043252R9999	-	-	1/1
60 x 10	1250	ZXFC227	2CPX043253R9999	-	-	1/1
80 x 10	1600	ZXFC228	2CPX043254R9999	-	-	1/1



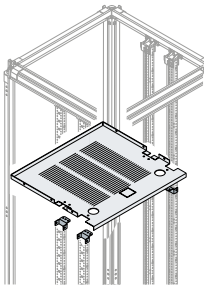
Central earthing point

Connection between busbar PEN-/ N for busbar PE.
50% current carrying capacity of conductors outside main busbar system.

Dimensions (mm)		Delivered in kit		Delivered assembled		
Cu busbars	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
50 x 10	1000/1250/1600	PPZXZC8	1STQ009859B0000	PPZXZC8A	1STQ004805M0000	1/1
50 x 10	2000	PPZXZC9	1STQ005410B0000	PPZXZC9A	1STQ001308M0000	1/1

185 mm Busbar System

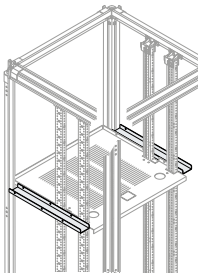
Order codes



Horizontal partitions

Horizontal partition in sheet steel for use of side components, type of protection IPXXB.
Including M40 cable gland on right and left and fastening elements.
WR mounting frame fastening position in front, position 6.

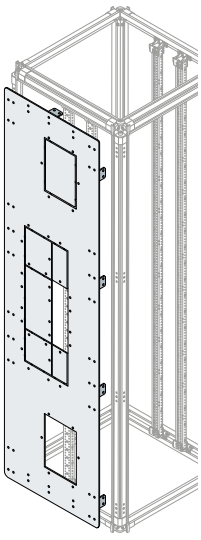
External dimensions (mm)			Delivered in kit		Delivered assembled		Package/
W	FB	D	Type	Order code	Type	Order code	No. pcs
600	2	400	ZXTH24	2CPX043215R9999	ZXMTH24	2CPX043209R9999	1/2
850	3	400	ZXTH34	2CPX043216R9999	ZXMTH34	2CPX043210R9999	1/2
600	2	600	ZXTH26	2CPX043217R9999	ZXMTH26	2CPX043211R9999	1/2
850	3	600	ZXTH36	2CPX043218R9999	ZXMTH36	2CPX043212R9999	1/2
For Emax 2.2 section							
600	2	600	PPTH5050	1STQ005186B0000	PPTH5051	1STQ005187B0000	1/2



Horizontal partitions

Horizontal partition wall side components (right and left), fastening elements included.

External dimensions (mm)			Delivered in kit		Delivered assembled		Package/
W	FB	D	Type	Order code	Type	Order code	No. pcs
		400	ZXSH4	2CPX043219R9999	ZXMSH4	2CPX043213R9999	1/1
		600	ZXSH6	2CPX043220R9999	ZXMSH6	2CPX043214R9999	1/1
For Emax 2.2 section							
600	2	600	PPSH2250	1STQ005188B0000	PPSH2251	1STQ005189B0000	



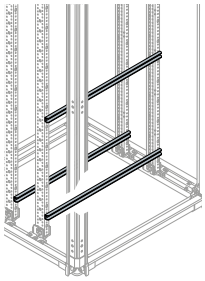
Vertical partitions

Vertical partitions in steel sheet, pre-engineered for passage of busbars, fastening elements included.
Compatible with PSBS0065 page 2/24.

External dimensions (mm)			Delivered in kit		Delivered assembled		Package/
H	RE	D	Type	Order code	Type	Order code	No. pcs
2200	12	400	ZXTV412	2CPX043225R9999	ZXMTV412	2CPX043221R9999	1/1
2200	14	400	ZXTV414	2CPX043226R9999	ZXMTV414	2CPX043222R9999	1/1
1900	12	600	ZXTV612	2CPX043227R9999	ZXMTV612	2CPX043223R9999	1/1
2200	14	600	ZXTV614	2CPX043228R9999	ZXMTV614	2CPX043224R9999	1/1

185 mm Busbar System

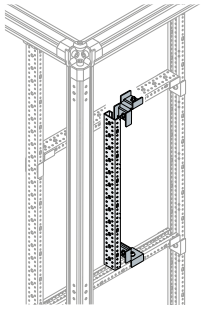
Order codes



Horizontal cross profile to divide the unit

Including fastening screws. Two cross profiles are required to divide the unit at the top and bottom.

External dimensions (mm)		Delivered in kit		Delivered assembled		Package/
W	FB	Type	Order code	Type	Order code	No. pcs
600	2	ZW165	2CPX041862R9999	ZWM165	2CPX041444R9999	1/1
		ZW165P10	2CPX062711R9999	-	-	1/10
850	3	ZW166	2CPX041863R9999	ZWM166	2CPX041445R9999	1/1
		ZW166P10	2CPX062712R9999	-	-	1/10



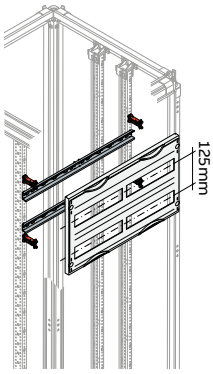
Vertical WR profile rail

Two vertical WR profile rails are required to divide the unit lengthwise.

Dimensions (mm)		Delivered in kit		Delivered assembled		Package/
H	RE	Type	Order code	Type	Order code	No. pcs
150	1	ZW367	2CPX041850R9999	ZWM367	2CPX041432R9999	1/1
300	2	ZW368	2CPX041851R9999	ZWM368	2CPX041433R9999	1/1
450	3	ZW369	2CPX041852R9999	ZWM369	2CPX041434R9999	1/1
600	4	ZW370	2CPX041853R9999	ZWM370	2CPX041435R9999	1/1
750	5	ZW371	2CPX041854R9999	ZWM371	2CPX041436R9999	1/1
900	6	ZW372	2CPX041855R9999	ZWM372	2CPX041437R9999	1/1

185 mm Busbar System

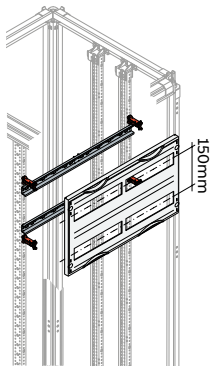
Order codes



Vertical WR profile rail

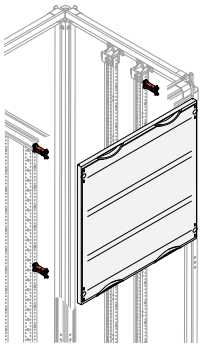
Two vertical WR profile rails are required to divide the unit lengthwise.

External dimensions (mm)					Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D kit	Type	Order code	Type	Order code	Package/ No. pcs
Row distance 125 mm									
150	1	300	1	120	MBG101	2CPX041650R9999	MG101	2CPX041200R9999	1/1
		600	2	120	MBG201	2CPX041651R9999	MG201	2CPX041201R9999	1/1
		850	3	120	MBG301	2CPX041652R9999	MG301	2CPX041202R9999	1/1
300	2	300	1	120	MBG102	2CPX041653R9999	MG102	2CPX041203R9999	1/1
		600	2	120	MBG202	2CPX041655R9999	MG202	2CPX041205R9999	1/1
		850	3	120	MBG302	2CPX041657R9999	MG302	2CPX041207R9999	1/1
450	3	300	1	120	MBG103	2CPX041659R9999	MG103	2CPX041209R9999	1/1
		600	2	120	MBG203	2CPX041661R9999	MG203	2CPX041211R9999	1/1
		850	3	120	MBG303	2CPX041663R9999	MG303	2CPX041213R9999	1/1
600	4	300	1	120	MBG104	2CPX041665R9999	MG104	2CPX041215R9999	1/1
		600	2	120	MBG204	2CPX041667R9999	MG204	2CPX041217R9999	1/1
		850	3	120	MBG304	2CPX041669R9999	MG304	2CPX041219R9999	1/1
750	5	300	1	120	MBG105	2CPX041671R9999	MG105	2CPX041221R9999	1/1
		600	2	120	MBG205	2CPX041673R9999	MG205	2CPX041223R9999	1/1
		850	3	120	MBG305	2CPX041675R9999	MG305	2CPX041225R9999	1/1
Row distance 150 mm									
150	1	300	1	120	MBG101	2CPX041650R9999	MG101	2CPX041200R9999	1/1
		600	2	120	MBG201	2CPX041651R9999	MG201	2CPX041201R9999	1/1
		850	3	120	MBG301	2CPX041652R9999	MG301	2CPX041202R9999	1/1
300	2	300	1	120	MBG412	2CPX041654R9999	MG412	2CPX041204R9999	1/1
		600	2	120	MBG422	2CPX041656R9999	MG422	2CPX041206R9999	1/1
		850	3	120	MBG432	2CPX041658R9999	MG432	2CPX041208R9999	1/1
450	3	300	1	120	MBG413	2CPX041660R9999	MG413	2CPX041210R9999	1/1
		600	2	120	MBG423	2CPX041662R9999	MG423	2CPX041212R9999	1/1
		850	3	120	MBG433	2CPX041664R9999	MG433	2CPX041214R9999	1/1
600	4	300	1	120	MBG414	2CPX041666R9999	MG414	2CPX041216R9999	1/1
		600	2	120	MBG424	2CPX041668R9999	MG424	2CPX041218R9999	1/1
		850	3	120	MBG434	2CPX041670R9999	MG434	2CPX041220R9999	1/1
750	5	300	1	120	MBG415	2CPX041672R9999	MG415	2CPX041222R9999	1/1
		600	2	120	MBG425	2CPX041674R9999	MG425	2CPX041224R9999	1/1
		850	3	120	MBG435	2CPX041676R9999	MG435	2CPX041226R9999	1/1



185 mm Busbar System

Order codes



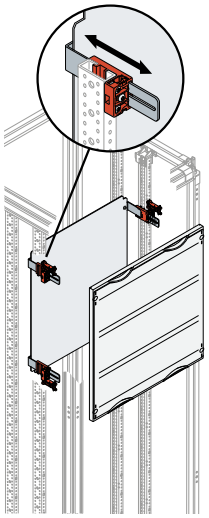
Protection against discharge

Module for use as protection against discharge or for expansion using components of the system. The mounting frame must be ordered separately.

External dimensions (mm)					Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D kit	Type	Order code	Type	Order code	Package/ No. pcs
150	1	300	1	120	MBB116	2CPX041722R9999	MB116	2CPX041257R9999	1/1
		600	2	120	MBB216	2CPX041723R9999	MB216	2CPX041258R9999	1/1
		850	3	120	MBB316	2CPX041724R9999	MB316	2CPX041259R9999	1/1
300	2	300	1	120	MBB117	2CPX041725R9999	MB117	2CPX041260R9999	1/1
		600	2	120	MBB217	2CPX041726R9999	MB217	2CPX041261R9999	1/1
		850	3	120	MBB317	2CPX041727R9999	MB317	2CPX041262R9999	1/1
450	3	300	1	120	MBB118	2CPX041728R9999	MB118	2CPX041263R9999	1/1
		600	2	120	MBB218	2CPX041729R9999	MB218	2CPX041264R9999	1/1
		850	3	120	MBB318	2CPX041730R9999	MB318	2CPX041265R9999	1/1
600	4	300	1	120	MBB119	2CPX041731R9999	MB119	2CPX041266R9999	1/1
		600	2	120	MBB219	2CPX041732R9999	MB219	2CPX041267R9999	1/1
		850	3	120	MBB319	2CPX041733R9999	MB319	2CPX041268R9999	1/1
750	5	300	1	120	MBB120	2CPX041734R9999	MB120	2CPX041269R9999	1/1
		600	2	120	MBB220	2CPX041735R9999	MB220	2CPX041270R9999	1/1
		850	3	120	MBB320	2CPX041736R9999	MB320	2CPX041271R9999	1/1

185 mm Busbar System

Order codes



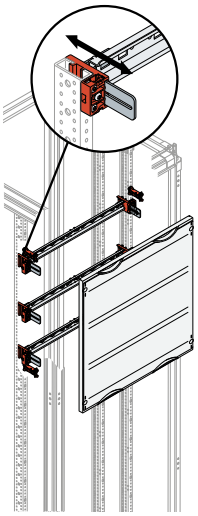
Mounting plates

2 mm sheet steel mounting plates.
The mounting plates can be directly adjusted on deep-mounting bracket ZW59P2.
Useful depth from 103 mm to 158 mm.
Useful width for installation: width 1188 mm, width 2438 mm, width 3688 mm.
The mounting frame must be ordered separately.

External dimensions (mm)					Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D kit	Type	Order code	Type	Order code	Package/ No. pcs
150	1	300	1	200	MBM111	2CPX041707R9999	MM111	2CPX041242R9999	1/1
		600	2	200	MBM211	2CPX041708R9999	MM211	2CPX041243R9999	1/1
		850	3	200	MBM311	2CPX041709R9999	MM311	2CPX041244R9999	1/1
300	2	300	1	200	MBM112	2CPX041710R9999	MM112	2CPX041245R9999	1/1
		600	2	200	MBM212	2CPX041711R9999	MM212	2CPX041246R9999	1/1
		850	3	200	MBM312	2CPX041712R9999	MM312	2CPX041247R9999	1/1
450	3	300	1	200	MBM113	2CPX041713R9999	MM113	2CPX041248R9999	1/1
		600	2	200	MBM213	2CPX041714R9999	MM213	2CPX041249R9999	1/1
		850	3	200	MBM313	2CPX041715R9999	MM313	2CPX041250R9999	1/1
600	4	300	1	200	MBM114	2CPX041716R9999	MM114	2CPX041251R9999	1/1
		600	2	200	MBM214	2CPX041717R9999	MM214	2CPX041252R9999	1/1
		850	3	200	MBM314	2CPX041718R9999	MM314	2CPX041253R9999	1/1
750	5	300	1	200	MBM115	2CPX041719R9999	MM115	2CPX041254R9999	1/1
		600	2	200	MBM215	2CPX041720R9999	MM215	2CPX041255R9999	1/1
		850	3	200	MBM315	2CPX041721R9999	MM315	2CPX041256R9999	1/1

185 mm Busbar System

Order codes



Horizontal terminals in series

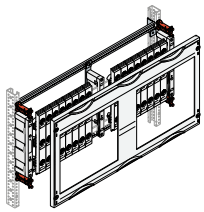
For insulated, protected and earthed frame.
With omega busbars installed horizontally 35 x 15 mm (omega busbars directly adjustable in depth).
Useful depth for ZW39P2 from 68 mm to 115 mm and useful depth for ZW59P2 from 90 mm to 145 mm.
Useful width for terminals in series: width 1 188 mm, width 2 438 mm, width 3 688 mm.
Row distance 150 mm (can be moved if necessary).
Note: The upper omega busbar must be fixed with at least one short deep-mounting bracket (ZW39P2).

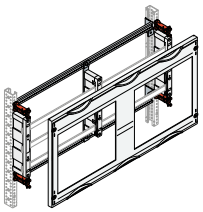
– Module structure:
  1 row: 1 of ZW39P2
  2 rows: 1 of ZW39P2, 1 of ZW59P2
  3 rows: 2 of ZW39P2, 1 of ZW59P2
  4 rows: 2 of ZW39P2, 2 of ZW59P2
  5 rows: 2 of ZW39P2, 3 of ZW59P2

External dimensions (mm)					Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D kit	Type	Order code	Type	Order code	Package/ No. pcs
150	1	300	1	200	MBK106	2CPX041677R9999	MK106	2CPX041227R9999	1/1
		600	2	200	MBK206	2CPX041679R9999	MK206	2CPX041228R9999	1/1
		850	3	200	MBK306	2CPX041681R9999	MK306	2CPX041229R9999	1/1
300	2	300	1	200	MBK107	2CPX041683R9999	MK107	2CPX041230R9999	1/1
		600	2	200	MBK207	2CPX041685R9999	MK207	2CPX041231R9999	1/1
		850	3	200	MBK307	2CPX041687R9999	MK307	2CPX041232R9999	1/1
450	3	300	1	200	MBK108	2CPX041689R9999	MK108	2CPX041233R9999	1/1
		600	2	200	MBK208	2CPX041691R9999	MK208	2CPX041234R9999	1/1
		850	3	200	MBK308	2CPX041693R9999	MK308	2CPX041235R9999	1/1
600	4	300	1	200	MBK109	2CPX041695R9999	MK109	2CPX041236R9999	1/1
		600	2	200	MBK209	2CPX041697R9999	MK209	2CPX041237R9999	1/1
		850	3	200	MBK309	2CPX041699R9999	MK309	2CPX041238R9999	1/1
750	5	300	1	200	MBK110	2CPX041701R9999	MK110	2CPX041239R9999	1/1
		600	2	200	MBK210	2CPX041703R9999	MK210	2CPX041240R9999	1/1
		850	3	200	MBK310	2CPX041705R9999	MK310	2CPX041241R9999	1/1

185 mm Busbar System

Order codes





Horizontal 60 mm busbar system, M(B)R...02(B)
For 3-pole busbars
The distance from center of busbars is 60 mm and 32 mm between Cu busbars and cover.
With busbar holder support type ZX146 and with end cover ZX172.
Starting from width 3 with fastening in center.
Rated current (In) max. 440 A.
With clip fuse-holder, see below.
Important: comply with the available module combinations if TwinLine panels in rows are installed.
The mounting frame must be ordered separately.
Not suitable for fire protection cabinets.

External dimensions (mm)					Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D kit	Type	Order code	Type	Order code	Package/ No. pcs
Module mounted for systems with vertically-installed 3-pole clip fuse-holders, In up to max. 250 A									
300	2	300	1	120	-	-	MR102B	2CPX041409R9999	1/1
		600	2	200	-	-	MR202B	2CPX041410R9999	1/1
		850	3	225	-	-	MR302B	2CPX041411R9999	1/1
Module not mounted for installation, for vertical assembly of clip fuse-holders, fuse switch-disconnector D0, or fuse switch disconnector NH00 In up to max. 440 A									
300	2	300	1	120	-	-	MR102	2CPX041406R9999	1/1
		600	2	200	-	-	MR202	2CPX041407R9999	1/1
		850	3	225	-	-	MR302	2CPX041408R9999	1/1



ZE60 ZE61



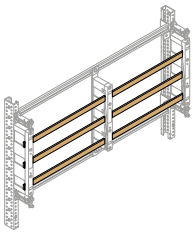
ZE62 ZA4P10

Clip fuse-holders

Description	Delivered in kit		Delivered assembled		Package/ No. pcs
	Type	Order code	Type	Order code	
Neozed E18 clip fuse-holders, width 26 mm					
For calibrated ring inserts, 3 poles, with covers and descriptive nameplates, with E18 threads, max. 63 A fuses	ZE60	2CPX061045R9999	-	-	1/1
	ZE60P10	2CPX062400R9999	-	-	1/10
Diazed E27 clip fuse-holders, wi dth 42 mm					
For calibrated ring inserts, 3 poles, with covers and descriptive nameplates, with E27 threads, max. 25 A fuses	ZE61	2CPX061046R9999	-	-	1/1
Diazed E33 clip fuse-holders, width 56 mm					
For calibrated ring inserts, 3 poles, with covers and descriptive nameplates, withE 33 threads, max. 63 A fuses	ZE62	2CPX061047R9999	-	-	1/1
Partitions instead of clip fuse-holders					
Colour similar to RAL 7035 to comply with discharge protection Useful width from 16 mm to 34 mm	ZA4P10	2CPX062374R9999	-	-	1/10

185 mm Busbar System

Order codes



Horizontal 60 mm busbar system, M(B)R...02(B)

Busbars for installation in single cabinet.

Combinations of modules of different sizes can be created inside the cabinet with busbars passing through. Three Cu busbars are required for each module.

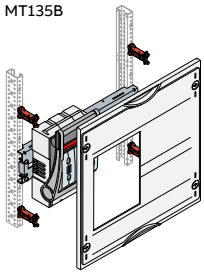
External dimensions (mm)				Delivered in kit		Delivered assembled		
Cu busbar	W	FB	In (A)	Type	Order code	Type	Order code	Package/ No. pcs
12x5	246	1	(100)* 250	ZX1001	2CPX041870R9999	ZXM1001	2CPX041480R9999	1/1
	496	2		ZX1002	2CPX041871R9999	ZXM1002	2CPX041481R9999	1/1
	746	3		ZX1003	2CPX041872R9999	ZXM1003	2CPX041482R9999	1/1
	996	4		ZX1004	2CPX041873R9999	ZXM1004	2CPX041483R9999	1/1
	1246	5		ZX1005	2CPX041874R9999	ZXM1005	2CPX041484R9999	1/1
	1496	6		ZX1006	2CPX042800R9999	ZXM1006	2CPX042822R9999	1/1
20 x 5	246	1	(250)* 320	ZX1013	2CPX041882R9999	ZXM1013	2CPX041492R9999	1/1
	496	2		ZX1014	2CPX041883R9999	ZXM1014	2CPX041493R9999	1/1
	746	3		ZX1015	2CPX041884R9999	ZXM1015	2CPX041494R9999	1/1
	996	4		ZX1016	2CPX041885R9999	ZXM1016	2CPX041495R9999	1/1
	1246	5		ZX1017	2CPX041886R9999	ZXM1017	2CPX041496R9999	1/1
	1496	6		ZX1018	2CPX042801R9999	ZXM1018	2CPX042823R9999	1/1
30 x 5	246	1	440	ZX1019	2CPX041888R9999	ZXM1019	2CPX041498R9999	1/1
	496	2		ZX1020	2CPX041889R9999	ZXM1020	2CPX041499R9999	1/1
	746	3		ZX1021	2CPX041890R9999	ZXM1021	2CPX041500R9999	1/1
	996	4		ZX1022	2CPX041891R9999	ZXM1022	2CPX041501R9999	1/1
	1246	5		ZX1023	2CPX041892R9999	ZXM1023	2CPX041502R9999	1/1
	1496	6		ZX1024	2CPX042802R9999	ZXM1024	2CPX042824R9999	1/1

* In the case of expansion using clip fuse-holders

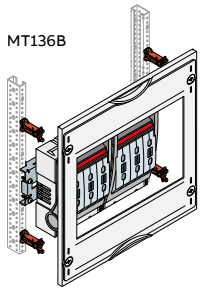
185 mm Busbar System

Order codes

MT135B



MT136B

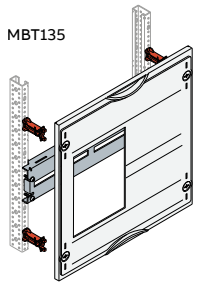


NH00 fuse switch-disconnector module

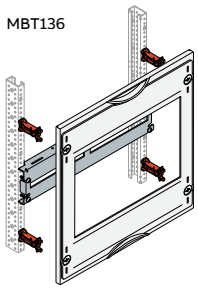
Assembled with NH00 160 A type ZH411 fuse switch-disconnector, with partitions.
With 320 A, 3 pole busbar system, M8 connection screws.
Rated current (In) max. 320 A.

Dimensions (mm)					With Disconnector	Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D	NH00	Type	Order code	Type	Order code	Package/ No. pcs
300	2	250	1	200	1	-	-	MT135B	2CPX042451R9999	1/1
		250	1	200	2	-	-	MT136B	2CPX041293R9999	1/1

MBT135



MBT136



NH00 fuse switch-disconnector module

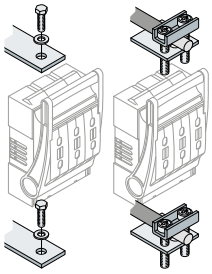
Not mounted for fuse switch-disconnector-module NH00 160 A Products: ABB (ZH411, ZH412), without partitions. For 320 A 3-pole busbar system.
Rated current (In) max. 320 A.

Dimensions (mm)					With Disconnector	Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D	NH00	Type	Order code	Type	Order code	Package/ No. pcs
300	2	250	1	200	1	MBT135	2CPX042452R9999	MT135	2CPX042450R9999	1/1
		250	1	200	2	MBT136	2CPX041770R9999	MT136	2CPX041299R9999	1/1

185 mm Busbar System

Order codes

ZH411 ZH412



Fuse switch-disconnector NH00

Rated current (In) max. 160 A, without partitions.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
With M8 connection screws	M(B)T135 - M(B)T136	ZH411	2CPX062947R9999	-	-	1/1
With bracket clamps up to 50 mm²	M(B)T135 - M(B)T136	ZH412	2CPX062948R9999	-	-	1/1

ZH214

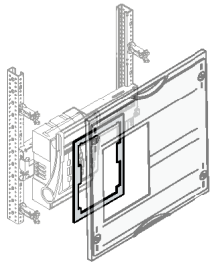


NH00 busbar system

Cu busbars 20 x 5 mm, 3 poles. Rated current (In) 320 A. A on one single level with M8 connection screws M8.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
NH00 busbar system	M(B)T136	ZH214	2CPX060443R9999	-	-	1/1

ZH425

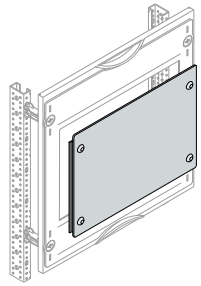


Partitions

For NH fuse switch-disconnector. Colour similar to RAL 7035 to comply with discharge protection.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Single trim cover	1 x M(B)T135 *	ZH425	2CPX062952R9999	-	-	1/1
Double trim cover	1 x M(B)T136 *	ZH426	2CPX062953R9999	-	-	1/1

* Number of pieces per module for complete assembly



Partitions, closed

Instead of NH fuse switch-disconnector. Colour similar to RAL 7035 to comply with discharge protection.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Partitions, closed	M(B)T135 - M(B)T136	ZH428	2CPX062955R9999	-	-	1/1



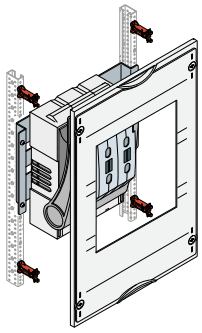
Insulating plate

For unoccupied busbar ends. For NH00 fuse switch-disconnector.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Insulating plate	M(B)T135 - M(B)T136	ZX148	2CPX044018R9999	-	-	1/1

185 mm Busbar System

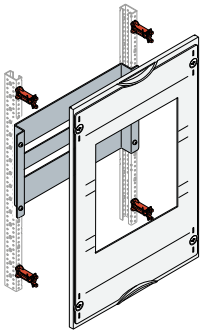
Order codes



NH1 fuse switch-disconnector module

Assembled with NH01 250 A type ZH411 fuse switch-disconnector, with partitions.
M10 connection screws included.

Dimensions (mm)					With Disconnector	Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D	NH00	Type	Order code	Type	Order code	Package/ No. pcs
450	3	250	1	200	1	-	-	MT142B	2CPX041305R9999	1/1



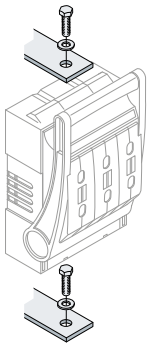
NH1 fuse switch-disconnector module

Not mounted for fuse switch-disconnector NH00 250 A Products: ABB (ZH431), without partitions.

Dimensions (mm)					With Disconnector	Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D	NH00	Type	Order code	Type	Order code	Package/ No. pcs
450	3	250	1	200	1	MBT142	2CPX041776R9999	MT142	2CPX041311R9999	1/1

185 mm Busbar System

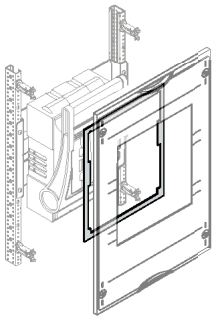
Order codes



Fuse switch-disconnector NH1

Rated current (In) max. 250 A, without partitions, with M10 connection screws.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Fuse switch-disconnector NH1	M(B)T142	ZH431	2CPX062958R9999	-	-	1/1

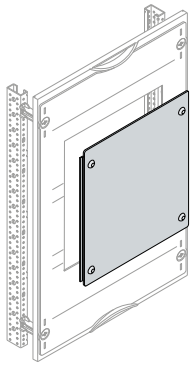


Partitions

Single trim cover for fuse switch-disconnector NH. Colour similar to RAL 7035 to comply with discharge protection.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Partitions	1 x M(B)T142 *	ZH438	2CPX062961R9999	-	-	1/1

* Number of pieces per module for complete assembly



Partition, closed

Single trim cover instead of NH fuse switch-disconnector, colour similar to RAL 7035, to comply with discharge protection.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Partition, closed	M(B)T142	ZH440	2CPX062963R9999	-	-	1/1



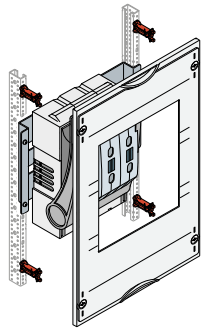
Insulating plate

For unoccupied busbar ends for fuse switch-disconnector NH1.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Insulating plate	M(B)T142	ZX128	2CPX039128R9999	-	-	1/1

185 mm Busbar System

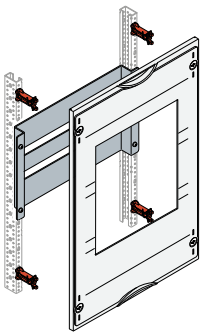
Order codes



NH2 fuse switch-disconnector module

Assembled with NH02 400 A type ZH411 fuse switch-disconnector, with partitions
With M10 connection screws. The mounting frame must be ordered separately.

Dimensions (mm)					With Disconnector	Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D	NH00	Type	Order code	Type	Order code	Package/ No. pcs
450	3	250	1	215	1	-	-	MT144B	2CPX041317R9999	1/1



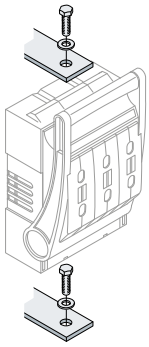
NH2 fuse switch-disconnector module

Not mounted for fuse switch-disconnector NH2 400 A Products: ABB (ZH441), without partitions.
The mounting frame must be ordered separately.

Dimensions (mm)					With Disconnector	Delivered in kit		Delivered assembled		
H kit	RE	W	FB	D	NH00	Type	Order code	Type	Order code	Package/ No. pcs
450	3	250	1	215	1	MBT144	2CPX041782R9999	MT144	2CPX041323R9999	1/1

185 mm Busbar System

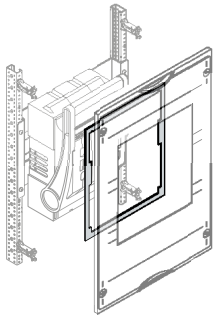
Order codes



Fuse switch-disconnector NH2

Rated current (In) max. 400 A, without partitions, With M12 connection screws.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Fuse switch-disconnector NH2	M(B)T144	ZH441	2CPX062964R9999	-	-	1/1

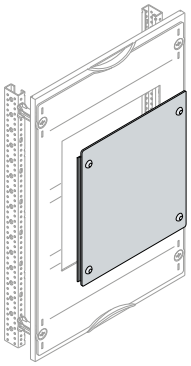


Partitions

For NH fuse switch-disconnector, colour similar to RAL 7035 to comply with discharge protection.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Partitions	1 x M(B)T144 *	ZH447	2CPX039842R9999	-	-	1/1

* Number of pieces per module for complete assembly



Partition, closed

Single trim cover instead of NH fuse switch-disconnector, colour similar to RAL 7035, to comply with discharge protection.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Partition, closed	M(B)T144	ZH442	2CPX062963R9999	-	-	1/1



Insulating plate

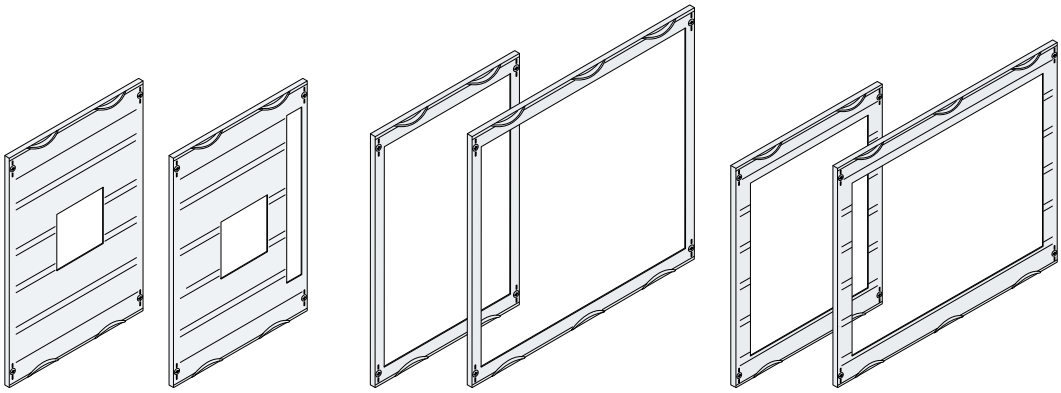
For unoccupied busbar ends for fuse switch-disconnector NH2.

Description	Suitable for module	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Insulating plate	M(B)T144	ZX129	2CPX039129R9999	-	-	1/1

185 mm Busbar System

Order codes

Covers with cut-out with press-in plug-screw 90°



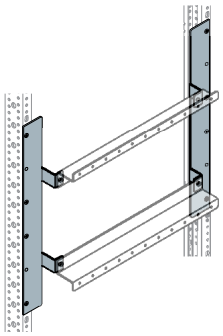
AG2502 AG2504 AG2520 AG3520 AG2530 AG3530

	Dimensions (mm)					Delivered in kit		Delivered assembled		
Description	H kit	RE	W	FB	Used for ...	Type	Order code	Type	Order code	Package/ No. pcs
For Tmax T7, Emax E1.2 circuit-breakers	750	5	600	2	M(B)A211751 M(B)A231751	AG2502	2CPX043182R9999	-	-	1/1
For Emax E2.2 circuit-breaker	750	5	600	2		PPAG2503	1STQ005190B0000	-	-	1/1
For Tmax T7, Emax E1.2 circuitbreakers, E fuse switch-disconnector module InLine II Width 50 mm	750	5	600	2	M(B)A211759	AG2504	2CPX043183R9999	-	-	1/1
For InLine II fuse switch-disconnector modules. Make: ABB InLine II, EFEN E3, Jean Müller SL, Wöhner Quadron	750	5	600	2	M(B)J24458	AG2520	2CPX043184R9999	-	-	1/1
For InLine II fuse switch-disconnector modules. Make: ABB InLine II, EFEN E3, Jean Müller SL, Wöhner Quadron	750	5	850	3	M(B)J34708	AG3520	2CPX043185R9999	-	-	1/1
For NH XR fuse switch-disconnector Make: ABB SlimLine XR, Jean Müller SASIL Plus S	750	5	600	2	M(B)J25406 M(B)J25407 M(B)J25408	AG2530	2CPX043186R9999	-	-	1/1
For InLine II fuse switch-disconnector modules. Make: ABB InLine II, EFEN E3, Jean Müller SL, Wöhner Quadron	750	5	850	3	M(B)M(B)J35656 M(B)J35657 M(B)J35658	AG3530	2CPX043187R9999	-	-	1/1

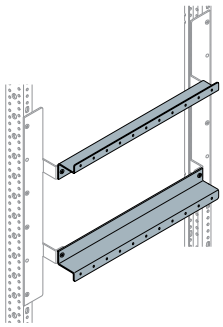
185 mm Busbar System

Order codes

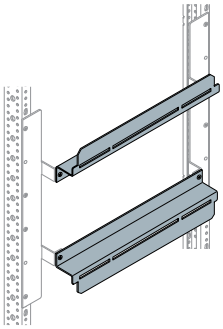
Mounting cross members and brackets



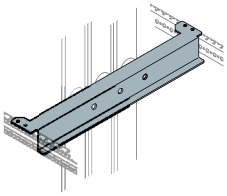
ZX921P10



ZX932P10



ZX933P10



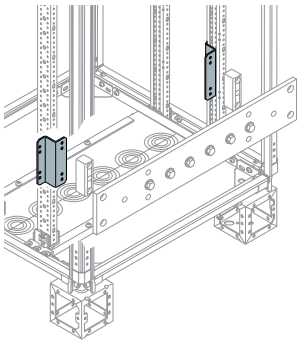
ZX936

Description	Used for ...	Delivered in kit Type	Order code	Delivered assembled Type	Order code	Package/ No. pcs
ZX522 mounting cross members for busbar holder support Two pieces are required per module	M(B)A... / M(B)J...	ZX921P10	2CPX043168R9999	-	-	1/10
ZX522 mounting cross members for busbar holder E2.2 sction		PPZX9222	1STQ005191B0000	-	-	1/10
Mounting cross members for circuit-breakers Two pieces are required per module						
For circuit-breaker module width 2 For Tmax T7, Emax E1.2 circuit-breakers	M(B)A211751 M(B)A211759 M(B)A231751	ZX932P10	1STQ005192B0000	-	-	1/10
For multiple circuit-breaker module width 2 For Tmax T4, T5, T6 circuit-breakers With cage nuts	M(B)A221850	ZX933P10	2CPX043172R9999	-	-	1/10
For multiple circuit-breaker module width 3 For Tmax T4, T5, T6 circuit-breakers With cage nuts	M(B)A321850	ZX935P10	-	-	-	1/10
Mounting shelf for E2.2		PPZX9336	-	-	-	1/5
Mounting cross members for busbar system		PPZX9336	-	-	-	1/2
Graduated for connection system width 2	ZX(M)AH2122	ZX936	-	-	-	1/1
Mounting cross members for NH fuse switch-disconnector						
for NH fuses. Make: ABB SlimLine XR, Jean Müller SASIL Plus S width 2	M(B)J25406	ZX941	2CPX043173R9999	-	-	1/1
for NH fuses. Make: ABB SlimLine XR, Jean Müller SASIL Plus S width 3	M(B)J35406	ZX942	2CPX043174R9999	-	-	1/1

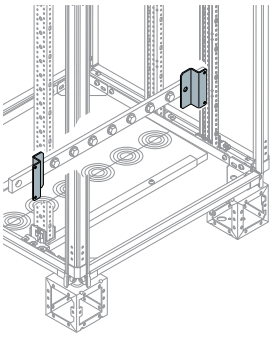
185 mm Busbar System

Order codes

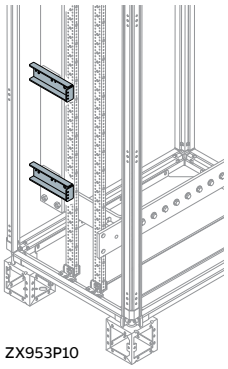
Mounting cross members and brackets



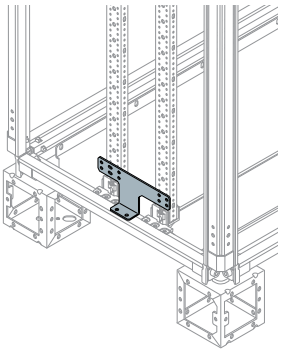
ZX952P10



ZX951P10



ZX953P10



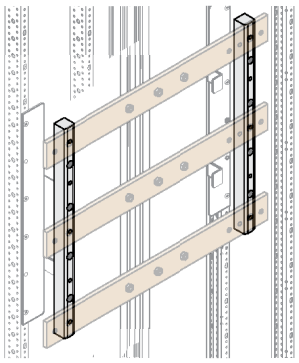
ZX990P10

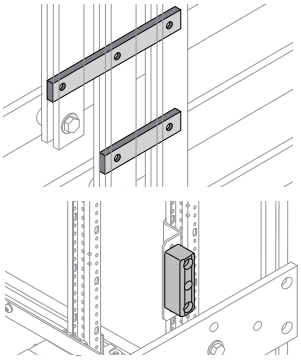
Description	Used for ...	Delivered in kit		Delivered assembled		Package/ No. pcs
		Type	Order code	Type	Order code	
Mounting bracket for horizontal N/PE busbar system						
Horizontal N mounting bracket. For ZX563 busbar holder support. For Cu busbars up to 100 x 10 mm	M(B)NH....	ZX951P10	2CPX043175R9999	-	-	1/10
Horizontal PE mounting bracket For Cu busbars up to 40 x 10 mm	M(B)PH....	ZX952P10	2CPX043176R9999	-	-	1/10
N mounting bracket for E2.2 section		PPZX9553	1STQ005193B0000	-	-	1/2
PE mounting bracket for E2.2 section		PPZX9554	1STQ005194B0000	-	-	1/2
Mounting bracket for vertical N/PE busbar system. For ZX563 busbar support						
For Cu busbars up to 100 x 10 mm For PE Cu busbars up to 40 x 10 mm	ZX(M)NVH4 ZX(M)PVH4	ZX980P10	2CPX043177R9999	-	-	1/10
Surge arrester mounting unit						
Mounting bracket for omega busbar		-	2CPX043179R9999	-	-	1/10
Protection conductor connection						
For routing the connection of the protection conductor of the PE busbar to mounting frame WR and the System pro E power mounting frame. Material: sheet steel including fastening elements		-	1STQ005409B0000	-	-	
Screws for Linsen sheet hexalobular socket type						
4.8 x 11.5 mm		ZB27P20	2CPX062588R9999	-	-	1/20
		ZB27P500	2CPX062689R9999	-	-	1/500
4.8 x 22 mm		ZB75P20	2CPX043256R9999	-	-	1/20
		ZB75P500	2CPX043257R9999	-	-	1/500

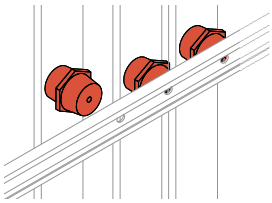
185 mm Busbar System

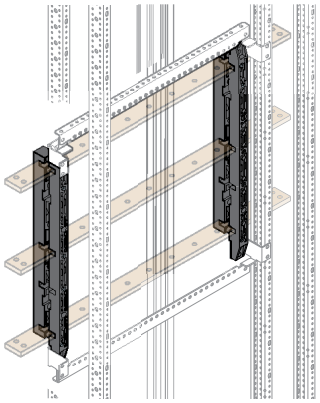
Order codes

Busbar supports and accessories


ZX522


ZX563


ZX52


ZX550

Description		Used for ...	Delivered in kit Type	Delivered in kit Order code	Delivered assembled Type	Delivered assembled Order code	Package/ No. pcs
3-pole busbar support							
Busbar centre distance 100 mm / 185 mm For 30 x 10 mm to 80 x 10 mm Cu busbars		M(B)NH.... M(B)PH....	ZX522	2CPX067909R9999	-	-	1/1
			ZX522P10	2CPX062553R9999	-	-	1/10
N/PR busbar support							
For 30 x 10 mm to 60 x 10 mm Cu busbars		M(B)NH...	ZX563	2CPX068735R9999	-	-	1/1
			ZX563P10	2CPX068736R9999	-	-	1/10
Intermediate busbar piece GFK. Material 50 mm x 10 mm							
Length 120 mm		ZX(M)VH23	ZX670	2CPX046976R9999	-	-	1/1
Length 190 mm		ZX(M)VH23 ZX(M)AH2122	ZX671	2CPX046977R9999	-	-	1/1
Support insulators with spanner flats							
40 x 40 mm, threads on both sides: M10 Width across flats: 40 mm		ZX(M)AH2122	ZX52	2CPX039052R9999	-	-	1/1
			ZX52P20	2CPX062560R9999	-	-	1/20
VSS busbar support. Distance from centre of busbars 185 mm. For Cu busbars							
1 x 50 x 10 mm	VSS 1000 A	M(B)J..5..6	ZX550	2CPX043188R9999	-	-	1/20
1 x 60 x 10 mm	VSS 1250 A	M(B)J..5..7	ZX551	2CPX068515R9999	-	-	1/500
1 x 80 x 10 mm	VSS 1600 A	M(B)J..5..8	ZX555	2CPX068676R9999	-	-	1/20
1 x 100 x 10 mm	VSS 2000 A		ZX559	2CPX068737R9999	-	-	1/500

Chapter 4
Technichal details and certification

4–2 **According to IEC 61439-1/2**

4–8 **Mechanical and electrical characteristics**

4–10 **Power dissipated**

4–12 **Electrical continuity granted up to 10A**

4–14 **Conductors**

4–15 **Ordinary and extraordinary maintainance**

4–18 **Special painting and Instruction manuals**

4–19 **Declaration of conformity**

4–20 **Specification**

4–21 **Handling**

4–25 **IP protection classes**

4–27 **Mechanical shock resistance IK**

Technical details and certifications
According to IEC 61439-1/2

As from November 1st, 2014, the IEC 61439-1 and IEC 61439-2 Standards are to be used for the construction and specification of low voltage assemblies (e.g.: Power Centers and secondary distribution switchboards).

of low voltage assemblies (e.g.: Power Centers and secondary distribution switchboards).
IEC 61439-1 includes all the rules and general prescriptions applicable to the protective and switching assemblies in low voltage (LV assemblies).This Standard deals with the definitions and establishes service conditions, construction rules, technical characteristics and verification prescriptions for LV assemblies (U ≤ 1000 V a.c or U ≤ 1500 V d.c.). Part 1 cannot be used alone to specify an assembly or to determine its compliance with the Standard, but it has to be used together with the specific product Standard. For System pro E power, the specific product Standard is IEC 61439-2 that deals with “Power switchgear and controlgear assemblies” and is used for the assembly designation marking.
The whole of these two Standards identifies the design and testing requirements as regards the industrialization of the product and the tests to be performed to ensure its performances.

A significant change introduced by the IEC 61439 series has been the elimination of the distinction between type-tested assemblies (TTA) and partially type-tested assemblies (PTTA), replaced with the concept of design verification.
IEC 61439-1 defines as “design verification” a verification made on a sample of an assembly or on parts of assemblies to show that the design meets the requirements of the relevant assembly standard.

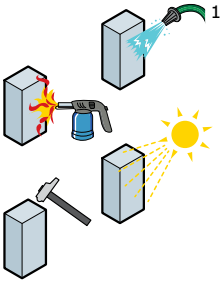
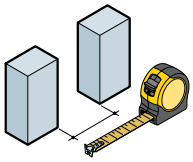
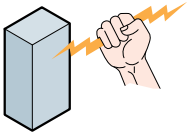
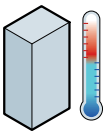
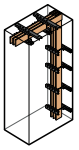
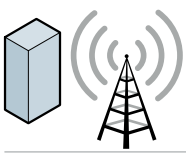
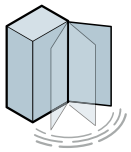
In particular, the Standard admits three different but equivalent methods to verify the compliance of the design with the Standard,
namely:

- verification by laboratory testing (previously defined type-tests and now verification tests); or
- verification by comparison with a tested reference design; or
- verification by assessment (verification through design rules, appropriate safety margins, calculation etc.).

The different characteristics (e.g.: temperature-rise, short-circuit withstand strength, insulation, degree of protection, etc.) can be verified using these three methods according to Annex D of the IEC 61439-1 (see Table 1) that prescribes , for each characteristics to be verified, which of the three verification options can be used.



Table 1 – List of design verifications to be performed.

	No.	Characteristic	Clauses or subclauses	Verification options available		
				Testing	Comparison with a reference design	Assessment
	1	Strength of material and parts:	10.2			
		Resistance to corrosion	10.2.2	YES	NO	NO
		Properties of insulating materials	10.2.3			
		Thermal stability	10.2.3.1	YES	NO	NO
		Resistance to abnormal heat and fire due to internal electric effects	10.2.3.2	YES	NO	YES
		Resistance to ultra-violet (UV) radiation	10.2.4	YES	NO	YES
		Lifting	10.2.5	YES	NO	NO
		Mechanical impact	10.2.6	YES	NO	NO
		Marking	10.2.7	YES	NO	NO
	2	Degree of protection of enclosures	10.3	YES	NO	YES
	3	Clearances	10.4	YES	NO	NO
	4	Creepage distances	10.4	YES	NO	NO
	5	Protection against electric shock and integrity of protective circuits:	10.5			
		Effective continuity between the exposed conductive parts of the assembly	10.5.2	YES	NO	NO
		and protective circuit	10.5.3	YES	YES	NO
	6	Incorporation of switching devices and components	10.6	NO	NO	YES
	7	Internal electrical circuits and connections	10.7	NO	NO	YES
	8	Terminals for external conductors	10.8	NO	NO	YES
	9	Dielectric properties:	10.9			
		Power-frequency withstand voltage	10.9.2	YES	NO	NO
		Impulse withstand voltage	10.9.3	YES	NO	YES
	10	Temperature-rise limits	10.10	YES	YES	YES
	11	Short-circuit withstand strength	10.11	YES	YES	NO
	12	Electromagnetic compatibility (EMC)	10.12	YES	NO	YES
	13	Mechanical operation	10.13	YES	NO	NO

For the end user, the method used is irrelevant, provided that the assembly design has been verified according to Table 1.

Technical details and certifications

According to IEC 61439-1/2

The Standard IEC 61439-1 defines the two roles of the “Original manufacturer” and the “ASSEMBLY manufacturer”.

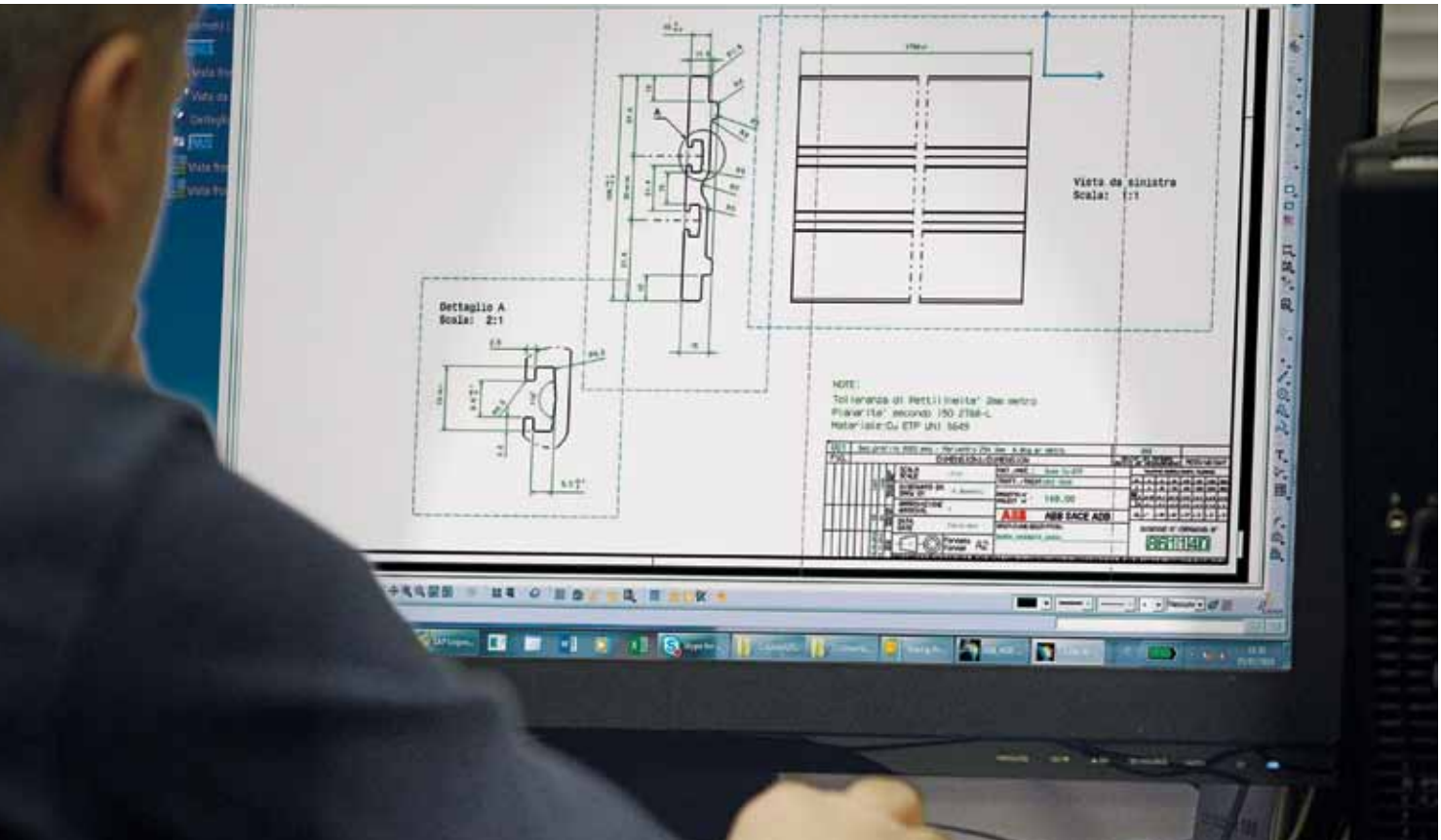
The “Original manufacturer” is the organization (e.g. ABB SACE) that has carried out the original design and the associated verification of an assembly, in accordance with the relevant assembly standard (IEC 61439-2 for System pro E power).

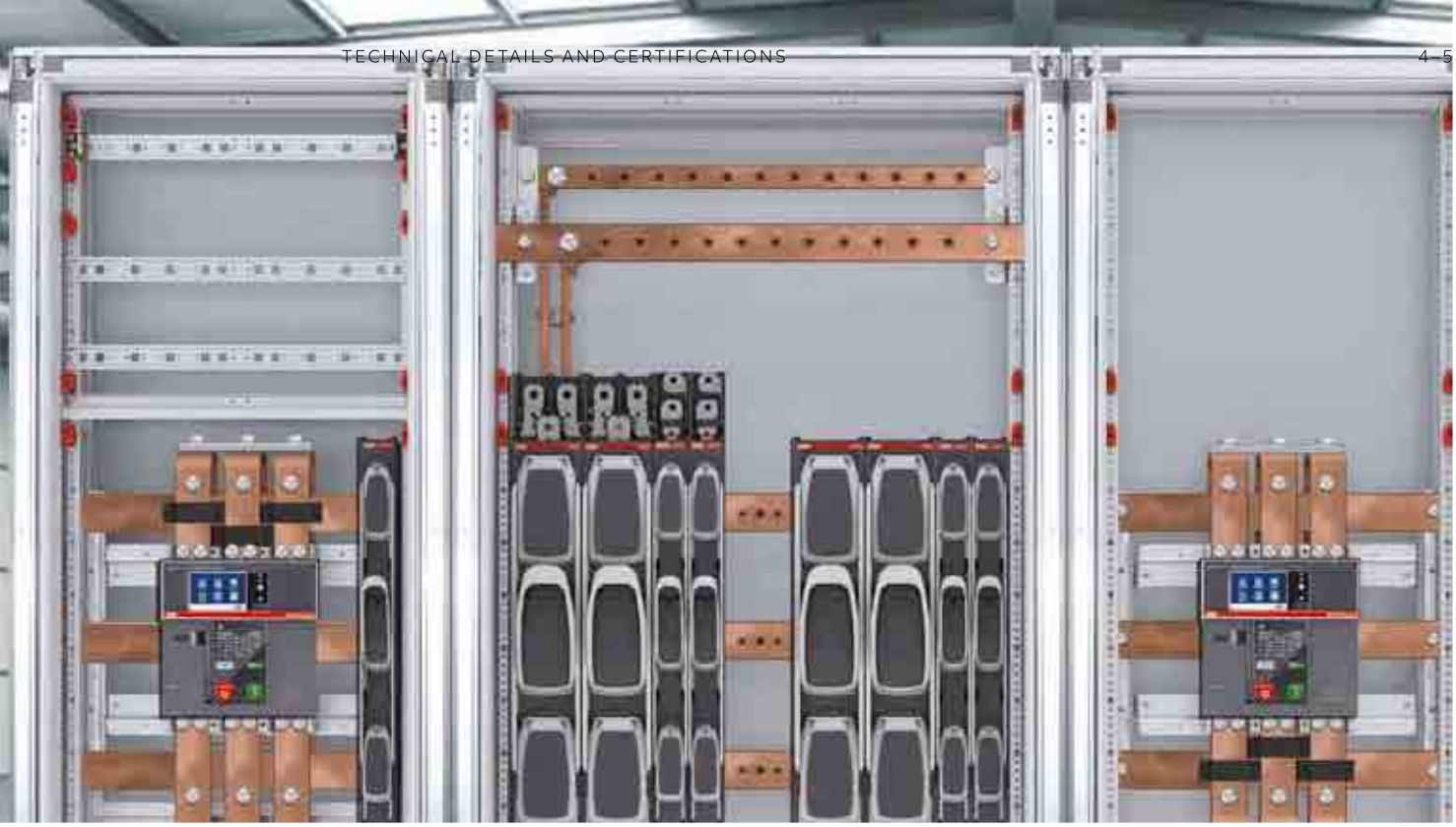
IBesides, in case mounting of the assembly is carried out by others, the Original manufacturer defines and publishes the instructions necessary to produce various assemblies.
The Original manufacturer designs and sets up a wide range of assembly configurations (the assembly system[1]), starting from a full and predefined range of components.

The assembly system is verified by the Original manufacturer in the most onerous representative configurations.

The Original manufacturer shall ensure the design verifications on the assembly system and provide the instructions for the selection of the components and for the mounting of the assembly.

[1] Assembly system: full range of mechanical and electrical components (enclosures, busbars, functional units, etc.), as defined by the original manufacturer, which can be assembled in accordance with the original manufacturer’s instructions in order to produce various ASSEMBLIES.





The “ASSEMBLY manufacturer” is the organization taking the responsibility for the completed assembly; The ASSEMBLY manufacturer may be a different organization to the original manufacturer.

The ASSEMBLY manufacturer (e.g.: the assembler/panel builder, the partner) puts together the assembly using spare parts/components and assembly kits, and, by following the instructions of the Original manufacturer, he obtains the final assembly complying with IEC 61439-2

The ASSEMBLY manufacturer shall carry out:

1) selection and assembling of the components according to the instructions provided by the Original manufacturer;

2) design verifications, through further tests or comparisons or assessments, in case of deviations from the instructions of the Original manufacturer;

3) routine verifications on any assembly realized. Hereunder the list of the routine verifications to be carried out by the “ASSEMBLY manufacturer”:

Characteristics relevant to construction:
- Degree of protection of enclosures;
- Clearances and creepage distances;
- Protection against electric shock and integrity of protective circuits;
- Installation of built-in components;
- Internal electrical circuits and connections;
- Terminals for external conductors;
- Mechanical operation.

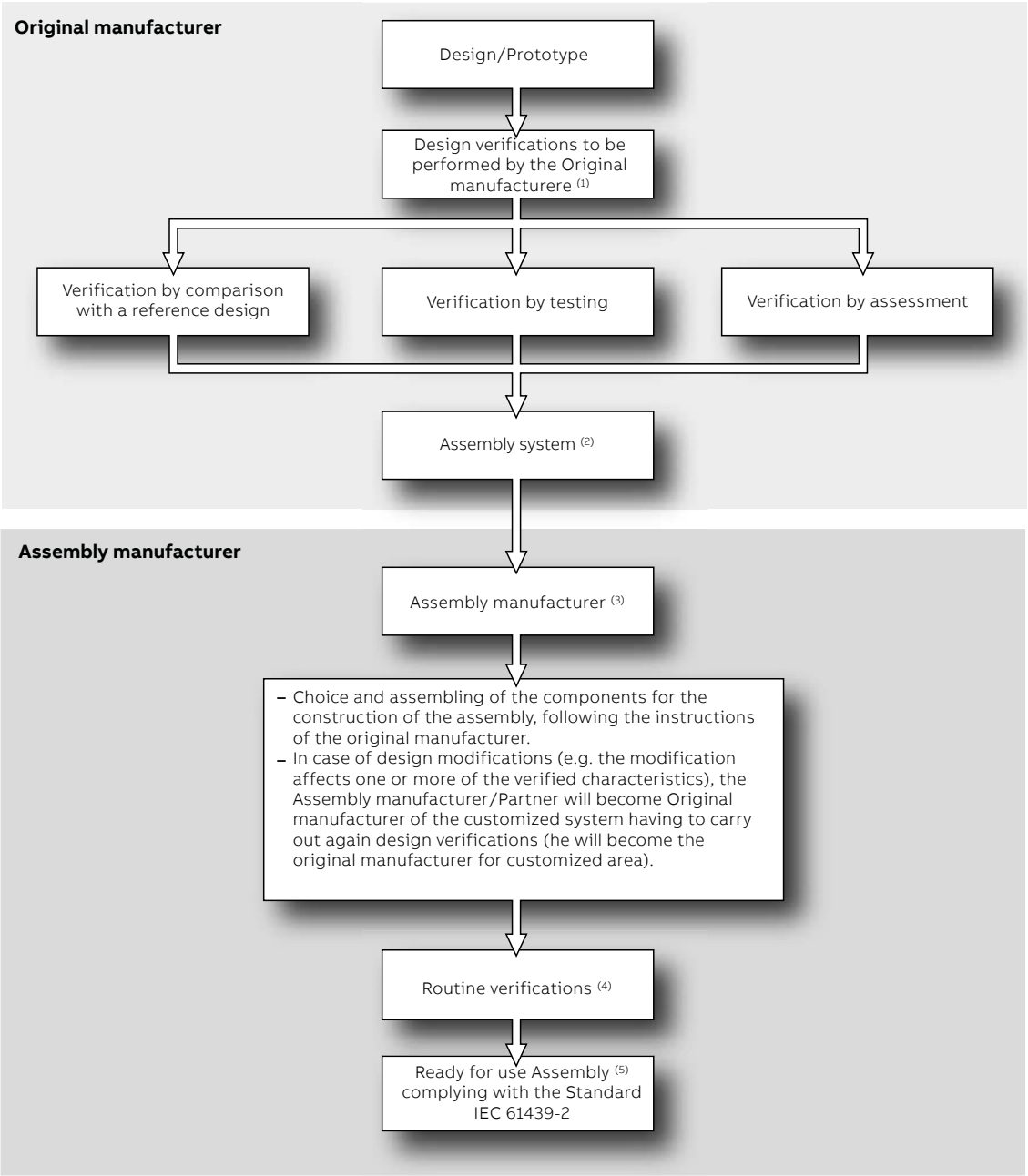
Characteristics relevant to performance:
- Dielectric properties;
- Wiring, operational performance and function

Technical details and certifications

According to IEC 61439-1/2

The main changes introduced by the series of Standards IEC 61439 can be summarized in the following flowchart:

Table 1



1) Original manufacturer: organization that has carried out the original design and the associated verification of an ASSEMBLY in accordance with the relevant ASSEMBLY standard
2) Assembly system: full range of mechanical and electrical components (enclosures, busbars, functional units, etc.), as defined by the original manufacturer, which can be assembled in accordance with the original manufacturer's instructions in order to produce various ASSEMBLIES
3) Assembly manufacturer: organization taking the responsibility for the completed ASSEMBLY; The ASSEMBLY manufacturer may be a different organization to the original manufacturer.
4) Routine verification: verification of each ASSEMBLY performed during and/or after manufacture to confirm whether it complies with the requirements of the relevant ASSEMBLY standard
5) Assembly: combination of one or more low-voltage switching devices together with associated control, measuring, signaling, protective, regulating equipment, with all the internal electrical and mechanical interconnections and structural parts

Technical details and certifications

According to IEC 61439-1/2

System pro E power, the 100% compliant solution with IEC 61439-1/2

System pro E power assemblies are subject at ABB laboratories to the testing prescribed by the Standards IEC 61439-1/2. The results of these verifications ensure the performances of System pro E power assemblies and relieve the ASSEMBLY manufacturer of the burden of carrying out further design verifications when ABB SACE structures, assembly kits, enclosures, busbars and devices are used following the selection criteria and mounting instructions of the Technical Catalogue and Instruction Handbook of System pro E power. Reference can be made to such results (summarized in Table 2) when drawing up the declaration of conformity of the assembly.

Table 2

Characteristic	Section	Verification Method	Certificates/ Test Report available for SPEP 185mm
Resistance to corrosion	10.2.2	Test	LBRS12753 00 LBRS15727 01 E Ezu 600983-01-03.pdf
Verification of thermal stability of enclosures	10.2.3.1	Test	Test for enclosures manufactured from insulating material.
Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects	10.2.3.2	Test/Assesment	DATA SHEET-LET01b Lgpo GPO3_pag.2
Resistance to ultra-violet (UV) radiation	10.2.4	Not required	ASSEMBLY for indoor installation.
Lifting	10.2.5	Test	IT19.007 ; IT19.008 ; IT17.060 ; IT18.120 ;
Mechanical impact	10.2.6	Test	16-0367-01Inrim SPEP IK10 18-0339-03 Inrim SPEP IK09
Marking	10.2.7	Test	The ASSEMBLY manufacturer shall provide each ASSEMBLY with one or more labels, marked in a durable manner and located in a place such that they are visible and legible when the ASSEMBLY is installed and in operation. Compliance is checked according to the test of 10.2.7 and by inspection.
Degree of protection of ASSEMBLIES	10.3	Test	T16-0367-01 17-0726-01 IP X5 18-0339-02 17-4788174320.3.1.SIC-A. 18-4788797797-2-1-1-SIC-A-TZ101
Clearances and creepage distances	10.4	Test	IT19.007 ; IT18.099 ; IT19.008 ;
Effective earth continuity between the exposed conductive parts of the ASSEMBLY and the protective circuit	10.5.2	Test	IT19.007 ; IT18.099 ; IT19.008 ; IT17.060 ; IT18.120 ; IT17.008 ;
Short-circuit withstand strength of the protective circuit	10.5.3	Test/Comparison with reference design	IT19.007 ; IT18.099 ; IT19.008 ; IT17.060 ; IT18.120 ; IT17.008 ;
Incorporation of switching devices and components	10.6	Assessment	ASSEMBLY manufacturer must observe the original manufacturer´s instructions of the cabinet system and switching devices and components.
Internal electrical circuits and connections	10.7	Assessment	The original parts/components must be assembled acc. to the original manufacturer´s instructions.
Terminals for external conductors	10.8	Assessment	The original parts/components must be assembled according to the original manufacturer´s instructions.
Dielectric properties Power-frequency withstand voltage	10.9.2	Test	IT19.007 ; IT18.099 ; IT19.008 ; IT17.060 ; IT18.120 ;
Dielectric properties Impulse withstand voltage	10.9.3	Test	IT19.007 ; IT18.099 ; IT19.008 ; IT17.060 ; IT18.120 ;
Verification of temperature rise	10.10	Test	IT19.007 ; IT18.099 ; IT19.008 ; IT18.010 ; IT17.060 ; IT18.120 ;
Short-circuit withstand strength	10.11	Test	IT19.007 ; IT18.099 ; IT19.008 ; IT17.060 ; IT18.120 ; IT17.008
Electromagnetic compatibility (EMC)	10.12	Assessment	Not required
Mechanical operation	10.13	Test	IT19.001 16-0367-01

The document and certificates can be downloaded at the following link:

http://www.abb.com/abblibrary/downloadcenter/

Technical details and certifications
Mechanical and electrical characteristics

Conformity to Standard IEC 61439-1-2

System pro E power switchboards are subjected in the ABB laboratories, to the type tests established by Standard IEC 61439-1-2.
The results of these tests guarantee the performance of System pro E power switchboards and when ABB SACE structures, air circuitbreakers, moulded-case and modular circuit-breakers are used, relieve the end manufacturer of the switchboard from having to perform further type tests so long as he/it complies with the selection criteria and assembly instructions for the various different components.
Reference can be made to these results, described below, when drawing up the declaration of conformity of the switchboard.

Overtemperature (Ref. sect. 9.2. of the Standard)

Values from the type tests performed referring to all System pro E - Power switchboard sizes and to the type of installation are given in the tables.
The dissipated power data (in Watts) depend on the allowable overtemperature inside the upper part of the switchboard and should be compared with the sum of the powers dissipated by all the components installed in the switchboard (also taking the coincidence factor into due account).

Dielectric properties (Ref. sect. 10.9. of the Standard)		
Rated service voltage		up to 1000V AC / 1500V DC
Rated insulation voltage		up to 1000V AC / 1500V DC
Rated impulse withstand voltage		8kV / 12kV
Short-circuit withstand capacity (Ref. sect. 10.11. of the Standard)		
Rated short-time short-circuit current:	line-to-line	120kA (1s) 50kA (3s)
	line-to-neutral	72kA (1s)
Rated max. peak short-circuit current		264kA
Protection against the circuit and short-circuit withstand (Ref. sect. 9.3. of the Standard)		
Rated admissible short-time withstand current Icw for the protection circuit		72kA (1s)
Insulation clearances (Ref. sect. 10.4. of the Standard)		
Insulation clearances are guaranteed when the assembly instructions provided with the ABB SACE structures and circuit-breakers are complied with.		
Mechanical operation (Ref. sect. 10.13. of the Standard)		
When the assembly instructions of the ABB SACE structures are circuit-breakers are complied with, mechanical operation can be considered as verified.		

Protection class (Ref. sect. 10.3 of the Standard)

Protection class obtained with respect to the type of panelling	Front sealing profiles	Door	Rear	Side panels	Top	Bottom	Top profile
Blind							
IP30	✓ *	-	✓ *	✓ *	✓ *	✓ *	-
IP65	-	✓	✓	✓	✓	✓	-
Vented							
IP30	✓ *	-	✓ **	✓ **	✓ *	✓ *	-

* Codes in the catalogue allowing IP30-IP31 protection class to be obtained for structures without doors, IP40-IP41 for structures with doors. The structures change from IP30 to IP31 if the top sealing kits are used in addition to the front sealing profiles. The structures change from IP40 to IP41 if the top sealing kits are used in addition to the doors.
** Codes in the catalogue for vented panels allowing IP30-31 protection class to be obtained for structures without doors. The structures change from IP30 to IP31 if the top sealing kits are used in addition to the front sealing profiles.
*** Codes in the catalogue for vented panels allowing IP30-31 protection class to be obtained for structures without doors. The structures change from IP30 to IP40 adding the door and the grates for vented panel. The structures change from IP30 to IP31 if the top sealing kits are used in addition to the front sealing profiles. The structures change from IP40 to IP41 if the top sealing kits are used in **addition to the doors.**

Technical details and certifications

Mechanical and electrical characteristics

Mechanical specifications

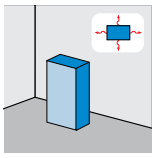
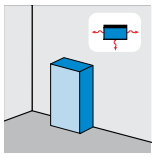
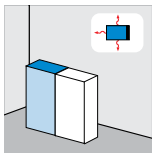
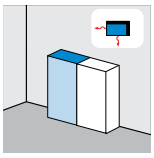
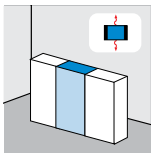
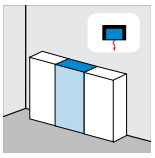
Material		
Uprights and cross-pieces	12/10mm hot-dip galvanized sheet steel	
	12/10mm AISI 304 stainless steel	
Plinth angle pieces	25/10mm hot-dip galvanized sheet steel	
Plinth flanges	15/10mm hot-dip galvanized sheet steel	
External panels	pickled steel sheet thickness 8/10mm for IP30/40 and 15/10 for IP65	
Doors	15/10mm thick pickled sheet steel. 4mm thick toughened glass glued from the inside	
Plates	15/10mm hot-dip galvanized sheet steel	
Panels	12/10mm pickled steel sheet	
Partitions	plastic components: thermoplastic vulcanizate metal components: 15/10mm pickled steel sheet	
Paint coating		
Structure colour	RAL 7035 grey orange peel finish	
Plinth colour	RAL 7012 grey orange peel finish	
Standard cycle	The sheet metal is cleaned	
	Phosphating, based on iron salts	
	Drying in a tunnel at 100°C	
	External and internal coating with electrostatic application of thermosetting powder coating with epoxy-polyester binders, RAL 7035 colour orange peel finish, total thickness 60/70 microns.	
	Curing in an oven 180°C	
Coating characteristics	Binder:	epoxy-polyester
	Specific gravity:	1.61g/cm3
	Theoretic yield:	10.4m²/kg with film an average 60 microns thick
	Melting point:	85-95 °C (Kofler bench method)
	Particle size:	standard distribution between 5 and 100 microns with 30 to 40 micron average particle size. Setting: 12 min x 190 °C (temperature of object).
	Hardness:	1H - 2H
	DIN 53152 bending elasticity:	unaltered on 1/4” mandrel
	DIN 53151 cross-hatch adhesion:	GT O (100%)
	Erichem elasticity:	SEN DIN 53156: > 6mm
	Gardner inpact resistance:	25 kg x cm.

Tests performed on degreased and phosphatized metal plates with 60/70 micron film thickness.
The paint coating passed the saline mist resistance tests (193 hours).

Environmental characteristics		
Type of installation	indoor	
Installation conditions	on floor	
Climatic conditions (t°/Rh%)	constant	23°C/83% - 40°C/93%
	variable	23°C/98% - 40°C/98%
Ambient temperature limits	for operation	-5°C +40°C Normal usage conditions (Ref. sect. 7.1 of the Standard IEC 61439-1-2)
	for stOrange	-25°C +55°C

Technical details and certifications
Power dissipated

System pro E power IP30 - IP40 - IP55 - IP55

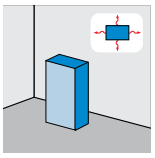
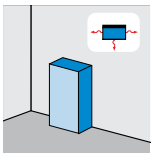
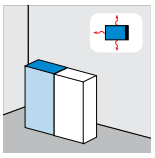
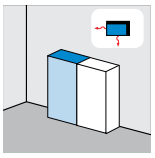
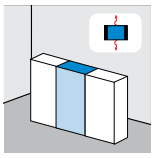
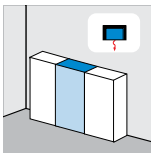
		Separate enclosure exposed on all sides					Separate enclosure for assembly on a wall					First and last enclosures exposed					First and last enclosures for assembly on wall					Central enclosure exposed					Central enclosure for assembly on a wall				
																															
		Maximum power dissipated (W)					Maximum power dissipated (W)					Maximum power dissipated (W)					Maximum power dissipated (W)					Maximum power dissipated (W)					Maximum power dissipated (W)				
W (mm)	D (mm)	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C
Structures H = 1800mm with blind panels																															
250	**200**	113	143	177	220	262	98	123	153	189	225	98	124	154	191	227	87	109	135	168	199	87	110	136	169	201	75	95	118	146	174
	300	135	170	211	261	311	122	154	191	237	282	119	150	186	231	274	105	132	164	203	242	100	126	156	194	231	90	113	140	174	207
	500	177	223	277	343	408	167	211	262	324	386	155	195	242	300	357	144	181	224	278	331	129	163	202	251	298	120	151	187	232	276
	700	222	280	347	431	512	218	275	341	423	503	202	254	315	391	465	194	244	303	375	446	170	214	265	329	392	162	204	253	314	373
500	**200**	167	211	262	324	386	145	183	227	281	335	156	196	243	301	359	133	167	207	257	306	145	183	227	281	335	124	156	193	240	285
	300	197	248	308	381	454	178	224	278	344	410	183	230	285	354	421	161	203	252	312	371	167	211	262	324	386	146	184	228	283	337
	500	241	304	377	467	556	231	291	361	447	532	227	286	355	440	523	215	271	336	417	496	211	266	330	409	487	194	245	304	377	448
	700	289	364	451	560	666	277	349	433	537	639	267	336	417	517	615	256	323	401	497	591	246	310	384	477	567	240	303	376	466	554
750	**200**	217	274	340	421	501	198	249	309	383	456	212	267	331	411	489	189	238	295	366	435	208	262	325	403	479	180	227	281	349	415
	300	244	308	382	474	564	227	286	355	440	523	235	296	367	455	542	219	276	342	424	505	228	287	356	441	525	209	263	326	404	481
	500	298	376	466	578	688	281	354	439	544	648	286	360	446	554	659	266	335	415	515	613	268	338	419	520	618	257	324	402	498	593
	700	345	435	539	669	796	329	415	515	638	759	326	411	510	632	752	315	397	492	610	726	310	390	484	600	714	297	374	464	575	684
1000	**200**	264	333	413	512	609	237	299	371	460	547	256	323	401	497	591	233	293	363	451	536	251	316	392	486	578	233	294	365	452	538
	300	294	370	459	569	677	269	339	420	521	620	287	362	449	557	662	260	328	407	504	600	279	351	435	540	642	258	325	403	500	595
	500	350	441	547	678	807	326	411	510	632	752	337	424	526	652	776	317	400	496	615	732	323	407	505	626	745	307	387	480	595	708
	700	405	510	632	784	933	379	478	593	735	875	385	485	601	746	887	361	455	564	700	833	362	456	565	701	834	352	443	549	681	811
1250	**200**	305	384	476	590	703	277	349	433	537	639	300	378	469	581	692	271	342	424	526	626	297	374	464	575	684	271	342	424	526	626
	300	340	429	532	660	785	311	392	486	603	717	333	419	520	644	767	306	386	479	594	706	325	410	508	630	750	303	382	474	587	699
	500	405	510	632	784	933	371	467	579	718	854	392	494	613	760	904	360	453	562	697	829	375	473	587	727	865	355	447	554	687	818
	700	467	589	730	906	1078	430	542	672	833	992	444	560	694	861	1025	413	520	645	800	951	421	530	657	815	970	399	503	624	773	920

Power dissipated inside System pro E power switchboards on the basis of the admissible overtemperature.
Δt = difference between the temperature inside the enclosure and ambient temperature.

Technical details and certifications

Power dissipated

System pro E power IP30 - IP40 - IP55 - IP55

		Separate enclosure exposed on all sides					Separate enclosure for assembly on a wall					First and last enclosures exposed					First and last enclosures for assembly on wall					Central enclosure exposed						Central enclosure for assembly on a wall				
																																
		Maximum power dissipated (W)					Maximum power dissipated (W)					Maximum power dissipated (W)					Maximum power dissipated (W)					Maximum power dissipated (W)						Maximum power dissipated (W)				
W (mm)	D (mm)	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C	20 °C	25 °C	30 °C	35 °C	40 °C
Structures H = 2100mm with blind panels																															
250	**200**	133	168	208	258	307	118	149	185	229	273	119	150	186	231	274	102	129	160	198	236	103	130	161	200	238	90	114	141	175	209
	300	158	199	247	306	364	145	183	227	281	335	140	177	219	272	324	125	158	196	243	289	121	152	188	234	278	106	133	165	205	243
	500	198	250	310	384	457	191	241	299	371	441	179	225	279	346	412	167	211	262	324	386	152	191	237	294	349	140	176	218	271	322
	700	227	286	355	440	523	221	278	345	427	509	206	259	321	398	474	203	256	317	394	468	181	228	283	351	417	173	218	270	335	399
500	**200**	191	241	299	371	441	169	213	264	328	390	179	226	280	347	414	156	196	243	301	359	167	211	262	324	386	144	182	226	280	333
	300	206	259	321	398	474	193	243	301	374	445	198	249	309	383	456	179	225	279	346	412	183	231	286	355	423	163	205	254	315	375
	500	259	326	404	501	596	244	307	381	472	562	240	302	374	464	553	229	288	357	443	527	225	283	351	435	518	213	269	334	414	492
	700	302	381	472	586	697	293	369	458	567	675	283	356	441	547	651	271	341	423	524	624	259	326	404	501	596	252	317	393	487	580
750	**200**	225	284	352	437	520	206	260	322	400	476	219	276	342	424	505	202	254	315	391	465	212	267	331	411	489	194	245	304	377	448
	300	263	331	410	509	606	240	302	374	464	553	251	316	392	486	578	231	291	361	447	532	240	303	376	466	554	227	286	355	440	523
	500	315	397	492	610	726	297	374	464	575	684	299	377	467	580	690	283	356	441	547	651	287	361	448	555	661	269	339	420	521	620
	700	372	469	582	721	858	351	442	548	680	809	348	438	543	673	801	329	415	515	638	759	325	409	507	629	748	317	399	495	614	730
1000	**200**	279	351	435	540	642	253	319	396	490	584	272	343	425	527	628	246	310	384	477	567	269	339	420	521	620	244	308	382	474	564
	300	310	391	485	601	715	286	360	446	554	659	300	378	469	581	692	278	350	434	538	640	294	370	459	569	677	271	342	424	526	626
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	700	443	558	692	858	1021	410	516	640	793	944	416	524	650	806	959	387	488	605	750	893	391	493	611	758	902	370	466	578	717	853
1250	**200**	317	400	496	615	732	285	359	445	552	657	310	390	484	600	714	282	355	440	546	650	305	384	476	590	703	281	354	439	544	648
	300	356	448	556	689	820	319	402	498	618	736	345	435	539	669	796	312	393	487	604	719	336	423	525	650	774	311	392	486	603	717
	500	429	541	671	832	990	390	492	610	756	900	411	518	642	796	948	375	472	585	726	864	393	495	614	761	906	365	460	570	707	842
	700	510	643	797	989	1177	458	577	715	887	1056	475	599	743	921	1096	433	546	677	840	999	444	559	693	860	1023	418	527	653	810	964

Power dissipated inside System pro E power switchboards on the basis of the admissible overtemperature.
Δt = difference between the temperature inside the enclosure and ambient temperature.

Technical details and certifications
Electrical continuity granted up to 10A

Electrical continuity of the structure and fixed and movable parts

The accessible metal parts in a switchboard must be electrically connected together and with the main protection conductor. The maximum resistance value allowed for this circuit is Ω 0,1.

According to standard IEC 61439-1 (part 8.4.3.2.2) “Specifications for earthing continuity to protect against the consequences of faults within switchgear”, point “b”:
“For covers, doors, closing plates and similar, the ordinary connections with metal screws and metal hinges are considered sufficient for electrical continuity so long as electrical devices that exceed the low voltage limits (ELV) are not installed on them”.
To achieve this:

- only and exclusively use the screws and accessories supplied with the components
- comply with the assembly instructions given in the manuals

The electrical continuity in System pro E power enclosures is automatically granted for the structure by screws and the assembly method itself. Moreover, it is possible to use a braid for the connection in the case of movable metal parts (doors or removable panels) provided with earthing pins.

Electrical continuity garanted up to 10A in System pro E power components

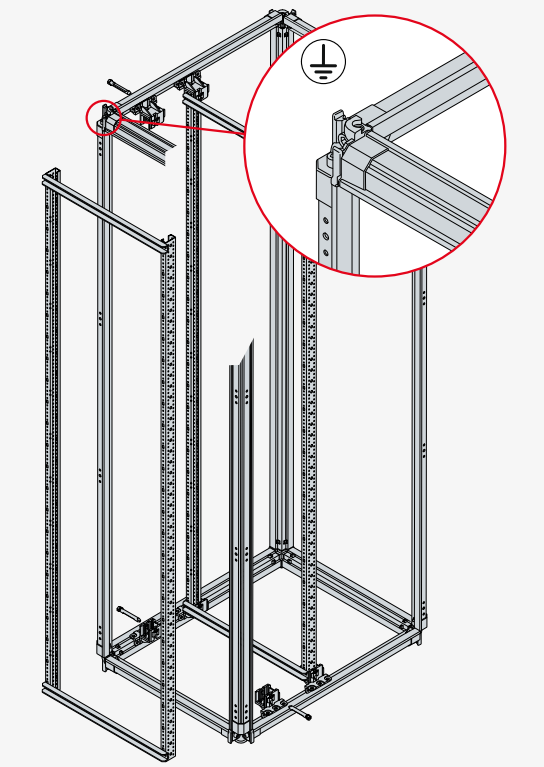
	Finishing		Electrical continuity
Description	**Galvanized Metal Sheet/Stainless Steel AISI 304**	**Painted Metal Sheet**	**Automatically granted**
Uprights/Crosspieces	✓		✓
WR frame	✓		✓
Internal panels for devices		✓	✓
Plates for devices	✓		✓
External panels (side/rear/roof)		✓	✓
Bottom with plinth		✓	✓
Bottom without plinth	✓		✓
Frontal full door		✓	✓
Frontal partial door		✓	✓

Technical details and certifications

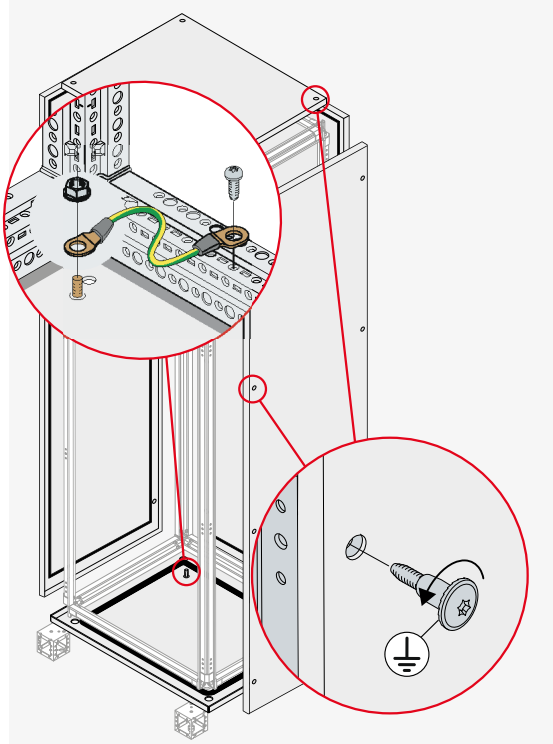
Electrical continuity granted up to 10A

—
01 The electrical continuity of the structure is automatically granted with the assembly of the structure itself, without the use of any dedicated accessory.
—
02 The side panels, the rear panels and the roof panels allows the electrical continuity by means of dedicated full thread head screws, which scratch the painting during the assembly. The bottom with plinth is provided with M6 pins, which allows the use of the traditional copper braid for the connection.
—
03 The blind and glass full doors are provided with M6 pins, which allows the use of the traditional copper braid for the connection.

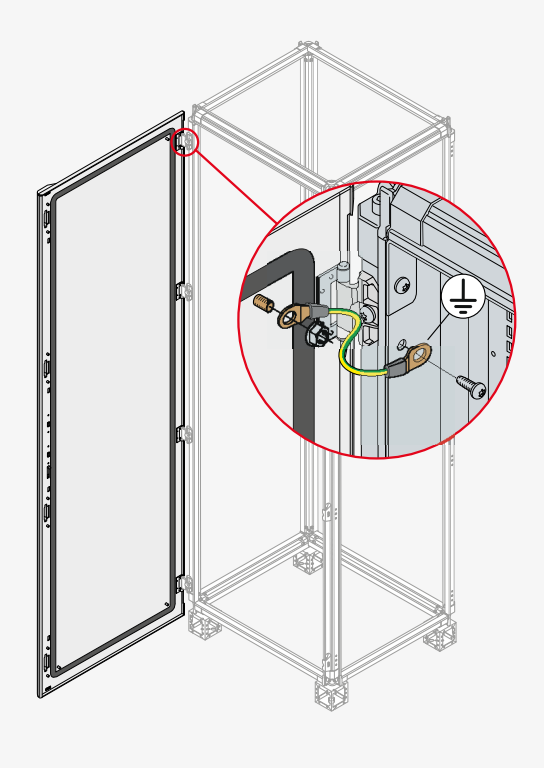
—
01



—
02



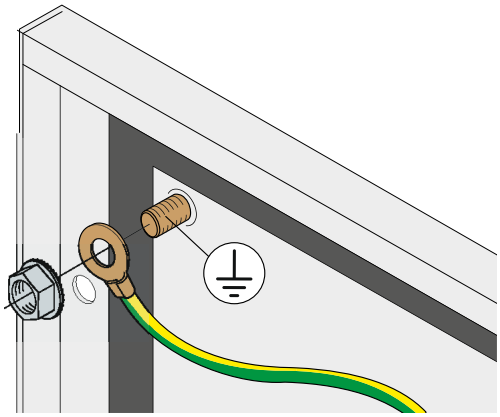
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03



Technical details and certifications
Conductors

Earthing of the structure

It is obligatory to use a braid for the earth connection in the case of movable metal parts (doors, swing frames or removable panels) that must support electrical components differing from class 2 (which, being fitted with double insulation, are not earthed).



Calculation of protection conductor PE
Standard IEC 61439-1-2 contain the methods for calculating the section of the protection conductor PE, which must be sized to withstand the thermal and dynamic components of the fault currents.

The following conditions must be ascertained when choosing the position in which the bar is to be fixed:

- the bar must be connected straight to the earthed parts of the switchboard (structure);
- the bar must be connected in an easily accessible position.

—

Use the values in the table for sizing taken from Standards IEC 61439-1-2.

S (mm²)					Sp (mm²)
		S	≤	16	S
16	<	S	≤	35	16
35	<	S	≤	400	S/2
400	<	S	≤	800	200
		S	>	800	S/4

Equipotentiality conductor

Conductive parts of a device, which cannot be connected to the protection circuit with their own means of connection, must be connected to the protection circuit of the apparatus through the equipotentiality of the protection.
This is done by means of a protective bonding conductor, the section of which must be chosen in accordance with the table below.

Rated service voltage I_e (A)					Minimum section of the protective bonding conductor (mm²)
		I_e	≤	20	S
20	<	I_e	≤	25	2,5
25	<	I_e	≤	32	4
32	<	I_e	≤	63	6
63	<	I_e			10

S = section of the line conductor (mm²)

Conductor PEN

The section of the PEN conductors of an apparatus must be determined in the same way as the neutral conductor (N).
10mm2 is the minimum section of a copper conductor.

The PEN conductor does not need to be insulated. Structure parts must not be used as a PEN conductors. However, the copper or aluminium assembly tracks can be used as PEN conductors.

For conductors that are not made of copper, equivalent conductivity sections are used instead of the sections above and may require larger terminals.

Technical details and certifications
Ordinary and extraordinary maintainance

1. Marking of the Enclosure
The manufacturer of the Enclosures must supply a readable identifying plate during the whole Enclosures' operation cycle.
The information that must be present on the license plate are:

- Manufacturer's name and trademark;
- Identification number of the Enclosures that can allow further information to be obtained from the constructor of the Enclosures
- Means for the identification of the construction date
- IEC 61439-2 referral
- CE marking (not outside Europe)

Company	
Enclosure number	
Date	
Standard	

Check the marking of the painting by rubbing for 15 seconds a rag soaked in water and then, for another 15 seconds, with rag soaked in petrol according to the directions reported in IEC 61439-1 10.2.7; the markings obtained by molding, pressure and engraving - similar, including labels with a coating laminated plastic, should not be verified according to the test.

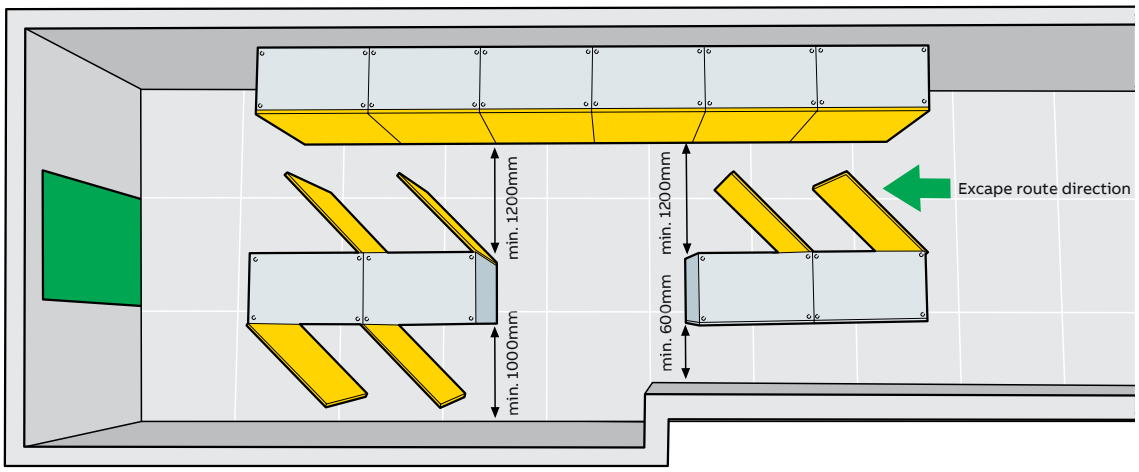
2. Required documentation to be attach to the painting:

- System pro E power Enclosures catalog and Equipment's catalog
- Instruction handbook for System pro E power components and Equipment's manual appliance instructions
- Document 1STC860086 Verification of the conditions installation
- If there are special service conditions agreed between the framework manufacturer and the user, verify that they are indeed in compliance to current Standard (see IEC 61439-1 7.2).

3. Installation and commissioning
The installation of the panel must take place in a position, which allows making easy accessibility both to the parts that can actually be object of maintenance and to the maneuvering devices, as an example:

- Keeping a distance of at least 600mm from the wall allows easy removal of the rear panel and assured thermal dissipation. The design, in fact, takes into account the positioning and the dimensions of the Enclosures, in order to guarantee compliance with the requirements for an effective maintenance.

For example, it is advisable to leave at least 600mm from the wall to allow easy removal of the back panel. The opening of the doors and swing frames must be granted.



Technical details and certifications

Ordinary and extraordinary maintainance

It must be possible to reach emergency exits in case of emergency without trouble.

- If the Enclosures are of considerable size, mechanical subdivisions must be prepared for an effective transport; before the floor installation, the mechanically parts must be reconnected as well as the electrical contacts.
- It is recommended the removal of glass door and extractable devices (if any) to avoid damage in the transport.
- Transport the loads following the instructions reported in the catalog.
- Floor fixing must take place on one leveled suitably base and free of excessive roughness with M12 class 8.8 screws.

Before activating the power supply of the Enclosures, it is recommended to check for any slack of the screws and to remove inclusions of dust and foreign bodies, etc.

- An example of the most important preliminary operations is summarized in Table 1.

Table 1

Action	Chek
Identification of the panel marking	
Visual inspection of cleaning and damage due to transport	
Visual inspection of seals integrity	
Tightening torques (Nm) of busbars and insulators: If previously marked with marker or varnish, carry out only a visual check, otherwise proceed with the verification of the tightening torques according to the table:	
Check tightening torque (Nm) Enclosures (External Panels, kit):	
Checking tightening torques (Nm) Devices:	
If previously marked with a felt-tip pen or paint, carry out only a visual check otherwise proceed with the verification of the tightening torques according to catalog indications and / or devices instruction manual	
Verification of the insulation resistance value between the three phases and between them and the mass	
Checking the correctness of the opening / closing operation on each appliance	
Verification of mechanical interlocks, if present	
Check operation of extraction and insertion on removable / removable devices, if any	
Verification of the connection of the auxiliary and measuring circuits, if any	
Verify the correct switching-on of any electronic measuring instruments, if any	
Verification of the correct intervention of the relays equipped with test button (switch in closed), if present	
Verification of auxiliary signals, if any	
Check correct relay ignition of electronic switches, if any	
Verification of operating cycles for motorized circuit breakers, if present	
Verification of the opening or emergency release coils, if any	
Check the auxiliary circuits of the withdrawable circuit-breakers in the isolated position, if present	
Check differential intervention using the Test key, if any	
Check switch adjustment, if any	
Check indications of voltmeters, lamps, analyzers, if any	

PTRN1951	4
PTRSXXXX	15
AD10XX	20
M6	8.9÷9.9
M8	21.8÷24.2
M10	43.2÷48
M12	74.3÷82.6
M14	117÷130
M16	177.5÷197.3

Screws Kit (three-bar M6)	6
Screws / nuts M6	8.9÷9.9
Upright and cross-member screws (M10)	20
Screw for External Panels and hinges	5

Technical details and certifications

Ordinary and extraordinary maintainance

Once these actions are successfully completed, it is possible to start the "tensioning", always remembering to replace the covers previously removed. To power an electrical panel, normally:

- The line arrival switches are closed;
- The correct functioning of the instruments of measurement, of the network analyzerand of the lamps is verified;
- Outgoing switches are closed individually
- The correct functioning of the utilities has to be tested.
- If the instantaneous opening of an outgoing switch occurs, it is necessary to look for the reason of the fault and repeat all the above described procedures.

Once the installation is complete, it is necessary to check that the individual circuits and the respective devices of protection are identifiable by tags, which comply with IEC 81346-1 and 81346-2.

4. Maintenance planning

The maintenance activity must be planned by the performer of the installation on the basis of the information provided by the panel builder: the latter is requested to collect all the necessary documentation from the constructing company and to integrate it with his experience. Maintenance activities are divided in:

- ordinary maintenance in order to prevent failures and inefficiencies and to limit the deterioration of the Enclosures
- scheduled operations must be foreseen in order to ensure regular operation and the good preservation of all equipment.

Extraordinary maintenance after a seismic event. Verify that no failure of the structure has occurred, in particular take care of the uprights and crosspieces status; the Enclosures must be able to guarantee the correct operation of the performances and mechanical and electrical characteristics (IP, IK, insulation…).
In any case proceed as indicated for ordinary maintenance (see table 2).

Table 2

List	Verification type	Monthly	Biannual	Annual	Biennial
1	Verification of identification plate presence and availability of the wiring diagram			✓	
2	Check the integrity of the panel		✓		
3	Check the mechanical connections of the Enclosure				✓
4	Visual verification of mechanical, thermal and electrical damages including any oxidations			✓	
5	Equipment matching and wiring diagram verification			✓	
6	Verification of protection devices based on the detected loads			✓	
7	Measurement tools efficiency verification		✓		
8	Fuse integrity verification and signal lamps (auxiliary circuits in general)		✓		
9	Verification of the mechanical functioning of the equipment		✓		
10	Functional verification of differential protection devices	✓			
11	Functional testing of MT / BT drag, (if present)			✓	
12	Functional testing of safety circuits	✓			
13	Verification of the connection to the ground system and of the protective conductors			✓	
14	Checking torques of bolted elements			✓	
15	Checking the terminal board, tightening and connections of cables, busbars and busbar holder			✓	
16	General cleaning of the panel and related equipment			✓	

Technical details and certifications
Special painting and Instruction manuals

Customized directly in the factory

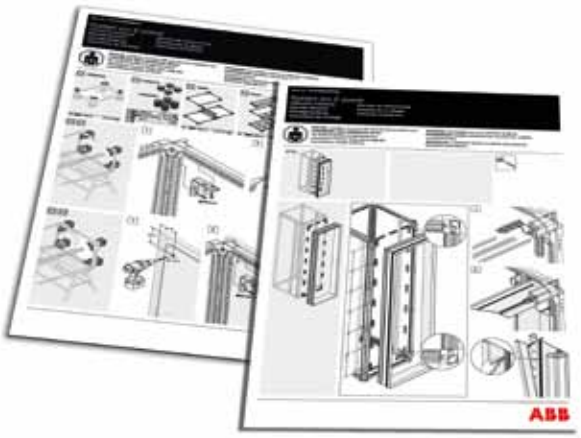
CUSTOM MADE SERVICE is an ABB service for Main Distribution Enclosures, which, on request, are supplied painted, drilled and, where necessary, assembled according to the customer's specific requirements.

Painting
A shade of color other than the standard one (grey orange peel RAL 7035) can be requested on the mounted versions of the enclosure.
For the various colors/finishes and for details of the painting cycle characteristics please contact ABB.

Customized drilling
CUSTOM MADE SERVICE offers also a drilling service complying with your own specific drawing, made using CAD .dwg or .dxf format drawings. Simply provide the useful dimensions. Should you prefer a solution ready to be worked with, you can choose the Custom Made Service solution dedicated to battery assembly of several columns.
The accessories can also be supplied already factory-mounted by ABB on request.

Instruction manuals
Detailed multi-language instruction manuals, including drawings, show the correct way to assemble the structures and the components inside them.

User compliance with manufacturer instructions allows the set-up of correctly selected and assembled electrical enclosures which conform to EN 61439-1 in accordance with the European Community Low Voltage Directive (Directive 2014/35/





Technical details and certifications
Declaration of conformity

System pro E power switchboards with rated characteristics	
Rated service voltage Ue	up to 1000V AC / 1500V DC
Rated insulation voltage Ui	up to 1000V AC / 1500V DC
Rated current / Icw	up to 2000A / fino a 75kA
IP protection class	IP30, IP55

If the components have been chosen and assembled correctly, as described in the catalogue and instruction manual, the resulting switchboards will conform to Standard IEC 61439-1-2, in accordance with the provisions established by the Low Voltage Directive adopted by the European Union 2007/95/EC (formerly Directive 73/23/EEC, Law 791/1977).

The above is valid if the switchboard has been designed and built:

- having chosen the materials on the basis of the performance values indicated in the ABB catalogues;
- having sized the conductors in accordance with the provisions established by Standards EN 61439-1 and CEI 64-8;
- having performed the individual tests established by Standard IEC 61439-1-2 and obtained positive results.

Technical details

Information about disposal at the end of the lifecycle of the products
ABB SACE has conducted research into the end of the lifecycle of the product.
The assessments were made by applying the LCA (Life Cycle Assessment) method as established by ISO 14040 - 1997 and in accordance with the requirements established by SEMC in the ISO TR 14025 TYPE III Enviromental declarations (MSR 1999:2 – “Guidelines Environmental Product Declarations”) document.
The research was conducted considering the disposal and recycling processes of the main materials forming a typical switchboard.
Using the bill of materials as a starting point, the researchers considered the ease with which each part can be disassembled and separated as well as the ability to recycle the materials. They found that the product is almost entirely recyclable.
After this, they limited the bill of materials to the most significant components and assessed the lifecycle of each.
The result was the flow of recyclable materials and salvaged materials (or for incineration) indicated in the Table. In theory, none of the materials should end up in a landfill.

Substance	Destination
Aluminium scrap	Recycling
Copper scrap	Recycling
Polyurethane gaskets	Incineration
Fiberglass	Recycling
Scrapped glass	Recycling
Paper/cardboard	Recycling
Plastic insulators	Recycling
Sheet metal scrap	Recycling

Technical details and certifications
Specification

Number of busbar holders (breaker)

The below char shows the total ammount of busbar holder to be mounted on a Breaker structure.

		Width	
	Breaker	**500**	**750**
Icw = 50 kA	T4/XT4 T5/XT5 T6/XT6	2	2
	T7/XT7 E1.2	2	NA
	E2.2	2	NA
Icw = 75 kA	T4/XT4 T5/XT5 T6/XT6	3	4
	T7/XT7 E1.2	4	NA
	E2.2	4	NA

Number of busbar holders ZX522 (InLine)

The below char shows the total ammount of busbar holder to be mounted on an InLine structure.

		Width			
	(A)	**500**	**750**	**1000**	**1350**
Icw = 50 kA	1000	2	2	4	4
	1250	2	2	4	4
	1600	2	2	4	4
	2000	2	2	4	4
Icw = 75 kA	1000	NA	NA	NA	NA
	1250	NA	NA	NA	NA
	1600	NA	NA	NA	NA
	2000	2	5	10	13

Number of busbar holders (SlimLine)

The below char shows the total ammount of busbar holder to be mounted on an SlimLine structure.

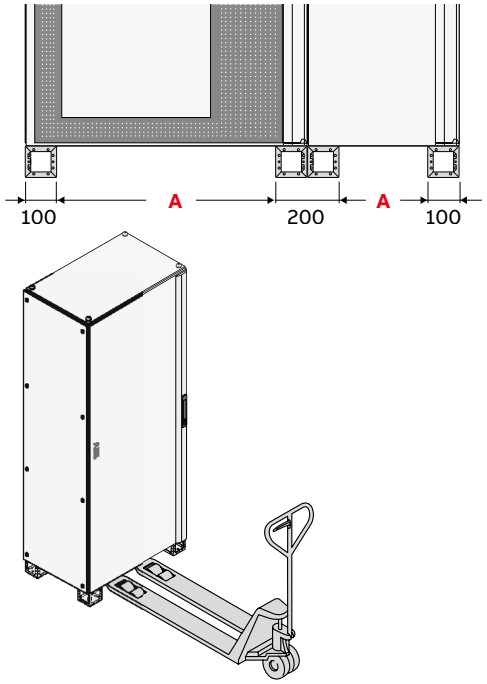
		Width			
	(A)	**500**	**750**	**1000**	**1350**
Icw = 50 kA	1000	3	4	6	7
	1250	3	4	6	7
	1600	3	4	6	7
	2000	3	4	6	7
Icw = 75 kA	1000	NA	NA	NA	NA
	1250	NA	NA	NA	NA
	1600	NA	NA	NA	NA
	2000	3	5	6	8

Note:
500mm: 2 fixed Busbar holder are inluded, the difference represents the number of additional busbar holders
750mm: 2 fixed Busbar holder are inluded, the difference represents the number of additional busbar holders
1000mm: 4 fixed Busbar holder are inluded, the difference represents the number of additional busbar holders
1250mm: 4 fixed Busbar holder are inluded, the difference represents the number of additional busbar holders

It is reccomend to install the additional busbar holders in the following way:
- 1 piece: in relation to the centerline of the column
- 2 or more pieces: it is reccomended to maintain equal distances among the pieces

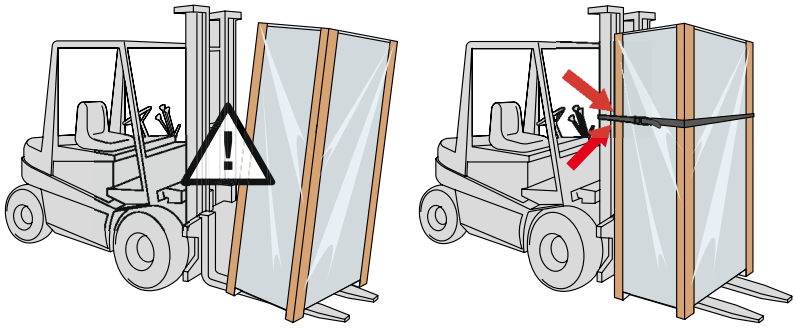
Technical details and certifications
Handling

Handling with a transpallet

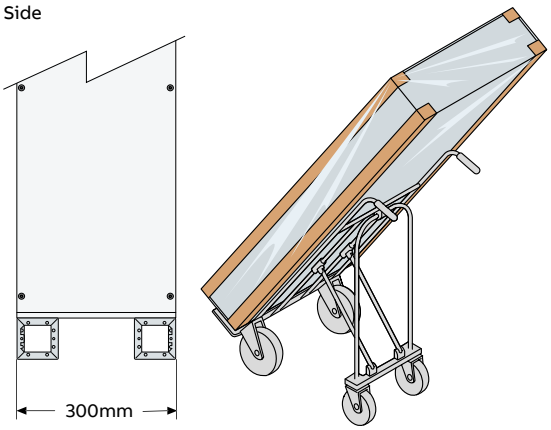


Dimensions	A (mm)
Width 300mm	198
Width 400mm	298
Width 600mm	498
Width 800mm	698
Width 1000mm	898
Width 1250mm	1098

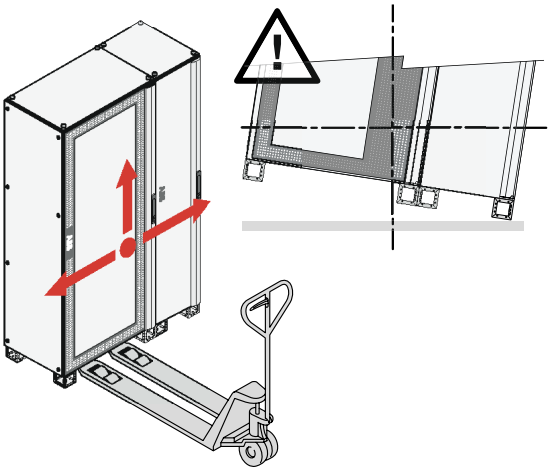
For extra safety, it is advisable to fasten the switchboard to the lift truck when using this type of vehicle for transport.



Shallow switchboards should be handled in the following way:



Check the center of gravity before handling structures measuring L=800/1000mm (with internal or external cable compartment) containing busbar systems.

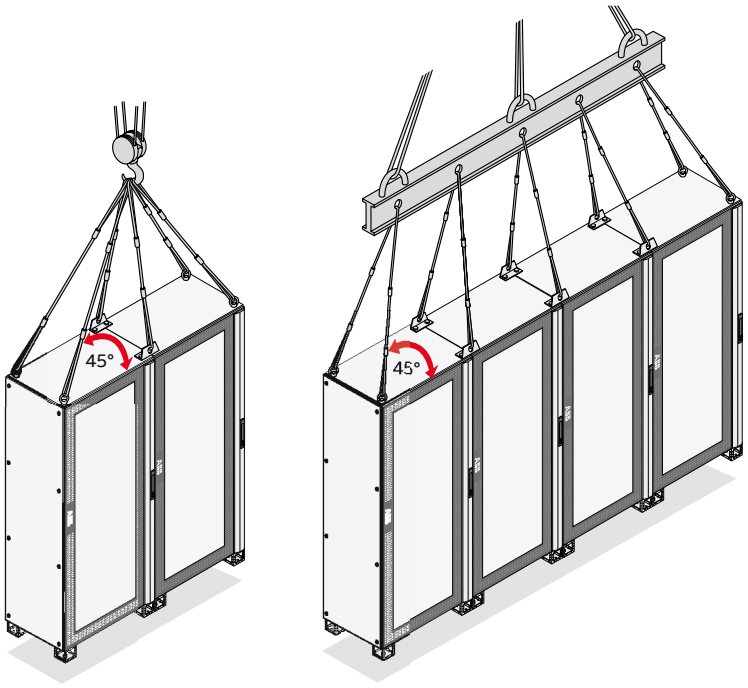


Technical details and certifications
Handling

Handling with a bridge crane

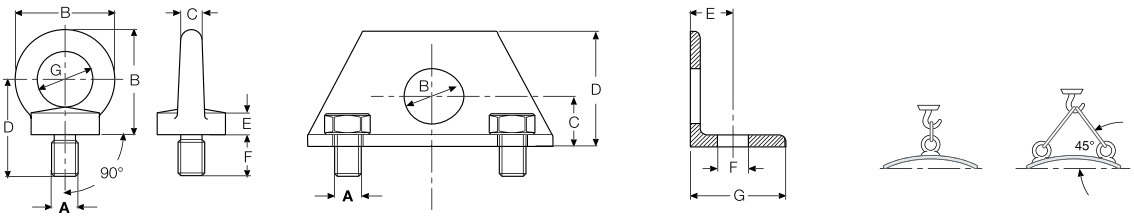
Before handling switchboards with a crane or bridge crane, make sure that:
- the ropes or chains are in an excellent condition;
- the angle between the lifting ropes and the top of the switchboard must be ≥45°;
- up to 3 units can be carried at the same time;
- maximum weight lifted as established by Standard DIN 580 (M12).

To comply with the conditions described above, use a lifting beam with the appropriate characteristics when lifting several adjacent units.



Standard DIN 580 concerning mechanical connection components (only for eyebolts)

Eyebolts **Lifting reinforcements**



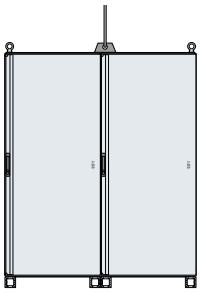
A	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Load 1 (kg)	Load 2 (kg)	Tightening (Nm)
Eyebolts									
M12	54	12	28	10	22	30	340	240	8*
Lifting reinforcements									
M12	Ø40	37	80	25	Ø14	60	510	350	40

Technical details and certifications
Handling

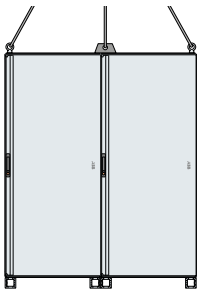
Maximum capacities
(in accordance with the IEC 62208 Standard



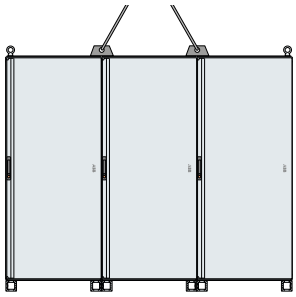
Number of columns	1
Weight of single column Kg	1000
Total weight of columns Kg	1000
Joining Kit	PSBS0065
	PSES0008
Lifting Kit	PEBL0004
Number of braces used	4



Number of columns	2
Weight of single column Kg	500
Total weight of columns Kg	1000
Joining Kit	PSBS0065
	PSES0008
Lifting Kit	PBRL0002
Number of braces used	2



Number of columns	2
Weight of single column Kg	2000
Total weight of columns Kg	1000
Joining Kit	PSBS0065
	PSES0008
Lifting Kit	PEBL0004
	PBRL0002
Number of braces used	6

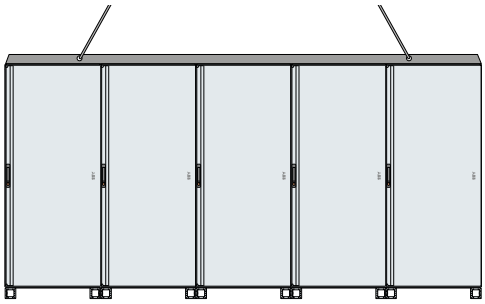


Number of columns	3
Weight of single column Kg	500
Total weight of columns Kg	1500
Joining Kit	PSBS0065
	PSES0008
Lifting Kit	PEBL0004
	PBRL0002
Number of braces used	4

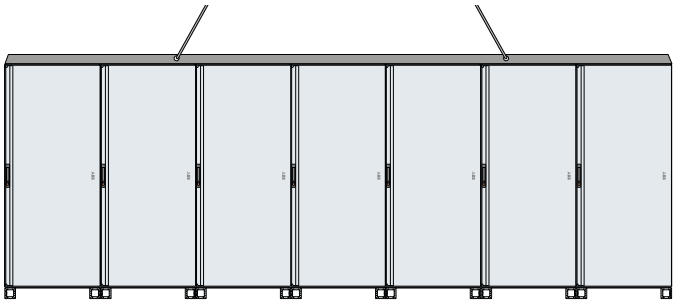
Technical details and certifications

Handling

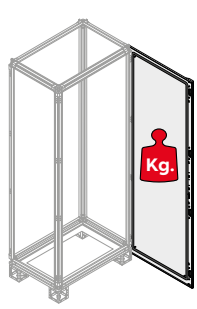
Maximum capacities
(in accordance with the IEC 62208 Standard



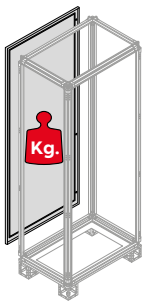
Number of columns	5
Weight of single column Kg	1000
Total weight of columns Kg	5000
Joining Kit	PSBS0065
	PSES0008
Lifting Kit	PEBL0004
	PBRL0002
	XXXXX
Number of braces used	4

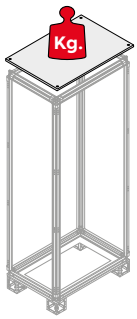


Number of columns	7
Weight of single column Kg	1000
Total weight of columns Kg	7000
Joining Kit	PSBS0065
	PSES0008
Lifting Kit	PEBL0004
	PBRL0002
	XXXXX
Number of braces used	4





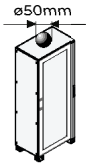
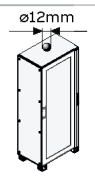
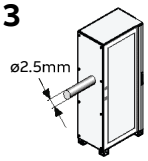
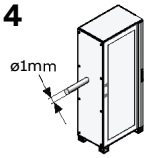
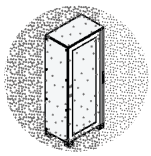




Door	**Side panel**		**Rear panel**		**Roof**
Kg	D (mm)	Kg	W (mm)	Kg	Kg
50	>800	90	>800	90	40
	≤800	110	≤800	110	

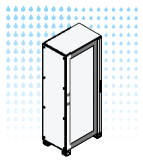
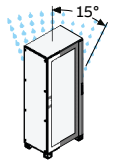
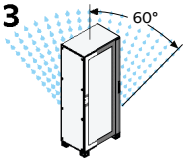
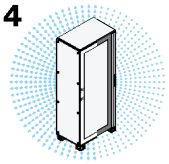
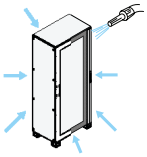
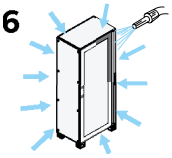
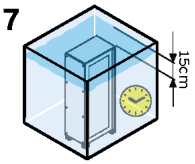
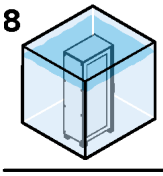
Technical details and certifications
IP protection classes

1st DIGIT: protection against solid objects

0		No protection
1		Protected against solid objects larger 50mm (accidental contact with the hands)
2		Protected against solid objects larger than 12mm (fingers)
3		Protected against solid objects larger than 2.5mm (tools, wires)
4		Protected against solid objects larger than 1mm
5		Protected against dust (no harmful deposits)
6		Totally protected against dust

1st digit defined by Standards 61439-1-2 (Ref. sect. 10.3).

2nd DIGIT: Protection against liquids

0		No protection
1		Protected against vertically dripping water (condensation)
2		Protected against water dripping at an angle up to 15° from the vertical
3		Protected against rain falling at an angle up to 60° from the vertical
4		Protected against water splashing from all directions
5		Protected against jets of water sprayed from all directions
6		Protected against jets of water similar to waves
7		Protected against the effects of temporary immersion
8		Protected against the effects of continuous immersion

2nd digit defined by Standards 61439-1-2 (Ref. sect. 10.3).

Technical details and certifications

IP protection classes

Component	Without Gasket	With Gasket	Empty enclosure for CombiLine N and 185mm Busbars System	Empty enclosure for Top busbars System	185mm busbars System	IP Column
Blind Side		✓	✓	✓	✓	IP65
Blind Rear		✓	✓	✓	✓	
Blind Top		✓	✓	✓	✓	
Blind Bottom		✓	✓	✓	✓	
Open top + flange PFCF....		✓	✓	-	✓	
Open bottom with plinth + flange PFCF....		✓	✓	-	✓	
Open bottom with plinth for column D=300mm + flange EV....		✓	✓	-	-	
External Single Door [1]		✓	✓ [1]	✓ [1]	✓ [1]	
Open top + flange TZ...		✓	✓	✓	-	IP55
Open bottom with plinth + flange TZ...		✓	✓	✓	-	
Internal blind bottom	✓		✓	-	-	IP40
Internal open bottom + flange	✓		✓	-	-	
Open bottom with plinth + flange RF...		✓	-	✓	-	
Blind side	✓		-	-	✓	
Vented side	✓		-	-	✓ [2]	
Blind Rear	✓		-	-	✓	
Vented rear	✓		-	-	✓ [2]	
Blind Top	✓		-	-	✓	
Blind Bottom	✓		-	-	✓	
Internal blind bottom	✓		-	-	✓	
Open top + flange PFCS....	✓		-	-	✓	
Open bottom with plinth + flange PFCS....	✓		-	-	✓	
External Single Door	✓		-	-	✓	
Vented top	✓		-	-	✓	IP30

[1] External double door IP54.
[2] For IP40 it is necessary to use the grates for vented panels.

The Maximum IP degree for the Empty enclosure for CombiLine N and 185mm Busbars System is IP65.
By selecting components belonging to IP55 or IP40 or IP30 list, there will be a de-rating in the IP protection degree.

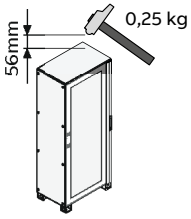
The Maximum IP degree for the 185mm Busbars System is IP65. By selecting components belonging to IP55 or IP40 or IP30 list, there will be a de-rating in the IP protection degree.

The Maximum IP degree for the Empty enclosure for Top Busbars System is IP65. By selecting components belonging to IP40 or IP30 list, there will be a de-rating in the IP protection degree.

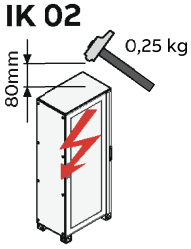
Technical details and certifications
Mechanical shock resistance IK

The IK is expressed in Joule in compliance with the requirements of IEC 62262.

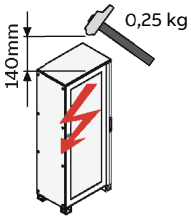
IK 0
Not protected

IK 01


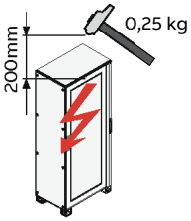
Impact energy in Joule 0.140

IK 02


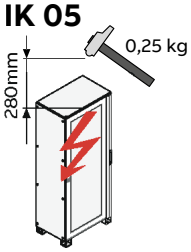
Impact energy in Joule 0.200

IK 03


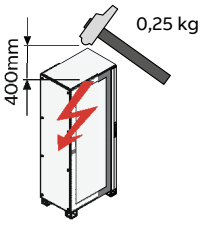
Impact energy in Joule 0.350

IK 04


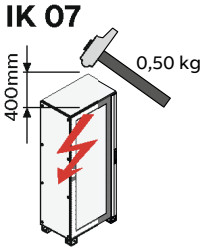
Impact energy in Joule 0.500

IK 05


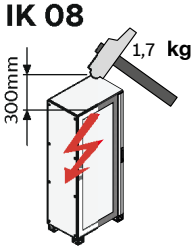
Impact energy in Joule 0.700

IK 06


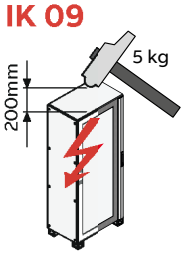
Impact energy in Joule 1.00

IK 07


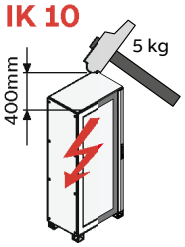
Impact energy in Joule 2.00

IK 08


Impact energy in Joule 5.00

IK 09


System pro E power
Glass door
Impact energy in Joule 10.00

IK 10


System pro E power
Blind door
Impact energy in Joule 20.00

Chapter 5
Overall dimensions

5–2 **Frame**

5–4 **External covers**

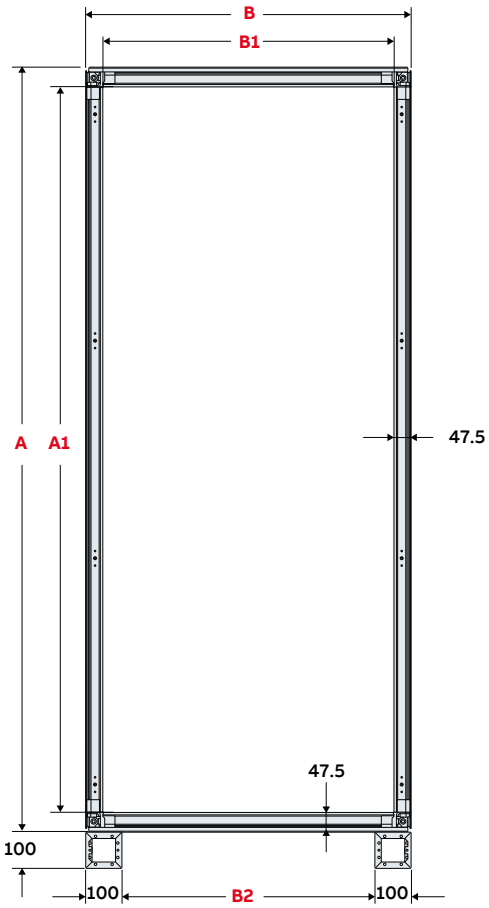
5–7 **Modules WR mounting frame**

5–8 **Useful space**

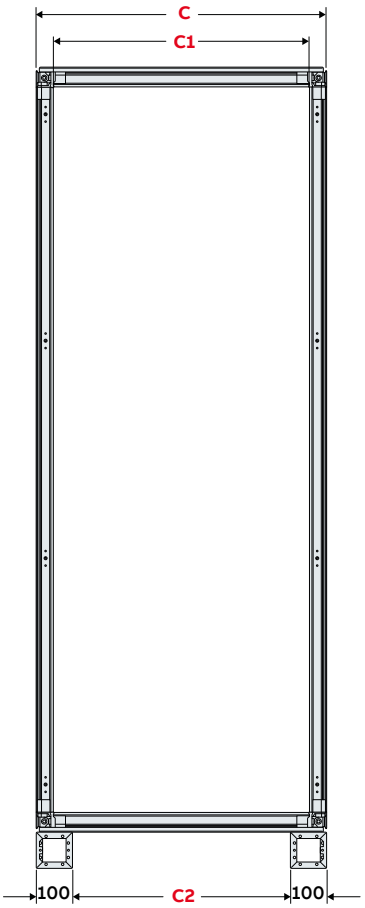
Overall dimensions

Frame

Front



Side



Height measurements (mm)

A	A1
1913	1804
2213	2104

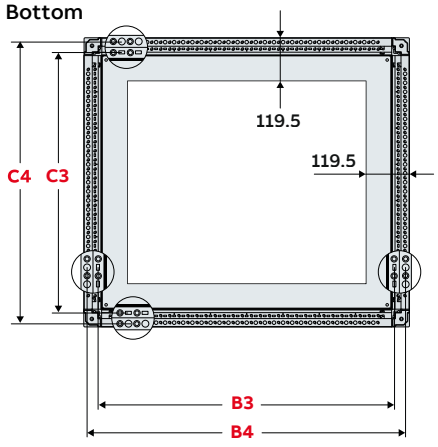
Width measurements (mm)

B	B1	B2	B3	B4	B5	B6	B7	B8
349	254	148	287	325	194	271	348	226
599	504	398	537	575	444	521	598	476
849	754	648	787	825	694	771	848	726
1099	1004	898	1037	1075	944	1021	1098	976
1349	1254	2248	1287	1325	1194	1271	1348	1226

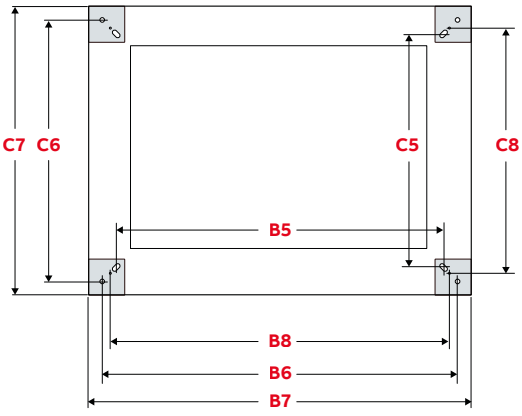
Depth measurements (mm)

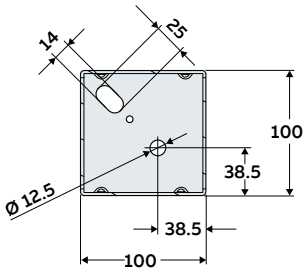
C	C1	C2	C3	C4	C5	C6	C7	C8
299	204	98	237	275	144	221	298	176
399	304	198	337	375	244	321	398	276
599	504	398	537	575	444	521	598	476
799	704	598	737	775	644	721	798	676
999	904	798	937	975	844	921	998	876

Bottom



Fixing on floor



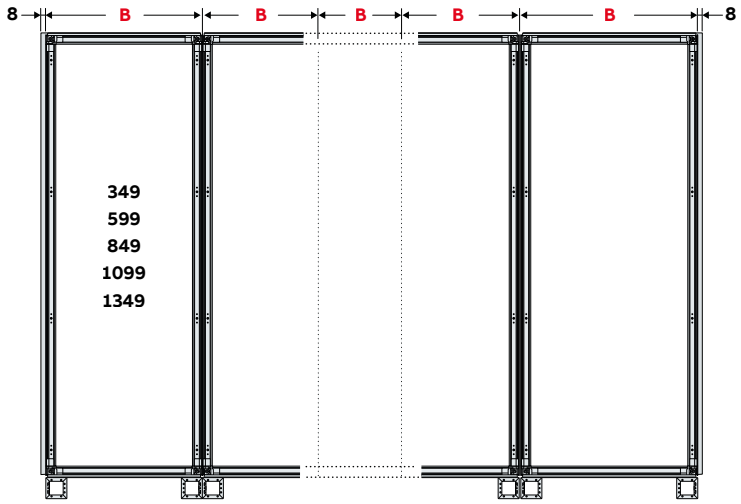


The measurements are given in millimeters

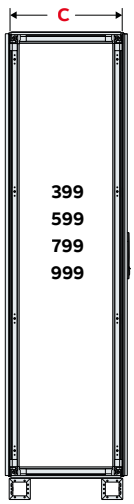
Overall dimensions

Overall dimensions for several adjacent structures

Front



Side

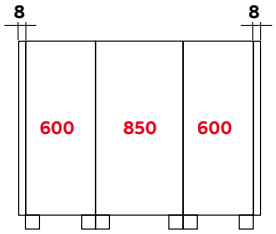


Total width calculation

Add 16mm for the 2 side panels (8+8=16mm)

Example

600 + 850 + 600 +16 = 2.066



Total depth calculation C

XLine Horizontal, CombiLine, External cable compartment
Depth of the structure + 48mm
(front and rear covers including handle)

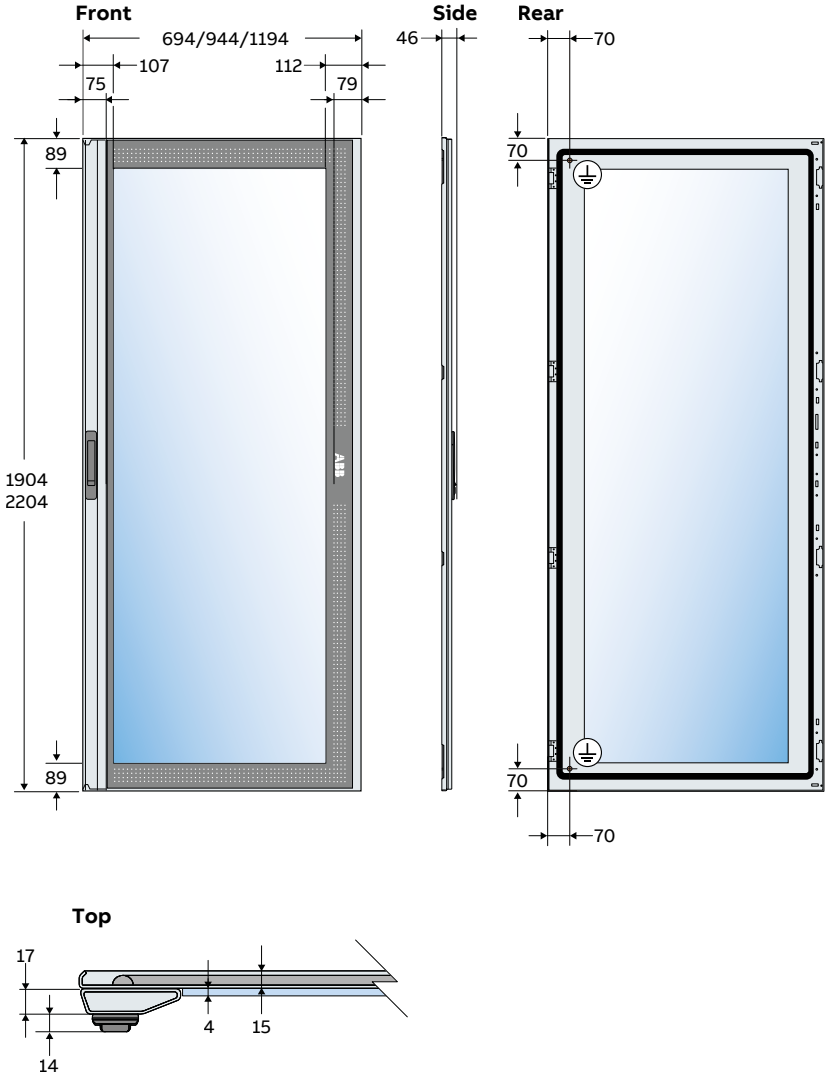
Vertical circuit breaker, InLine, XLine Vertical
Depth of the structure + 28mm
(front segment doors and rear covers)

The measurements are given in millimeters

Overall dimensions

External covers

Glass doors



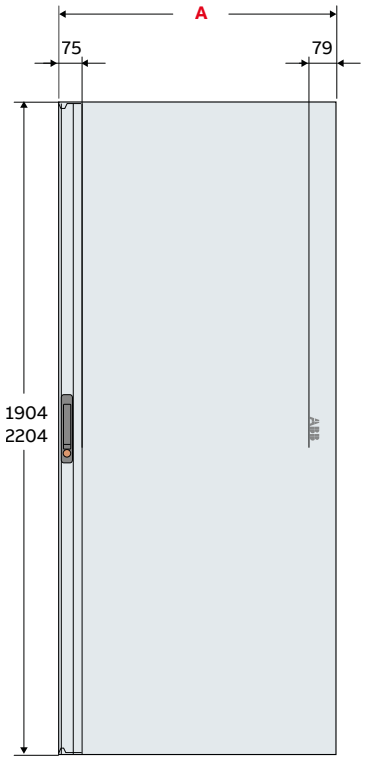
The measurements are given in millimeters

Overall dimensions

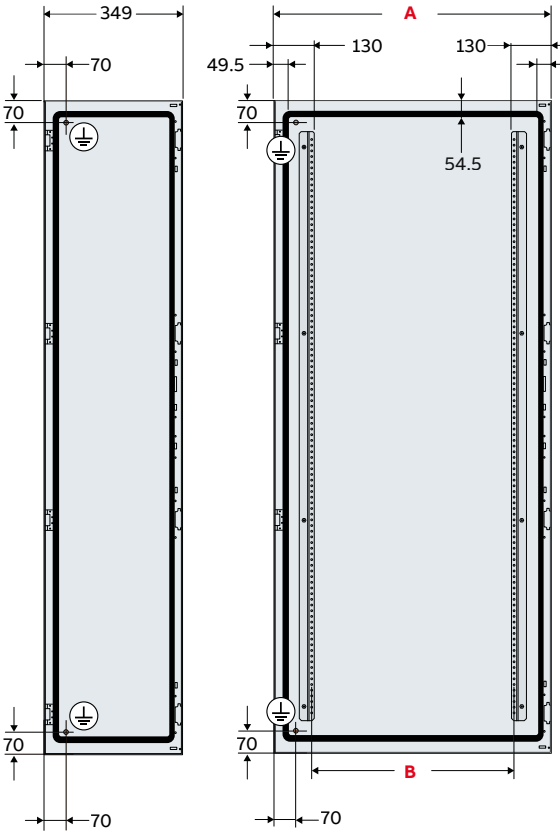
External covers

Blind doors

Front

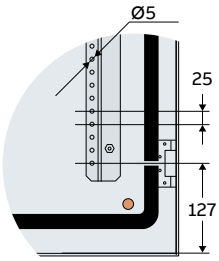


Rear

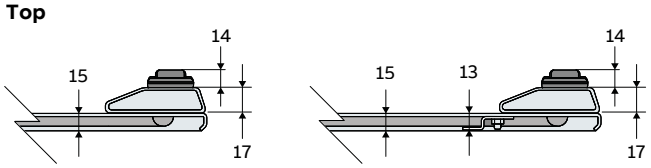


Side





Top



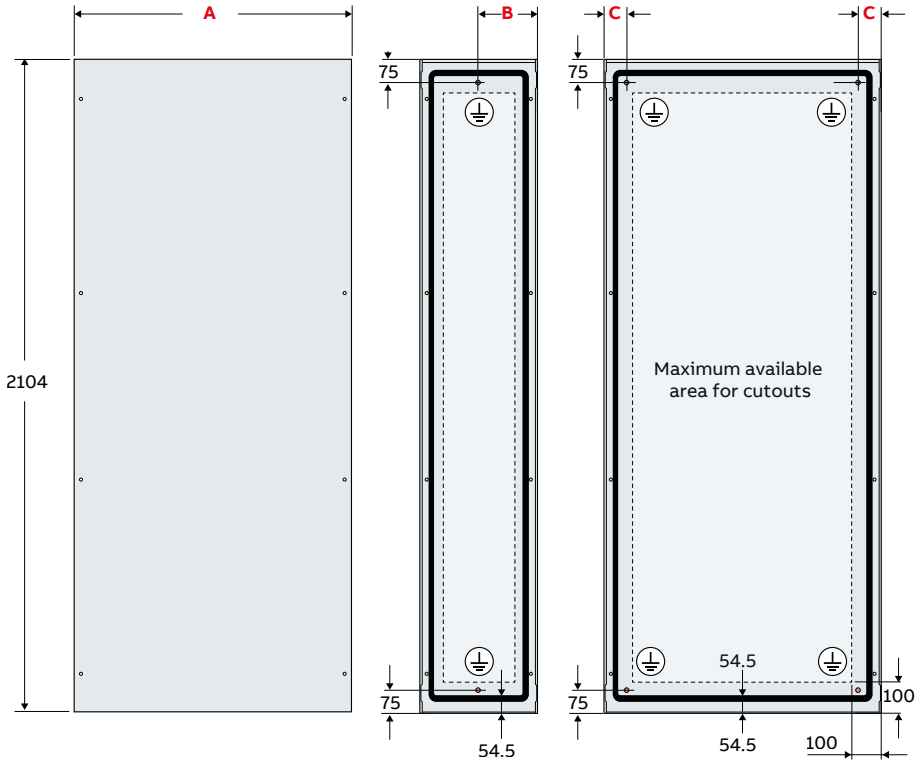
A	B
394	250
444	350
494	450
694	650
894	850
944	
1194	

The measurements are given in millimeters

Overall dimensions

External covers

Rear, side panels



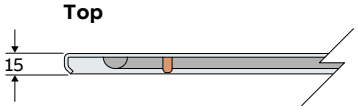
Rear panels

A	B	C
389	194.5	
439	219.5	
489	244.5	
689		75
889		75
939		75
1189		75

Side panels

A	B	C
389	144.5	
489	244.5	
689		75
889		75

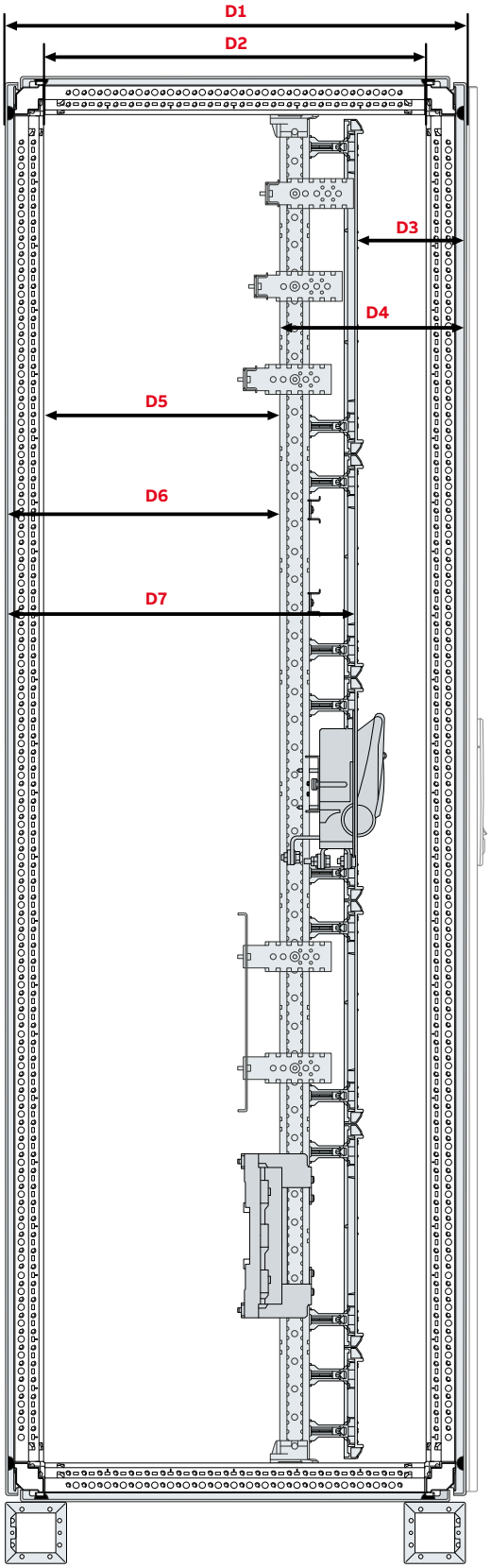
Top



The measurements are given in millimeters

Overall dimensions

Modules WR mounting frame



Empty enclosures

D1	D2	D3	D4	D5	D6	D7
316	204	83	188	70	125	227
416	304	133	238	120	175	227
616	504	133	238	320	375	477
816	704	133	238	520	575	677

185mm Busbar System

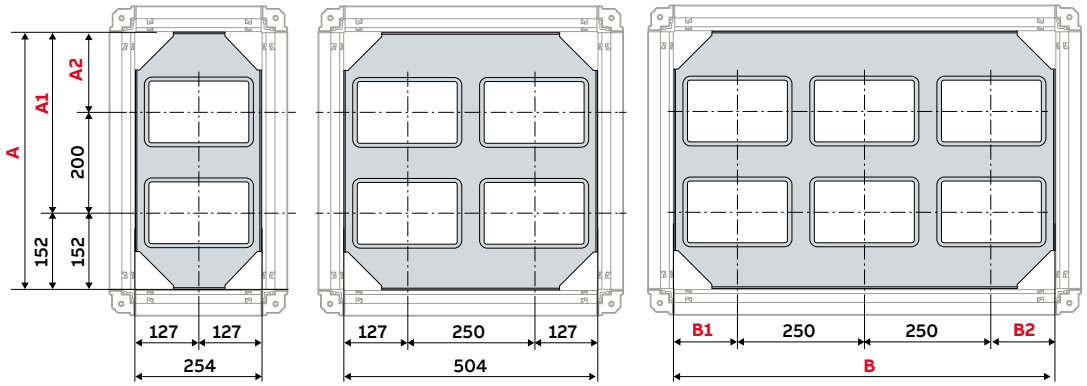
	D1	D2	D3	D4	D5	D6	D7
Emax E1.2, Tmax T7, InLine II, SlimLine XR, T4, T5, T6	616	504	133	238	320	375	477
Emax E2.2	616	504	58	163	395	450	552

The measurements are given in millimeters

Overall dimensions

Internal cover

PBWF....

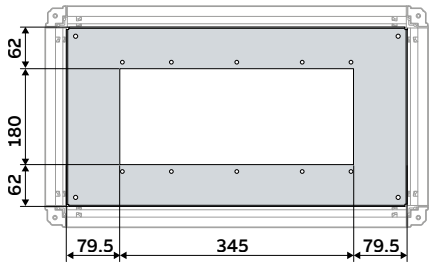


A	A1*	A2**
304	152	-
504	352	152
704	552	352
904	752	552

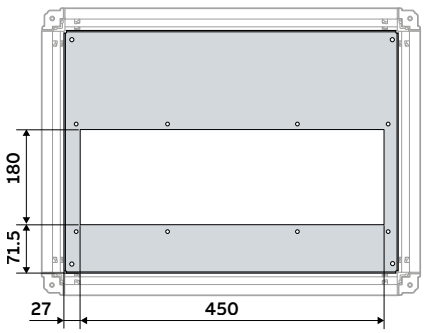
*One row **Two rows

B	B1	B2
754	127	127
1004	252	252
1254	377	377

PBWF5031

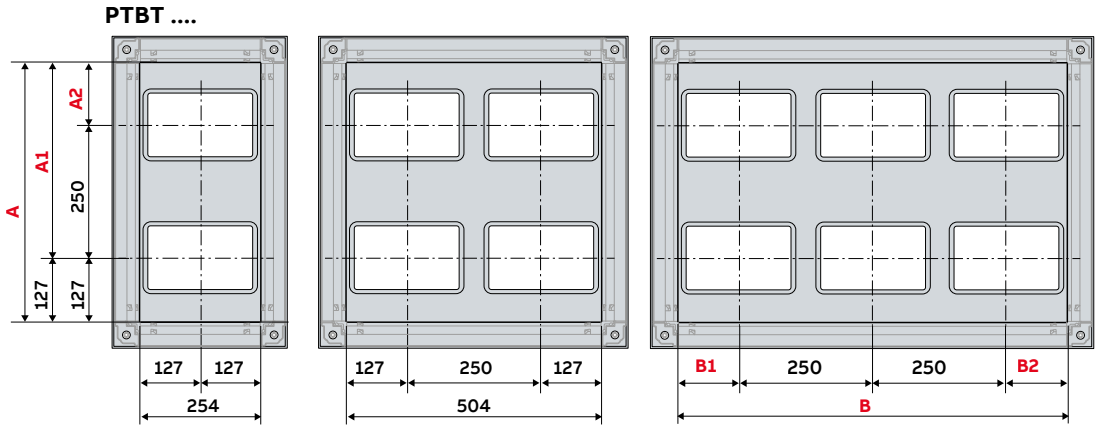


PBWF5051



External cover

PTBT ....

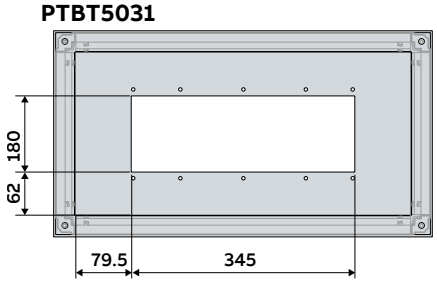


A	A1*	A2**
304	177	-
504	377	127
704	577	327
904	777	527

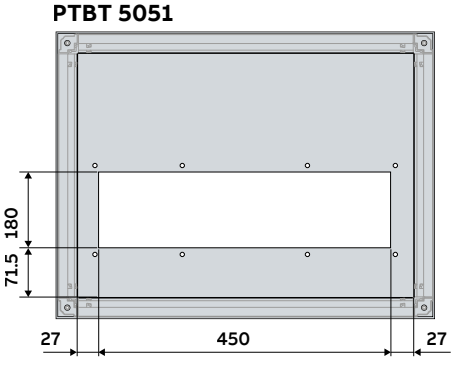
*One row **Two rows

B	B1	B2
754	127	127
1004	252	252
1254	377	377

PTBT5031



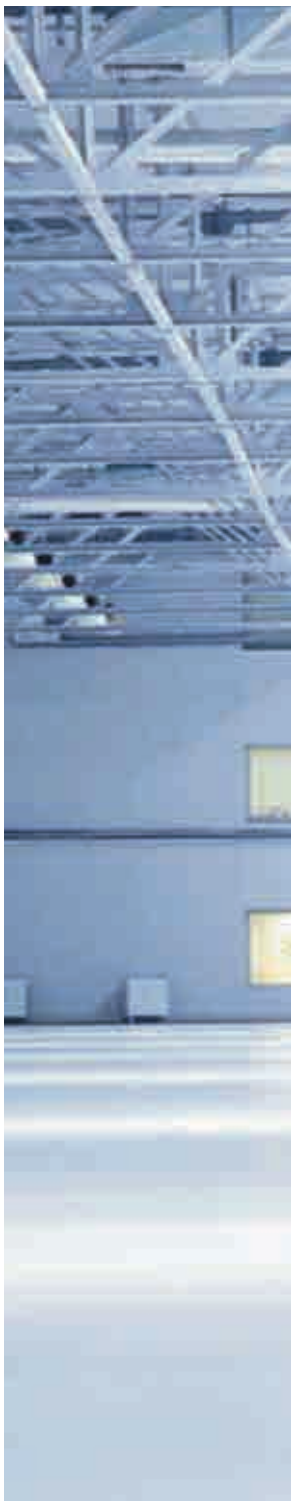
PTBT 5051



The measurements are given in millimeters

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1STC803009D0103 - 03/2022

Due to possible developments of standards as well as of materials, the characteristics and dimensions specified in this document may only be considered binding after confirmation by ABB SACE.

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