Composition accessories
Locking system

> Advantage:
Easy opening.

Handle for shape inserts and cylindrical barrels

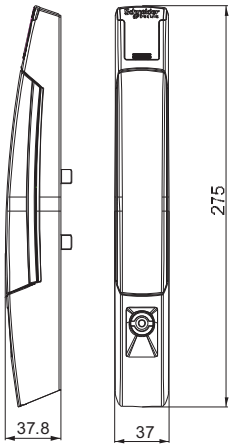
- Handle lock allowing the door to be opened: with a single movement.
- Standard handle for the entire range of **Spacial SF** and **Spacial SM** enclosures; does not include the insert when ordered as an accessory.
- Easy and quick installation of inserts without needing screws.
- Allows the installation of shape inserts and cylindrical barrels.
- The symmetric design of the locking system makes it easy to change the opening direction of the door, right/left. Easy fixing by means of screws.
- Space reserved for enclosure identification, 21 × 27 mm, protected by a label frame.
- Material:

– Handle: polyamide 6 with 30% fibreglass, RAL 9005 black.
– Label frame: polycarbonate.

- UV resistant.
- Fire resistance: 650 ºC.
- Resistance to external mechanical impacts: IK10.

Supply: standard handle and fixing elements (insert not included).

Reference
NSYSFHS1



Composition accessories
Locking system

Shape inserts and cylindrical barrels

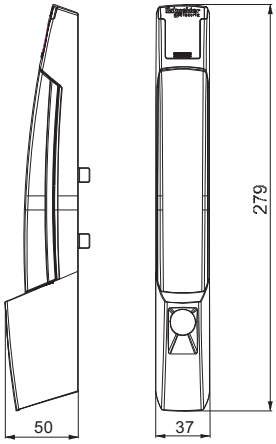
Shape inserts	Reference
 6-mm square insert	NSYINS61
Female 6-mm square insert	NSYINS6G1
7-mm square insert	NSYINS71
8-mm square insert	NSYINS81
Female 8-mm square insert	NSYINS8G1
8-mm square insert with slot	NSYINS8H1
6.5-mm triangular insert	NSYINT61
7-mm triangular insert	NSYINT71
8-mm triangular insert	NSYINT81
9-mm triangular insert	NSYINT91
10-mm triangular insert	NSYINT101
10-mm keyless hexagonal insert	NSYINH31
3-mm double-bar insert	NSYINDB31
5-mm double-bar insert	NSYINDB51
Daimler Benz insert	NSYINBENZ1
Fiat insert	NSYINFIAT1
Keyless USA slot insert	NSYINUSA1
Keyless 2 × 4 slot insert	NSYIN241
Crown insert	NSYINCW1

Push button	Reference
 Push button	NSYINPULS1

> For installing shape inserts and cylindrical barrels in handle types DIN, KABA and ASSA (ref. **NSYSFHD2**), see adapter (ref. **NSYLADP**) page **3/73**.

Cylindrical barrels	Reference
 405E key lock	NSYIN405E1
421E key lock	NSYIN421E1
455 key lock	NSYIN4551
1242E key lock	NSYIN1242E1
1332E key lock	NSYIN1332E1
2124E key lock	NSYIN2124E1
2131A key lock	NSYIN2131A1
2132A key lock	NSYIN2132A1
2331A key lock	NSYIN2331A1
2433A key lock	NSYIN2433A1
2452E key lock	NSYIN2452E1
3113A key lock	NSYIN3113A1
3122E key lock	NSYIN3122E1
3123A key lock	NSYIN3123A1
3133A key lock	NSYIN3133A1
3422E key lock	NSYIN3422E1
3432E key lock	NSYIN3432E1
EDF1300 key lock	NSYINF1301
EDF1400 key lock	NSYINF1401
Michelin 8079 keyless lock	NSYINICHEL8791
Michelin 8133 keyless lock	NSYINICHEL8131
Michelin 8376 keyless lock	NSYINICHEL8371
E1 keyless lock	NSYINE11

Composition accessories
Locking system



Handle for insert types DIN, KABA, ASSA

- Easy-opening handle lock: requires a single movement.
- The inserts are easily and quickly mounted without any screws and allow the installation of profiled DIN, KABA and ASSA locks.
- To install shape inserts or cylindrical barrels, it is necessary to add adapter ref. **NSYLADP**.
- The symmetric design of the locking system makes it easy to change the opening direction of the door, right/left. Mounting on the door by means of screws.
- Space reserved for enclosure identification, 21 × 27 mm, protected by a label frame.
- Material:

– Handle: polyamide 6 with 30% fibreglass, RAL-9005 colour.
– Label frame: polycarbonate.

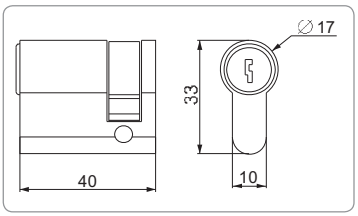
- UV resistant.
- Fire resistance: 650 °C.
- Resistance to external mechanical impacts: IK10.

Supply: one handle for DIN, KABA and ASSA inserts and fixing elements (insert not included).

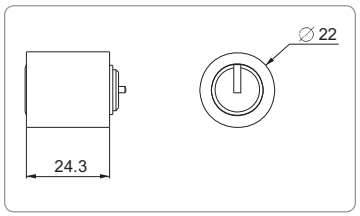
Reference
NSYSFHD2

Lock system: DIN, KABA and ASSA		Reference
	Adapter for DIN cylinder	NSYINDIN2
	Adapter for KABA cylinder (1)	NSYINKBA2
	Adapter for ASSA cylinder	NSYINASSA2
	1242E key lock	NSYIN1242E2
	Reinforced key lock	NSYINKR2
	JIS key lock	NSYINKJIS2
	FAC key lock	NSYINKFAC2

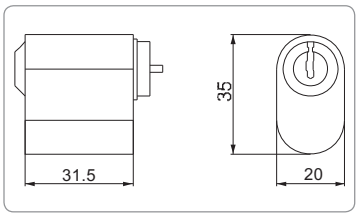
(1) Adapter for receiving the KABA8, KABA20 and KABA start cylinders.



Insert dimensions for DIN adapters.

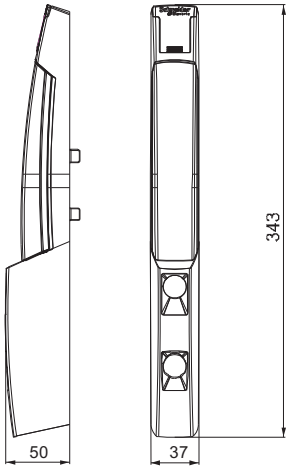


Insert dimensions for KABA adapters.



Insert dimensions for ASSA adapters.

Composition accessories
Locking system



Double-insert handle

- Easy-opening handle lock: requires a single movement. Allows two inserts to be installed in the same lock.
- To install shape inserts or cylindrical barrels, it is necessary to add adapter ref. **NSYLADP**.
- The handle can perform the "AND" and "OR" functions. The elements for performing these functions are supplied with the handle.

– "AND" function: one insert blocks the activation of the other insert.
– "OR" function: either insert can release the handle.

- The symmetric design of the locking system makes it easy to change the opening direction of the door, right/left. Mounting on the door by means of screws.
- Space reserved for enclosure identification, 21 × 27 mm, protected by a label frame.
- Material:

– Handle: polyamide 6 with 30% fibreglass, RAL 9005 colour.
– Label frame: polycarbonate.

- UV resistant.
- Fire resistance: 650 ºC.
- Resistance to external mechanical impacts: IK10.

Supply: one double-insert handle, elements for performing the "AND" and "OR" functions and fixing elements (insert not included).

Reference
NSYSFHD3

Adapter for shape inserts and cylindrical barrels

- Plastic adapter for installing shape inserts and cylindrical barrels in handle lock types DIN, KABA, ASSA.

Supply: 1 unit.

- See shape inserts and cylindrical barrels on page **3/71**.
- See insert types DIN, KABA, ASSA on page **3/72**.

Reference
NSYLADP

Composition accessories
Locking system

Padlock locking

- Padlock locking system, for installation in all the handles of the **Spacial SF** and **Spacial SM** enclosures.
- Bolt with 7.5-mm drill hole.

Supply: one cut-out handle, bolt for padlock and bolt fixing screw.

Reference
NSYBLKH123

CNOMO kit

- Locking system to be installed on the central locking bar of the door. It works as a locking bar immobiliser, preventing the handle from closing while the door is still open.
- It is compatible with all handle lock versions, except the flat lock and the small flat lock.

Supply: one mechanism, 6.5-mm triangular insert, key and fixing elements.

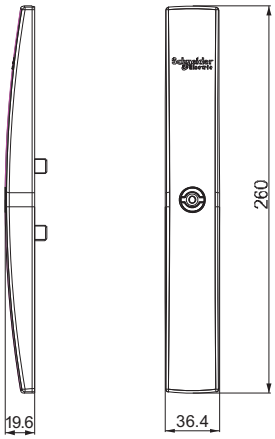
Reference
NSYCNOH123

Composition accessories
Locking system

Flat escutcheon lock

- Optional flat escutcheon lock. Replaces the handle lock.
- The symmetric design of the locking system makes it easy to change the opening direction of the door, right/left. Mounting on the door by means of screws.
- Possibility of changing the turning direction of the insert.
- Material: polyamide 6 with 30% fibreglass, RAL 9005 black.
- UV resistant.
- Fire resistance: 650 °C.
- Resistance to external mechanical impacts: IK10.

Supply: flat lock, shape insert, key and fixing elements.

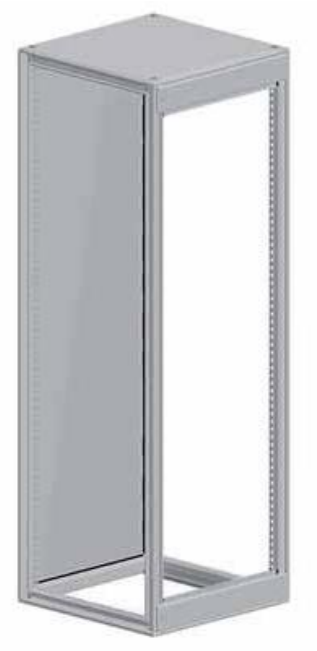


Models		Reference
	Flat lock + screwdriver slot, 2-mm groove	**NSYSFLOCK24**
	Flat lock + 8-mm triangular insert	**NSYSFLOCKT8**
	Flat lock + 7-mm triangular insert	**NSYSFLOCKT7**
	Flat lock + 6.5-mm triangular insert	**NSYSFLOCKT6**
	Flat lock + 8-mm female square insert	**NSYSFLOCKSG8**
	Flat lock + 8-mm square insert	**NSYSFLOCKS8**
	Flat lock + 7-mm square insert	**NSYSFLOCKS7**
	Flat lock + 6-mm square insert	**NSYSFLOCKS6**
	Flat lock + 5-mm double-bar insert	**NSYSFLOCKDB5**

Applications

3

Compartimentalised enclosure
Composition accessories



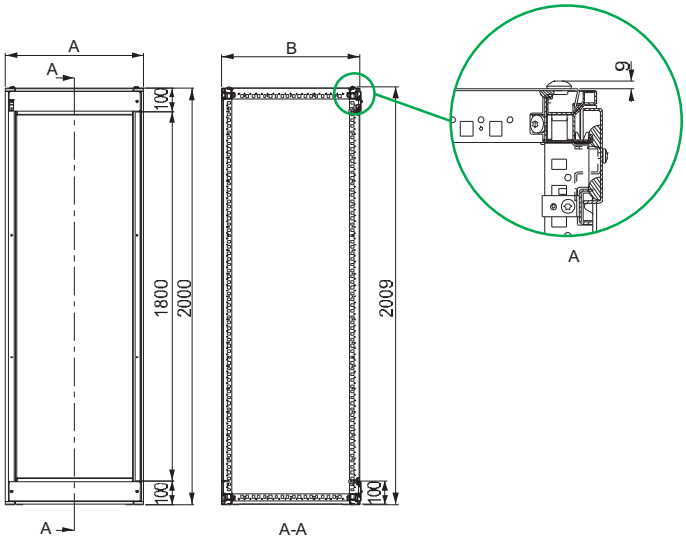
Compartmentalised enclosure application

- The compartimentalised enclosure separates the various working areas, restricting their access.
- The closed compartments make it possible:

– To insulate the control of a device mechanically and electrically.
– To reduce the destructive effects of a short-circuit.

Composition

- Structure: top and bottom frame and vertical uprights.
- Fixed panels: top and bottom, to allow modularity.
- 2 intermediate crossbars.
- Removable roof.
- External fixing rear panel.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.



External dimensions (mm)			Useful height for doors (mm)	Reference
Height	Width (B)	Depth (C)		
2000	600	600	1800	**NSYSF20660M**
		800	1800	**NSYSF20680M**
	800	600	1800	**NSYSF20860M**
		800	1800	**NSYSF20880M**

Enclosure cladding accessories, see page **3/78**.

Equipment support accessories, see page **3/85**.

Optional composition accessories, see page **3/36**.

Compartimentalised enclosure
Composition accessories

Standard side panels

External fixing

- Set of 2 side panels fixed to the outside of the enclosure.
- Captive screws.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: two side panels with external fixing, supplied with sealing gasket.

Spacial SF dimensions (mm)		Reference
Height	Depth	
2000	600	NSY2SP206
	800	NSY2SP208

Plinth

- See composition accessories: floor, page **3/36**.
- Model heights: 100 and 200 mm.

Front plinth

Supply:
– **Height 100 mm:** 4 corners, 2 panels (front and rear), 4 corner covers and fixing elements.
– **Height 200 mm:** 4 corners, 4 panels (2 front and 2 rear), 4 corner covers and fixing elements.

Plinth side panels

Supply:
– **Height 100 mm:** two side panels, four corner covers and fixing elements.
– **Height 200 mm:** four side panels (height of 100 mm, 2 for each side), four corner covers and fixing elements.

Spacial SF Dimensions (mm)		Front plinth reference (mm)		Plinth side panel reference (mm)	
Width	Depth	100	200	100	200
600	600	NSYSPF6100	NSYSPF6200	NSYSPS6100	NSYSPS6200
	800			NSYSPS8100	NSYSPS8200
800	600	NSYSPF8100	NSYSPF8200	NSYSPS6100	NSYSPS6200
	800			NSYSPS8100	NSYSPS8200

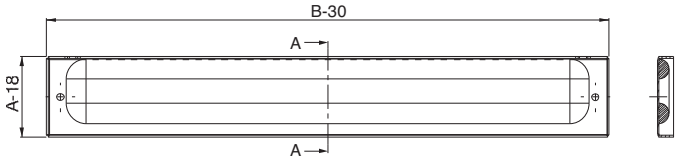
Compartimentalised enclosure
Composition accessories

Fixed panel for modularity

- Panel fixed to the structure of the enclosure by means of screws.
- Recommended for enclosure kits.
- It is installed at the top and bottom of the enclosure, to obtain the modularity required to install partial doors.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: two panels and fixing elements.

Spacial SF dimensions (mm)		Reference
Height (A)	Width (B)	
100	600	**NSYMFP16**
	800	**NSYMFP18**
300	600	**NSYMFP36**
	800	**NSYMFP38**

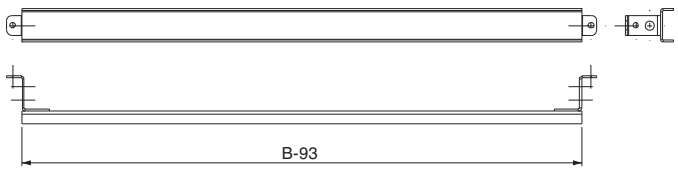


Intermediate crossbar

- Crossbar with direct fixing to the structure.
- It is mounted between partial doors or between doors and control desk, guaranteeing good sealing.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: 1 crossbar and fixing elements.

Spacial SF Dimensions (mm)	Reference
Width (B)	
600	**NSYMIC6**
800	**NSYMIC8**



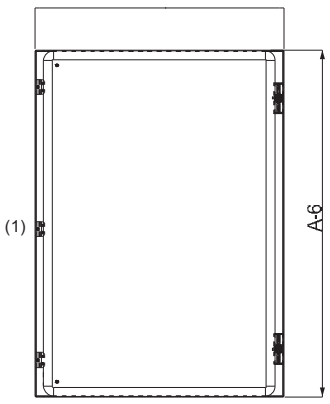
Compartimentalised enclosure
Composition accessories

Partial doors

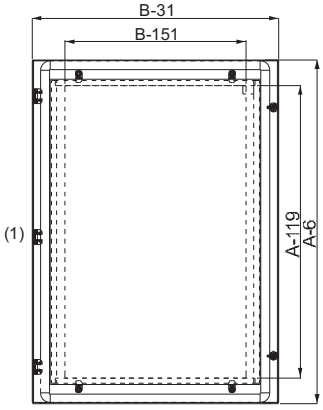
- Two partial door versions:
  – Plain partial door.
  – Transparent partial door with Securit® glass.
- They are fixed to the uprights of the structure by means of hinges.
- Locking system with small flat escutcheon, made from polyamide 6 with 30% fibreglass, RAL-9005 black, with 3 mm double-bar metal insert.
- 1 locking point for doors with heights of 200 and 400 mm, and 2 locking points for doors with heights of 600 to 1000 mm.
- Opening to the right or left.
- 2 vertical reinforcement frames, cut-out with a pitch of 25 mm; except doors with a height of 200 mm.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: partial door, hinges and fixing elements.

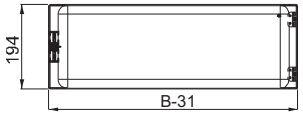
Spacial SF dimensions (mm)		Plain partial door reference	Transparent partial door reference
Height (A)	Width (B)		
200	600	NSYMPD26	NSYMPD26T
400		NSYMPD46	NSYMPD46T
600		NSYMPD66	NSYMPD66T
800		NSYMPD86	NSYMPD86T
1000		NSYMPD106	NSYMPD106T
200	800	NSYMPD28	NSYMPD28T
400		NSYMPD48	NSYMPD48T
600		NSYMPD68	NSYMPD68T
800		NSYMPD88	NSYMPD88T
1000		NSYMPD108	NSYMPD108T



Heights from 400 to 1000 mm.
(1) 3 hinges in 1000 mm height

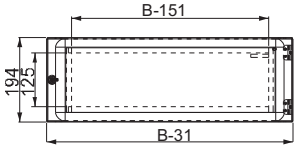


Heights from 400 to 1000 mm.
(1) 3 hinges in 1000 mm height



Height 200 mm

Plain partial door.



Height 200 mm

Transparent partial door.

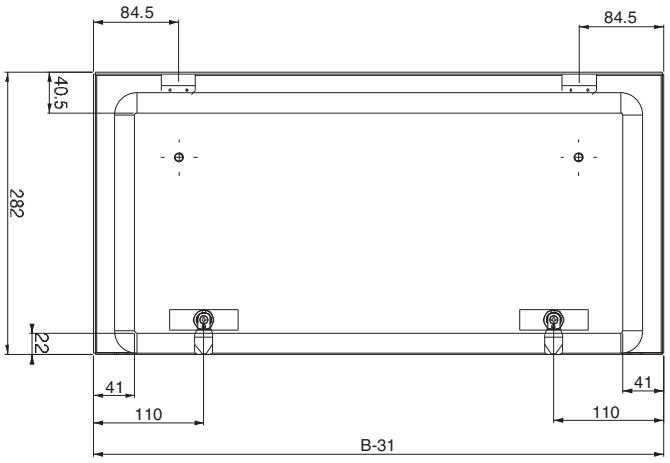
Compartimentalised enclosure
Composition accessories

Folding panels

- Horizontal panel, hinged at the top.
- Guarantees protection of the sets of bars.
- Opening angle: 90º.
- It is installed together with partial doors to create the modularity of the enclosure.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Locking system with two small flat escutcheons, made from polyamide 6 with 30% fibreglass, RAL 9005 black, with 3-mm double-bar insert.

Supply: one folding panel, hinges and fixing elements.

Nominal dimensions (mm)		Reference
Height	Width (B)	
300	600	**NSYCDP36**
	800	**NSYCDP38**



Compartimentalised enclosure
Composition accessories

Partial door for folding panel

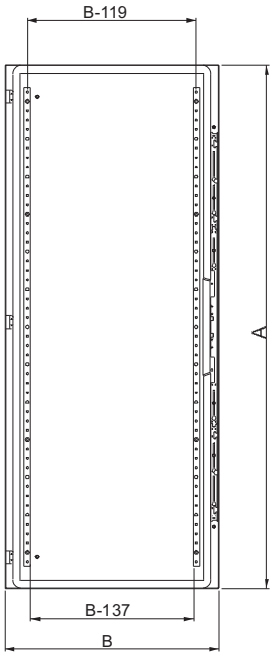
- Can be combined with folding panels and with the rest of the partial doors.
- Plain partial doors with handle lock with 5-mm double-bar insert.
- 4 locking points and 2 or 3 hinges according to the height:

– 2 hinges, heights of 1200 and 1400 mm.
– 3 hinges, height of 1600 mm.

- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: one partial door, hinges and catches of the locking system.

Nominal dimensions (mm)		Plain partial door reference
Height (A)	Width (B)	
1200	600	**NSYMPD126**
1400		**NSYMPD146**
1600		**NSYMPD166**
1200	800	**NSYMPD128**
1400		**NSYMPD148**
1600		**NSYMPD168**



Compartimentalised enclosure
Composition accessories

Drilling template

- Guide for drilling the vertical uprights, prior to installing the partial doors.
- It can be reused.
- Material: zinc-coated steel.

Supply: one template.

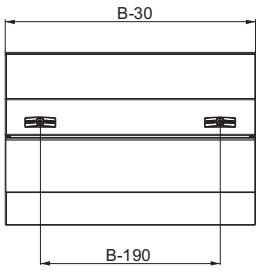
Reference
NSYMDT

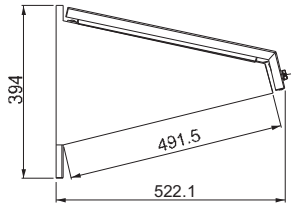
Control desk

- Support for human-machine dialogue.
- It is fixed directly to the structure of the enclosure and can be inserted the same as the partial doors.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Locking system with small flat escutcheons, made from polyamide 6 with 30% fibreglass, RAL 9005 black, with 3-mm double-bar metal insert.

Supply: one control desk and fixing elements.

Nominal dimensions (mm)		Reference
Height	Width (B)	
400	600	NSYMCOD264
	800	NSYMCOD284





Compartimentalised enclosure
Composition accessories

Locks

- Locks to replace the 3-mm double-bar lock supplied with the partial doors, folding panel and control desk.
- Models:

– Transformation of lock with shape inserts, triangular 6.5 mm and square 6 mm.
– Lock with 2233X key for partial doors.
– Lock with 2233X key for folding panel and control desk.

Supply:
– One lock with shape inserts, triangular 6.5 mm and square 6 mm: metal body, shape insert and safety washer.
– One lock with 2233X key for partial doors: metal body, insert, bolt, safety washer and key.
– One lock with 2233X key, exclusive for folding panel and control desk: metal body, insert, special bolt, safety washer and key.

Description	Reference
Lock with 6.5-mm triangular insert for control desk and partial, hinged door	**NSYMLT6**
Lock with 6-mm square insert for partial door, folding panel and control desk	**NSYMLS6**
Lock with 2233X key for partial door	**NSYML23**
Lock with 2233X key for folding panel and control desk	**NSYMLCD23**

Examples of composition accessories

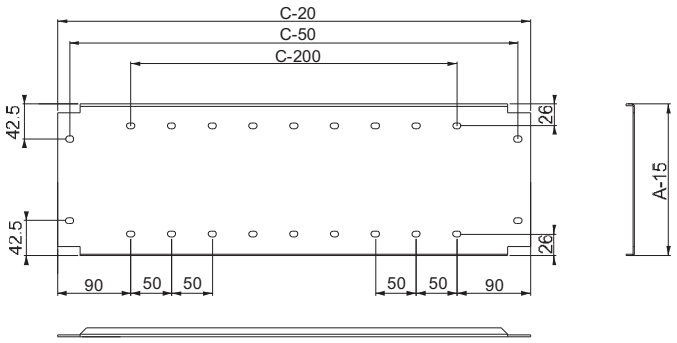
Compartimentalised enclosure
Mounting accessories

Side partitions

- Side partitions which guarantee good insulation of the compartments.
- Direct fixing on the structure of the enclosure.
- Material: galvanised steel.

Supply: two side partitions and fixing elements.

Nominal dimensions (mm)		Reference
Height (A)	Depth (C)	
200	600	NSYMSC26
	800	NSYMSC28
400	600	NSYMSC46
	800	NSYMSC48

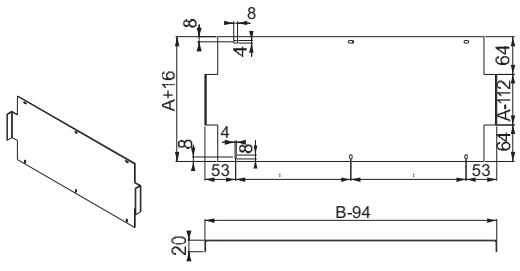


Rear partitions

- Rear enclosing plates for forming modules, also allowing the installation of equipment.
- They are installed at the rear of the partition tray.
- Material: galvanised steel.

Supply: 1 rear partition and fixing elements.

Nominal dimensions (mm)		Reference
Height (A)	Width (B)	
200	600	NSYMBC26
400		NSYMBC46
600		NSYMBC66
800		NSYMBC86
1000		NSYMBC106
200	800	NSYMBC28
400		NSYMBC48
600		NSYMBC68
800		NSYMBC88
1000		NSYMBC108



Compartimentalised enclosure
Mounting accessories

Fixing kit

- Provide the fixing of the mounting plate.
- They are fixed to the side enclosing plates.
- Models:

– Fixed: allow adjustment with a pitch of 50 mm.
– Adjustable: allow continuous adjustment for depths of 600 and 800 mm.

- Material: zinc-coated steel.

Supply: four units and fixing elements.

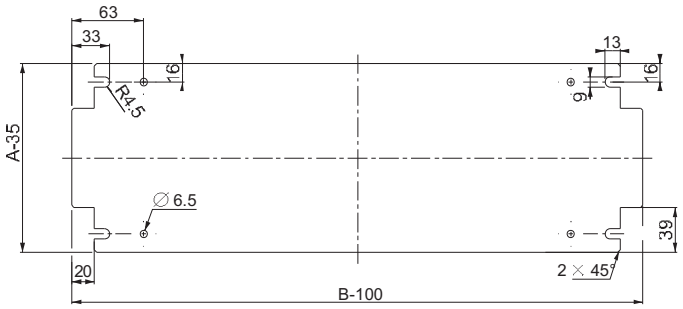
Model	Nominal dimensions (mm)	Reference
	Depth	
Fixed	-	**NSYCFIX**
Adjustable	600	**NSYCFIX6**
Adjustable	800	**NSYCFIX8**

Mounting plate

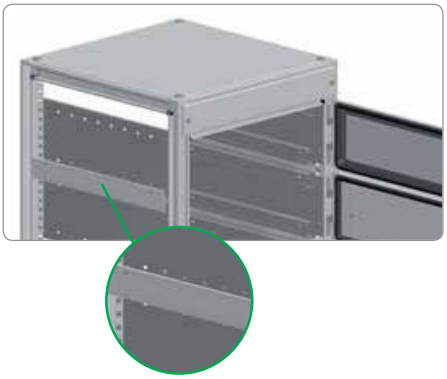
- Plate for fixing elements.
- It is mounted fixed on the fixing kit, with ref. **NSYCFIX**, or with adjustable depth with ref. **NSYCFIX6** or **NSYCFIX8**.
- Material: galvanised steel.

Supply: one mounting plate.

Nominal dimensions (mm)		Reference
Height (A)	Width (B)	
200	600	**NSYMP26**
400		**NSYMP46**
600		**NSYMP66**
800		**NSYMP86**
1000		**NSYMP106**
200	800	**NSYMP28**
400		**NSYMP48**
600		**NSYMP68**
800		**NSYMP88**
1000		**NSYMP108**



Compartimentalised enclosure
Mounting accessories



Side enclosing plate

- Plate to be installed between the side partitions, achieving full enclosure of the module.
- It is fixed to the side partition from the outside of the enclosure.
- Material: galvanised steel.

Supply: one side enclosing plate and fixing elements.

Spacial SF Dimensions (mm)	Reference
Depth	
600	**NSYCMOD6**
800	**NSYCMOD8**

Partition tray

- Guarantees horizontal insulation of the modules.
- It is fixed to the front frame, supported by the side partitions.
- Material: galvanised steel.

Supply: one partition tray and fixing elements.

Spacial SF dimensions (mm)		Reference
Width	Depth	
600	400	**NSYSTR64**
	500	**NSYSTR65**
800	400	**NSYSTR84**
	500	**NSYSTR85**

Compartimentalised enclosure
Mounting accessories

Tray crossbar

- To be installed between partial doors separated with a partition tray.
- It is fixed to the partition tray by screws.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: one tray crossbar and fixing elements.

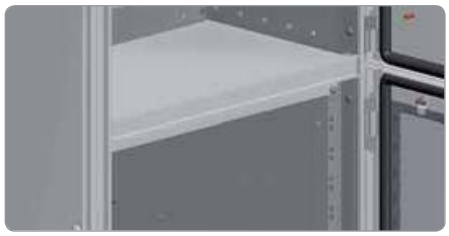
Spacial SF Dimensions (mm) Width	Reference
600	**NSYTRG6**
800	**NSYTRG8**

Partial 19" fixed rack

- Designed for coupling to enclosures with a width of 600 mm.
- Direct fixing to the structure, in front position.
- Maximum load: 2 kg/u.
- Material: zinc-coated steel.

Supply: two racks, two horizontal escutcheons and fixing elements.

Enclosure height (mm)	No. of units	Reference
200	3	**NSYCRCKP3**
400	7	**NSYCRCKP7**
600	12	**NSYCRCKP12**
800	16	**NSYCRCKP16**
1000	21	**NSYCRCKP21**
1200	25	**NSYCRCKP25**



Compartimentalised enclosure
Mounting accessories

Examples of mounting accessories

PC rack

Technical characteristics

- Enclosure designed to protect computer equipment installed in industrial environments.
- Degree of protection IP55, or IP40 with hinged keyboard.
- Available in two heights: 1600 and 1800 mm.

Composition

- Structure: top and bottom frame and vertical uprights.
- Partial front doors opening to the right, made from steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Models:

– Partial door for PC screen, with Securit® anti-glare glass.
– Plain partial door for CPU (enclosures with height of 1800 mm).
– Hinged plain door for keyboard.
– Plain partial door for optional installation of A4 printer support.

- Plain rear door, made from steel painted with epoxy-polyester resin, textured RAL 7035 grey. Reversible opening direction (right or left).
- Locking system with flat escutcheon, made from polyamide 6 with 30% fibreglass, RAL 9005 black, with 5-mm double-bar insert for the plain rear door, and small flat escutcheon with 3-mm double-bar insert for the partial front doors.
- Roof and side panels fixed from the inside, made from steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Cable-gland plate with 1 entry.

Certifications

- BV, DNV, UL*, CUL.
  *1, 12, 12K.

Spacial SF PC rack dimensions (mm)			No. of compartments	Reference
Height (A)	Width (B)	Depth (C)		
1600	600	600	3	**NSYSF16660PC**
		800	3	**NSYSF16680PC**
1800		600	4	**NSYSF18660PC**
		800	4	**NSYSF18680PC**

Detail of screen compartment.

Detail of CPU and keyboard compartment with tray.

> Advantage:

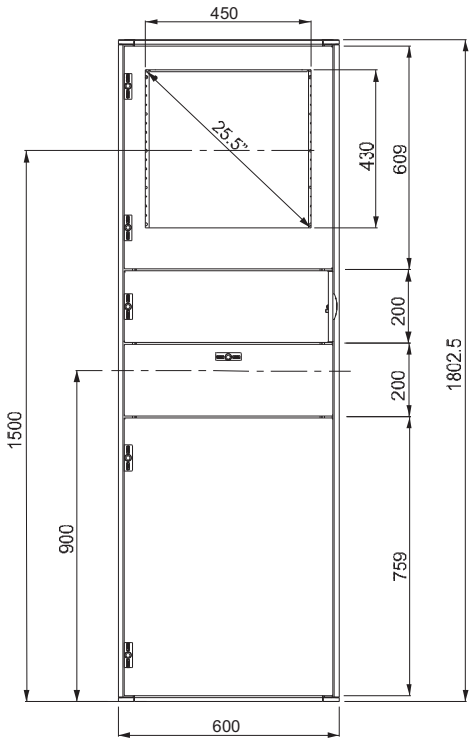
Security. The roof and panels, fixed from the inside, prevent access by unauthorised personnel.

PC rack

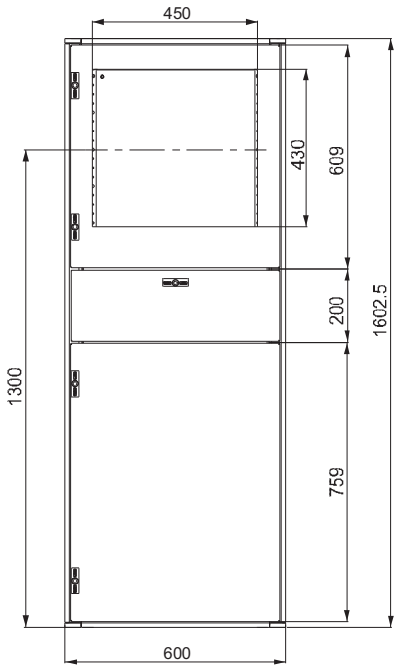
Locks

Detail of 3-mm DB lock on partial door.

Detail of 5-mm DB lock on rear door.



PC rack with a height of 1800 mm.



PC rack with a height of 1600 mm.

PC rack
Composition accessories

Plinth

- See composition accessories: floor, page **3/36**.
- Model heights: 100 and 200 mm.

Front plinth

Supply:
– **Height 100 mm:** four corners, two panels (front and rear), four corner covers and fixing elements.
– **Height 200 mm:** four corners, four panels with a height of 100 mm (two front and two rear), four corner covers and fixing elements.

Plinth side panels

Supply:
– **Height 100 mm:** two side panels, four corner covers and fixing elements.
– **Height 200 mm:** four side panels with a height of 100 mm (two for each side), four corner covers and fixing elements.

Spacial SF Dimensions (mm)		Front plinth reference (mm)		Plinth side panel reference (mm)	
Width	Depth	100	200	100	200
600	600	NSYSPF6100	NSYSPF6200	NSYSPS6100	NSYSPS6200
600	800			NSYSPS8100	NSYSPS8200

Locks for partial doors

- Locks to replace the 3-mm double-bar lock supplied with the partial doors.
- Models:

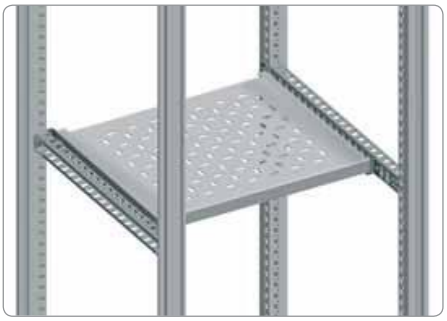
– Transformation of lock with shape inserts, triangular 6.5 mm and square 6 mm.
– Lock with 2233X key for partial doors.
– Lock with 2233X key, exclusive for hinged keyboard door.

Supply:
– Lock with shape inserts, triangular 6.5 mm and square 6 mm: metal body, shape insert and safety washer.
– Lock with 2233X key for partial doors: metal body, insert, bolt, safety washer and key.
– Lock with 2233X key, exclusive for hinged keyboard door: metal body, insert, special bolt, safety washer and key.

Description	Reference
One lock with 6.5-mm triangular insert for partial and hinged door	NSYMLT6
One lock with 6-mm square insert for partial and hinged door	NSYMLS6
One lock with 2233X key for partial door	NSYML23
One lock with 2233X key for hinged keyboard door	NSYMLCD23

PC rack
Composition accessories


Tray installed on the structure


Tray installed on cross rails

> Advantage:
Withstands loads of up to 150 kg.

Fixed tray

- Tray with option for direct fixing to the structure if the tray is the same size as the enclosure and on cross rails if it is smaller.
- Depth adjustable with a pitch of 25 mm in this case.
- Provided with cut-outs for improving air circulation inside.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.
- Acceptable load: 150 kg, evenly distributed.
- Tray height: 30 mm.

Supply: one fixed tray and fixing elements.

Spacial SF dimensions (mm)		Tray dimensions (mm)	Reference
Width	Depth		
600	400	482 × 290 × 30	**NSYFXT6040**
	500	482 × 390 × 30	**NSYFXT6050**
	600	482 × 490 × 30	**NSYFXT6060**
800	400	682 × 290 × 30	**NSYFXT8040**
	500	682 × 390 × 30	**NSYFXT8050**
	600	682 × 490 × 30	**NSYFXT8060**


Telescopic rails fixed to the structure


Telescopic rails fixed to cross rails

Telescopic rails

- The telescopic rails can be installed directly on the structure of the enclosure or on cross rails.
- The installation of a telescopic tray consists of the following:
– 1 fixed tray.
– 2 telescopic rails (fixed directly to the structure).
- End-of-travel stop of the rails in open and closed position.
- Material: zinc-coated steel.
- Acceptable load: 50 kg, evenly distributed.

Supply: two telescopic rails and fixing elements.

Spacial SF Dimensions (mm)	Reference
Depth	
400	**NSYTTG40**
500	**NSYTTG50**
600	**NSYTTG60**

PC rack
Mounting accessories

Tray cross rails

- Cross rails that allow the installation of fixed trays and telescopic rails. Quick-fixing and universal cross rails, see page **7/36**.

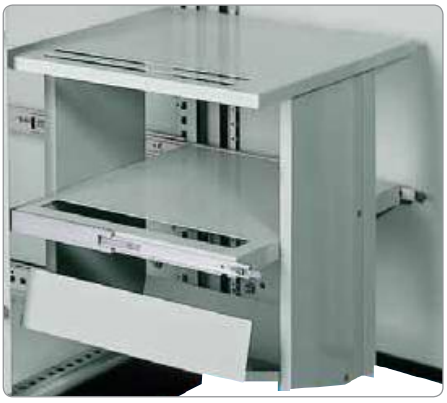
Spacial SF Dimensions (mm)	Universal cross rail reference	Quick cross rail reference
Depth	40 mm (1 row)	40 mm (1 row)
400	**NSYSUCR4040**	**NSYSQCR4040**
500	**NSYSUCR4050**	**NSYSQCR4050**
600	**NSYSUCR4060**	**NSYSQCR4060**
800	**NSYSUCR4080**	**NSYSQCR4080**

Handle for telescopic trays

- Handle designed for easy extraction of the sliding trays.
- Material: polyamide 6 (black).

Supply: two units and fixing elements.

Reference
NSY1TH



Printer support

- Support for placing an A4 printer, with area reserved for paper.
- Fixed directly to the structure of the enclosure, with a depth of 600 mm. For a depth of 800 mm, it can be installed with 40-mm (1 row) universal or quick-fixing cross rails, see page **7/38**.
- Material: steel painted RAL 7035 grey.

Supply: one printer support and fixing elements.

Reference
NSYPSA4

Electronic application

Suitable metal enclosure for electronic applications

Enclosure prepared for the installation of standard 19" racks in professional telecommunication, voice, data and electronic facilities, by means of 19" fixed and swing racks, see page **3/105**.

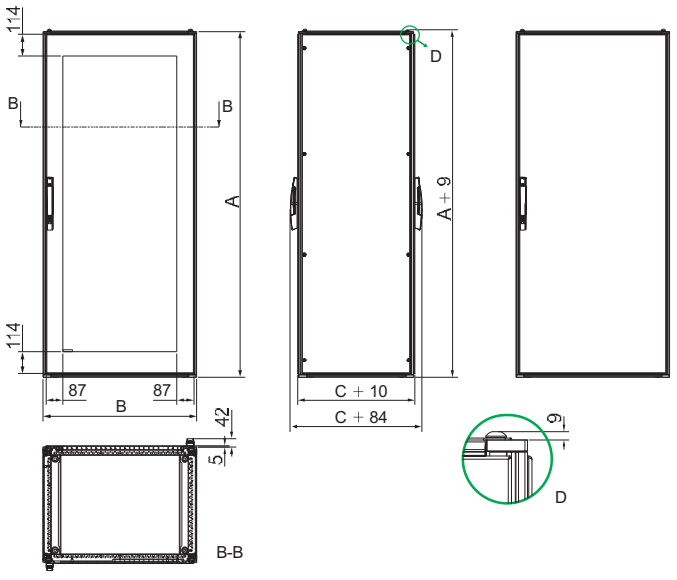
Composition

- Structure: top and bottom frame and vertical uprights.
- Transparent front door, made from sheet steel, painted with epoxy-polyester resin, textured RAL 7035 grey, with Securit® glass.
- Plain rear door, made from sheet steel, painted with epoxy-polyester resin, textured RAL 7035 grey:
- Standard locking system with handle and 5-mm double-bar insert.
- Removable roof.
- External fixing side panels, made from sheet steel, painted with epoxy-polyester resin, textured RAL 7035 grey, double folded to increase their rigidity with captive fixing screws that reduce installation time.
- In enclosures with widths of 600 and 800 mm, it is possible to install fixed or swing racks, to be ordered separately.

Certifications

- BV, DNV, UL*, CUL.
  *1, 12, 12K.

Spacial SF electronic application enclosure dimensions (mm)			Reference
Height (A)	Width (B)	Depth (C)	
1200	600	600	**NSYSF12660E**
		800	**NSYSF12680E**
	800	600	**NSYSF12860E**
		800	**NSYSF12880E**
2000	600	600	**NSYSF20660E**
		800	**NSYSF20680E**
	800	600	**NSYSF20860E**
		800	**NSYSF20880E**
		1000	**NSYSF208100E**
2200	600	600	**NSYSF22660E**
		800	**NSYSF22680E**
		1000	**NSYSF226100E**
	800	600	**NSYSF22860E**
		800	**NSYSF22880E**
		1000	**NSYSF228100E**



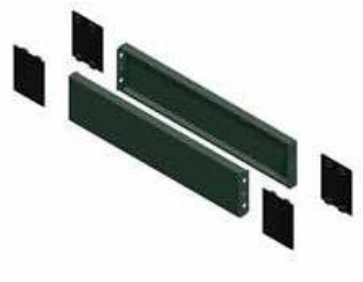
Electronic application
Composition accessories

Plinth

- See composition accessories: floor, page **3/36**.
- Model heights: 100 and 200 mm.

Front plinth

Supply:
- **Height 100 mm:** four corners, two panels (front and rear), four corner covers and fixing elements.
- **Height 200 mm:** four corners, four panels (two front and two rear), four corner covers and fixing elements.



Plinth side panels

Supply:
- **Height 100 mm:** two side panels, four corner covers and fixing elements.
- **Height 200 mm:** four side panels (height of 100 mm, two for each side), four corner covers and fixing elements.

Spacial SF Dimensions (mm)		Front plinth reference (mm)		Side panel plinth reference (mm)	
Width	Depth	100	200	100	200
600	600	NSYSPF6100	NSYSPF6200	NSYSPS6100	NSYSPS6200
	800			NSYSPS8100	NSYSPS8200
	1000			NSYSPS10100	NSYSPF10200
800	600	NSYSPF8100	NSYSPF8200	NSYSPS6100	NSYSPS6200
	800			NSYSPS8100	NSYSPS8200
	1000			NSYSPS10100	NSYSPF10200

Ventilated front plinth

Supply:
- **Height 100 mm:** four corners, two ventilated panels (front and rear), four corner covers and fixing elements.

Ventilated plinth side panels

Supply:
- **Height 100 mm:** two ventilated side panels, four corner covers and fixing elements.

Spacial SF dimensions (mm)		Ventilated front plinth reference	Ventilated plinth side panel reference
Width	Depth	100 mm	
600	600	NSYSPFV6100	NSYSPV6100
	800		NSYSPV8100
800	600	NSYSPFV8100	NSYSPV6100
	800		NSYSPV8100

Electronic application
Composition accessories

Cable-gland plates

- See composition accessories: cable gland, page **3/49**.
- Models: plain plates, with one entry and two entries.

Plain cable-gland plate

Supply: One plain plate and fixing elements.

Cable-gland plate with 1 entry

Supply: one plate with one entry, self-extinguishing polyurethane adhesive gasket with cross-section of 15 × 25 mm, which guarantees good sealing, and fixing elements.

Cable-gland plate with 2 entries

Supply: one plate with two entries, self-extinguishing polyurethane adhesive gasket with cross-section of 15 × 25 mm, which guarantees good sealing, and fixing elements.

Nominal dimensions (mm)		Reference		
Width	Depth	Plain	With 1 entry	With 2 entries
600	600	NSYEC66	NSYEC661	NSYEC662
	800	NSYEC68	NSYEC681	NSYEC682
	1000	NSYEC610	NSYEC6101	NSYEC6102
800	600	NSYEC86	NSYEC861	NSYEC862
	800	NSYEC88	NSYEC881	NSYEC882
	1000	NSYEC810	NSYEC8101	NSYEC8102

Ventilated cable-gland plates

- Plates for cable entry from the bottom of the enclosure.
- Material: galvanised steel.
- Thickness: 1.5 mm.
- Fixing by C-shaped clip, fixed with screws, providing electrical continuity through the clip.
- Each plate has a hole with an 8-mm diameter, covered with a plug, for cases in which earthing needs to be performed by an earthing cable or braid (elements not supplied).

Supply: one ventilated plate with one entry, self-extinguishing polyurethane adhesive gasket with cross-section of 15 × 25 mm, and fixing elements.

Nominal dimensions (mm)		Reference
Width	Depth	
600	600	NSYECV661
	800	NSYECV681
	1000	NSYECV6101
800	600	NSYECV861
	800	NSYECV881
	1000	NSYECV8101

Electronic application
Composition accessories

Enclosure width 600 mm

Enclosure width 800 mm

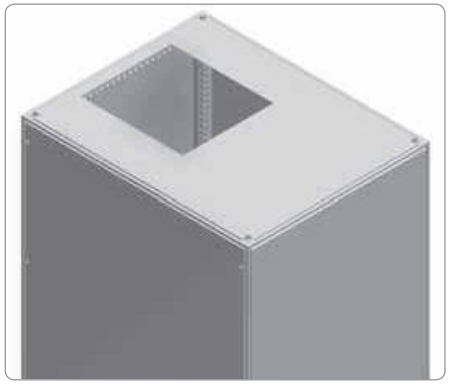
Cable-gland support for CaSys plates

- Support for cable entry from the bottom of the enclosure.
- Allows the installation of CaSys cable-gland accessories.
- Material: galvanised steel.
- Thicknesses: 1.5 mm.
- Fixing by C-shaped clip, fixed with screws, providing electrical continuity through the clip.
- The CaSys plates are fixed by C-shaped clips to the enclosures with a width of 600 mm, and by screws directly to the support in the enclosures with a width of 800 mm.

Supply:
– Enclosure width 600 mm: two plates and fixing elements.
– Enclosure width 800 mm: one support and fixing elements.

Nominal dimensions (mm)		Reference
Width	Depth	
600	600	**NSYCECS66**
	800	**NSYCECS68**
	1000	**NSYCECS610**
800	600	**NSYCECS86**
	800	**NSYCECS88**
	1000	**NSYCECS810**

Electronic application
Composition accessories

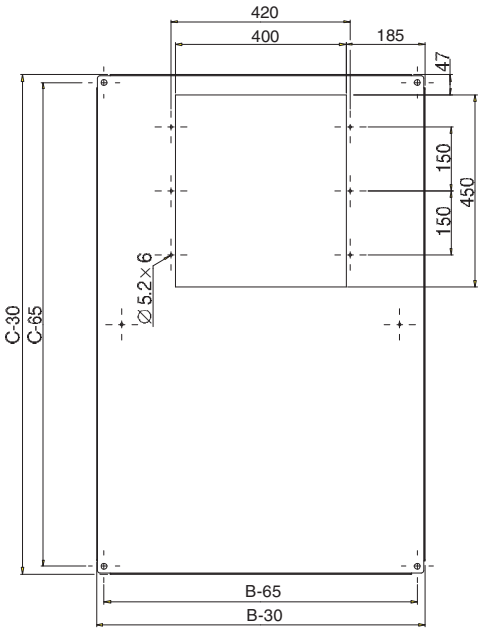


Roof for CaSys plates

- Roof prepared for installing CaSys roof accessories.
- Suitable for enclosures with widths of 600 and 800 mm.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one roof with central cut-out and side pre-cuts (width 800 mm).

Spacial SF dimensions (mm)		Reference
Width (B)	Depth (C)	
800	600	**NSYSRSYS86**
	800	**NSYSRSYS88**
	1000	**NSYSRSYS810**



Plain top roof plate

- Removable plate made from folded sheet steel.
- Option of installing roof elevators for aeration, ref. **NSYEX206**, and cable glands.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one plain top roof plate and fixing elements.

Reference
NSYTSPC450

Electronic application
Composition accessories

Top roof plate with brush gasket

- Removable folded sheet-steel plate, equipped with a gasket with cable-gland brush.
- Optional installation of roof elevators for aeration, ref. **NSYEX206**, and cable-gland plates.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one top roof plate with brush gasket and fixing elements.

Reference
NSYTSP450

Cut-out top roof plate

- Removable plate made from folded sheet steel.
- Optional installation of roof elevators for aeration, ref. **NSYEX206**, cable-gland plates and fans.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one cut-out top roof plate and fixing elements.

Reference
NSYTSPV450

Roof plate elevators for aeration

- Columns with a height of 20 mm.
- Fixing between the roofplate and the roof.

Supply: 100 units.

Reference by unit. Order by multiples of 100 (100, 200, 300...).

Reference
NSYEX206

Plain cable-gland plate

- Fixing on the outside of the roof.
- Can be combined with other types of cable-gland plates.
- Material: galvanised steel.

Supply: one plain cable-gland plate and fixing elements.

Reference
NSYEC440

Electronic application
Composition accessories

Cable-gland plate with brush

- Fixing on the outside of the roof.
- Can be combined with other types of cable-gland plates.
- Material: galvanised steel.

Supply: one cable-gland plate with brush and fixing elements.

Reference
NSYECP440

Self-ventilated cable-gland plate

- Fixing on the outside of the roof.
- Can be combined with other types of cable-gland plates.
- Material: galvanised steel.

Supply: one self-ventilated cable-gland plate and fixing elements.

Reference
NSYECAV440

Ventilation plate with cut-outs and with or without fans, 120 mm

- Fixing on the outside of the roof.
- Can be combined with other types of cable-gland plates.
- Supplied with 2 or 3 fans, each of which has an output capacity of 170 m³/h, 220 V-50/60 Hz, installed and wired to a terminal strip. A 2-m power cord is supplied connected.
- Sound level: 34 dB (A).

Supply: one cable-gland plate with or without fans, 2-m power cord (version with fans) and fixing elements.

Description	Reference
No fans, 3 positions	NSYECVT3440
With 3 fans	NSYECVT3V440
No fans, 2 positions	NSYECVT2440
With 2 fans	NSYECVT2V440

Cable-gland filter

- To be mounted on the cable-gland plate with or without fan or on the self-ventilated cable-gland plate.

Supply: one mounting support, colour RAL-9011, and filter.

Reference
NSYFECVT440

Electronic application
Composition accessories

Spare cable-gland filter

- Spare filter.

Supply: five units.

Reference
NSYCEFILS

Examples of possible combinations of cable-gland plates for the roof

Spacial SF dimensions (mm)		Combination 1	Combination 2
Width	Depth		
600/800	600		
	800		
	1000		

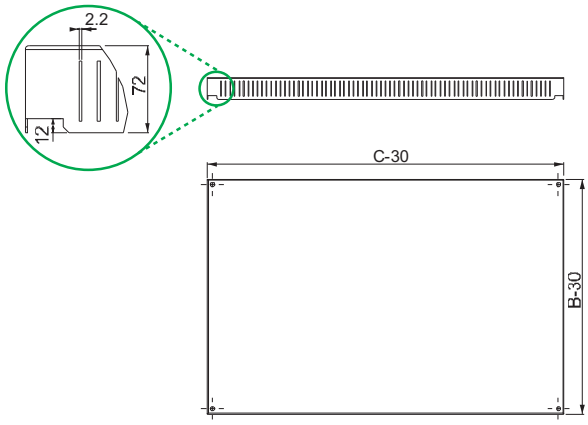
Electronic application
Composition accessories

Ventilated roof

- Roof for providing natural ventilation for the enclosure, with IP30 protection.
- Material: steel.
- Height: an extra 63 mm in relation to the structure.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one ventilated roof and fixing elements.

Nominal dimensions (mm)		Reference
Width (B)	Depth (C)	
600	600	**NSYSVR606**
	800	**NSYSVR608**
800	600	**NSYSVR806**
	800	**NSYSVR808**



Electronic application
Composition accessories

Ventilated door for 19" racks

- Door designed to achieve natural ventilation of the enclosure.
- Installation on enclosures with a width of 800 mm, equipped with centred fixed or swing racks.
- Opening of 120°.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Standard locking system with handle and 5-mm double-bar insert.

Supply: one ventilated door for racks.

Nominal dimensions (mm)		Single ventilated door reference	Double ventilated door reference
Height	Width		
1200	600	NSYPCVD126	NSYPCV2D126
	800	NSYPCVD128	NSYPCV2D128
1400	800	NSYPCVD148	NSYPCV2D148
1600	800	NSYPCVD168	NSYPCV2D168
1800	800	NSYPCVD188	NSYPCV2D188
2000	600	NSYPCVD206	NSYPCV2D206
	800	NSYPCVD208	NSYPCV2D208
2200	600	NSYPCVD226	NSYPCV2D226
	800	NSYPCVD228	NSYPCV2D228

Transparent door for off-centre racks

- Transparent door for installation in enclosures with off-centre 19" racks.
- Shows only the devices mounted on the 19" rack.
- Opening of 120°.
- Lock with handle and 5-mm double-bar insert, four locking points.
  – 2 points, heights of 1200 and 1400 mm.
  – 4 points, heights of 1600 to 2200 mm.
- Door stop profile.
- Opening to the right or left.
- Width of the glass 485 mm, off-centre by 77 mm.
- Material: steel and Securit® glass.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey, textured.

Supply: one off-centre transparent door.

Nominal dimensions (mm)		Reference
Height	Width	
1200	800	NSYED128T
1400		NSYED148T
1600		NSYED168T
1800		NSYED188T
2000		NSYED208T
2200		NSYED228T

Electronic application
Mounting accessories

19" fixed rack

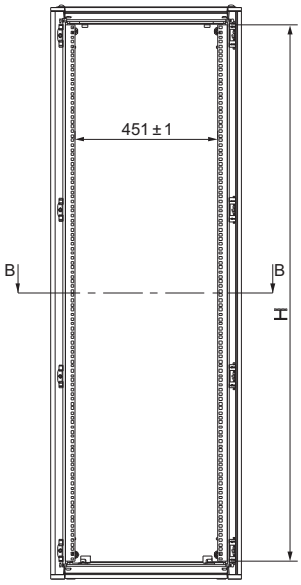
- Rack designed for installation in enclosures with a width of 600 mm.
- **Spacial SF:** Direct fixing on the structure of the enclosures.

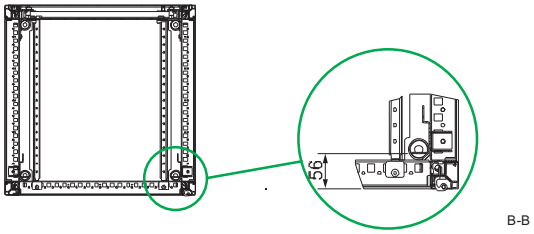
– For installation on enclosures with a width of 800 mm, use the 19" fixed-rack support brackets.
– To reinforce the rigidity of the uprights in enclosures with a width of 800 mm, it is advisable to use the central fixing kit, for enclosure heights above 1800 mm, ref. **NSYRCK19KIT**.

- **Spacial SM:** fixing on the top/bottom adjustment rails.
- Adjustable depth with a pitch of 25 mm.
- Maximum load: 400 kg.
- Material: zinc-coated steel.

Supply: two uprights and fixing elements.

Nominal dimensions (mm) Height	No. of units (H)	Reference
1200	24	**NSYRCK24**
1400	29	**NSYRCK29**
1600	33	**NSYRCK33**
1800	38	**NSYRCK38**
2000	42	**NSYRCK42**
2200	47	**NSYRCK47**





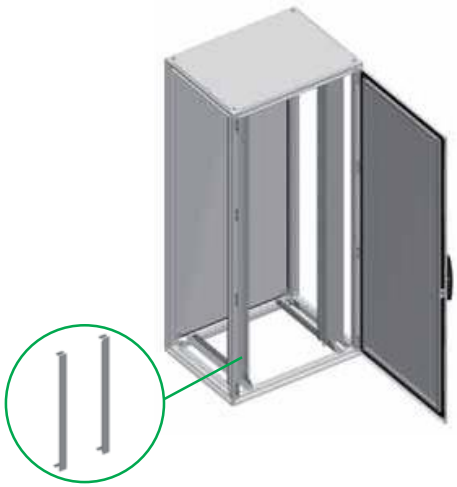
Electronic application
Mounting accessories

Support brackets for 19" fixed rack with a width of 800 mm

- Support brackets for coupling the fixed rack to enclosures with a width of more than 600 mm.
- They allow the depth of the fixed rack to be adjusted with a pitch of 25 mm.
- Maximum load: 400 kg.
- Material: zinc-coated steel.

Supply: four support brackets and fixing elements.

Nominal dimensions (mm)	Reference
Depth	
600	**NSYRCKS6**
800	**NSYRCKS8**



Side plates of the centred fixed rack for a width of 800 mm

- Side plates for coupling to the fixed rack in enclosures with a width of 800 mm.
- Direct installation on the rack by screws.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: two side plates and fixing elements.

Nominal dimensions (mm)		Reference
Height	Width	
1200	800	**NSYRC12**
1400		**NSYRC14**
1600		**NSYRC16**
1800		**NSYRC18**
2000		**NSYRC20**
2200		**NSYRC22**

Central fixing kit

- To reinforce the rigidity of the 19" fixed racks in enclosures with a width of 800 mm.
- Fixing to the enclosure by cross rails or light cross rails installed depthwise. See page **7/39**.
- Material: zinc-coated steel.

Supply: two supports and fixing elements.

Reference
NSYRCK19KIT

Electronic application
Mounting accessories

(1)

Partial 19" fixed rack

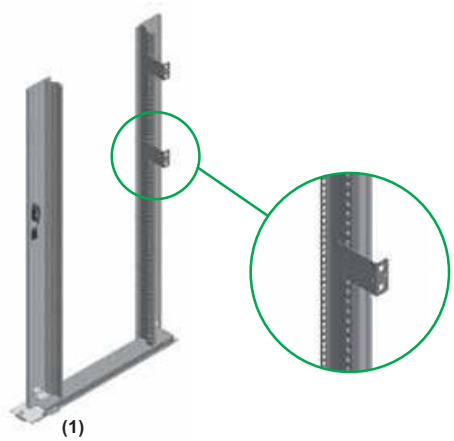
- Rack designed for coupling in enclosures with a width of 600 mm.
- Installation options (**Spacial SF**):
  – Installation at the top front of the enclosure, no cross rails needed (image 1).
  – Depth adjustment of the cross rails: two cross rails need to be installed, see page **7/36**.
  – For installation at any other height, four depth cross rails are required (image 2).
- Installation options (**Spacial SM**):
  – At the top of the enclosure (image 1): install two depth cross rails, see cross rails on page **7/31**.
  – At another height (image 2): install four cross rails for depthwise installation.
  – Depthwise installation of the cross rails. Installation of the vertical adaptation profile and the 40-mm universal cross rail (1 row) in vertical position, in the position closest to the back.
- Adjustable depth with a pitch of 25 mm.
- Maximum load: 2 kg/U.
- Material: zinc-coated steel.

Supply: two uprights and fixing elements.

Rack height (mm)	No. of units	Reference
200	4	**NSYRCKP4**
400	8	**NSYRCKP8**
600	12	**NSYRCKP12**
800	17	**NSYRCKP17**
1000	21	**NSYRCKP21**
1200	26	**NSYRCKP26**

(2)

Electronic application
Mounting accessories



(1)

>Advantage:

It is possible to adjust the height with the rack installed and loaded.

19" swing racks for 800 mm enclosures

- Racks prepared for direct coupling to enclosures with a width of 800 mm.
- **Spacial SF:** fixing to the structure of the enclosure.
- **Spacial SM:** fixing on the top/bottom adjustment rails.
- Can be moved depthwise with a pitch of 25 mm.
- Maximum load: 3 kg/U.
- Maximum opening: 120° (possibility of opening to 180° using 180° hinges).
- Reversible opening direction: left/right.
- Handle opening system with ball lock.
- Maximum equipment installation depth:

Off-centre 19" swing rack:
– 120° = 470 mm.
– 180° = 425 mm.
Centred 19" swing rack:
– 120° = 390 mm.
– 180° = 345 mm.

- **Spacial SF:** multiple installation options in enclosures with a width of more than 800 mm (1000, 1200 or 1600 mm), by using universal or quick-fixing cross rails, see page **7/36**.
- **Spacial SM:** option for installing the racks in enclosures with a width of 1600 mm by using universal or quick cross rails, see page **7/36**.
- Components:

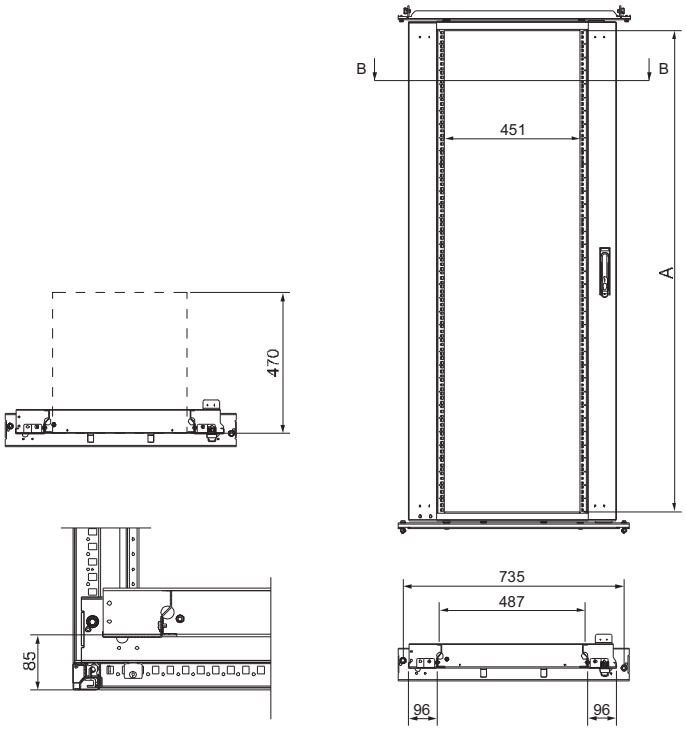
– Zinc-coated steel central structure.
– Side plate made from steel painted with epoxy-polyester resin, textured RAL 7035 grey. Fixed to the central structure by screws.

- The cross rail of the double-folded rack increases the installation options.
- Rear fixing uses self-tapping M6 screws, and side fixing is possible by means of quick-installation accessories (image 1).
- Lateral adjustment is possible with the rack installed and loaded.

Supply:
– Off-centre 19" swing rack: hinged rack, 800-mm swing rack supports, side lid with ball-lock handle and fixing elements.
– Centred 19" swing rack: swing rack, 800-mm swing rack supports, side plates with ball-lock handle and fixing elements.

Nominal dimensions (mm)		No. of units	Off-centre 19" hinged rack reference	Centred 19" hinged rack reference
Height (A)	Width (B)			
1400	800	27	**NSYRSW27**	**NSYRSWC27**
1600		31	**NSYRSW31**	**NSYRSWC31**
1800		36	**NSYRSW36**	**NSYRSWC36**
2000		40	**NSYRSW40**	**NSYRSWC40**
2200		45	**NSYRSW45**	**NSYRSWC45**

Electronic application
Mounting accessories



B-B

180° hinge

- Hinge for installation on centred and off-centre 19" swing racks.
- Allows the swing rack to be opened to 180°.
- Fixing by M8 screws directly to the swing rack.
- Maximum equipment installation depth:
  – Off-centre 19" swing rack: 425 mm.
  – Centred 19" swing rack: 345 mm.
- Material: zamak 5.

Supply: two hinges and fixing elements.

Reference
NSYRSWH180

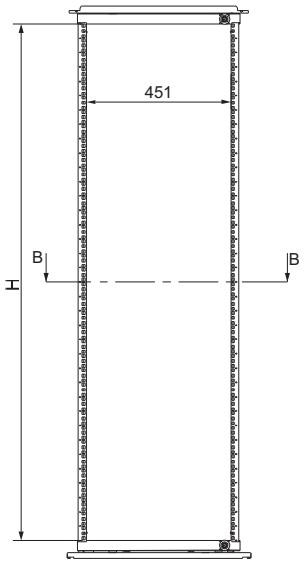
Electronic application
Mounting accessories

19" swing rack with no panels

- To be coupled to enclosures with widths of 600 and 800 mm.
- In both cases, it is required the use of 19" swing rack support, ref. **NSYRSW6** or **NSYRSW8**, see page **3/111**.
- **Spacial SF:** fixing to the enclosure structure at any height using supports for 19" swing racks.
- **Spacial SM:** fixing to the enclosure on the top/bottom adjustment rails using supports for 19" swing racks.
- Can be moved depthwise with a pitch of 25 mm.
- Maximum load: 3 kg/U.
- Maximum opening: 120°.
- Maximum equipment installation depth: 180 mm, in enclosures with a width of 600 mm.
- **Spacial SF:** multiple installation options in enclosures with a width of more than 800 mm (1000, 1200 and 1600 mm), by using universal or quick cross rails, see page **7/36**, in addition to the 19" swing rack support.
- **Spacial SM:** option for installing two racks in enclosures with widths of 1200 and 1600 mm.
- For enclosures with a width of 1200 mm, top/bottom adjustment rails are necessary, in addition to the 19" swing rack support.
- Material: zinc-coated steel.
- Reversible opening direction: left/right.
- Locking system, top and bottom, with 5-mm double-bar key.

Supply: one 19" swing rack with no panels.

Nominal dimensions (mm)		No. of units	Reference
Height (A)	Width (B)		
1400	600/800	27	**NSYRSW627**
1600		31	**NSYRSW631**
1800		36	**NSYRSW636**
2000		40	**NSYRSW640**
2200		45	**NSYRSW645**



Electronic application
Mounting accessories

19" swing rack support

- Support for coupling the 19" swing rack in enclosures with widths of 600 and 800 mm in off-centre position.
- Rack installation in centred and off-centre position.
- Adjustable depth with a pitch of 25 mm.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: 2 supports and fixing elements.

Nominal dimensions (mm)	Reference
Width	
600	**NSYRSWS6**
800	**NSYRSWS8**

Electronic application
Mounting accessories

Examples of alternatives for 19" swing racks

19" swing rack in enclosure with a width of 600 mm.

Off-centre 19" swing rack in enclosure with a width of 800 mm.

Centred 19" swing rack in enclosure with a width of more than 800 mm.

Electronic application
Mounting accessories

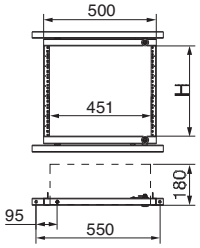
Partial 19" swing rack

- Rack for coupling to enclosures with widths of 600 and 800 mm.
- In enclosures with a width of 800 mm, the rack can be installed centred or off-centre.
- **Spacial SF:** Fixing to the highest position of the enclosure by means of supports for partial 19" swing rack.
- **Spacial SM:** Fixing to the highest position of the enclosure by means of supports for partial 19" swing rack and vertical adaptation profiles.
- For height or depth adjustment, with a pitch of 25 mm, it is necessary to use two 65-mm (2 rows) universal cross rails and a 19" multiple bracket, ref. **NSYMBR19**; and for moving depthwise and up or down, four cross rails are required. See universal cross rails, page **7/36**.
- **Spacial SM:** to install the depthwise cross rails, the vertical adaptation profile and two 40-mm universal cross rails (1 row) are required, installed vertically in the back of the enclosure.
- Maximum load: 2 kg/u.
- Maximum opening: 120°.
- Material: zinc-coated steel.
- Reversible opening direction: left/right.
- Locking system, top and bottom, with 5-mm double-bar key.
- Maximum equipment installation depth: 180 mm, in enclosures with a width of 600 mm.

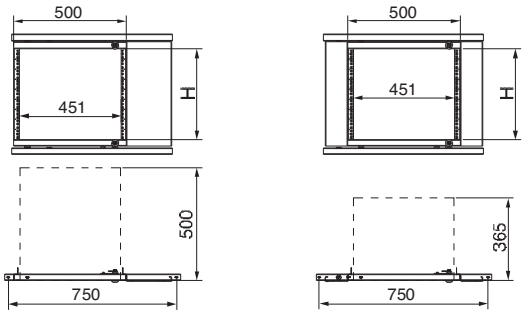
Supply: one partial 19" swing rack.

Rack height (mm)	Nominal dimensions (mm)	No. of units (H)	Reference
	Width (B)		
355	600/800	6	**NSYRSWP6**
468		9	**NSYRSWP9**
601		12	**NSYRSWP12**
735		15	**NSYRSWP15**
868		18	**NSYRSWP18**
1002*		21	**NSYRSWP21**

*Optional installation in enclosures with height of 1200 mm.

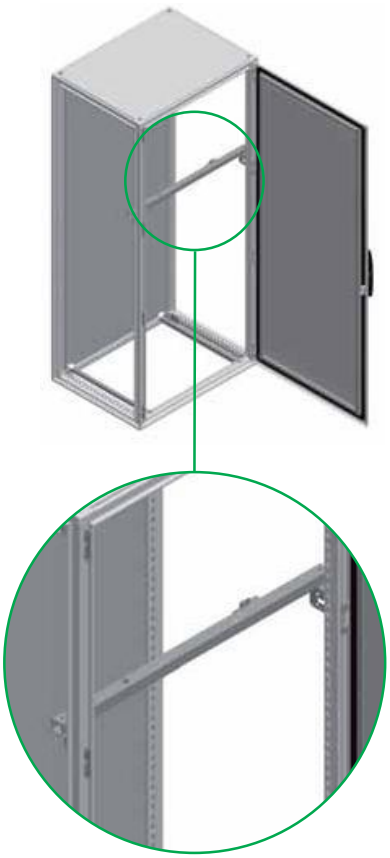


Partial 19" swing rack for enclosures with a width of 600 mm.



Partial 19" swing rack, off-centre and centred, for enclosures with a width of 800 mm.

Electronic application
Mounting accessories



Partial 19" swing rack support

- Supports for coupling the partial swing rack to enclosures with widths of 600 and 800 mm.
- Installation of the rack in centred or off-centre position, for enclosures with a width of 800 mm.
- **Spacial SF:** direct fixing to the structure.
- **Spacial SM:** fixing to the enclosure by means of the vertical adaptation profile, page **7/34**.
- Height or depth adjustment, with a pitch of 25 mm, by two 65-mm (2 rows) universal cross rails and a 19" multiple bracket, ref. **NSYMBR19**.
- Material: zinc-coated steel.

Supply: two supports and fixing elements.

Nominal dimensions (mm)	Reference
Width	
600	**NSYRSWSP6**
800	**NSYRSWSP8**

19" multiple bracket

- Bracket for fixing 65-mm universal cross rails (2 rows), depthwise, to position the partial 19" swing rack in any direction, up and down and/or depthwise.
- Material: zinc-coated steel.

Supply: four brackets and fixing elements.

Reference
NSYMBR19

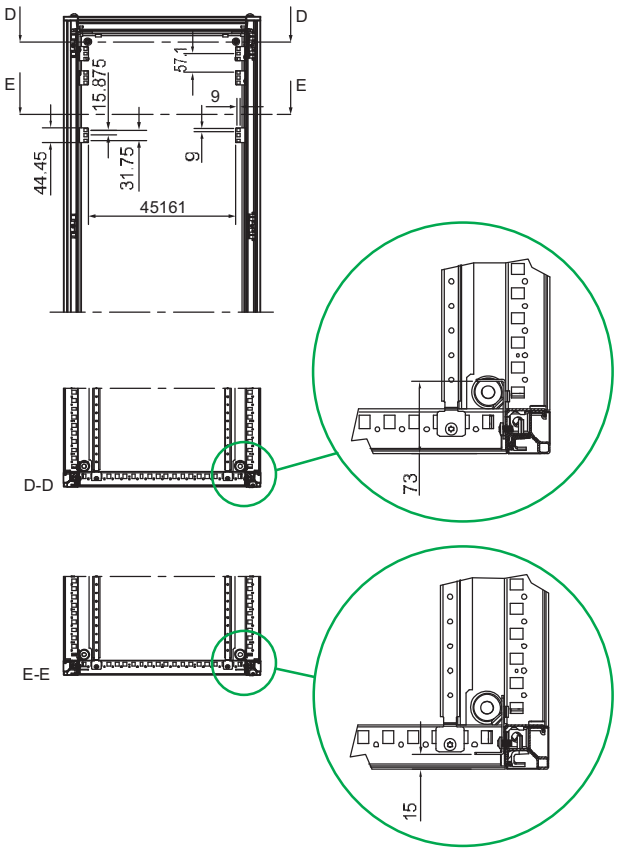
Electronic application
Mounting accessories

1 U / 3 U support

- Support prepared for installing equipment 1 U or 3 U high.
- Designed with quick locking for easy installation.
- **Spacial SF:** direct fixing to the structure.
- **Spacial SM:** fixing to the enclosure by means of the vertical adapter section, page **7/34**.
- Material: zinc-coated steel.

Supply: four 1 U/3 U supports (2 units right and 2 units left) and fixing elements.

Reference
NSYRC1U



19" rack rail

- Rails for installation on fixed or swing racks.
- Direct fixing on the structure of the enclosure, by quick locking.
- Maximum load: 15 kg.
- Material: zinc-coated steel.
- Thickness: 1.2 mm.

Supply: two rails and fixing elements.

Reference
NSYGB140

Electronic application
Mounting accessories

Rear cable-guide support

- Supports used for installation on the rear of the swing racks.
- Suitable for fixing cable-guide accessories.
- Allow vertical fixing of cable ducts:
- Adjustable depth with a pitch of 44.45 mm.
- Material: zinc-coated steel.

Supply: two cable-guide supports, crossbar and fixing elements.

Service depth (mm)	Reference
150	**NSYRCSUP15**
250	**NSYRCSUP25**

Fixing of cable ducts on 19" racks

- Allows vertical fixing of cable ducts for cable guide.
- Service depth: 150 mm.
- Fixed by quick locking to the 19" rack profile.
- Material: zinc-coated steel.

Supply: three units and fixing elements.

Reference
NSYRCDFIX

Electronic application
Door accessories

120° mechanical door stop

- Door stop for installation on the swing racks.
- Direct fixing to the rack support and the 19" rack.
- Maximum opening: 120°.

Supply: one mechanical door stop and fixing elements.

Reference
NSYRCDR12

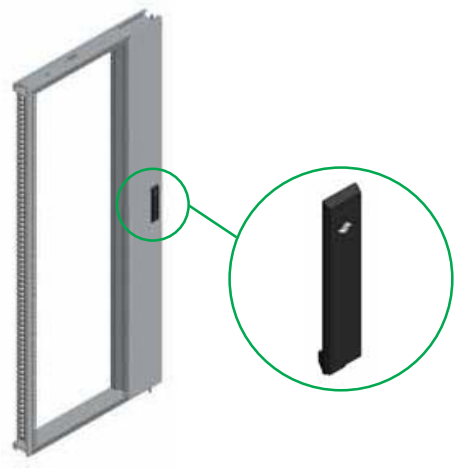
180° pneumatic door stop

- Door stop for installation on the swing racks installed with 180º hinges.
- **Spacial SF:** fixing to the base of the structure and to the rack.
- **Spacial SM:** direct fixing to the rack support and to the 19" rack.
- Maximum opening: 180°.

Supply: one pneumatic door stop and fixing elements.

Reference
NSYRCDR18

Electronic application
Door accessories



Flat escutcheon for swing 19" rack

- Flat escutcheon with 5-mm double-bar insert lock, for installation on swing 19" racks.

Supply: one flat escutcheon, 5-mm double-bar insert and fixing elements.

Reference
NSYRCLOCK

Switch for swing 19" rack

- Switch for direct fixing on the bottom or top support of the swing rack.
- M20 connection.
- Open + closed contact, 10 A/500 V.

Supply: one 19" rack switch and fixing elements.

Reference
NSYRCINT

Fixing elements for 19"

- Elements required for fixing switchgear on 19" racks, made up of:

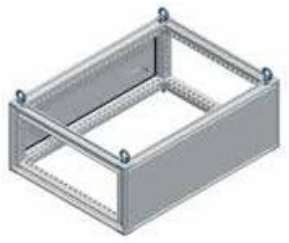
– Screws.
– Washers.
– Nuts.

Supply: 50 units of each.

Reference by unit. Order by multiples of 50 (50, 100, 150...).

Thread type	Reference
M5	NSYGFR95M55
M6	NSYGFR95M65

Power distribution
Power distribution accessories

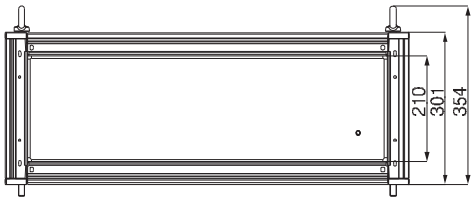


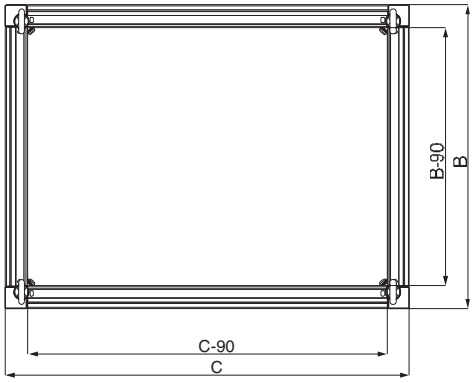
Top busbar chamber

- Chamber which protects and supports the sets of horizontal bars.
- Enables new switchgear by tapping and isolates the sets of bars from the rest of the equipment.
- It is only installed at the top of the enclosure.
- Degree of protection: IP55.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply:
– One structure of the busbar chamber as a kit.
– Two front panels.
– Four eyebolts.
– One sealing gasket.

Nominal dimensions (mm)			Reference
Height (A)	Width (B)	Depth (C)	
300	300	500	NSYTBC335
		600	NSYTBC336
	400	500	NSYTBC345
		600	NSYTBC346
		800	NSYTBC348
	600	500	NSYTBC365
		600	NSYTBC366
		800	NSYTBC368
	800	500	NSYTBC385
		600	NSYTBC386
		800	NSYTBC388
	1000	500	NSYTBC3105
		600	NSYTBC3106
		800	NSYTBC3108
	1200	500	NSYTBC3125
		600	NSYTBC3126
		800	NSYTBC3128





Power distribution
Power distribution accessories

Side panels for the busbar chamber

- Set of two side panels for coupling with the busbar chamber.
- Captive screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: two side panels and fixing elements.

Nominal dimensions (mm)		Reference
Height	Depth	
300	500	**NSYSPBC35**
	600	**NSYSPBC36**
	800	**NSYSPBC38**

Side busbar chamber

- Protects and supports the sets of vertical bars.
- Enables new switchgear by tapping and isolates the sets of bars from the rest of the equipment.
- It can be installed on either of the two sides of the enclosure.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply:
– One structure of the busbar chamber.
– One roof.
– One rear panel.
– One door with handle (5-mm DB lock).

Nominal dimensions (mm)			Reference
Height	Width	Depth	
1800	400	400	**NSYSF18440**
		500	**NSYSF18450**
		600	**NSYSF18460**
2000	300	500	**NSYSF20350**
		600	**NSYSF20360**
	400	400	**NSYSF20440**
		500	**NSYSF20450**
		600	**NSYSF20460**
		800	**NSYSF20480**
2200	400	600	**NSYSF22460**

Spacial SF for Prisma Plus P system

The Spacial SF range includes specific enclosure models for installing the Prisma Plus P system: functional units and vertical and horizontal busbars.
The panels are subject to type tests according to standard IEC 61439-2.
Partition types: forms 2 and 3 thanks to the components of the Prisma Plus P system.

RAL 7035 grey, IP 55, IK 10.
Specific finishes and colours are available on demand using our customisation service.

The offer consists of:
- Steel suitable enclosures, height 2000 mm.
- Width 700 mm for installing Prisma P functional units and width 300 mm for installing cable ducting or vertical busbars.
- Depths 500 and 600 mm for panels up to 1600 A.
- Depth 800 mm for panels up to 3200 A or connection of devices by the rear.

To create mixed power distribution and automation panels, the Spacial SF enclosures for Prisma Plus P system can be coupled with standard Spacial SF enclosures and therefore use the universal mounting accessories.

Note: The standard Spacial SF 400mm width can also be used for cable ducting.

Electrical characteristics

The installation of devices with the Prisma Plus P system for Spacial SF allows the installation of low-voltage equipment compliant with standards IEC 50298, IEC 62262 and IEC 61439-2 and having the following characteristics:
- Rated insulation voltage of the main busbar: 1000 V.
- Rated operational current: In 3200 A.
- Rated peak withstand current: Ipk: 187 kA.
- Rated short-time withstand current: Icw 85 kA eff/1 s.
- Frequency: 50/60 Hz.

Mechanical characteristics

- Galvanised-steel framework.
- Sheet-steel panels, painted with epoxy-polyester resin, textured finish, RAL 7035 grey.
- The panels can be removed.
- The frameworks can be coupled side-to-side or back-to-back.
- IP 55.
- IK 10 (IK 08 for glazed doors).

Configured

Specific

Specific finishes and colours, please contact us.

Spacial SF for Prisma Plus P system
Composition accessories

W = 300 mm.

Enclosure depth 500

W = 700 mm.

Enclosure depth 600 or 800

Technical characteristics

These Spacial SF enclosures have been designed specially for installing the Prisma Plus P system: functional units and busbars. Height: 2000 mm.
IP 55 and IK 10 enclosures for the plain-door version or IK 08 for the glazed-door version.

The enclosures are available with 3 depths:
- 500 and 600 mm for panels up to 1600 A;
- 800 mm for panels up to 3200 A or connection by the rear.

The enclosures with width 700 mm support direct installation of Prisma Plus P system functional in white - RAL 9001.

The enclosures with width 300 mm can be used as cable ducts or for the installation of a flat busbar.

The bar compartment can be positioned on the right or on the left.
Bar compartments can be coupled side-to-side and back-to-back.

The enclosures with width 700 mm are compatible with all existing Prisma Plus P system functional units, except prefabricated connections, see Prisma Plus catalogue.

The enclosures with width 700 mm consist of:
- 2 frames (top and bottom with screwed roof);
- 4 vertical uprights;
- 4 adapter uprights (enclosure depth 500);
- 2 adapter uprights and 2 intermediate uprights (enclosure depths 600 and 800);
- Screwed rear panel.
- Plain or glazed door.

And can be coupled side-to-side and back-to-back.

The enclosures with width 300 mm consist of:
- 2 frames (top and bottom with screwed roof);
- 4 vertical uprights;
- Screwed rear panel;
- Plain door.

The Linergy busbar can only be installed in lateral position with depth 500 mm. Add the set of 2 Prisma Plus P system functional uprights **NSYSFPA**.

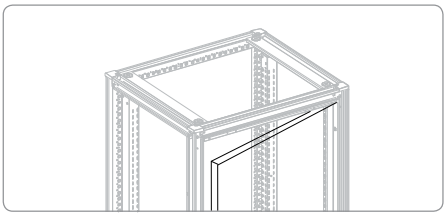
The enclosures are supplied assembled, without lateral panels.

All Spacial SF enclosures for Prisma Plus P system can be coupled with Spacial SF enclosures with the same depth.

Height	Depth	Width			Set of 2 lateral panels
		300 Plain door	700 Plain door	700 Glazed door	
2000	500	NSYSF20350	NSYSFP20750	NSYSFP20750T	NSY2SP205
	600	NSYSF20360	NSYSFP20760	NSYSFP20760T	NSY2SP206
	800	NSYSF20380	NSYSFP20780	NSYSFP20780T	NSY2SP208

Use the earth cables to guarantee the earth connection of the side panels.

Spacial SF for Prisma Plus P system
Accessories



Prisma Plus hinged support frame

Hinged support frame for cover plates with width 700 mm.
- Reversible, opening to right/left.
- Colour: white - RAL 9001.
- Locking at 2 points by 1/4 turn nuts.
- Installed on enclosures with width 700 mm.
- Mandatory for installing Prisma Plus Functional units.

Reference
08566

Plinths

The plinths are available in 2 heights: 100 and 200 mm. They can be combined to obtain heights of 300 mm, 400 mm or more.
The complete plinth comprises two assemblies:
- The front and rear panels, with the 4 corners;
- 2 side panels.

Width	Depth	Plinth H 100 mm		Plinth H 200 mm	
		Front/rear panels	Side panels	Front/rear panels	Side panels
300	500	NSYSPF3100	NSYSPS5100	NSYSPF3200	NSYSPS5200
	600		NSYSPS6100		NSYSPS6200
	800		NSYSPS8100		NSYSPS8200
700	500	NSYSPF7100	NSYSPS5100	NSYSPF7200	NSYSPS5200
	600		NSYSPS6100		NSYSPS6200
	800		NSYSPS8100		NSYSPS8200

Cable-gland plate

Galvanised-steel plates for cable entry by the bottom of the enclosures, thickness 1.5 mm.
Fixing by C-shaped clips fixed by screws ensuring electrical continuity.
Plate with 1 entry: self-extinguishing polyurethane adhesive seal, rectangular section of 15 × 25 mm and fixing elements.

Width	Depth	Reference
300	500	NSYEC351
	600	NSYEC361
	800	NSYEC381
700	500	NSYEC751
	600	NSYEC761
	800	NSYEC781

Earth cables

- Essential to guarantee the earthing of the side panels, roof and door.
- Material: brass and copper alloy terminal, green and yellow PVC insulating sheath.
- Composition: 10 earth cables, to be ordered by multiples of 10 (nuts and washers not included).

Length (mm)	Cut (mm²)	Terminal ∅ (mm)	Reference
160	6	8.3	NSYEL166D8
350	25	8.3	NSYEL3525D8

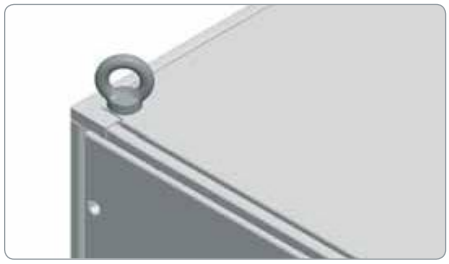
Spacial SF for Prisma Plus P system
Accessories

Side panels

External fixing

- Set of 2 side panels fixed from the outside of the enclosure.
- Captive screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.
- Supply: 2 side panels fixed from the outside and fixing elements.

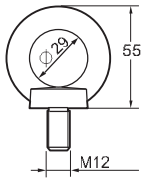
Nominal dimensions (mm)		Reference
Height	Depth	
2000	500	NSY2SP205
	600	NSY2SP206
	800	NSY2SP208

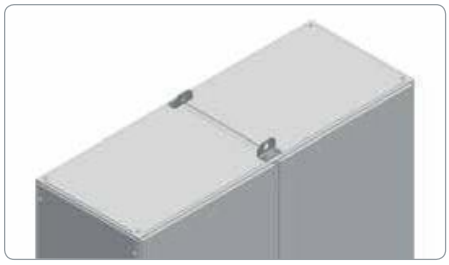


Eyebolts

Set of 4 moulded galvanised-steel M12 eyebolts for direct screwing in the framework of the enclosure, in line with the uprights.

Reference
NSYSFEB

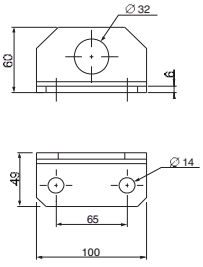




Lifting brackets

Set of 4 zinc-coated steel transport brackets for fixing to the framework, spanning two coupled enclosures, in line with the uprights.

Reference
NSYSFELB



Coupling kit

For side to side or back to back* coupling of 2 enclosures:
- Fixing from the inside of the enclosure.
- Protection degree: IP 55.
- Material:

– Flat links: zinc-coated steel.
– Sealing gasket: EPDM.

Reference
NSYSFBK19

* Back to back associations must be shipped individually.

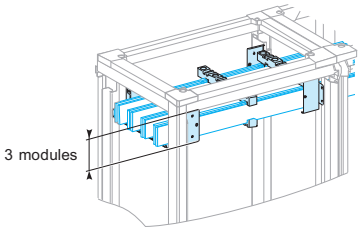
Spacial SF for Prisma Plus P system
Horizontal busbars up to 1600 A

Busbar configuration

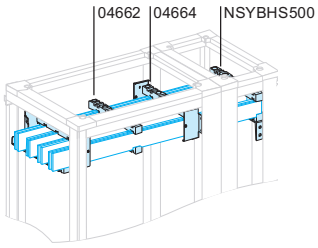
The bars are supported by insulating supports fixed to the framework.
The tables on this page show:
- The number and section of the bars to be used according to the permissible current level of the busbar;
- The number of bar supports to be installed in each type of framework, according to:

– The section of the bars
– The rated short-time withstand current Icw.

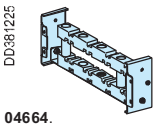
For further information on configuring the busbar, see page **3/128**.
The busbar takes up 3 Prisma modules of 50 mm each.



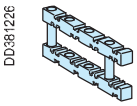
Busbar selection



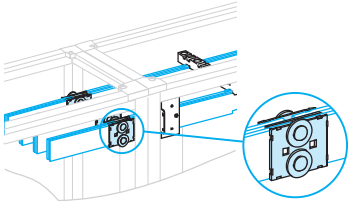
Fixed support and mobile support.



04664.



04662.



Connection.

Number and section of the copper bars

Permissible current level (A) IP55	No. bars/phase
750	1 bar, 60 × 5
900	1 bar, 80 × 5
1250	2 bars, 60 × 5
1600	2 bars, 80 × 5

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Number of supports

Framework width (mm)	Bar section (mm)	No. of Icw supports (kA eff/1 s)				
		≤ 15	≤ 25	≤ 30	≤ 40	≤ 50
700	1 bar, 60 × 5	2			3	
	1 bar, 80 × 5					
	2 bars, 60 × 5					
	2 bars, 80 × 5					
300	All sections	1			2	

Flat bars with width 2000 mm

Type of bar	Reference
Plain copper bar, 60 × 5	**04536**
Plain copper bar, 80 × 5	**04538**

Bar supports

2 compulsory fixed supports for frameworks with width 700 and 1 compulsory support for frameworks with width 300. If more supports are required, complete them using mobile supports.

Busbar centre-to-centre distance (mm)	Enclosure W700 Depth 500	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800
	75	75	75	75
Fixed support for horizontal bars	**04664**	**NSYBHS500**	**NSYBHS600**	**NSYBHS800**
Mobile support (additional)	**04662**	**04662**	**04662**	**04662**

Connections

Connections		Reference
1 connection for bars	Width 60 mm	**04640**
	Width 80 mm	**04641**

Note: When installed at the bottom of the enclosure, the busbar must be partitioned.

Spacial SF for Prisma Plus P system

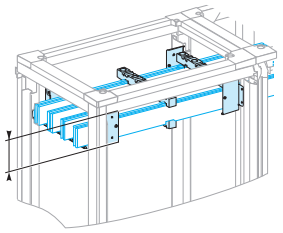
Horizontal busbars up to 3200 A

Busbar configuration

The bars are supported by insulating supports fixed to the framework.
The tables on this page show:
- The number and section of the bars to be used according to the permissible current level of in the busbar;
- The number of bar supports to be installed in each type of framework, according to:

– The section of the bars.
– The rated short-time withstand current Icw.

For further information on configuring the busbar, see page **3/128**.
The busbar takes up 3 Prisma modules of 50 mm each.



Number and section of the copper bars

Permissible current level (A) IP55	No. bars/phase
1080	1 bar, 50 × 10
1250	1 bar, 60 × 10
1600	1 bar, 80 × 10
1850	2 bars, 50 × 10
2000	2 bars, 60 × 10
2500	2 bars, 80 × 10
2900	2 bars, 100 × 10

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Number of supports (centre-to-centre distance: 75 mm)

Framework width (mm)	Bar section (mm)	No. of Icw supports (kA eff/1 s)							
		≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
700	1 bar, 50 × 10	2			3			4	
	1 bar, 60 × 10								
	1 bar, 80 × 10								
	2 bars, 50 × 10								
	2 bars, 60 × 10								
	2 bars, 80 × 10								
	2 bars, 100 × 10								
300	All sections	1					2		

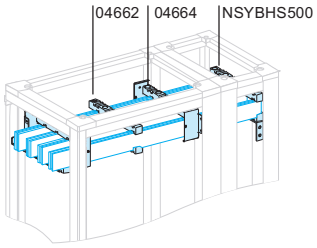
Number of supports (centre-to-centre distance: 115 mm)

Framework width (mm)	Bar section (mm)	No. of Icw supports (kA eff/1 s)							
		≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
700	1 bar, 50 × 10	2			3			4	
	1 bar, 60 × 10								
	1 bar, 80 × 10								
	2 bars, 50 × 10								
	2 bars, 60 × 10								
	2 bars, 80 × 10								
	2 bars, 100 × 10								
300	All sections	1					2		

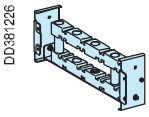
Spacial SF for Prisma Plus P system

Horizontal busbars up to 3200 A

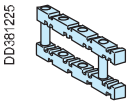
Busbar choice



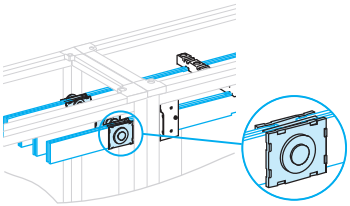
Fixed support and mobile support.



04664.



04662.



Flat bars with width 2000 mm

Type of bar	Reference
Plain copper bar, 50 × 10	**04545**
Plain copper bar, 60 × 10	**04546**
Plain copper bar, 80 × 10	**04548**
Plain copper bar, 100 × 10	**04550**

Bar supports

2 compulsory fixed supports for frameworks with width 700 and 1 compulsory fixed support for frameworks with width 300. If more supports are required, complete them using mobile supports.

Busbar centre-to-centre distance (mm)	Bar width	Enclosure W700	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800
		75	75	75	75
Fixed support for horizontal bars	⩽80 mm	**04664**	**NSYBHS500**	**NSYBHS600**	**NSYBHS800**
	>80 mm	**04664 +04671**	**NSYBHS500 +04671**	**NSYBHS600 +04671**	**NSYBHS800 +04671**
Mobile support (additional) for bars	⩽80 mm	**04662**	**04662**	**04662**	**04662**
	>80 mm	**04662 +04671**	**04662 +04671**	**04662 +04671**	**04662 +04671**

Busbar centre-to-centre distance (mm)	Bar width	Enclosure W700 Depth 800	Enclosure W300 Depth 800
		115	115
Fixed support for horizontal bars	⩽80 mm	**NSYBHS800L**	**NSYBHS800L**
	>80 mm	**NSYBHS800L +04671**	**NSYBHS800L +04671**
Mobile support (additional) for bars	⩽80 mm	**04678**	**04678**
	>80 mm	**04678 +04671**	**04678 +04671**

Connections

Connections		Reference
1 connection for bars	Widths 50 and 60 mm	**04640**
	Widths 80 and 100 mm	**04641**

Note: When installed at the bottom of the enclosure, the busbar must be partitioned.

Spacial SF for Prisma Plus P system

Linergy vertical busbars up to 3200 A, depth 500 mm

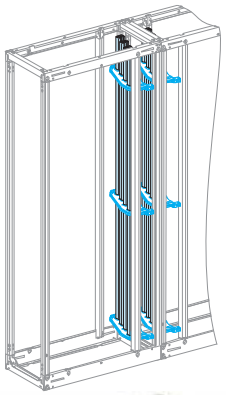
Busbar configuration

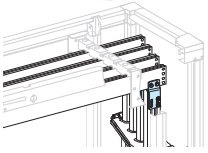
The table on this page shows:
- The reference of the aluminium profiles to be used according to the permissible current level of the busbar.
- The number of supports to be used according to the rated short-time withstand current (Icw in kA eff/1 s).

Beyond 1600 A, the busbar is doubled in two bar compartments, side-by-side.
In this case, it is compulsory to install 3 equipotential links between the busbars.
- The support is identical, regardless of the current-carrying capacity.

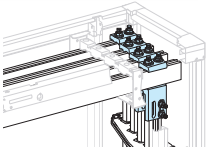
Linergy rail	Reference of 1 rail	Permissible current level (A) at 35 °C for panel	No. of supports according to the rated short-time withstand currents Icw (kA eff / 1 s)							
		IP > 31	≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
Single busbar										
Linergy 630	**04502**	590	3							
Linergy 800	**04503**	760								
Linergy 1000	**04504**	950								
Linergy 1250	**04505**	1170				4	5			
Linergy 1600	**04506**	1480							7	8
Double busbar										
Linergy 2000	**04504** × 2	1820	2 × 3				2 × 4		2 × 5	
Linergy 2500	**04505** × 2	2260								
Linergy 3200	**04506** × 2	2920								

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel. The bottom support can also be used to wedge the bars. Each reference consists of 1 rail.





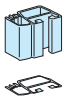
04635 connection to horizontal bars, thickness 5 mm.



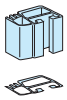
04636 connection to horizontal bars, thickness 10 mm.

Busbar selection

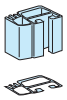
Linergy rail with width 1670 mm, section 32.5 × 42.5 mm.
Choice of references: see table below.



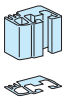
630 A rail, ref. **04502**



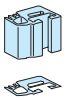
800 A rail, ref. **04503**



1000 A rail, ref. **04504**



1250 A rail, ref. **04505**



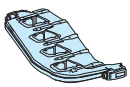
1600 A rail, ref. **04506**

Bar support and adapter upright

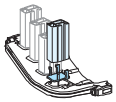
- To install a Linergy busbar in a 300-mm sheath, depth 500 mm, it is necessary to add the adapter uprights.
- The Linergy bar supports are delivered with class 8.8 fixings.

Description	Reference
Adapter upright, batch of 2	**NSYSFPA**
Linergy bar support	**04651**

The busbar is installed in suitable enclosures with width 700 mm and depth 500 mm.



Bar support installed



Each rail is delivered with one stop to be on the bottom support

Connection to a horizontal busbar

It connects a horizontal busbar (thickness 5 or 10 mm) to a Linergy lateral busbar. It is delivered with fixings.

Connection (1)		Reference
to horizontal bars, thickness 5 mm	1000 A connection conductor	**04634**
	1600 A connection conductor	**04635**
to horizontal bars, thickness 10 mm	connection conductor for horizontal bar width ≤ 80 mm	**04636**
	connection conductor for horizontal bar width > 80 mm	**04636 + 04642**

(1) References **04634**, **04635** and **04636** are delivered as a unit: 1 link per phase.

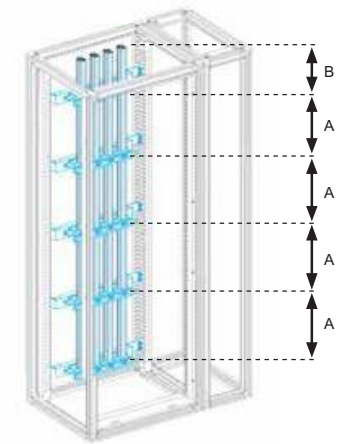
Spacial SF for Prisma Plus P system

Linergy rear busbars up to 1600 A

Busbar configuration

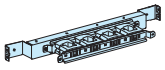
The table on this page shows:
- The reference of the profiles to be used according to the permissible current level of the busbar.
- The number of supports to be used according to the rated short-time withstand current (Icw in kA eff/1 s).

The busbar is installed in enclosures with width 700 mm, depth 500 mm.
- The support is identical, regardless of the current-carrying capacity.

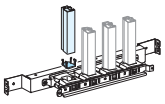


Busbar up to 1600 A (30 kA SCC and 40 kA).
The bottom support can also be used to wedge the bars.

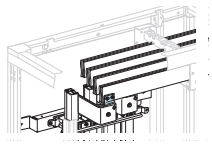
B = max. 387.5 mm
A = max. 350 mm



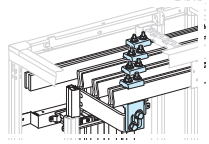
Bar support.



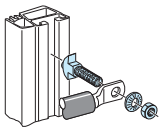
Each bar is delivered with one stop to be installed on the bottom support (vertical wedging).



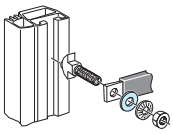
04635 connection with horizontal bars, thickness 5 mm.



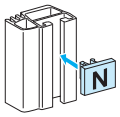
04636 connection with horizontal bars, thickness 10 mm.



Linergy bolts (screw + nut + contact washer).



Flat washers.

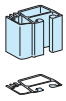


Linergy rail	Reference of 1 rail	Permissible current level (A) at 35 °C for panel	No. of supports according to the rated short-time withstand currents Icw (kA eff/1 s)			
		IP > 31	≤ 25	≤ 30	≤ 40	≤ 50
Linergy 630	**04502**	590	3	4	5	7
Linergy 800	**04503**	760				
Linergy 1000	**04504**	950				
Linergy 1250	**04505**	1170				
Linergy 1600	**04506**	1480				

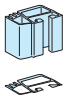
Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel. The bottom support can also be used to wedge the bars. Each reference consists of 1 rail.

Busbar selection

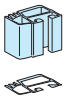
Linergy rail with width 1670 mm, 32.5 w 42.5-mm section.
Choice of references: see table below.



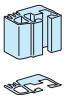
630 A rail, ref. **04502**



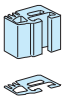
800 A rail, ref. **04503**



1000 A rail, ref. **04504**



1250 A rail, ref. **04505**



1600 A rail, ref. **04506**

Bar support

- A stop for the bottom support also allows the bars to be wedged.
- Delivered with class 8.8 fixings.

Bar support	Reference
for Linergy rear busbar	**04652**

Connection to a horizontal busbar

For connecting a horizontal busbar (thickness 5 or 10 mm) and a Linergy rear vertical busbar.

Connection (2)		Reference
to horizontal bars, thickness 5 mm		**04635 (1)**
to horizontal bars, thickness 10 mm	horizontal bars, width ≤ 80 mm	**04636 (1)**
	horizontal bars, width > 80 mm	**04636 + 04642 (1)**

(1) A part of the link must be made using insulated flexible bars.
(2) References **04635** and **04636** are delivered as a unit: 1 link per phase.

Linergy accessories

Linergy screws (3)

Batch of 20 Linergy M8 bolts (20 screws + 20 nuts + 20 contact washers)	Reference
Width = 25 mm (to connect flexible bars and lugs)	**04766**
Width = 39 mm (to connect copper bars)	**04767**

(3) The 8.8 screws slide along the rail and immobilise at the desired location.

Flat washers

Batch of 20 M8 flat washers		Reference
steel	outer diameter 20 mm	**04772**
	outer diameter 24 mm	**04773**
	outer diameter 28 mm	**04774**
brass	outer diameter 20 mm (i 25v lug connection on Linergy)	**04775**

Identification

Set of 12 phase identifiers	Reference
12 clip-on supports + N, L1, L2, L3, PE, PEN labels	**04794**

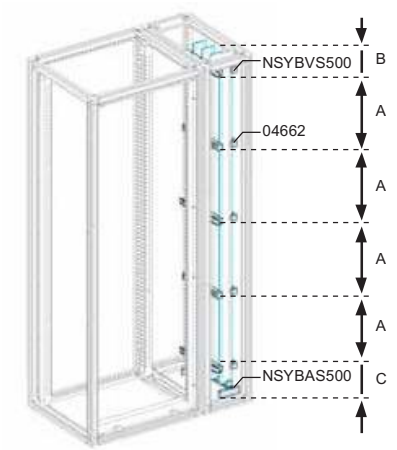
Spacial SF for Prisma Plus P system

Vertical busbars up to 1600 A
Flat bars, thickness 5 mm

Busbar configuration

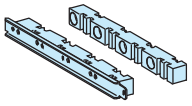
The bars are supported by insulating supports: 3 fixed supports (screwed to the framework) are compulsory.
If necessary, use additional mobile supports.
The bars are resting against a bottom support.
The table on this page shows:

- The number and section of the bars to be used according to the permissible current level of the busbar.
- The number of bar supports to be installed in an enclosure according to the rated short-time withstand current (Icw).

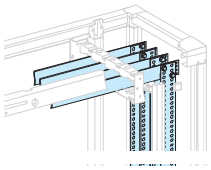


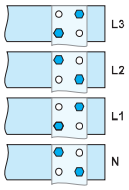
Busbar with Icw 30 kA eff/1 s.
The bars are supported by 3 fixed supports (compulsory) and 2 mobile supports.

B = max. 100 mm
A = max. 350 mm
C = max. 87.5 mm



Mobile bar support **04662.**





Separation required between bar coupling points to guarantee the insulation distances.

Number of copper bars and supports

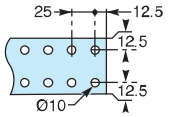
Permissible current level (A) for panel	No. of bars/phase and section (mm)	No. of supports according to the rated short-time withstand currents Icw (kA eff/1 s)				
IP > 31		15	≤ 25	≤ 30	≤ 40	≤ 50
750	1 bar, 60 × 5	3	5			7
900	1 bar, 80 × 5					
1250	2 bars, 60 × 5					
1600	2 bars, 80 × 5					

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Busbar selection

Flat bars with width 1675 mm

Perforated copper bar	Reference
60 × 5 mm	**04516**
80 × 5 mm	**04518**



Bar supports: fixing directly on framework of 300-mm duct

3 fixed supports are compulsory for supporting the bars. If more than 3 supports are required, use the mobile supports (additional).

Busbar centre-to-centre distance (mm)	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800	Enclosure W300 Depth 800
	75	75	75	115
Fixed support for lateral flat busbar	**NSYBVS500**	**NSYBVS600**	**NSYBVS800**	**NSYBVS800L**
Mobile support (additional)	**04662**	**04662**	**04662**	**04678**

Bar wedging

The bottom support allows the bars to be installed and positioned. It does not count as a bar support.

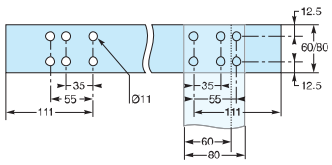
Busbar centre-to-centre distance (mm)	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800	Enclosure W300 Depth 800
	75	75	75	115
Bottom support for lateral flat busbar	**NSYAS500**	**NSYAS600**	**NSYAS800**	**NSYAS800L**

Note: When connecting 5-mm flat bars to a horizontal busbar, references **NSYAS•00** are not required.

Connection to a horizontal busbar, thickness 5 mm

Direct connection (centre-to-centre distance 75 mm)

For a busbar centre-to-centre distance of 75 mm, the bars must be completely overlapped.



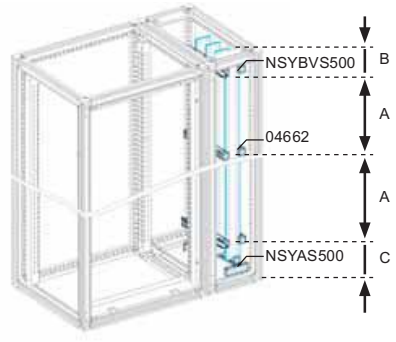
Drilling dimensions for the horizontal bars, thickness 5 mm.

Spacial SF for Prisma Plus P system

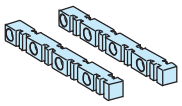
Vertical busbars up to 3200 A
Flat bars, thickness 10 mm

Busbar configuration

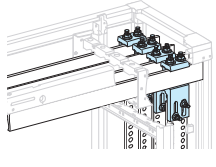
The bars are supported by insulating supports: 3 fixed supports (screwed to the framework) are compulsory. If necessary, use additional mobile supports.
The bars are resting against a bottom support.
The table on this page shows:
- The number and section of the bars to be used according to the permissible current level of the busbar;
- The number of bar supports to be installed in an enclosure according to the rated short-time withstand current (Icw).



Single busbar ≤ 1600 A (IP ≤ 31).



Mobile bar support **04662.**



Number of copper bars and supports

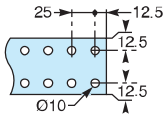
Permissible current level (A) for panel		No. of bars/phase and section (mm)	No. of supports according to the rated short-time withstand currents Icw (kA eff/1 s)							
IP ≤ 31	IP > 31		≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
Single busbar										
1200	1080	1 bar, 50 × 10	3	5	5	7	7	7	9	9
1400	1250	1 bar, 60 × 10								
1800	1600	1 bar, 80 × 10								
2050	1850	2 bars, 50 × 10								
2300	2000	2 bars, 60 × 10								
2820	2500	2 bars, 80 × 10								
3200	2820	2 bars, 100 × 10								

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Busbar selection

Flat bars with width 1675 mm

Perforated copper bar	Reference
50 × 10 mm	**04525**
60 × 10 mm	**04526**
80 × 10 mm	**04528**



Bar supports: fixing directly on framework of 300-mm duct

3 fixed supports are compulsory for supporting the bars. If more than 3 supports are required, use the mobile supports (additional).

Busbar centre-to-centre distance (mm)	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800	Enclosure W300 Depth 800
	75	75	75	115
Fixed support for lateral flat busbar	**NSYBVS500**	**NSYBVS600**	**NSYBVS800**	**NSYBVS800L**
Mobile support (additional)	**04662**	**04662**	**04662**	**04678**

Bar wedging

The bottom support allows the bars to be installed and positioned. It does not count as a bar support.

Busbar centre-to-centre distance (mm)	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800	Enclosure W300 Depth 800
	75	75	75	115
Fixed support for lateral flat busbar	**NSYAS500**	**NSYAS600**	**NSYAS800**	**NSYAS800L**

Connection to a horizontal busbar, thickness 10 mm

Vertical busbar connection (2)	Horizontal bars	Vertical bars	Reference
(1 bar/phase) to horizontal bars	L < 80 mm	50/60 mm	**04636**
	L > 80 mm	50/60 mm	**04636 + 04642**
	L ≤ 80 mm	80 mm	**04637**
	L > 80 mm	80 mm	**04637 + 04642**
(2 bars/phase) to horizontal bars	L < 80 mm	50/80 mm	**04637**
	L > 80 mm	50/80 mm	**04637 + 04642**

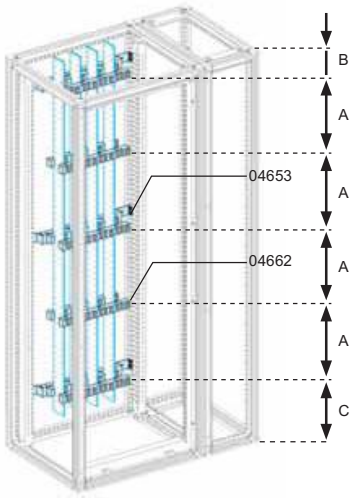
(2) References **04636** and **04637** are delivered as a unit: 1 link per phase.

Spacial SF for Prisma Plus P system

Rear busbars up to 1250 A
Flat bars, thickness 5 mm

Busbar configuration

The bars are supported by insulating supports: 3 fixed supports (screwed to the framework) are compulsory. If necessary, use additional mobile supports.
The bars rest against one of the fixed supports by means of a wedge screwed onto each bar.
The table on this page shows:
- The number and section of the bars to be used according to the permissible current level of the busbar.
- The number of bar supports to be installed according to the rated short-time withstand current (Icw).



Busbar with Icw 30 kA eff/1 s.
The bars are supported by 3 fixed supports, 04653 × 3 (compulsory), and 2 mobile supports, 04662 × 2.

B = max. 100 mm
A = max. 750 mm
C = max. 87.5 mm

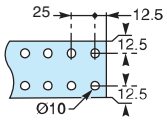
Number of copper bars and supports

Permissible current level (A) for panel		No. of bars/phase and section (mm)	No. of supports according to rated short-time withstand currents Icw (kA eff/1 s)				
IP ≤ 31	IP > 31		15	≤ 25	≤ 30	≤ 40	≤ 50
800	750	1 bar, 60 × 5	3	5			7
1000	900	1 bar, 80 × 5					
1400	1250	2 bars, 60 × 5					

Busbar selection

Flat bars with width 1675 mm

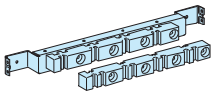
Perforated copper bar	Reference
60 × 5 mm	**04516**
80 × 5 mm	**04518**



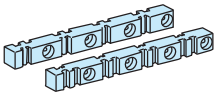
Bar supports

3 fixed supports are compulsory for supporting the vertical busbars. If more than 3 supports are required, use the mobile supports (additional).

Bar support	Reference
fixed for rear flat busbar	**04653**
mobile (additional)	**04662**



Fixed bar support **04653.**

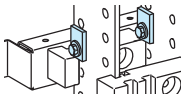


Mobile bar support **04662.**

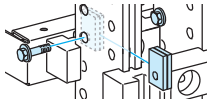
Bar wedging

A metal wedge with thickness 5 mm is screwed onto the bar.
It rests against a fixed support and wedges the bar.

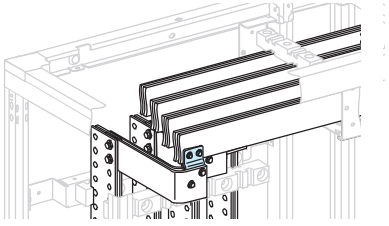
Wedge for bars	Reference
100 5-mm wedges for bars	**04669**



Wedging: 1 bar/phase.



Wedging: 2 bars/phase.



Connection to a horizontal busbar

1600 A connection		Reference
to horizontal bars, thickness 5 mm		**04635 (1) (2)**
to horizontal bars, thickness 10 mm	L ≤ 80 mm	**04636 (1) (2)**
	L > 80 mm	**04636 (2) + 04642 (1)**

(1) A part of the link must be made using insulated flexible bars.
(2) References **04635** and **04636** are delivered as a unit = 1 link per phase.

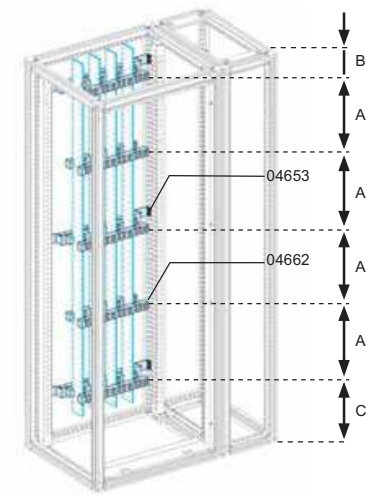
Spacial SF for Prisma Plus P system

Rear busbars up to 1600 A
Flat bars, thickness 10 mm

Busbar configuration

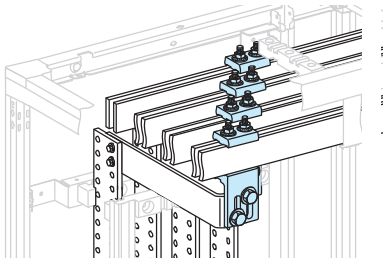
The bars are supported by insulating supports: 3 fixed supports (screwed to the framework) are compulsory. If necessary, use additional mobile supports.
The bars rest against one of the fixed supports by means of a wedge screwed onto each bar.
The table on this page shows:

- The number and section of the bars to be used according to the permissible current level of the busbar.
- The number of bar supports to be installed according to the rated short-time withstand current (Icw en KA eff/15).
- The busbar is installed in suitable enclosures with width 700 mm and depth 500 mm.



Busbar with Icw 40 kA eff/1 s.
The bars are supported by 3 fixed supports, 04653 (compulsory), and 2 mobile supports, **04662**.

B = max. 100 mm
A = max. 375 mm
C = max. 87.5 mm



Number of copper bars and supports

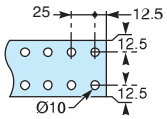
Permissible current level (A) for panel	No. of bars/phase and section (mm)	No. of supports according to the rated short-time withstand currents Icw (kA eff/1 s)							
IP > 31		≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
1080	1 bar, 50 × 10	3	5			7		9	
1250	1 bar, 60 × 10								
1600	1 bar, 80 × 10								

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Busbar selection

Flat bars with width 1675 mm

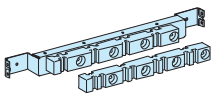
Perforated copper bar	Reference
50 × 10 mm	**04525**
60 × 10 mm	**04526**
80 × 10 mm	**04528**



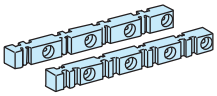
Bar supports

3 fixed supports are compulsory for supporting the vertical busbars. If more than 3 supports are required, use the mobile supports (additional).

Bar support	Reference
fixed for rear flat busbar	**04653**
mobile (additional)	**04662**



Fixed bar support **04653.**

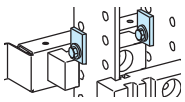


Mobile bar support **04662.**

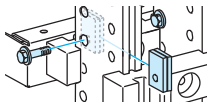
Bar wedging

A metal wedge with thickness 5 mm is screwed onto the bar.
It rests against a fixed support and wedges the bar.

Wedge for bars	Reference
100 5-mm wedges for bars	**04669**



Wedging: 1 bar/phase.



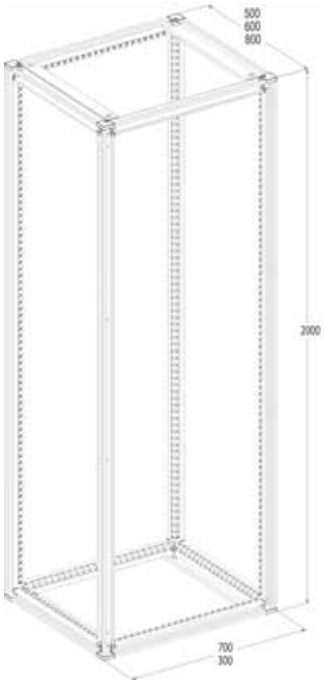
Wedging: 2 bars/phase.

Connection to a horizontal busbar, thickness 10 mm

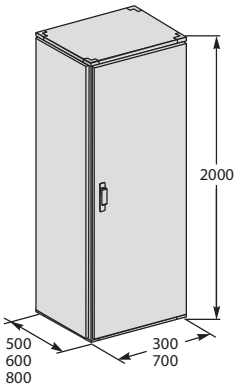
Connection ≤ 1600 A		Reference
to horizontal bars,thickness 10 mm	L ≤ 80 mm	**04636 (1) (2)**
	L > 80 mm	**04636 (2) + 04642 (1)**

(1) A part of the link must be made using insulated flexible bars.
(2) References **04635** and **04636** are delivered as a unit = 1 link per phase.

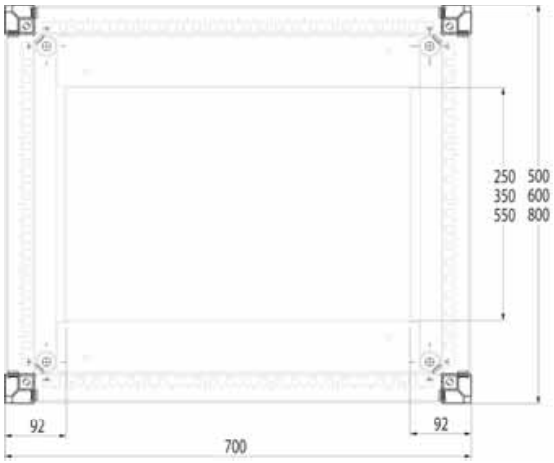
Spacial SF for Prisma Plus P system
Dimensions

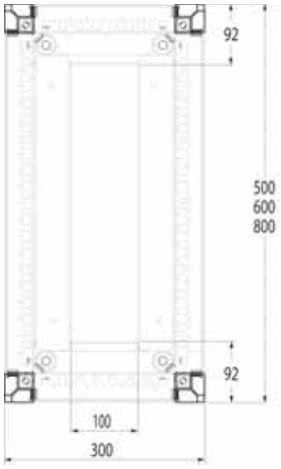


Plain or transparent door, side panels



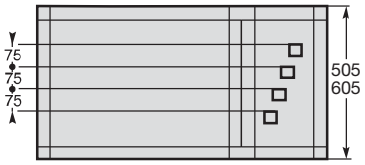
Cable-entry plate



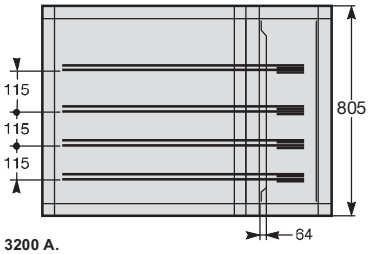


Spacial SF for Prisma Plus P system
Dimensions

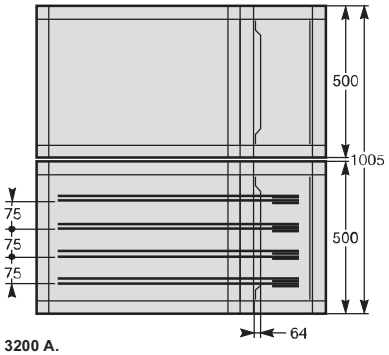
Busbar installation
Side vertical busbar



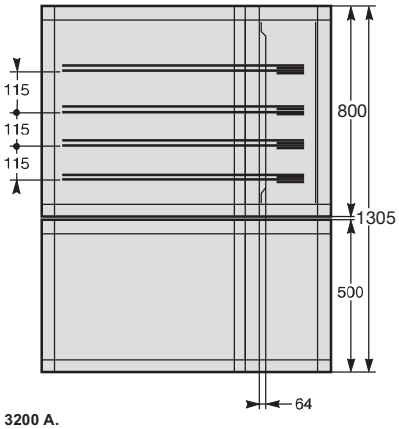
1600 A.



3200 A.



3200 A.

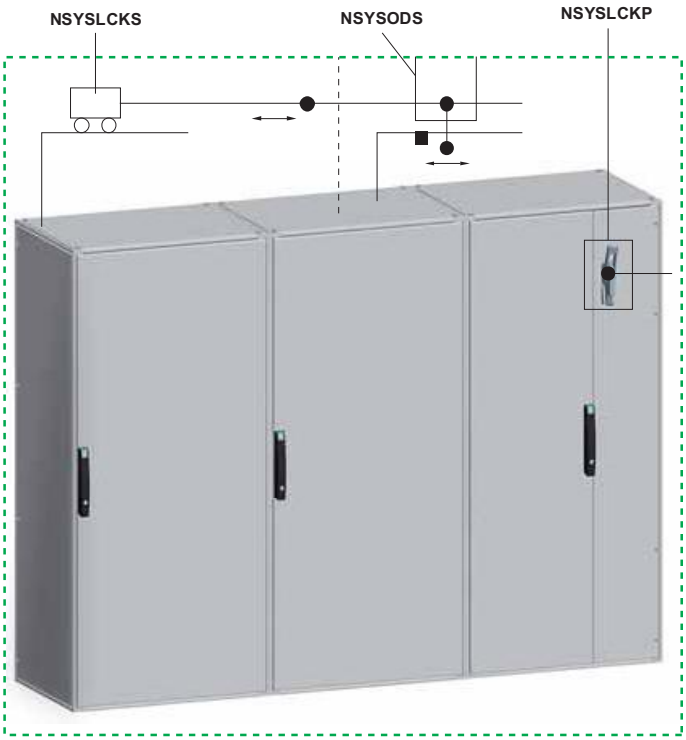


3200 A.

Automobile application

Built-in system for interlocking the doors of associated enclosures

- The door of the "incoming" enclosure is interlocked by the control of the main switch or circuit breaker. A built-in interlocking system with runner rods prevents the opening of the "outgoing" enclosure doors. Access is only allowed when the main switch or circuit breaker is in "O" position and the main door is open. Manual activation of the rods unlocks the other doors and allows access.
- Designed to be associated with certain circuit breakers or switches:
  – Square D (9422 A1).
  – Telemecanique.
- The built-in secure interlocking system for the door (on demand) of the "incoming"/"outgoing" enclosures allows Spacial SF enclosures to be adapted to the requirements of the American car industry.



Automobile application

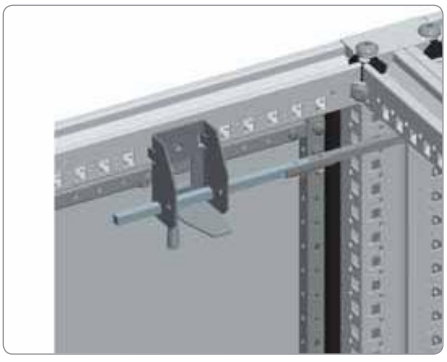
Interlocking for main door

- System for unlocking the main door adapted to the switches:
  – Allen Bradley (1494 VH11).
  – Square D (9422 A1).
  – Siemens (FH0H).
  – Schneider Electric.
- Unlocks the main door when the switch is in the open position "O".
- Material: steel.
- Finish: zinc-coated.
- The main door interlocking system requires the ordering of both references:
  1 Activation for secondary doors.
  2 Interlocking for secondary doors.

Supply: two brackets for fixing the configured panel, interlocking elements, switch and fixings.

Configured panel and handle not included.

Reference
NSYSLCKP



Activation for secondary doors

- System installed in the main enclosure. Activated by manual operation, preventing the opening of the secondary enclosures connected to one another by runner rods.
- It has a secure function which consists of a part that forces the system into the position in which the secondary enclosures are locked in order to lock the main door.
- Material:

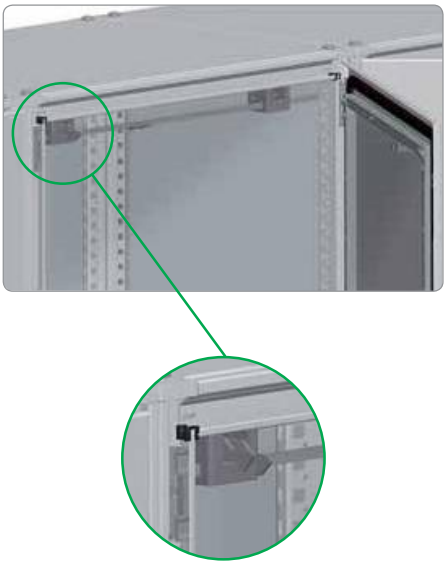
– Mechanism: zinc-coated steel.
– Activation handle: black plastic.

Supply: elements for activating the main door and fixings.

For the complete function, both activation (1) and interlocking systems (2) need to be ordered.

Reference
NSYSODS

Automobile application



Interlocking for secondary doors

- System for interlocking the outgoing enclosures connected to one another by runner rods that lock their doors.
- Fixing to the structure of the enclosures by screws.
- Material: steel.
- Finish: zinc-coated.

Supply: elements for interlocking the secondary doors and fixings.

For the complete function, both activation (1) and interlocking systems (2) need to be ordered.

Nominal dimensions (mm)	Reference
Width	
600	**NSYSLCKS6**
800	**NSYSLCKS8**
1000	**NSYSLCKS10**