



# PrismaSeT HD Active

Catalogue 2022  
Cubicles up to 4000 A



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Life Is On

**Schneider**  
Electric



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# Overview





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B



# PrismaSeT Active - Reliable, Easily connected

The new PrismaSeT Active switchboard is the market forerunner with built-in cloud connectivity, allowing instant access to smart alarm system, energy usage analysis, trends, and preventative maintenance plans.

Built-in cloud connectivity allows users to be notified of the round-the-clock electrical distribution as well as voltage loss if any. This maximizes efficiency and power availability, while creating the basis for future innovations. The PrismaSeT Active switchboard also allows easy wireless integration of sensors.

## PowerLogic HeatTag

- Cable Overheating Alert



The PowerLogic HeatTag sensor is a revolutionary new product designed for fire prevention in switchboards. It uses proactive heating detection technology to drastically reduce the risk of fire.

## ComPacT NSX

- With wireless Auxiliary Contact



New Com**PacT** NSX circuit breaker redefines and enhances customer experience through seamless connectivity along with game-changing user interface.

## Acti9 AFDD Connect

- Arc Fault detection on Load cables



Acti9 AFDD Connect is most advanced protection available with all-in-one function providing connectivity and diagnostics.

## PowerLogic PowerTag

- From 1 to 6300 A

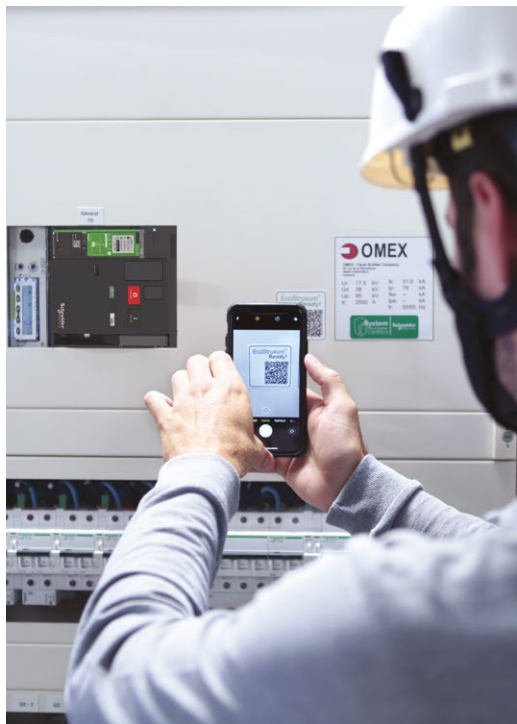


PowerTag Energy is a wireless communication energy sensor that provides precise, real-time data on energy, currents, power, voltage, and power factor.



# EcoStruxure™ Facility Expert

## Cloud software to improve operations efficiency



### Mobility to improve maintenance & operations

#### Register easily and overview all your assets status

QR code ready, Schneider Electric devices are already configured to communicate with EcoStruxure™ Facility Expert in a simple way and enable automatic download of ID, technical documentation and maintenance plan.

Located on the map, visualize all assets in real time, navigate and filter by area or status.

#### Remain connected and Informed

Providing relevant information on critical assets, sending instant and documented alarms EcoStruxure™ Facility Expert allows to diagnose remotely in case of issue and to manage maintenance efficiently.

- Instant alarms on threshold and status change
- Real-time assets status and map localization.
- Maintenance plan, asset log history, asset doc repository.
- Task manager and task reminder.
- 1 click to edit intervention and activity reports including voice memos, notes, photos and measurements.
- Remain connected, comment, share information and get support in the field from colleagues or experts if needed.



### Web-application to monitor & analyze energy

EcoStruxure™ Facility Expert energy features give insights into energy data and provide visibility to reduce energy consumption.

On their web portal, Facility Managers get a clear vision on real time energy consumption for all managed buildings from any location.

- Main energy consumptions tracking (main, usage, zone, meter)
- Multi-site comparison capacity
- Cost monitoring
- Power demand and power factor monitoring
- Building performance: benchmarking against local energy performance scale (regulatory compliance to ISO50001, LEED, NABERS)
- Monthly score cards
- **Energy kiosk:** displayed on building public TV screens, this option shows your green image to visitors and promotes occupant ecofriendly behaviours.

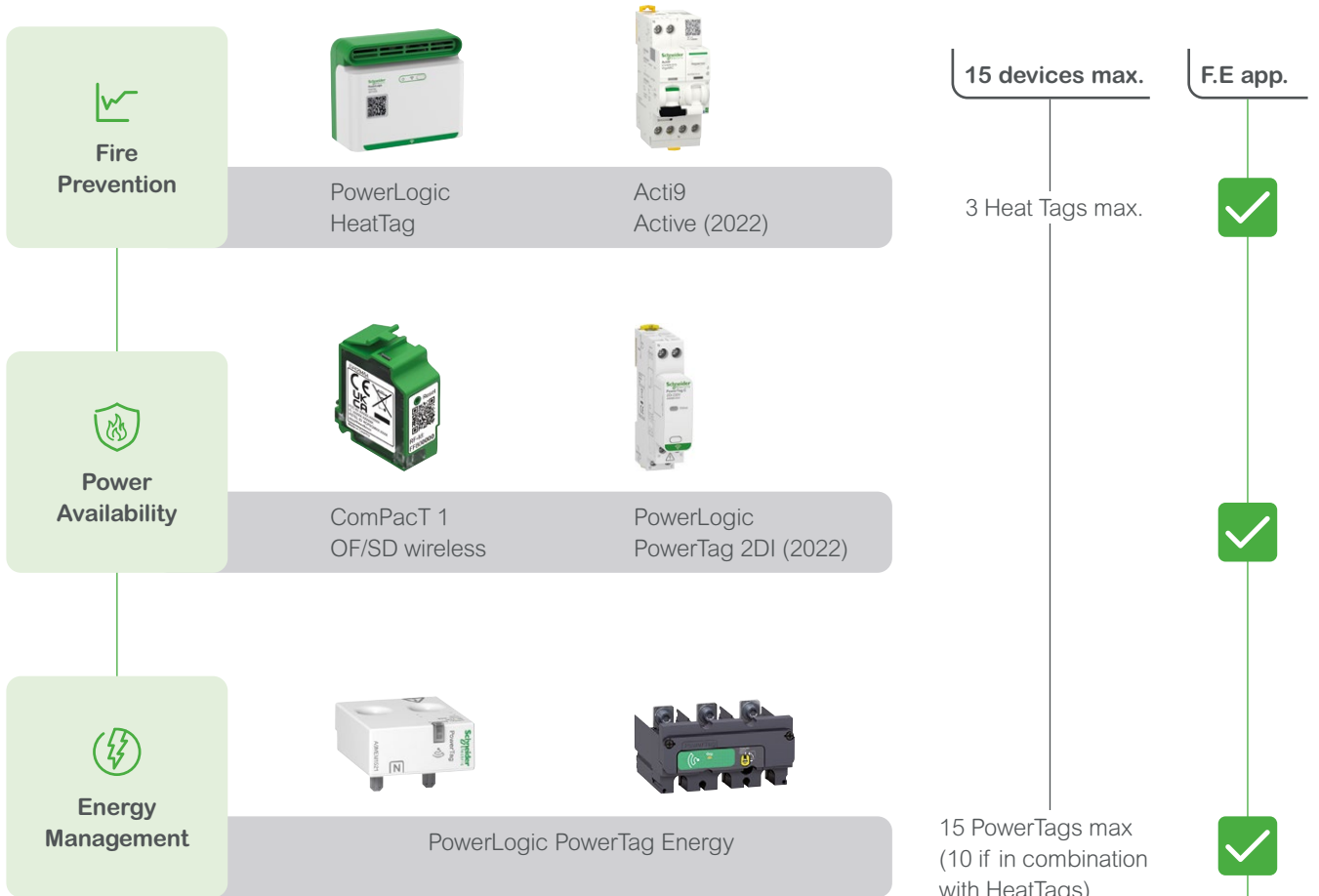
### Schneider Electric partners network

Schneider Electric local partners are trained and certified to sell, install and commission EcoStruxure™ Facility Expert. They can also operate the solution if the site manager wants to delegate this task.



# Communication Architecture

## General Principle



\*Facility Expert Energy: It is a Cloud software for energy efficiency. The app generates alarms when the consumption exceeds set targets while monitoring the energy consumption 24/7 with comparison by site or usage.

\*Facility Expert Operation: It is a cloud software for operation efficiency that alerts the user to optimize the maintenance procedures.



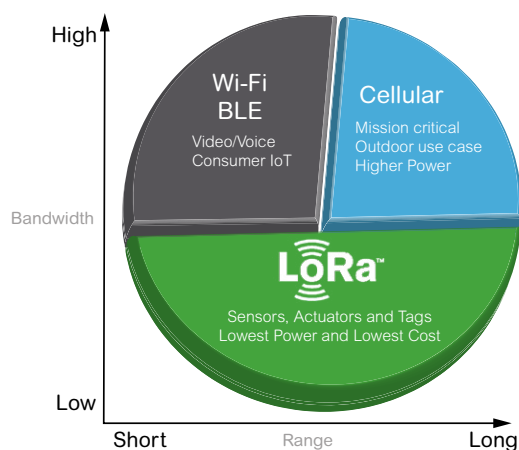
# Communication Architecture

## Main Features

LoRaWAN (Long Range Wide Area Network) is a networking protocol designed to connect wirelessly in order to assure end-to-end communication services.

The followings are the differentiating factors compared to other networking protocols:

- Long range coverage
- Low energy consumption
- Better penetration in buildings
- No SIM needed
- No additional fees to pay (included in Facility Expert subscription).



B



Simple 3-wire cable connections for ease of connectivity to Voltage Presence indicator.

Free real time alarming in case of losing power.

EcoStruxure Power Commission application simplifies sensor integration and commissioning.



QR code compatible for scanning through any device.

Quick activation and subscription for the LoRa connection without paying any additional fees.

Periodic report and updates.



# Communication Architecture

	Name	Reference	Description
Applications	EcoStruxure Power Commission App	For free Play store/ Apple store	Easy wireless Panel and sensors Configuration
	EcoStruxure Facility Expert App	For free Play store/ Apple store	Reactive maintenance and Energy Management
Built-in Gateway	Wireless Panel Server built-in	Check page E-4	Built in PrismaSeT HD Active
Alarming Sensors	HeatTag cable overheating sensor	SMT10020	Provide a proactive heating detection
	ComPacT NSX OF/SD auxiliary contact wireless	LV429454	Redefine and enhance customer experience with seamless connectivity
	ComPacT NSXm OF/SD auxiliary contact wireless	LV429453	Redefine and enhance customer experience with seamless connectivity
	Powertag C 2DI - 2 digital inputs 230 V for any default signal	A9XMC2D3	Provide a precise real time data on energy, currents, power, voltage and power factor
	Arc Fault Detection Device with wireless communication	refer to Acti 9 catalog	Prevent arc fault reaching temperatures which can ignite home fires
PowerTag Energy Metering Sensors	PowerTag Energy Monoconnect 63A 1P+Wire	A9MEM1520	Provide precise, real-time data on energy, currents, power, voltage, and power factor
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	PowerTag Energy Monoconnect 63A 3P+N top	A9MEM1541	
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	LoRa /IP Plug & Play Bridge via SIM Card	SMT10014	In case of no reception of LoRa public network on your site



# For Commercial and Industrial application

## PrismaSeT P Active

Wireless Panel Server



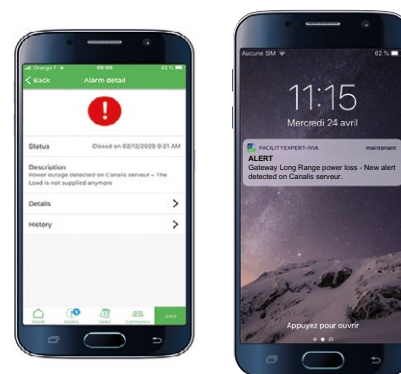
- 1 Built-in wireless panel server
  - 2 LED indicators: Phase status (on/off)
  - 3 QR Code to activate your free alerts
  - 4 EcoStruxure™ Facility Expert communication status indicator
- Service is activated on cloud-based software
  - Service is not activated (blinking)

## PowerLogic™ HeatTag sensor



B

## EcoStructure™ Facility Expert



Alert detail

24/7 notifications on mobile devices

Note: The voltage presence indication of the Wireless Panel Server is only indicative and cannot replace all safety measures required before any intervention into the Low Voltage Switchboard

Easy to install: directly on a DIN rail in non-forced air-ventilated switchboards.

Easy to commission from your mobile with EcoStruxure™ Power Commission.

# PrismaSeT G Active Pack 160

## 250 enclosures up to 630 A

### IP30, IP40, IP41, IP43, IP55



160 A

250 A

630 A

- Schools
- Small shops
- Hotels, etc.

### Pack



- Small companies
- Buildings
- Offices
- Laboratories
- Healthcare centres
- Hotels
- Supermarkets
- Malls, etc.

### PrismaSeT G Active





# PrismaSeT P Active cubicles up to 4000 A IP30, IP31, IP55

The optimised, tested and IEC compliant solution, for low voltage electrical distribution and control switchboards.



- Hospitals
- Data centres
- Logistics centres
- Shopping centres
- Offices buildings

## PrismaSeT P Active



# PrismaSeT HD Active: Electrical switchboards up to 4000 A in harsh environments

The PrismaSeT HD Active functional system can be used for all types of low-voltage distribution switchboards up to 4000 A in harsh environments.



PB503827 eps  
PB503778 eps



## Switchboard design is very simple

### 1. A metal structure

Made up of one or more pre-assembled frameworks combined side-by-side or back-to-back.

### 2. A distribution system

Horizontal busbars running on the top or bottom and vertical busbars positioned in a lateral compartment or at the rear of the cubicle are used to distribute electricity throughout the switchboard.

### 3. Complete functional units

- dedicated mounting plate for device installation
- front plate to block direct access to live parts.
- devices for on-site connections.

Each functional unit contributes to a function in the switchboard.

The functional units are modular and are arranged rationally.

The system includes everything required for functional unit mounting, supply and onsite connection.

The components of the PrismaSeT HD Active and those of the functional units in particular have been designed and tested taking into account device characteristics.

This design approach ensures a high degree of reliability in system operation and optimum safety for personnel.



## Advantages of PrismaSeT HD Active system switchboards

### 1. A dependable electrical installation

The total compatibility of Schneider Electric devices with the PrismaSeT HD Active system is a key advantage in ensuring a high level of installation dependability.

### 2. An upgradeable electrical installation

Thanks to modular design, PrismaSeT HD Active switchboards can be modified easily to integrate new functional units as needed or to be combined with your Spacial SF Control Panel cabinets.

### 3. Total safety for personnel

Work in a switchboard must be carried out by authorised persons in compliance with all applicable safety regulations.

To increase the safety of personnel, devices are installed behind protective front plates; only the operating handles are accessible.

Additional internal protection (partitions, barriers) is available to create form 2, 3 or 4 separation to protect against direct contacts with live parts.

Terminal shields are mandatory for installation of Compact NSX and INS/INV devices in PrismaSeT HD Active enclosures.

### 4. Connected solution up 4000 A

- Wireless panel server
- Fire prevention
- Power availability
- Energy management



# PrismaSeT 6300: Low Voltage switchboards up to 6300 A

Use of the components in the PrismaSeT 6300 Active functional system ensures the creation of switchboards complying with standard IEC 61439-1&2.



PB503772.eps  
PB503771.eps

B

## ⚡ Electrical characteristics

- Rated insulation level of main busbars: 1000 V
- Rated operational current  $I_e$ : 6300 A
- Rated peak withstand current  $I_{pk}$ : 220 kA
- Rated short-time withstand current  $I_{sw}$ : 100 kA rms/1 second
- Frequency: 50/60 Hz.



## 🔧 Mechanical characteristics

- Steel sheet metal.
- Structured finish epoxy-polyester powder.
- 2 options:
  - Grey color RAL 7035 and white color RAL 9003 inside (for the PrismaSeT references)
  - White color RAL 9003 outside and inside.
- Can be dismantled.
- Can be combined side-by-side and back-to-back.
- Degree of protection: IP55 up to 4000 A and IP54 up to 6300 A.
- Degree of protection against mechanical impacts: IK10 with door.
- Enclosures dimensions:
  - four widths:
    - W300 and W500: busbar or cable compartment
    - W700 and W1200: device compartment
  - two depths:
    - D800: front connection up to 6300 A
    - D1300 (D800 + D500 combination): rear connection up to 6300 A
  - height: 2000 mm
- Indoor cubicles.



For more information about PrismaSeT 6300 and for solutions up to 6300 A see the catalog PrismaSeT 6300.

**UEMKCAT008EN**



Electrical switchboards built using the PrismaSeT functional system and Schneider Electric recommendations fully comply with international standard IEC 61439-1 and 2.



# The switchboard, central to the electrical installation

Both the point of arrival of energy and a device for distribution to the site applications, the LV switchboard is the intelligence of the system, central to the electrical installation.

It plays an essential role in the availability of electric power, while meeting the needs of personal and property safety. Its definition, design and installation are based on precise rules; there is no place for improvisation. The IEC 61439 standard aims to better define "low-voltage switchgear and controlgear assemblies", ensuring that the specified performances are reached. It specifies in particular:

- the responsibilities of each player, distinguishing those of the original equipment manufacturer; the organization that performed the original design and associated verification of an assembly in accordance with the standard, and of the assembly manufacturer - the organization taking responsibility for the finished assembly;
- the design and verification rules, constituting a benchmark for product certification.

All the component parts of the electrical switchboard are concerned by the IEC 61439 standard. Equipment produced in accordance with the requirements of this switchboard standard ensures the safety and reliability of the installation.

A switchboard must comply with the requirements of standard IEC 61439-1 and 2 to guarantee the safety and reliability of the installation. Managers of installations, fully aware of the professional and legal liabilities weighing on their company and on themselves, demand a high level of safety for the electrical installation.

What is more, the serious economic consequences of prolonged halts in production mean that the electrical switchboard must provide excellent continuity of service, whatever the operating conditions.

## The Schneider Electric solution

- Specify switchboards that comply with standard IEC 61439-1 and 2.
- Guarantee a level of safety that has been 100 % tested, from the day the switchboard is installed and throughout its service life.
- Ensure a lasting investment through easy upgrading of the installation in compliance with the standard.
- Guarantee that the switchboard complies with the technical specifications.

## PrismaSeT tested switchboards

The conformity of the switchboard has been tested and proven.

A PrismaSeT switchboard is:

- made up of Schneider Electric low-voltage devices and components that all comply with the applicable standards;
- based on configurations in our catalogue;
- made up of PrismaSeT and Linergy mechanical and electrical components that have been subjected to the verification of original equipment manufacturer;
- mounted and wired by a panelbuilder in compliance with professional standards;
- subjected to the individual verification.

Schneider Electric makes available to the panelbuilder everything required to create tested PrismaSeT switchboards, including the basic configurations in the low voltage distribution catalogue, all the documentation for switchboard design and mounting, calculation and design software, etc.

Panelbuilders can demonstrate conformity with standard IEC 61439-1 and 2 by presenting the declarations or certificates of conformity for type tests carried out by independent laboratories (ASEFA, ASTA, etc.) and supplied by Schneider Electric. The panelbuilder is responsible for the individual routine verification and delivers the corresponding declarations of conformity.







# Standards and Certifications



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# Standards

## Regional standardization systems



## Standards and tested switchboards

### IEC international standards

#### IEC member countries

Argentina	Luxemburg
Australia	Malaysia
Austria	Mexico
Belarus	Netherlands
Belgium	New Zealand
Brazil	Norway
Bulgaria	Pakistan
Canada	Poland
China	Portugal
Croatia	Rumania
Czech Rep.	Russia
Denmark	Singapore
Egypt	Slovakia
Finland	Slovenia
France	South Africa
Germany	Spain
Greece	Sweden
Hungary	Switzerland
India	Thailand
Indonesia	Turkey
Iran	Ukraine
Ireland	United Kingdom
Israel	United States
Italy	
Japan	
Korea (Rep. of)	

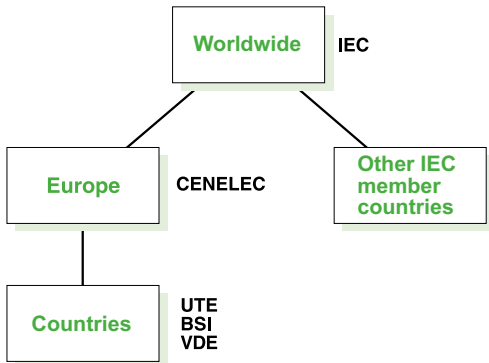
The IEC (International Electrotechnical Commission) is a worldwide organisation for standardisation comprising all national electrotechnical committees (IEC National Committees).

The object of the IEC is to promote international cooperation on all questions concerning standardisation in the electrical and electronic fields. To that end, the IEC publishes International Standards.

Their preparation is entrusted to technical committees and any IEC National Committee interested in the subject dealt with may participate in the preparatory work.

### Local standards

D0089372\_eps



#### In Europe

The IEC documents are first studied by CENELEC, which establishes:

- either a European standard (EN), often identical to the IEC standard, which then becomes the applicable national standard in all the member countries
- or, in the event of differences, a harmonisation document (HD).

#### Other IEC member countries

Each country is autonomous and can accept the IEC standard as the national standard, with or without modifications.

Even though they are IEC members, countries such as Japan and the United States continue to develop their own standardisation systems.

#### Countries without a standardisation system

It is possible to refer to an IEC standard in the framework of a project.

#### CEI / IEC

Commission Electrotechnique Internationale

#### CENELEC

Comité Européen de Normalisation ELECTrotechnique

#### UTE

Union Technique de l'Électricité

#### VDE

Verband der Elektrotechnik, Elektronik und Informationstechnik

e.v. (German electrotechnical, electronics and computer

technology standardisation organisation)

#### BSI

British Standards Institution



# Standards

## Standards types

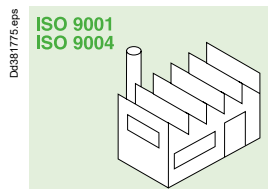


## Standards and tested switchboards

### The different types of standards

There are different types of standards, including:

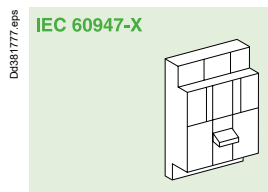
- management standards
- installation standards
- product standards.



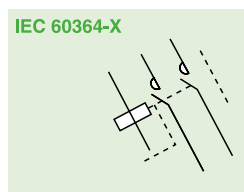
Design and manufacture.



Switchgear and controlgear assemblies.



Switchgear and controlgear.



Installation.

### Management standards

**ISO 9004:** Quality-management systems - guidelines for performance improvements. Used in setting up a quality-management system.

**ISO 9001:** Quality management systems - requirements. Used for certification audits.

**ISO 14004:** Environmental-management systems. General guidelines on the principles, systems and supporting techniques.

**ISO 14001:** Environmental-management systems. Specification with guidance for use

- The majority of Schneider Electric development centres and factories are certified ISO 9001 and ISO 14001.

### Installation standards

The set of IEC 60364-X standards defines the main principles and rules on:

- determining general characteristics of installations
- protection
- selection and installation of equipment
- verification and maintenance of installations.

### Product standards

They apply to devices or assemblies and are aimed at ensuring correct operation and safety of the concerned products.

- standards on low-voltage switchgear and controlgear:
  - IEC 60947-1: general rules
  - IEC 60947-2: circuit breakers
  - IEC 60947-3: switches and disconnectors
  - IEC 60947-4: contactors
  - IEC 62208: empty enclosures.
- standards on low-voltage switchgear and controlgear assemblies:
  - IEC 61439-1: general rules
  - IEC 61439-2: power switchgear and controlgear assemblies
  - IEC 61439-3: distribution boards
  - IEC 61439-4: assemblies for construction sites
  - IEC 61439-5: assemblies for power distribution
  - IEC 61439-6: busbar trunking systems.

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Regulations in a given country may make certain standards legally binding and may also create additional safety requirements.

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In addition to providing proof of the conformity of its quality-management system, a product manufacturer can demonstrate the quality of products by providing proof that the design and manufacture comply with the requirements in the applicable standard.

Proof of conformity may be a declaration by the manufacturer or a certificate supplied by an independent organisation.

# Selection Guide



# Contents

<u>Selection guide</u>	D-2
Upgradeable functional units	D-2
Select a cubicle configuration	D-3





# Switchgears



## Upgradeable functional units

Functional units include switchgear mounting plates, front plates, connection supports, barriers...

- MasterPacT MTZ2  
From 800 to 4000 A



- MasterPacT MTZ1  
From 600 to 1600 A



- ComPacT NSX up to 630 A



- ComPacT NS from 630b to 1600 A



- ComPacT NS up to 3200 A



- EasyPact from 100 to 630 A



- ComPacT INS-INV250-630 A



- ComPacT INS-INV630-2500 A



- Source changeover systems ComPacT/MasterPacT



- Source changeover systems ComPacT INS

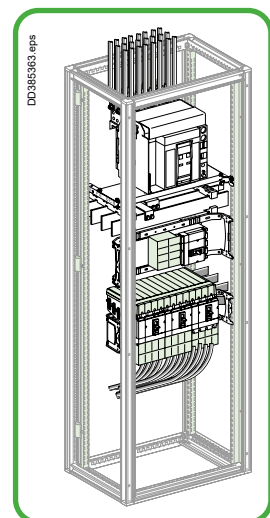


- FuPacT from 32 to 1250 A



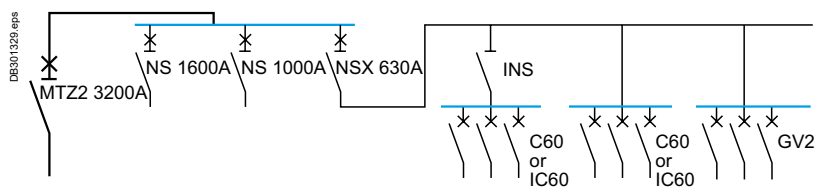
- Acti9

Accessories



## Select a cubicle configuration

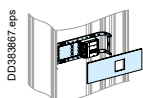
Starting with the electrical diagram:  
IP55 switchboard



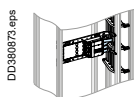
Install functional units up to 3200 A

### PrismaSeT P Functional Units

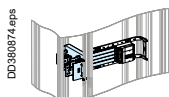
#### 1 Installation



#### 2 Lynergy LGY BB conn.



#### 3 Connection with vertical BB must be made



See **PrismaSeT P Active** catalogue (DESW026EN) to design the functional units up to 3200 A



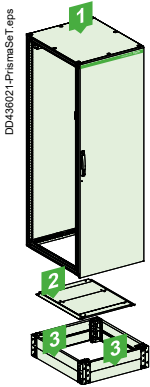
### Determine the size of the switchboard:

- Count the number of modules occupied
- Determine the number of cubicles
- Order the additional plain front plates

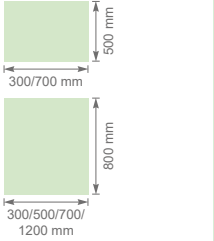
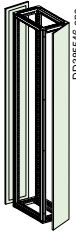
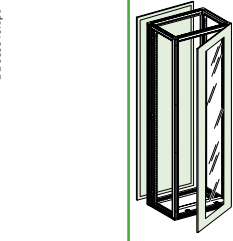

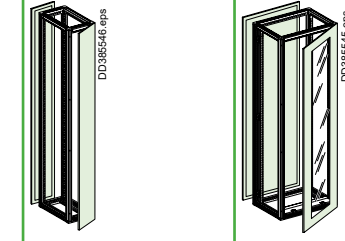
# Select a cubicle configuration

Select the enclosures

## PrismaSeT HD Active cubicles

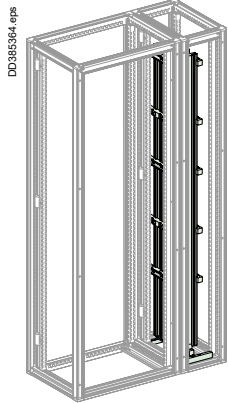


Switchboard 1 - Enclosure for the functional units, W = 700 with connectivity

Mounting	Enclosures for front connection			
 500 mm 300/700 mm  800 mm 300/500/700/ 1200 mm	 DD385546.eps	 DD385545.eps	 DD385546.eps	 DD385546.eps
<b>Width (mm)</b>	<b>300</b>	<b>700</b>	<b>300</b>	<b>700</b>
	<b>Depth 500 mm</b>		<b>Depth 800 mm</b>	
Assembled enclosure plain door	NSYSF20350ED	NSYSFP20750ED	NSYSF20380ED	NSYSFP20780ED
Assembled enclosure with connectivity plain door	-	NSYSFP20750EDA	-	NSYSFP20780EDA
Assembled enclosure glazed door	-	NSYSFP20750TED	-	NSYSFP20780TED
Assembled enclosure with connectivity glazed door	-	NSYSFP20750TEDA	-	NSYSFP20780TEDA
Uprights for Linergy LGY mounting	NSYSFPAED	-	NSYSFPAED + NSYSUCR40200	-

Plan the distribution system

## Linergy distribution systems



Permissible current and selection of Linergy LGYE busbars  
 Up to 4000 A  
 Linergy LGYE section

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
Size per phase	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
Linergy LGYE 630	680	580	650	550	630	530	590	500	550	470	520	•
Linergy LGYE 800	860	740	830	710	800	680	750	630	700	600	660	•
Linergy LGYE 1000	1080	920	1040	884	1000	850	940	790	880	750	830	•
Linergy LGYE 1250	1350	1150	1300	1100	1250	1050	1170	1000	1100	930	1020	•
Linergy LGYE 1600	1730	1580	1690	1530	1650	1480	1550	1380	1450	1300	1350	•
Linergy LGYE 2000	2200	1810	2100	1730	2000	1650	1900	1560	1810	1480	1720	•
Linergy LGYE 2500	2640	2230	2540	2160	2440	2100	2310	2000	2240	1930	2120	•
Linergy LGYE 3200	3400	3020	3300	2900	3200	2800	3040	2660	2890	2520	2750	•
Linergy LGYE 4000	3800	3510	3710	3430	3620	3350	3450	3180	3280	3020	3120	•





# Enclosures



# Contents

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	PrismaSeT HD Active - Enclosures RAL 7035	E-4
	PrismaSeT HD Active - Wireless Panel Server	E-6
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<b>Accessories</b>		<b>E-9</b>
	Coupling kit	E-9
	Plinth	E-10
	Installation accessories	E-11



# Enclosures

## Enclosures

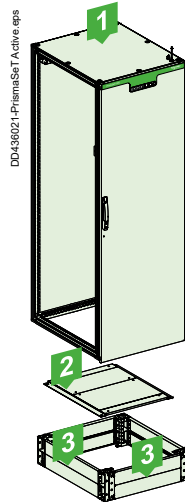
### 700 mm width switchboard with connectivity (connected solution up to 4000 A)

For switchboard with front connections.

- assembled enclosure
- transparent door or plain door
- gland plates (1 entry).
- plinth
- wireless panel server

**Parts list for switchboard 1 (depth 800)**

- 1 NSYSFP20780EDA** PrismaSeT HD Active - Enclosure FU - plain door - 2000x700x800 mm - RAL9003
- 2 NSYEC781** Spacial SF 1 entry cable gland plate - fixed by clips - 700x800 mm
- 3 NSYSFP7200** Spacial SF/SM front plinth - 200x700 mm
- 3 NSYSPS8200** Spacial SF/SM side panel plinth - 200x800 mm



Switchboard 1 - Enclosure for the functional units, W = 700 with connectivity

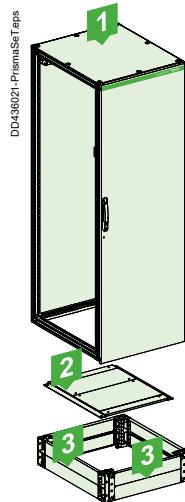
### 700 mm width switchboard

For switchboard with front connections.

- assembled enclosure
- transparent door or plain door
- gland plates (1 entry).
- plinth

**Parts list for switchboard 2 (depth 800)**

- 1 NSYSFP20780ED** PrismaSeT HD - Enclosure PrismaSeT FU - plain door - 2000x700x800 mm - RAL9003
- 2 NSYEC781** Spacial SF 1 entry cable gland plate - fixed by clips - 700x800 mm
- 3 NSYSFP7200** Spacial SF/SM front plinth - 200x700 mm
- 3 NSYSPS8200** Spacial SF/SM side panel plinth - 200x800 mm



Switchboard 2 - Enclosure for the functional units, W = 700

### 300 mm width switchboard

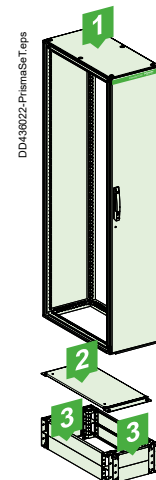
Made up of single cubicle used for vertical busbars (up to 4000 A) or cable chamber.

Front connections are possible.

- assembled Enclosure
- gland plates (1 entry).
- plinth

**Parts list for switchboard 3 (depth 800)**

- 1 NSYSF20380ED** PrismaSeT HD - Enclosure busbar/cables - plain door - 2000x300x800 mm - RAL9003
- 2 NSYEC381** Spacial SF 1 entry cable gland plate - fixed by clips - 300x800 mm
- 3 NSYSFP3200** Spacial SF/SM front plinth - 200x300 mm
- 3 NSYSPS8200** Spacial SF/SM side panel plinth - 200x800 mm



Switchboard 3 - Enclosure for vertical busbar installation or cable management, W = 300

# Enclosures

Frameworks / IP55 side panels

Enclosures

Mounting	Enclosures for front connection			
<b>Width (mm)</b>	<b>300</b>	<b>700</b>	<b>300</b>	<b>700</b>
	<b>Depth 500 mm</b>		<b>Depth 800 mm</b>	
Assembled enclosure plain door	NSYSF20350ED	NSYSFP20750ED	NSYSF20380ED	NSYSFP20780ED
Assembled enclosure with connectivity plain door	-	NSYSFP20750EDA	-	NSYSFP20780EDA
Assembled enclosure glazed door	-	NSYSFP20750TED	-	NSYSFP20780TED
Assembled enclosure with connectivity glazed door	-	NSYSFP20750TEDA	-	NSYSFP20780TEDA
Uprights for Linergy LGY mounting	NSYSFPAED	-	NSYSFPAED + NSYSUCR40200	-

Mounting	Additional enclosure for rear			
Vertical uprights	NSYSFV20ED	NSYSFV20ED	-	-
Bottom and top frame with roof	NSYSFC35ED	NSYSFC75ED	-	-
Characteristics	<ul style="list-style-type: none"> <li>Cubicles can be combined side-by-side and back-to-back.</li> <li>Can be equipped with side panels (see next page).</li> </ul>			

Mounting	Side panels			
<b>Dimensions (mm)</b>	<b>W = 300</b>	<b>W = 700</b>	<b>W = 300</b>	<b>W = 700</b>
<b>Dimensions (mm)</b>	<b>D = 500</b>		<b>D = 800</b>	
Side panels	NSY2SP205ED		NSY2SP208ED	
Characteristics	Supplied with quarter-turn fasteners.			



## Enclosures

## Enclosures

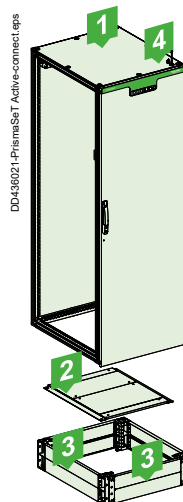
700 mm width switchboard with connectivity  
(connected solution up to 4000 A)

For switchboard with front connections.

- assembled enclosure
- transparent door or plain door
- gland plates (1 entry)
- plinth
- wireless panel server

**Parts list for switchboard 1 (depth 800)**

- |          |                     |   |
|----------|---------------------|---|
| <b>1</b> | <b>NSYSFP20780G</b> | PrismaSeT HD - Enclosure PrismaSet FU - plain door - 2000x700x800mm - RAL7035 |
| <b>2</b> | <b>NSYEC781</b>     | Spacial SF 1 entry cable gland plate - fixed by clips - 700x800 mm            |
| <b>3</b> | <b>NSYSPF7200</b>   | Spacial SF/SM front plinth - 200x700 mm                                       |
| <b>3</b> | <b>NSYSPS8200</b>   | Spacial SF/SM side panel plinth - 200x800 mm                                  |
| <b>4</b> | <b>NSYSFVPID</b>    | PrismaSeT HD Active - Voltage presence indicator Kit - LoRa communication     |
| <b>4</b> | <b>NSYSFSEGS</b>    | PrismaSeT HD - SE Green Signature for RAL 7035 enclosures                     |



Switchboard 1 - Enclosure for the functional units, W = 700 with connectivity

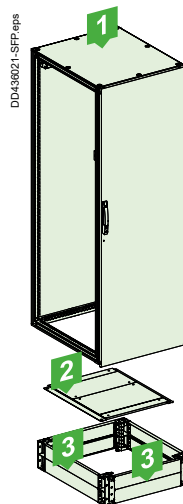
## 700 mm width switchboard

For switchboard with front connections.

- assembled enclosure
- transparent door or plain door
- gland plates (1 entry)
- plinth

**Parts list for switchboard 2 (depth 800)**

- |          |                     |   |
|----------|---------------------|---|
| <b>1</b> | <b>NSYSFP20780G</b> | PrismaSeT HD - Enclosure PrismaSet FU - plain door - 2000x700x800mm - RAL7035 |
| <b>2</b> | <b>NSYEC781</b>     | Spacial SF 1 entry cable gland plate - fixed by clips - 700x800 mm            |
| <b>3</b> | <b>NSYSPF7200</b>   | Spacial SF/SM front plinth - 200x700 mm                                       |
| <b>3</b> | <b>NSYSPS8200</b>   | Spacial SF/SM side panel plinth - 200x800 mm                                  |



Switchboard 2 - Enclosure for the functional units, W = 700

## 300 mm width switchboard

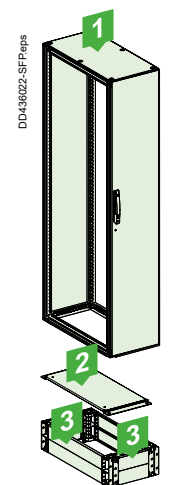
Made up of single cubicle used for vertical busbars (up to 4000 A) or cable chamber.

Front connections are possible.

- assembled Enclosure
- gland plates (1 entry)
- plinth

**Parts list for switchboard 3 (depth 800)**

- |          |                   |   |
|----------|-------------------|---|
| <b>1</b> | <b>NSYSF20380</b> | Spacial SF enclosure without mounting plate - assembled - 2000x300x800 mm |
| <b>2</b> | <b>NSYEC381</b>   | Spacial SF 1 entry cable gland plate - fixed by clips - 300x800 mm        |
| <b>3</b> | <b>NSYSPF3200</b> | Spacial SF/SM front plinth - 200x300 mm                                   |
| <b>3</b> | <b>NSYSPS8200</b> | Spacial SF/SM side panel plinth - 200x800 mm                              |



Switchboard 3 - Enclosure for vertical busbar installation or cable management, W = 300

## PrismaSeT HD Active - Enclosures RAL 7035

Enclosures  
Frameworks

## Enclosures

Mounting	Enclosures for front connection					
<b>Width (mm)</b>	<b>300</b>	<b>700</b>	<b>300</b>	<b>700</b>	<b>300</b>	<b>700</b>
	<b>Depth 500 mm</b>		<b>Depth 600 mm</b>		<b>Depth 800 mm</b>	
Assembled enclosure plain door	NSYSF20350	NSYSFP20750G	NSYSF20360	NSYSFP20760G	NSYSF20380	NSYSFP20780G
Assembled enclosure glazed door	-	NSYSFP20750TG	-	NSYSFP20760TG	-	NSYSFP20780TG
Uprights for Linergy LGY mounting	NSYSFPAED	-	NSYSFPAED + NSYSUCR40200	NSYSFPAED + NSYSUCR40200	NSYSFPAED + NSYSUCR40200	-

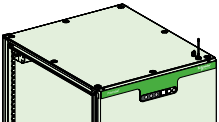
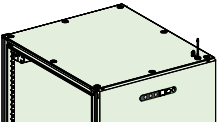
Mounting	Additional enclosure for rear					
Vertical uprights	NSYSFV20	NSYSFV20	-	-	-	-
Bottom and top frame with roof	NSYSFC35	NSYSFC75	-	-	-	-
Characteristics	<ul style="list-style-type: none"> <li>Cubicles can be combined side-by-side and back-to-back.</li> <li>Can be equipped with side panels (see next page).</li> </ul>					

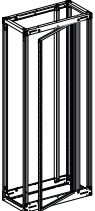
Mounting	Side panels					
<b>Dimensions (mm)</b>	<b>W = 300</b>		<b>W = 700</b>		<b>W = 300</b>	
<b>Dimensions (mm)</b>	<b>D = 500</b>		<b>D = 600</b>		<b>D = 800</b>	
Side panels	NSY2SP205		NSY2SP206		NSY2SP208	
Characteristics	Supplied with quarter-turn fasteners.					

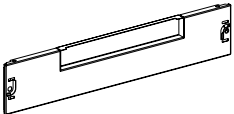
# Enclosures

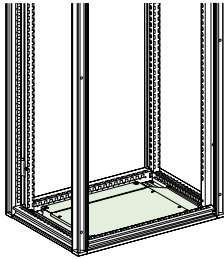
## Wireless Panel Server

### Enclosures

Mounting		Wireless panel server kit for RAL7035 Enclosures	
		 <p>DE301323.eps</p> <p>Sticker included inside of NSYSFSEGS</p>	 <p>DE301333.eps</p> <p>Sticker included inside of NSYSFVPID</p>
Width (mm)		<b>700</b>	
Voltage presence indicator kit		<b>NSYSFVPID</b>	
SE Green Signature		<b>NSYSFSEGS</b>	
Characteristics		<ul style="list-style-type: none"> <li>The sticker is need to secure IP55.</li> <li>The kit can be used up to 4000 A.</li> <li>Holes need to be die-cut on the door for the installation of the kit.</li> <li>Cross rail on SE Green Signature is needed to assemble the voltage presence indicator kit on the W700 door.</li> </ul>	

Mounting		Hinged front plate frame support W700	
		 <p>D0381324.ai</p>	
Width (mm)		<b>700</b>	
Cat. no.		<b>LVS08566</b>	
Characteristics		<ul style="list-style-type: none"> <li>Reversible for left or right-hand opening.</li> <li>Secured at two points.</li> </ul>	

Mounting		Front plate for wireless panel server	
		 <p>D8301324.eps</p>	
Width (mm)		<b>700</b>	
Cat. no.		<b>LVS03915</b>	
Characteristics		<ul style="list-style-type: none"> <li>PrismaSet cover plate to be installed on the top of LVS08566</li> <li>Need it for enclosures with wireless panel server</li> <li>2M high (100 mm)</li> </ul>	

Mounting		Gland plates	
		 <p>D0384427.eps</p>	
Dimensions (mm)		W = 300 mm	W = 700 mm
D500		<b>NSYEC351</b>	<b>NSYEC751</b>
D600		<b>NSYEC361</b>	<b>NSYEC761</b>
D800		<b>NSYEC381</b>	<b>NSYEC781</b>

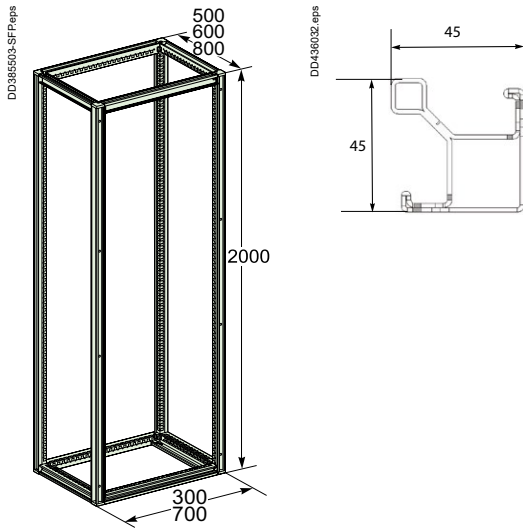
**Note:** Gland plates with 1 cable entry for W300/700 mm.

# Enclosures

## Dimensions

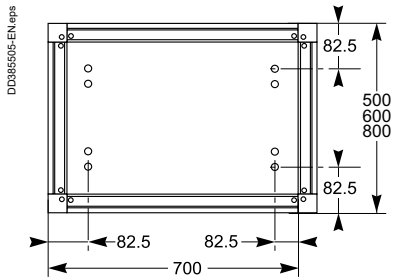
### Dimensions

#### Frameworks



#### Fixing to floor

Without plinth



#### Cubicle with cover panels

Height



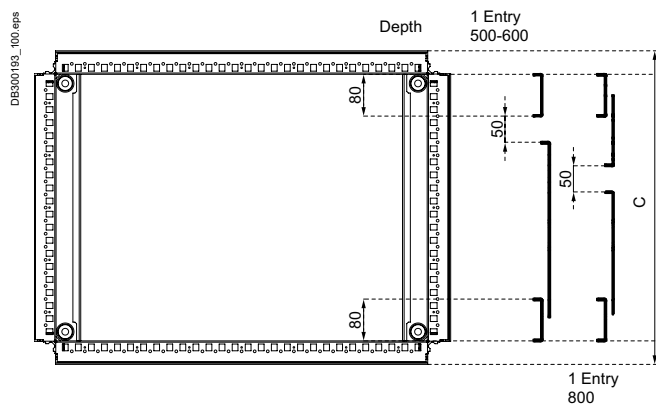


# Enclosures

## Dimensions

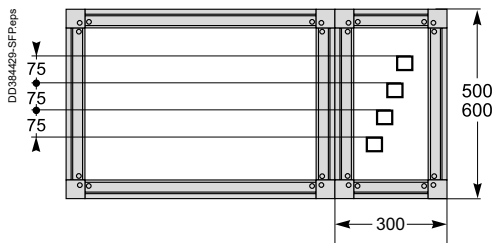
### Dimensions

#### Gland plates

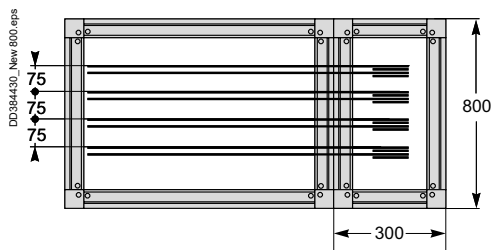


#### Busbars mounting, lateral vertical busbars

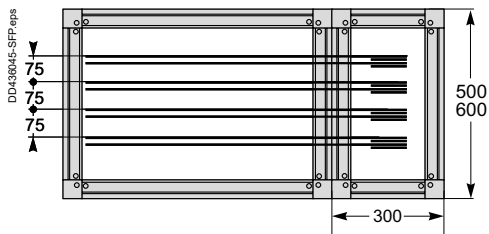
##### 1600 A



##### 2500 A - up to 4000 A



##### 2000 A



# Accessories

## Coupling kit

Enclosures

Coupling kit	
<b>Type</b>	<b>Side-by-side or back-to-back</b>
<b>Cat. no.</b>	<b>NSYSFBK19</b>
<b>Characteristics</b>	Back-to-back association must be shipped individually and combined during on-site installation. Back-to-back combination: D800 - D500

Accessories	
<b>Type</b>	<b>Commodities</b>
	<b>Fixing screws and nuts</b>
<b>Cat. no.</b>	<b>LVS08921</b>
<b>Characteristics</b>	Set of 20 screws



# Accessories

## Plinth

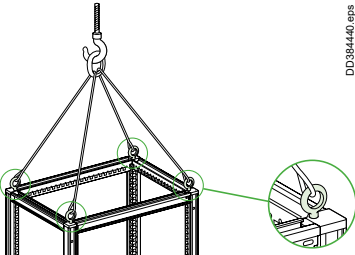
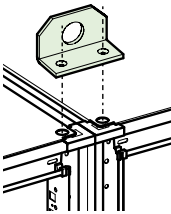
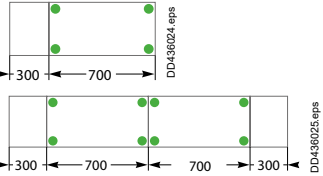
### Enclosures

Mounting		Plinth H = 100 mm		Plinth H = 200 mm	
Dimensions (mm)		W = 300	W = 700	W = 300	W = 700
Front and rear cross-pieces	D = 500, 600 and 800	NSYS PF3100	NSYS PF7100	NSYS PF3200	NSYS PF7200
Lateral cross-pieces	D = 500	NSYS PS5100	NSYS PS5100	NSYS PS5200	NSYS PS5200
	D = 600	NSYS PS6100	NSYS PS6100	NSYS PS6200	NSYS PS6200
	D = 800	NSYS PS8100	NSYS PS8100	NSYS PS8200	NSYS PS8200
Characteristics	The plinth is made up of two catalogue numbers: <ul style="list-style-type: none"> <li>one catalogue number comprising four corner posts + two cross-pieces (front and rear), that can be used in side-by-side combinations or stacked to form a plinth 200 mm high (maximum)</li> <li>one catalogue number comprising two side plates (500, 600 or 800 mm).</li> </ul> Each catalogue number is supplied with the necessary hardware.				
Examples	<p>Side-by-side combination of two cubicles with a plinth.</p>		<p>The front and rear cross-pieces can be easily removed for a pallet-mover.</p>		

# Accessories

## Installation accessories

### Enclosures

Mounting	Lifting rings	Lifting brackets
	 <p style="text-align: right;">DD384440.eps</p>	 <p style="text-align: right;">NSYSFELB.eps</p>
Cat. no.	<b>NSYSFEB</b>	<b>NSYSFELB</b>
Characteristics	<ul style="list-style-type: none"> <li>▪ Set of four lifting rings screwed to the framework.</li> <li>▪ Use a set of lifting rings for each framework containing devices.</li> <li>▪ When two cubicles with devices have been combined, use a lifting beam.</li> <li>▪ can be installed and removed without removing the roof</li> <li>▪ even if they are left attached, the switchboard conserves its original degree of protection.</li> </ul>  <p style="text-align: right;">DD436024.eps DD436025.eps</p> <p>Positions of the lifting rings for two combined cubicles containing devices. In this case, a liftingbeam must be used.</p>	<ul style="list-style-type: none"> <li>▪ Made up of four blocks under the framework</li> <li>▪ Suitable for all types of cubicles, whatever the width and depth</li> <li>▪ Increases the stability of the cubicle during mounting of devices</li> <li>▪ Makes possible cubicle handling using a pallet mover or a forklift</li> <li>▪ Protects the front, side and rear cover panels during handling</li> <li>▪ Can be reused.</li> </ul>



# Lineryg Distribution Systems



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Lateral profiles up to 4000 A	F-5
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Rear profiles up to 1600 A	F-7
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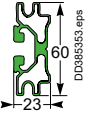
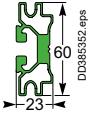
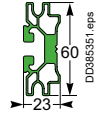
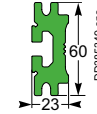
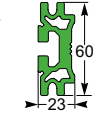
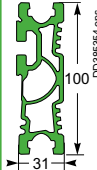
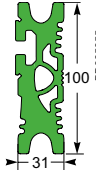

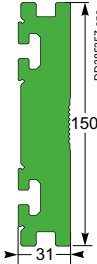
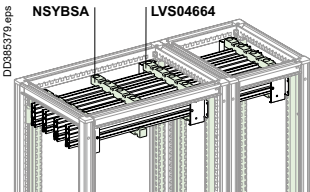
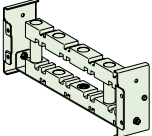
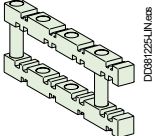


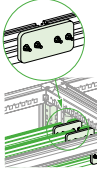

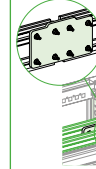


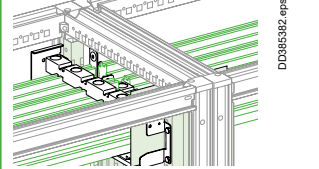


# Linergy LGYE

Horizontal profiles up to 4000 A

Power busbars

Linergy LGYE profiles										
Installation in PrismaSeT HD Active		Up to 1600 A					Up to 4000 A			
Linergy profiles, 2000 mm length										
Permissible current for an ambient temperature of 35 °C around the switchboard	IP ≤ 31	630 A	800 A	1000 A	1250 A	1650 A	2000 A	2440 A	3200 A	3620 A
	IP > 31	530 A	680 A	850 A	1050 A	1480 A	1650 A	2100 A	2800 A	3350 A
Number of profiles per phase		1					3			
Total number of vertical modules (50 mm)		3					4			
Cat. no.		LVS04560	LVS04561	LVS04562	LVS04563	LVS04564	LVS04565	LVS04566	LVS04567	LVS04568
										
		Fixed support <b>LVS04664</b>					Free support <b>NSYBSA</b>			
		2 fixed supports for PrismaSeT HD Active 700 wide frame are compulsory. 1 fixed support for 300/400 wide frame are compulsory. If more supports are needed, add free supports.								
In enclosure: W700	Number of supports	≤ 15	2							
Busbar supports	depending	≤ 25	2							
75 mm distance between bars	on I <sub>ow</sub> (kA rms/1 s)	≤ 30	2							
		≤ 40	-	2						
		≤ 50	-		2					
		≤ 60	-		2+1		2			
		≤ 65	-			2+1				
		≤ 75	-			2+1				
		≤ 85	-			2+1				
		≤ 100	-				2+2			
	Fixed support		LVS04664				LVS04664 + LVS04671 (order 1 per support)		LVS04664 + LVS04646 (sold in lots of 12 spacers)	
	Free support		NSYBSA				NSYBSA + LVS04671 (order 1 per support)		NSYBSA + LVS04646 (sold in lots of 12 spacers)	
In duct: W300	Number of supports	≤ 15	1							
Busbar supports	depending	≤ 25	1							
75 mm distance between bars	on I <sub>ow</sub> (kA rms/1 s)	≤ 30	1							
		≤ 40	1							
		≤ 50	1							
		≤ 60	1							
		≤ 65	1+1							
		≤ 75	1+1							
		≤ 85	1+1							
		≤ 100	-				1+1			
	Fixed support		LVS04664				LVS04664 + LVS04671 (order 1 per support)		LVS04664 + LVS04646 (sold in lots of 12 spacers)	
	Free support		NSYBSA				NSYBSA + LVS04671 (order 1 per support)		NSYBSA + LVS04646 (sold in lots of 12 spacers)	

Joints										
Installation in PrismaSeT HD Active		Up to 1600 A					Up to 4000 A			
		630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	4000 A
										
Cat. no.		LVS04620		LVS04623			LVS04624			
3P		3x LVS04620					3x LVS04621		3x LVS04623	
4P		4x LVS04620 + LVS04624				4x LVS04621 + LVS04624		4x LVS04623 + LVS04624		
Reference LVS04624 is compulsory when installing jointed Linergy LGYE 4P busbars and must be fitted where the frames meet. When installed at the bottom of an enclosure, the busbar must be partitioned.										



# Linergy BS

Horizontal flat busbars up to 4000 A

Power busbars

Flat busbars		Up to 1600 A				Up to 4000 A					
Installation in PrismaSeT HD Active											
Copper bar, 2000 mm length											
Permissible current for an ambient temp. of 35 °C around the switchboard	IP ≤ 31	800 A	1000 A	1400 A	1800 A	1800 A	2050 A	2300 A	2820 A	3300 A	3760 A
	IP > 31	750 A	900 A	1250 A	1600 A	1600 A	1850 A	2000 A	2500 A	2900 A	3340 A
Busbar cross-section (mm)		60 x 5	80 x 5	60 x 5	80 x 5	80 x 10	50 x 10	60 x 10	80 x 10	100 x 10	120 x 10
Number of busbars per phase		1	1	2	2	1	2	2	2	2	2
Total number of vertical modules (50 mm)		3				4					
Cat. no.		LVS04536	LVS04538	LVS04536	LVS04538	LVS04548	LVS04545	LVS04546	LVS04548	LVS04550	LVS04552

Busbar supports		Up to 1600 A				Up to 4000 A					
In cubicle: PrismaSeT HD Active W700 with 75 mm distance between bars	Characteristics	2 fixed supports for PrismaSeT HD Active 700 wide frame are compulsory. 1 fixed support for 300 wide frame are compulsory. If more supports are needed, add free supports.									
Number of supports depending on l <sub>cw</sub> (kA rms/1 s)	≤ 15	2									
	≤ 25	2+1	2								
	≤ 30	2+1	2								
	≤ 40	2+1	2								
	≤ 50	-	2+1					2			
	≤ 60	-				2+1					
	≤ 65	-				2+1					
	≤ 75	-				2+2	2+1				
	≤ 85	-				-	2+1				
	Cat. no.	Fixed support	LVS04664		LVS04664			LVS04664 + LVS04671			
Free support		LVS04662		LVS04662			LVS04662 + LVS04671				
In duct: PrismaSeT HD Active W300 with 75 mm distance between bars	Number depending on l <sub>cw</sub> (kA rms/1 s)	≤ 30	1		1						
	≤ 50	1+1									
	≤ 85	-		1+1							
Cat. no. depending on depth	Fixed support	NSYBHS500 (D500) NSYBHS600 (D600) or NSYBHS800 (D800)			NSYBHS500 (D500) NSYBHS600 (D600) or NSYBHS800 (D800)			NSYBHS800 (D800) + LVS04671			
	Free support	LVS04662			LVS04662			LVS04662 + LVS04671			
In cubicle: PrismaSeT HD Active W700 with 115 mm distance between bars	Number depending on l <sub>cw</sub> (kA rms/1 s)	≤ 30	-		2						
	≤ 40			2+1		2					
	≤ 60			2+1							
	≤ 75			2+2		2+1					
	≤ 85			-		2+2		2+1			
	Cat. no.	Fixed support				NSYBHS800L			NSYBHS800L + LVS04671 (fixings)		
Free support					LVS04678			LVS04678 + LVS04671 (fixings)			
In duct: PrismaSeT HD Active W300 with 115 mm distance between bars	Number depending on l <sub>cw</sub>	≤ 50	-		1						
	≤ 85			2							
	Cat. no.	Fixed support				NSYBHS800L			NSYBHS800L + LVS04671 (fixings)		
Free support					LVS04678			LVS04678 + LVS04671 (fixings)			




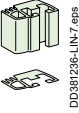

Joints		Up to 1600 A				Up to 4000 A					
Installation in PrismaSeT HD Active		1 vertical bar per phase		2 vertical bars per phase		1 vert. bar per phase		2 vertical bars per phase			
Busbar cross-section (mm)		60 x 5	80 x 5	60 x 5	80 x 5	80 x 10	50 x 10	60 x 10	80 x 10	100 x 10	120 x 10
Sliding joints with self-breaking lock nut		LVS04640			LVS04641						
Cat. no.		LVS04640	LVS04641	LVS04640	LVS04641	LVS04641	LVS04640	LVS04640	LVS04641	LVS04641	LVS04643

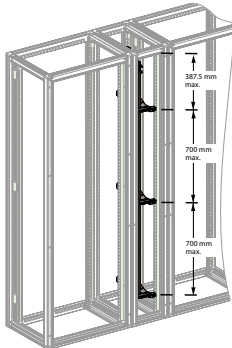
Note: When installed at the bottom of a cubicle, the busbar must be partitioned.

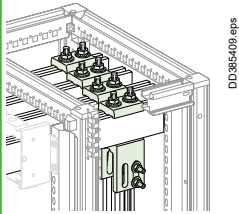
# Linergy LGY

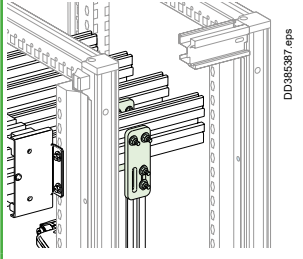
Lateral profiles up to 1600 A

Power busbars

Linergy LGY profiles		Up to 1600 A (single busbar)				
<b>In PrismaSeT HD Active duct</b> Linergy profile, 1670 mm length		<b>W300</b>				
		 DD381233-LIN-7 eps	 DD381234-LIN-7 eps	 DD381235-LIN-7 eps	 DD381236-LIN-7 eps	 DD381237-LIN-7 eps
Permissible current for an ambient temp. of 35 °C around the switchboard	IP ≤ 31	<b>630 A</b> 680 A	<b>800 A</b> 840 A	<b>1000 A</b> 1040 A	<b>1250 A</b> 1290 A	<b>1600 A</b> 1650 A
	IP > 31	590 A	760 A	950 A	1170 A	1480 A
Number of profiles per phase		1				
<b>Cat. no.</b>		<b>LVS04502</b>	<b>LVS04503</b>	<b>LVS04504</b>	<b>LVS04505</b>	<b>LVS04506</b>

Busbar supports																	
	<p><b>Fixed support LVS04651</b></p> <p>An end stop must be fitted on the bottom support: LVS01109 (sold in lots of 12)</p>																
Characteristics																	
Number depending on l <sub>cw</sub> (kA rms/1 s)	<table border="1"> <tr><td>≤ 25</td><td>3</td></tr> <tr><td>≤ 30</td><td>3</td></tr> <tr><td>≤ 40</td><td>3</td></tr> <tr><td>≤ 50</td><td>4</td></tr> <tr><td>≤ 60</td><td>5</td></tr> <tr><td>≤ 65</td><td>5</td></tr> <tr><td>≤ 75</td><td>7</td></tr> <tr><td>≤ 85</td><td>8</td></tr> </table>	≤ 25	3	≤ 30	3	≤ 40	3	≤ 50	4	≤ 60	5	≤ 65	5	≤ 75	7	≤ 85	8
≤ 25	3																
≤ 30	3																
≤ 40	3																
≤ 50	4																
≤ 60	5																
≤ 65	5																
≤ 75	7																
≤ 85	8																
<b>Cat. no.</b>	<b>LVS04651 (set of 2 upright adapters NSYSFPAED for installation in PrismaSeT HD Active cubicle)</b>																

Connections to the Linergy BS horizontal busbar	
	
Characteristics	Supplied with mounting hardware. Reference include 1 connection only. Order 1 connection per phase.
<b>Cat. no</b>	<b>LVS04634</b>   <b>LVS04635</b>
5 mm thick	
10 mm thick	Width ≤ 80 mm
	Width > 80 mm
<b>according to horizontal busbar size</b>	<b>LVS04636</b>
	<b>LVS04636 + LVS04642</b>
	<b>LVS04638 + LVS04642</b>

Connections to the Linergy LGYE horizontal busbar	
	
Characteristics	≤ 1600 A
Characteristics	Supplied with mounting hardware. Reference include 1 connection only. Order 1 connection per phase.
<b>Cat. no.</b>	<b>LVS04602 (vertical connection)</b> <b>LVS04603 (vertical shifted connection) <sup>(1)</sup></b>

(1) Dedicated connection LVS04603 for Linergy LGYE busbar in 150 mm duct with horizontal jointing.

# Linergy LGYE

Lateral profiles up to 4000 A

Power busbars

## Linergy LGYE profiles

Installation in PrismaSeT HD Active duct		W300												
Linergy profiles, 2000 mm length														
Permissible current for an ambient temperature of 35 °C around the switchboard	IP ≤ 31	630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	4000 A				
	IP > 31	530 A	680 A	850 A	1050 A	1480 A	1650 A	2100 A	2800 A	3350 A				
Length to cut for side-mounted		1675 mm							1625 mm					
Number of profiles per phase		1												
Height available (mm)		150					150		200					
Cat. no.		LVS04560	LVS04561	LVS04562	LVS04563	LVS04564	LVS04565	LVS04566	LVS04509	LVS04510				

## Busbar supports

		Fixed support <b>NSYBVS500</b>		Free support <b>NSYBSA</b>	
		3 fixed supports are compulsory to hold the busbar in position. If more than 3 supports are needed, use free supports (in addition).			
	Number depending on $I_{nw}$ (kA rms/1 s)	≤ 30	3		
		≤ 40	-	3+2*	3
		≤ 50	-	3+2*	3
	≤ 60	-	3+2*	3	
	≤ 65	-			
	≤ 75	-	3+2*		
	≤ 85	-	3+4*	3+2*	
	≤ 100	-	3+4*		
Cat. no. of supports depending on distance between bars and duct depth	Cat. no. 75 mm distance between bars	W300, D500	NSYBVS500 (fixed) + NSYBSA (free) + NSYAS500 (spacer) (1)		
	W300, D600	NSYBVS600 (fixed) + NSYBSA (free) + NSYAS600 (spacer) (1)			
	W300, D800	NSYBVS800 (fixed) + NSYBSA (free) + NSYAS800 (spacer) (1)			
	Cat. no. 115 mm distance between bars	W300, D800	NSYBVS800L (fixed) + LVS04678 (free) + NSYAS800L (spacer) (1)		

(1) If using a 100 x 10 bars, add a pack of screws ref. LVS04671 for each fixed support and free support.  
\* References of supports depending on distance between bars and duct depth

## Wedging busbars in position

	Wedge fitted on bottom support <b>LVS04658</b>	
	The bottom support is used to place profiles and ensure they are in the correct position. It is not considered to be a busbar support.	
Cat. no. Wedge	LVS04658	LVS04659

## Connections to the Linergy LGYE horizontal busbar

	2000/2500 A	
	3200/4000 A	
	Supplied with mounting hardware. Reference include 1 connection only. Order 1 connection per phase.	
Cat. no. (short connection)	LVS04604	LVS04607
Cat. no. (long connection)	LVS04605	-

# Linergy BS

Lateral flat busbars up to 3200 A

Power busbars

Flat busbars												
		Up to 1600 A				Up to 3200 A						
In PrismaSeT HD Active duct		W300 D500/800				W300 D500/800						
Pre-slotted copper, 1675 mm length												
Permissible current for an ambient temp. of 35 °C around the switchboard		IP ≤ 31		IP > 31								
Busbar cross-section (mm)		800 A	1000 A	1400 A	1800 A	1200 A	1400 A	1800 A	2050 A	2300 A	2820 A	3200 A
Number of busbars per phase		750 A	900 A	1250 A	1600 A	1080 A	1250 A	1600 A	1850 A	2000 A	2500 A	2820 A
Cat. no.		60 x 5	80 x 5	60 x 5	80 x 5	50 x 10	60 x 10	80 x 10	50 x 10	60 x 10	80 x 10	100 x 10
		1	2		1		2		2			
		LVS04516	LVS04518	LVS04516	LVS04518	LVS04525	LVS04526	LVS04528	LVS04525	LVS04526	LVS04528	LVS04550 <sup>(1)</sup>

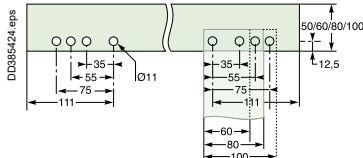
Busbar supports		
Description		
3 fixed supports are compulsory to hold the busbar in position. If more than 3 supports are needed, use free supports (in addition). The bottom wedge support is used to place the busbar and ensure it is in the correct position. It does not count as a busbar support.		
Number of supports depending on lchw (kA rms/1 s)	≤ 15	3
	≤ 25	3+2
	≤ 30	3+2
	≤ 40	3+4
	≤ 50	3+4
	≤ 60	3+4
	≤ 65	3+4
	≤ 75	3+6
	≤ 85	3+4
Cat. no. of supports depending on distance between bars and duct depth	PrismaSeT HD Active duct 75 mm distance between bars	W300, D500
		W300, D500
		W300, D800
	PrismaSeT HD Active duct 115 mm distance between bars	W300, D800
		NSYBVS500 (fixed) + LVS04662 (free) + NSYAS500 (bottom) <sup>(2)</sup>
		NSYBVS600 (fixed) + LVS04662 (free) + NSYAS600 (bottom) <sup>(2)</sup>
		NSYBVS800 (fixed) + LVS04662 (free) + NSYAS800 (bottom) <sup>(2)</sup>
		NSYBVS800L (fixed) + LVS04678 (free) + NSYAS800L (bottom) <sup>(2)</sup>

(1) Copper bar without holes.  
 (2) If using a 100 x 10 bars, add a pack of screws ref. LVS04671 for each fixed support and free support.

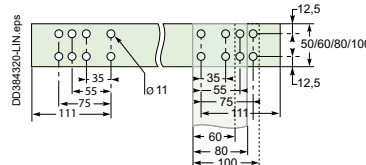
## Connections to the Linergy BS horizontal busbar

Characteristics		For a busbar with 75 mm distance between bars, the bars must be completely covered. Staggered assembly points between one bar and the next, to maintain the necessary clearance distances. <sup>(3)</sup>				References LVS04636, LVS04637, LVS04638 are supplied individually: 1 connection per phase. Reference LVS04642 consists of 2 M8 x 140 screws which can replace the original M8 x 120 screws.						
		1 vertical bar per phase		2 vertical bars per phase		1 vertical bar per phase		2 vertical bars per phase				
		60 x 5	80 x 5	60 x 5	80 x 5	50 x 10	60 x 10	80 x 10	50 x 10	60 x 10	80 x 10	100 x 10
Cat. no. of the connection piece depending on horizontal busbar size		≤ 80 mm		LVS04645		LVS04636	LVS04637	LVS04637		LVS04645		
		> 80 mm		LVS04645		LVS04636 + LVS04642	LVS04637 + LVS04642	LVS04637 + LVS04642		LVS04645		

(3) Drill hole dimensions for 5 mm thick horizontal busbars.



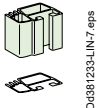

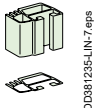
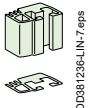
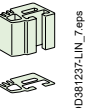
Drill hole dimensions for 10 mm thick horizontal busbars.



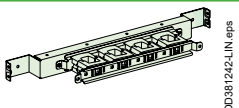
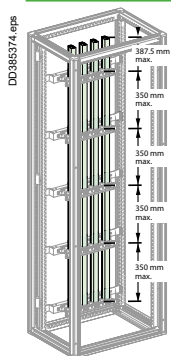
# Linergy LGY

Rear profiles up to 1600 A

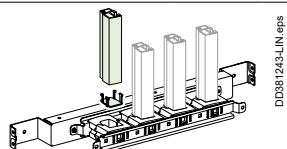
Power busbars

Linergy LGY profiles		Up to 1600 A				
At the rear of a PrismaSeT HD Active cubicle		W700				
Linergy profile, 1670 mm length						
		<b>630 A</b>	<b>800 A</b>	<b>1000 A</b>	<b>1250 A</b>	<b>1600 A</b>
Permissible current for an ambient temp. of 35 °C around the switchboard	IP ≤ 31	680 A	840 A	1040 A	1290 A	1650 A
	IP > 31	590 A	760 A	950 A	1170 A	1480 A
Number of profiles per phase		1				
Cat. no.		LVS04502	LVS04503	LVS04504	LVS04505	LVS04506

## Busbar supports

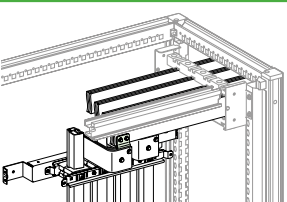


Fixed support LVS04652						
Number	≤ 25	3				
depending on l <sub>cw</sub>	≤ 30			4		
(kA rms/1 s)	≤ 40			5		
	≤ 50			7		

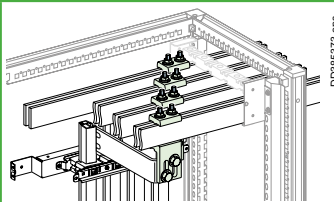


An end stop must be fitted on the bottom support LVS01109 (sold in lots of 12)

## Connections to the Linergy BS horizontal flat busbar



LVS04635 connection to 5 mm thick horizontal busbar

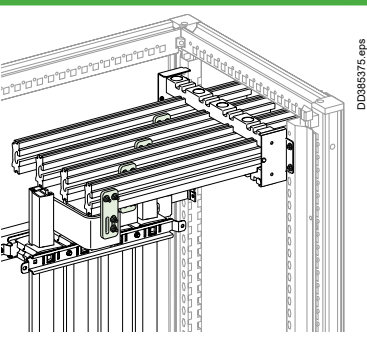


LVS04636 connection to 10 mm thick horizontal busbar

Characteristics: Fixings supplied, order 1 connection per phase. For part of the connection, flexible insulated busbars are needed.

Cat. no. according to horizontal busbar size	5 mm thick	LVS04635
	10 mm thick	LVS04636
	Width ≤ 80 mm	LVS04636
	Width > 80 mm	LVS04636 + LVS04642

## Connections to the Linergy LGYE horizontal flat busbar



LVS04602 connection to the Linergy LGYE horizontal flat busbar

Characteristics: Fixings supplied, order 1 connection per phase. For part of the connection, flexible insulated busbars are needed.

Cat. no.	LVS04602
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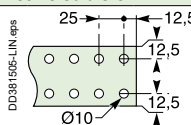
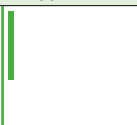
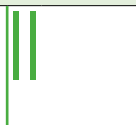
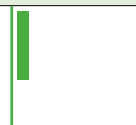



# Linergy BS

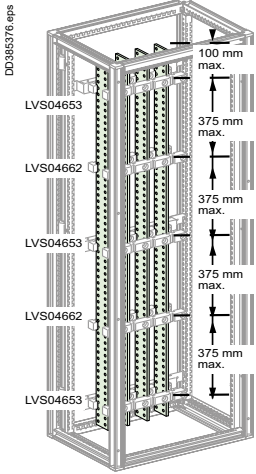
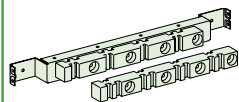
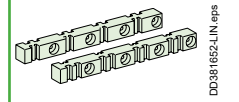
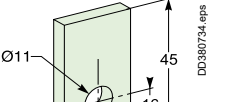
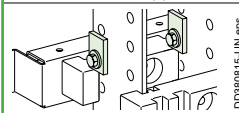
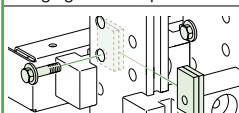
Rear flat busbars up to 1600 A

Power busbars

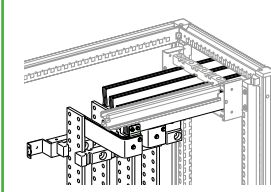
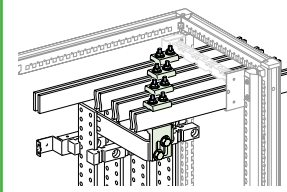
## Flat busbars

		Up to 1600 A					
At the rear of a PrismaSeT HD Active cubicle		W700					
Pre-slotted copper, 1670 mm length							
		<b>800 A</b>	<b>1000 A</b>	<b>1400 A</b>	<b>1000 A</b>	<b>1200 A</b>	<b>1600 A</b>
Permissible current for an ambient temperature of 35 °C around the switchboard	IP ≤ 31	800 A	1000 A	1400 A	-	-	-
	IP > 31	750 A	900 A	1250 A	1080 A	1250 A	1600 A
Busbar cross-section (mm)		60 x 5	80 x 5	60 x 5	50 x 10	60 x 10	80 x 10
Number of busbars per phase		1		2		1	
<b>Cat. no</b>		<b>LVS04516</b>	<b>LVS04518</b>	<b>LVS04516</b>	<b>LVS04525</b>	<b>LVS04526</b>	<b>LVS04528</b>

## Busbar supports

			
	Fixed busbar support LVS04653	Busbar free support LVS04662	Mounting chocks LVS04669
Characteristics	3 fixed supports ref. LVS04653 are compulsory to keep the busbar vertical. If more than 3 supports are needed, use free support ref. LVS04662 (in addition). Metal shim ref. LVS04669 (sold in lots of 100), 5 mm thick, is screwed onto the busbar. It rests on a fixed support and is used to wedge the busbar in position.		
		Wedging: 1 busbar/phase	
		Wedging: 2 busbars/phase	
Number depending on I <sub>cw</sub> (kA rms/1 s)	≤ 15	3	3
	≤ 25	3+2	3
	≤ 30	3+2	3+2
	≤ 40	3+4	3+2
	≤ 50		3+2
	≤ 60		3+4
	≤ 65		3+4
	≤ 75		
	≤ 85		3+6
<b>Cat. no.</b>	<b>LVS04653 (fixed) + LVS04662 (free) + LVS04669 (spacer)</b>		

## Connections to the Linergy BS horizontal flat busbar


		
	LVS04635 connection to horizontal busbar 5 mm thick	LVS04636 connection to horizontal busbar 10 mm thick
Characteristics	For part of the connection, flexible insulated busbars are needed. References LVS04635, LVS04636 are supplied individually = 1 connection per phase. Reference LVS04642 consists of 2 M8 x 140 screws which can replace the original M8 x 120 screws.	
<b>Cat. no. according to horizontal busbar size</b>	5 mm thick	<b>LVS04635</b>
	10 mm thick	<b>LVS04636</b> <sup>(1)</sup>
	Width ≤ 80 mm	<b>LVS04636 + LVS04642</b> <sup>(1)</sup>
	Width > 80 mm	

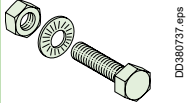
(1) To be made.

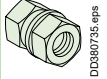


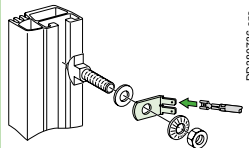
Linergy  
Accessories

Power busbars





Accessories		
		
Linergy screw	Characteristics	Sold in lots of 20: 20 screws + 20 nuts + 20 contact washers, class 8.8. The screws slide into the profile and are then locked in the desired position.
	Cat. no.	25 mm length 39 mm length see the table "Connections on Linergy LGYE & LGY" below
Steel plain washers	Characteristics	M8 sold in lots of 20
	Cat. no.	ext. Ø20 mm <b>LVS04772</b> ext. Ø24 mm <b>LVS04773</b> ext. Ø28 mm <b>LVS04774</b>
Brass plain washers	Characteristics	M8 sold in lots of 20 for connection of y 25 mm <sup>2</sup> lugs to Linergy
	Cat. no.	ext. Ø20 mm <b>LVS04775</b>
Identification	Characteristics	12 clip-on supports + N, L1, L2, L3, PE, PEN labels
	Cat. no.	<b>LVS04794</b>
	Characteristics	Linergy LGYE busbar screw plate kit after sales service
	Cat. no.	<b>LVS01130</b>

M8 bolts		
		
Linergy BS, 20 bolts 8.8 class	Characteristics	Set of 20 bolts + 20 nuts + 40 contact washers.
	Cat. no.	M8 x 20 <b>LVS04782</b>
		M8 x 25 <b>LVS04783</b>
		M8 x 30 <b>LVS04784</b>
		M8 x 35 <b>LVS04785</b>
		M8 x 40 <b>LVS04786</b>
		M8 x 45 <b>LVS04787</b>
	M8 x 50 <b>LVS04788</b>	

Torque nuts		
		
20 M8 torque nuts	Characteristics	Can be used to obtain the correct tightening torque (28 Nm) recommended by then manufacturer, without using a torque wrench. Torque nuts may be used for all electrical connections.
	Cat. no.	<b>LVS04759</b>

Voltage tap-offs		
		
20 M10 voltage tap-offs for two 6.35 mm tab connectors	Characteristics	For small lugs (on low-current cables or measurement tap-offs), insert a conducting washer (cat. no. LVS04775) between the busbar and the lug.
	Cat. no.	<b>LVS04229</b>

★ Connections on Linergy LGYE & LGY

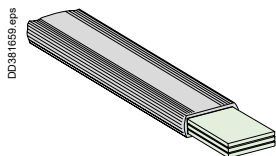
InA (A)		Connection on Linergy	Utilisation	Cat. no.	
0 to 630	Cable Insulated flexible bar	Use the 25 mm Linergy screw	Recommended	<b>LVS04766</b>	
		Use the 39 mm Linergy screw	Possible	<b>LVS04767<sup>(1)</sup></b>	
800 to 1250	5 mm thick bar	Use the 25 mm Linergy screw	Recommended	<b>LVS04766</b>	
		Use the 39 mm Linergy screw	Possible	<b>LVS04767<sup>(1)</sup></b>	
		Use the flate plate screw with 2 studs	Possible	<b>LVS04768</b>	
1600 to 2500	5 or 10 mm thick bar	Use the flate plate screw with 2 studs	Recommended	<b>LVS04768</b>	
		Use the 39 mm Linergy screw	Possible	<b>LVS04767<sup>(1)</sup></b>	
3200 to 4000	10 mm thick bar	Use the flate plate screw with 3 screw plates	Recommended	<b>LVS04769</b>	

(1) LVS04767 is only compatible with Linergy LGY.



## Insulated flexible bars

## Secondary distribution



The insulated flexible bars are tested in a type-tested switchboard environment. Their design takes into account the switchboard architecture where they are often in close proximity to a protection device (circuit breaker or fuse) with significant heat losses.

The sizes for the flexible bars indicated below take into account the heat losses of Schneider Electric devices in a PrismaSeT switchboard.

## Characteristics

Length	1800 mm
Rated insulation voltage (Ui)	1000 V
Maximum withstand temperature for the insulating material	125 °C

## Connection between device and busbars

The flexible bars are determined taking into account the connected device, whatever the internal temperature of the switchboard.

The bar sizes indicated below take into account the derating curves of devices.

Devices	Size (mm)	Catalogue number
NSX100	20 x 2	LVS04742
NSX160/250	20 x 3 (1)	LVS04743
NSX400	32 x 5	LVS04751
NSX630	32 x 8 (2)	LVS04753
NSX100 ELCB	20 x 2	LVS04742
NSX160/250 ELCB	20 x 3 (1)	LVS04743
NSX400 ELCB	32 x 5	LVS04751
NSX630 ELCB	32 x 8 (2)	LVS04753
INS125/160	20 x 2	LVS04742
INS250	20 x 3	LVS04743
INS400	32 x 5	LVS04751
INS630	32 x 6	LVS04752
FM 200 A Linergy	20 x 3	LVS04743
FC 3P Linergy	32 x 8 (2)(3)(4)	LVS04753
FC 4P Linergy	32 x 8 (2)(3)(4)	LVS04753
Fupact 250	24 x 5	LVS04746
Fupact 400	32 x 5	LVS04751
Fupact 630	32 x 8 (2)	LVS04753
Easypact CVS100	20 x 2	LVS04742
Easypact CVS160/250	20 x 3 (1)	LVS04743
Easypact CVS400	32 x 5	LVS04751
Easypact CVS630	32 x 8 (2)	LVS04753

(1) To connect a ComPact NSX250 and NSX150 ELCB to Linergy BW busbars, use a 24 x 5 mm flexible bar (LVS04746).

(2) The insulated flexible bars is not compatible with Form 2 partitioning (LVS04922). In this case, use the form 2 restoration kit LVS04924.

(3) In case of use of 32 x 6 insulated flexible bar, please contact Schneider Electric.

(4) Max length 500 mm per connection.



# Functional Partitioning



# Contents

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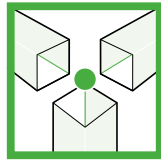
Partitioning	G-2
Form 1 partitioning	G-3
Form 2 partitioning	G-4
Form 3b partitioning	G-6
Form 4 partitioning	G-7



# PrismaSeT HD Active functional system

## The forms according to IEC 61439-1&2

Decisions concerning the Form of separation and the degree of protection are the subject of an agreement between the manufacturer and the user.



In most installations, PrismaSeT HD Active cubicles do not require partitioning. In this case, the switchboard is a Form 1.

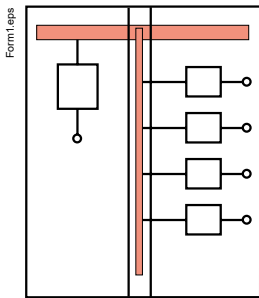
Safety being one of its foremost goals, Schneider Electric offers options and features that go well beyond the recommendations of the standard.

The protection of life and property is a standard feature due to:

- front plates that require a tool to be removed
- keylocks on doors, some of which provide access to live parts
- the systematic installation of terminal shields on ComPacT NSX circuit breakers and ComPacT INS and INV switch-disconnectors
- covering of the upstream and downstream terminals on the incoming device so that operators are perfectly safe at all points in the switchboard when the incoming device is off (open).

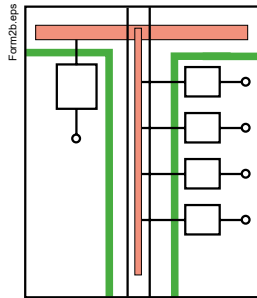
What is more, PrismaSeT HD Active offers different levels of partitioning to create separations inside the cubicles and thus create Form 2b, 3b, 4a and 4b electrical switchboards. Electrical switchboards must meet the degree of protection IP2X to comply with standard IEC 61439-1&2.

### Form 1



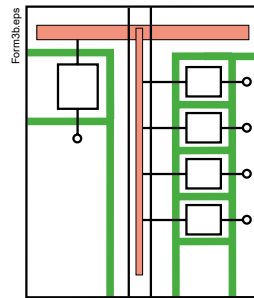
In most installations, PrismaSeT HD Active cubicles do not require partitioning. In this case, the switchboard is a Form 1. Safety being one of its foremost goals, Schneider Electric offers options and features that go well beyond the recommendations of the standard.

### Form 2b



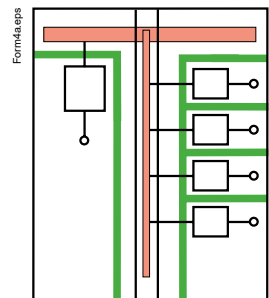
- Terminals for external conductors separated from busbars.
- The functional units and the terminals are separated from the busbars.

### Form 3b



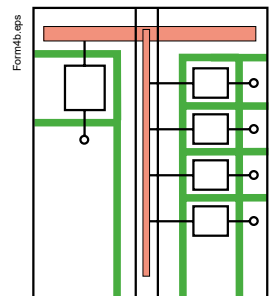
- Terminals for external conductors separated from busbars.
- The functional units are separated from each other and from the busbars.
- The terminals are separated from the busbars, but not from each other.

### Form 4a



Terminals for external conductors in the same compartment as the associated functional unit.

### Form 4b



Terminals for external conductors not in the same compartment as the associated functional unit, but in individual, separate, enclosed protected spaces or compartments.



## Form 1 partitioning

Form partitioning

## ★ Presentation

Decisions concerning the Form of separation and the degree of protection are the subject of an agreement between the manufacturer and the user.

In most installations, PrismaSeT HD Active cubicles do not require partitioning. In this case, the switchboard is a Form 1.

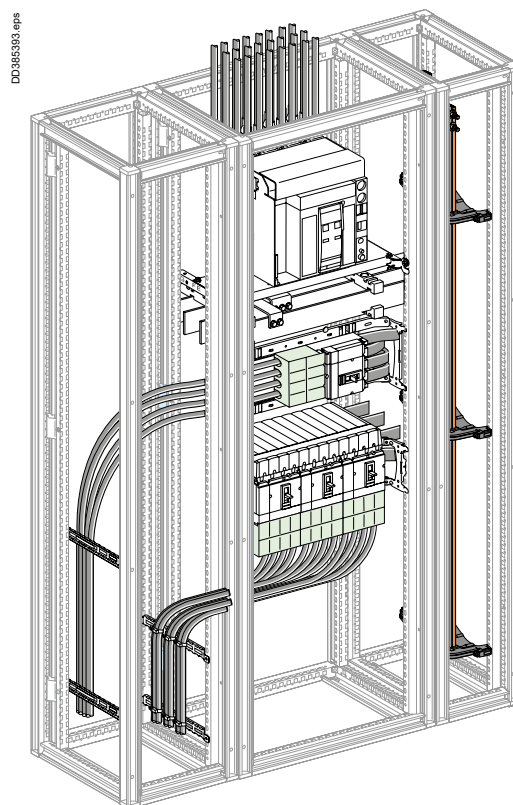
Safety being one of its foremost goals, Schneider Electric offers options and features that go well beyond the recommendations of the standard.

The protection of life and property is a standard feature due to:

- > front plates that require a tool to be removed
- > keylocks on doors, some of which provide access to live parts
- > the systematic installation of terminal shields on ComPacT NSX circuit breakers and ComPacT INS and INV switch-disconnectors.

What is more, PrismaSeT HD Active offers different levels of partitioning to create separations inside the cubicles and thus create Form 2b, 3b, 4a & 4b electrical switchboards.

Electrical switchboards must meet the degree of protection IP2X to comply with standard IEC 61439-1 and 2.



The protection of life and property is ensured by the systematic installation of terminal shields on ComPacT NSX circuit breakers and on ComPacT INS and INV switch-disconnectors (see the pages on the functional units).

G

# Form 2 partitioning

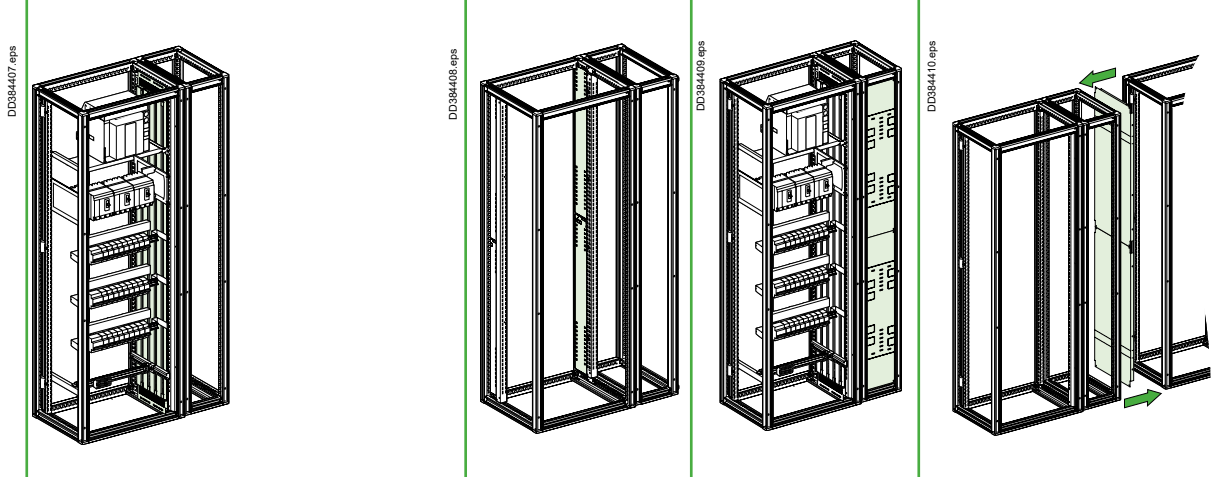
## Form partitioning

### Form 2 partitioning

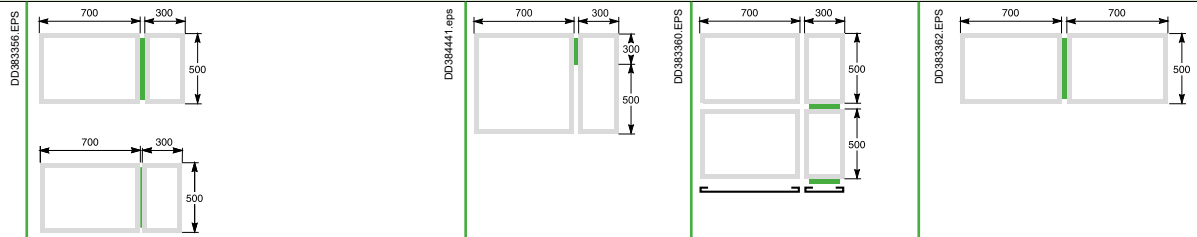
Separation of busbars from the functional units:

- protection against contact with live parts upstream of the outgoing circuits
- protection against penetration of foreign solid bodies.

#### Lateral partitioning



#### Schemes



Characteristics	<ul style="list-style-type: none"> <li>▪ Vertical barrier made of insulating slats.</li> <li>▪ Can be installed on both sides of Linergy and flat busbars.</li> <li>▪ The space between the slats is sufficient for prefabricated connections (one copper bar, 5 or 10 mm thick, or insulated flexible bars) or for cables up to 35 mm<sup>2</sup>, while maintaining the degree of protection IP2X compliance with standard IEC 60695.2.1 concerning withstand to fire.</li> </ul>	<ul style="list-style-type: none"> <li>▪ This kit enables passage of the connection between a device &gt; 1600 A (NW, INS) and lateral vertical busbars.</li> <li>▪ It is made up of an insulated plate (six modules H 300 mm) that can be cut as required, supplied with supports and the necessary hardware.</li> </ul>	<ul style="list-style-type: none"> <li>▪ For the PrismaSeT HD Active system switchboards 800 mm depth (500 + 300), a partitioning extension for 300 mm depth is required.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Front protection is realized by the association of the door W300 and this barrier. Metallic barrier, composed of 2 parts H850, pre-cut at both ends.</li> <li>▪ Rear protection, a barrier is required at the rear of the busbar compartment in cubicles that are 800, 1000 and 1300 mm deep.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Metal partition, used to separate two adjacent cubicles.</li> <li>▪ It is made up of two panels, each 850 mm high.</li> <li>▪ The top and bottom ends have knock-outs for horizontal busbars.</li> <li>▪ Supplied with the necessary supports and hardware, the partition is mounted on the framework and does not hinder installation of the functional mounting plates.</li> </ul>
Cat. no.	D500: LVS06545	LVS04924	D600: LVS06541 D800: LVS06543	W300: LVS06540	D500: LVS06555 D600: LVS04911 + LVS06541 D800: LVS04911 + LVS06543

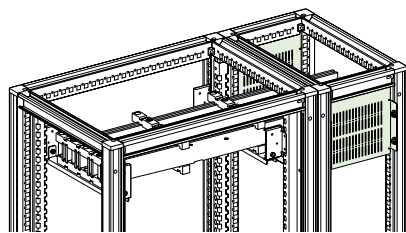


# Form 2 partitioning

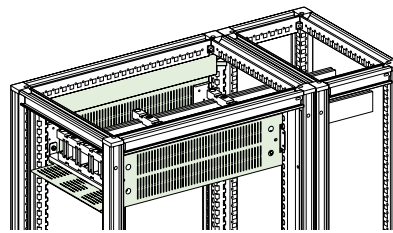
Form partitioning

## Partitioning of horizontal busbars

DD384412.eps



DD384411.eps



	W300			W700		
<b>Designation</b>	<ul style="list-style-type: none"> <li>Set of two barriers (front and rear), plus a slotted rear panel for efficient natural convection in the switchboard.</li> <li>The set can be used to partition horizontal busbars installed at the top or bottom of the cubicle.</li> <li>The space required for the busbars is not increased.</li> </ul>					
<b>For Depth</b>	D500	D600	D800	D500	D600	D800
<b>Cat. no. for 3M busbar</b>	LVS06560	LVS06561	LVS06563	LVS06570	LVS06570	LVS06570
<b>Cat. no. for 4M busbar</b>	LVS06568	LVS06568	LVS06568	LVS06567	LVS06567	LVS06567

**Note:** when the busbars are at the bottom of the cubicle, gland plates are mandatory.



# Form 3b partitioning

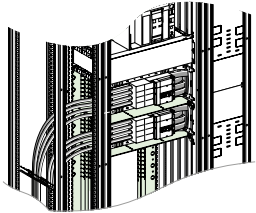
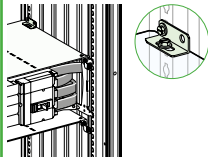
## Form partitioning

### Form 3b partitioning

Separation of busbars from the functional units and separation of all functional units from one another.

Separation of the terminals for external conductors from the functional units, but not from each other.

- protection against contact with live parts
- reduction in the risk of faults between the functional units (propagation of electrical arcs, etc.).

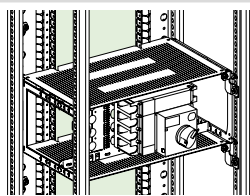
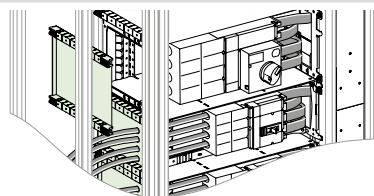
Front connection		Rear connection	
			
<b>Horizontal metal partition, W650 mm</b>		<b>Rear support for partitions, W650 mm</b>	
<b>Characteristics</b>	<ul style="list-style-type: none"> <li>▪ A horizontal metal partition can be used to physically separate functional units from one another.</li> </ul>	<ul style="list-style-type: none"> <li>▪ It is fixed at the rear by a support (two uprights) secured to the framework (500 mm deep) or to the intermediate uprights (800 mm deep frameworks).</li> </ul>	<ul style="list-style-type: none"> <li>▪ A set of brackets can be used to install partial Form 3 partitioning in the cubicle.</li> <li>▪ It does not take up any useful space in the switchboard.</li> </ul>
<b>Cat. no.</b>	<b>LVS04901</b>	<b>LVS04943</b>	<b>LVS03583</b>
		<b>Rear connection</b>	
		<ul style="list-style-type: none"> <li>▪ Vertical partitions (two cat. no. per functional unit)</li> </ul>	
		3 to 4 modules	5 to 6 modules
		<b>LVS04955</b>	<b>LVS04956</b>

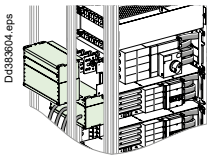
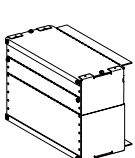
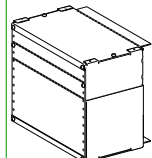
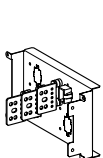
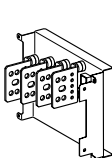
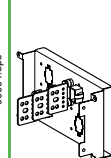
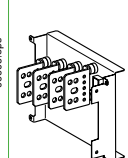
# Form 4 partitioning

## Form partitioning

### Form 4 partitioning

- Separation of busbars from the functional units and separation of all functional units from one another, including the terminals for external conductors which are an integral part of the functional unit.
- Protection against contacts with live parts and reduction in the risk of faults between the functional units (propagation of electrical arcs, etc.).
- Form 4a: terminal for external conductors in the same compartment as the associated.
- Form 4b: Terminals for external conductors not in the same compartment as the associated functional unit, but in individual, separate, enclosed protected spaces or compartments.

Form 4a partition			
For front connection			
	 <p>DD3485389 eps</p>	 <p>Dd383603 eps</p>	
Characteristics	<b>Form 4a backplate (one cat. no. per cubicle)</b> <ul style="list-style-type: none"> <li>▪ A backplate (one cat. no. per cubicle) made up of two metal half panels mounted on the rear supports for Form 3 partitions. This backplate is not indispensable for 500 mm deep frameworks.</li> </ul>	<b>Form 4a gland plate</b> <ul style="list-style-type: none"> <li>▪ A plastic gland plate that can be easily cut out (one for each functional unit) and is mounted on the framework.</li> </ul>	
		3 or 4 modules	5 or 6 modules
Cat. no.	LVS04946	LVS04951	LVS04952

Form 4b partition							
	 <p>Dd383604 eps</p>	 <p>04953 eps</p>	 <p>04954 eps</p>	 <p>06606 eps</p>	 <p>06607 eps</p>	 <p>06604 eps</p>	 <p>06605 eps</p>
Characteristics	<b>Connection transfer assembly, 3 to 5 modules, 250 A</b> <ul style="list-style-type: none"> <li>▪ A cover with metallic gland plates that can be easily cut out on the side and bottom. It is available in two heights:</li> </ul>		<b>Connection transfer assembly, 3 to 5 modules, 250 A</b> <ul style="list-style-type: none"> <li>▪ Transfer assembly without connection to simplified the cable installation.</li> </ul>		<b>Connection transfer assembly, 4 to 6 modules, 630 A</b> <ul style="list-style-type: none"> <li>▪ Transfer assembly without connection to simplified the cable installation.</li> </ul>		
		3 to 5 modules	4 to 6 modules	3P	4P	3P	4P
Cat. no.	LVS06600	LVS06601	LVS06606	LVS06604	LVS06607	LVS06605	



# Additional Information



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<b>Designing horizontal busbars - Linergy BS</b>	<b>H-4</b>
<b>Designing vertical busbars - Linergy LGY</b>	<b>H-5</b>
<b>Designing vertical busbars - Linergy LGYE</b>	<b>H-6</b>
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<b>Connection of busbar trunking</b>	<b>H-10</b>

# After-sales accessories

## SE Green Signature

### Plain sticker

D8301336-neweps



PrismaSeT HD Active - SE Green signature for W300 RAL 7035 enclosures

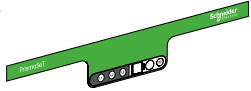
**NSYSFSEGS300**

PrismaSeT HD Active - SE Green signature for W700 RAL 7035 enclosures

**NSYSFSEGS700**

### Connectable sticker

D8301337-neweps



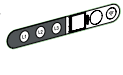
PrismaSeT HD Active - SE Green signature for RAL 7035 enclosures

**NSYSFSEGS**

PrismaSeT HD Active - SE universal connectivity sticker for RAL 7035 enclosures

**NSYSFSEGSU**

D8301338.eps



# Designing horizontal busbars

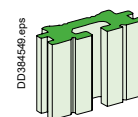
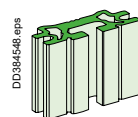
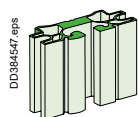
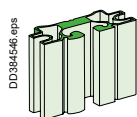
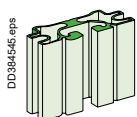
## Linery LGYE

### Electrical characteristics

Permissible current and selection of Linery LGYE busbars  
Up to 4000 A

Linery LGYE section

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
Size per phase	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
Linery LGYE 630	680	580	650	550	630	530	590	500	550	470	520	▪
Linery LGYE 800	860	740	830	710	800	680	750	630	700	600	660	▪
Linery LGYE 1000	1080	920	1040	884	1000	850	940	790	880	750	830	▪
Linery LGYE 1250	1350	1150	1300	1100	1250	1050	1170	1000	1100	930	1020	▪
Linery LGYE 1600	1730	1580	1690	1530	1650	1480	1550	1380	1450	1300	1350	▪
Linery LGYE 2000	2200	1810	2100	1730	2000	1650	1900	1560	1810	1480	1720	▪
Linery LGYE 2500	2640	2230	2540	2160	2440	2100	2310	2000	2240	1930	2120	▪
Linery LGYE 3200	3400	3020	3300	2900	3200	2800	3040	2660	2890	2520	2750	▪
Linery LGYE 4000	3800	3510	3710	3430	3620	3350	3450	3180	3280	3020	3120	▪



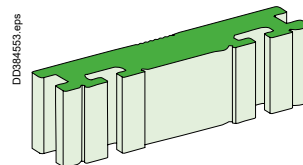
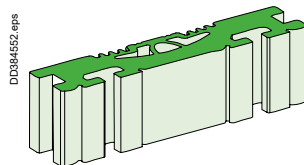
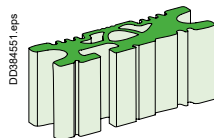
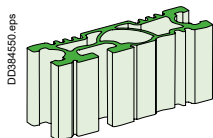
Section 630 A.  
Cat. No. LVS04560.

Section 800 A.  
Cat. No. LVS04561.

Section 1000 A.  
Cat. No. LVS04562.

Section 1250 A.  
Cat. No. LVS04563.

Section 1600 A.  
Cat. No. LVS04564.



Section 2000 A.  
Cat. No. LVS04565.

Section 2500 A.  
Cat. No. LVS04566.

Section 3200 A.  
Cat. No. LVS04567.

Section 4000 A.  
Cat. No. LVS04568.



# Designing horizontal busbars

## Linergy BS

### Electrical characteristics

#### Permissible current and selection of horizontal busbar

The goal is to optimise busbar size according to the installation and operating criteria.

#### Up to 1600 A

##### Linergy BS bars, 5 mm thick

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
Size per phase	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
1 Linergy BS bar, 60 x 5	890	840	850	790	800	750	760	700	710	650	660	▪
1 Linergy BS bar, 80 x 5	1130	1050	1080	990	1000	900	970	870	910	810	860	▪
2 Linergy BS bars, 60 x 5	1580	1420	1500	1350	1400	1250	1350	1180	1260	1090	1180	▪
2 Linergy BS bars, 80 x 5	2010	1820	1920	1720	1800	1600	1720	1510	1610	1390	1510	▪

- Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

#### Up to 3200 A

##### Linergy BS bars, 10 mm thick

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
Size per phase	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
1 Linergy BS bar, 50 x 10	1330	1220	1260	1160	1200	1080	1130	1010	1060	940	990	▪
1 Linergy BS bar, 60 x 10	1550	1400	1470	1320	1400	1250	1320	1160	1240	1070	1160	▪
1 Linergy BS bar, 80 x 10	1990	1800	1890	1700	1800	1600	1700	1500	1600	1390	1500	▪
2 Linergy BS bars, 50 x 10	2270	2090	2160	1980	2050	1850	1930	1740	1810	1610	1690	▪
2 Linergy BS bars, 60 x 10	2550	2270	2420	2140	2300	2000	2170	1870	2030	1720	1900	▪
2 Linergy BS bars, 80 x 10	3110	2820	2970	2660	2820	2500	2660	2330	2500	2160	2330	▪
2 Linergy BS bars, 100 x 10	3650	3280	3490	3100	3300	2900	3130	2720	2950	2510	2750	▪
2 Linergy BS bars, 120 x 10	4160	3760	3960	3550	3760	3340	3560	3100	3340	2880	3120	▪

- Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

#### Example:

Two 50 x 10 mm bars can be used for a 2160 A current with an IP ≤ 31 and an ambient temperature of 30 °C around the switchboard.

Where possible, use of 10 mm bars is worthwhile in terms of the In/Isc:

- gain in time during switchboard mounting given, where applicable, the lesser number of bars installed
- for short-circuits, the rigidity of the bars means fewer busbar supports.

#### Recommendation:

Use 5 mm bars for In ≤ 1600 A and low Icw values (40 kA rms).

Use 10 mm bars for In > 1600 A and medium to high Icw values (> 40 kA rms).

**Note:** the values indicated above have been validated for PrismaSeT HD Active switchboards.





# Designing vertical busbars

## Lineryg LGY

### Electrical characteristics

#### Permissible current and selection of Lineryg LGY busbars

The goal is to optimise busbar size according to the installation and operating criteria.

#### Up to 3200 A

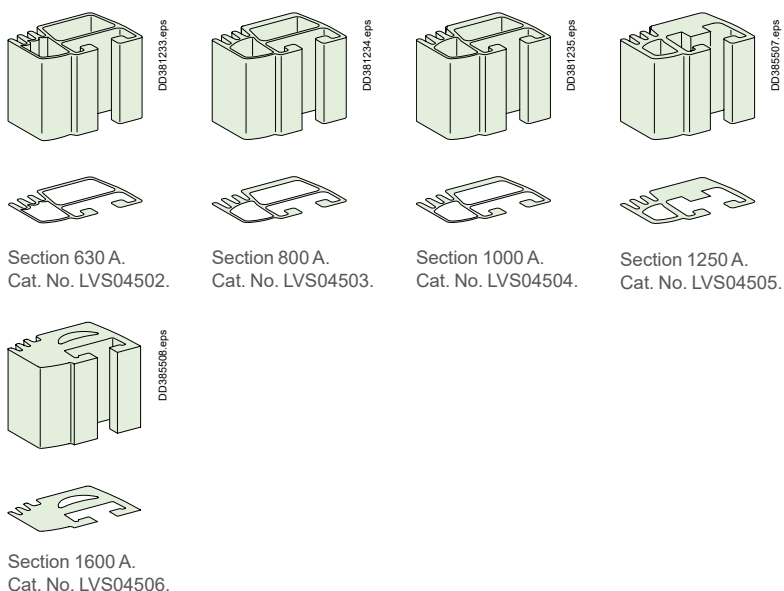
#### Lineryg LGY section

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
Lineryg LGY 630	750	680	710	630	680	590	630	550	590	530	550	*
Lineryg LGY 800	920	840	880	800	840	760	800	720	760	680	720	*
Lineryg LGY 1000	1140	1040	1090	990	1040	950	990	900	950	850	900	*
Lineryg LGY 1250	1410	1290	1350	1230	1290	1170	1230	1100	1170	1050	1100	*
Lineryg LGY 1600	1800	1650	1720	1580	1650	1480	1580	1390	1480	1320	1390	*
Lineryg LGY 2000 (2 x 1000)	2200	2000	2100	1900	2000	1820	1900	1720	1820	1620	1720	*
Lineryg LGY 2500 (2 x 1250)	2740	2500	2620	2380	2500	2260	2380	2120	2260	2020	2120	*
Lineryg LGY 3200 (2 x 1600)	3480	3200	3340	3060	3200	2920	3060	2780	2920	2640	2780	*

\* Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

#### Example:

A Lineryg LGY channelled bar can be used for a 1650 A current with an IP ≤ 31 and an ambient temperature around the switchboard of 35 °C.



**Note:** the values indicated above have been validated for PrismaSeT HD Active switchboards.



# Designing vertical busbars

## Linery LGYE

### Electrical characteristics

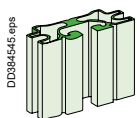
#### Permissible current and selection of Linery LGYE busbars

Up to 4000 A

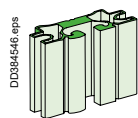
Linery LGYE section

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
Size per phase	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
Linery LGYE 630	680	580	650	550	630	530	590	500	550	470	520	▪
Linery LGYE 800	860	740	830	710	800	680	750	630	700	600	660	▪
Linery LGYE 1000	1080	920	1040	884	1000	850	940	790	880	750	830	▪
Linery LGYE 1250	1350	1150	1300	1100	1250	1050	1170	1000	1100	930	1020	▪
Linery LGYE 1600	1730	1580	1690	1530	1650	1480	1550	1380	1450	1300	1350	▪
Linery LGYE 2000	2200	1810	2100	1730	2000	1650	1900	1560	1810	1480	1720	▪
Linery LGYE 2500	2640	2230	2540	2160	2440	2100	2310	2000	2240	1930	2120	▪
Linery LGYE 3200	3400	3020	3300	2900	3200	2800	3040	2660	2890	2520	2750	▪
Linery LGYE 4000	3800	3510	3710	3430	3620	3350	3450	3180	3280	3020	3120	▪

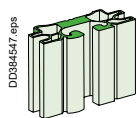
▪ Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.



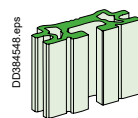
Section 630 A.  
Cat. No. LVS04560.



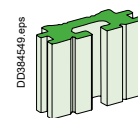
Section 800 A.  
Cat. No. LVS04561.



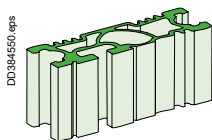
Section 1000 A.  
Cat. No. LVS04562.



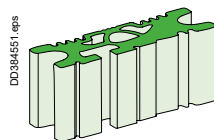
Section 1250 A.  
Cat. No. LVS04563.



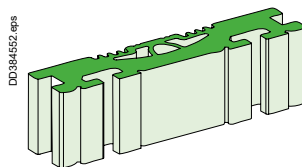
Section 1600 A.  
Cat. No. LVS04564.



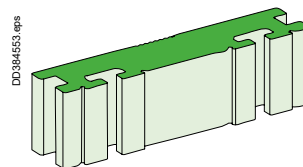
Section 2000 A.  
Cat. No. LVS04565.



Section 2500 A.  
Cat. No. LVS04566.



Section 3200 A.  
Cat. No. LVS04567.



Section 4000 A.  
Cat. No. LVS04568.

# Designing vertical busbars

## Lineryg BS

### Electrical characteristics

#### Permissible current and selection of vertical busbar

The goal is to optimise busbar size according to the installation and operating criteria.

#### Up to 1600 A

##### Lineryg BS bars, 5 mm thick

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
Size per phase	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
1 Lineryg BS bar, 60 x 5	890	840	850	790	800	750	760	700	710	650	660	▪
1 Lineryg BS bar, 80 x 5	1130	1050	1080	990	1000	900	970	870	910	810	860	▪
2 Lineryg BS bars, 60 x 5	1580	1420	1500	1350	1400	1250	1350	1180	1260	1090	1180	▪
2 Lineryg BS bars, 80 x 5	2010	1820	1920	1720	1800	1600	1720	1510	1610	1390	1510	▪

- Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

#### Up to 3200 A

##### Lineryg BS bars, 10 mm thick

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
Size per phase	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
1 Lineryg BS bar, 50 x 10	1330	1220	1260	1160	1200	1080	1130	1010	1060	940	990	▪
1 Lineryg BS bar, 60 x 10	1550	1400	1470	1320	1400	1250	1320	1160	1240	1070	1160	▪
1 Lineryg BS bar, 80 x 10	1990	1800	1890	1700	1800	1600	1700	1500	1600	1390	1500	▪
1 Lineryg BS bar, 100 x 10	2370	2150	2260	2030	2150	1900	2030	1780	1900	1650	1780	▪
2 Lineryg BS bars, 50 x 10	2270	2090	2160	1980	2050	1850	1930	1740	1810	1610	1690	▪
2 Lineryg BS bars, 60 x 10	2550	2270	2420	2140	2300	2000	2170	1870	2030	1720	1900	▪
2 Lineryg BS bars, 80 x 10	3110	2820	2970	2660	2820	2500	2660	2330	2500	2160	2330	▪
2 x 1 Lineryg BS bar, 80 x 10	3540	3200	3370	3020	3200	2820	3020	2650	2840	2450	2650	▪
2 Lineryg BS bars, 100 x 10	3650	3280	3490	3100	3300	2900	3130	2720	2950	2510	2750	▪
2 Lineryg BS bars, 120 x 10	4160	3760	3960	3550	3760	3340	3560	3100	3340	2880	3120	▪

- Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

#### Example

Two 80 x 10 mm bars can be used for a 2820 A current with an IP ≤ 31 and an ambient temperature of 35°C around the switchboard.

Two 80 x 10 mm bars installed separately in two busbar compartments can be used for a 3200 A current with an IP ≤ 31 and an ambient temperature of 35°C around the switchboard.

**Note:** the values indicated above have been validated for PrismaSeT HD Active switchboards.

# Designing rear busbars

## Linery LGYE, Linery BS

### Electrical characteristics

#### Permissible current and selection of vertical busbar

The goal is to optimise busbar size according to the installation and operating criteria.

#### Up to 1600 A

##### Linery LGY section

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
Linery LGY 630	750	680	710	630	680	590	630	550	590	530	550	▪
Linery LGY 800	920	840	880	800	840	760	800	720	760	680	720	▪
Linery LGY 1000	1140	1040	1090	990	1040	950	990	900	950	850	900	▪
Linery LGY 1250	1410	1290	1350	1230	1290	1170	1230	1100	1170	1050	1100	▪
Linery LGY 1600	1800	1650	1720	1580	1650	1480	1580	1390	1480	1320	1390	▪

- Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

#### Up to 1600 A

##### Linery BS bars, 5 mm thick

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
Size per phase	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
1 Linery BS bar, 60 x 5	890	840	850	790	800	750	760	700	710	650	660	▪
1 Linery BS bar, 80 x 5	1130	1050	1080	990	1000	900	970	870	910	810	860	▪
2 Linery BS bars, 60 x 5	1580	1420	1500	1350	1400	1250	1350	1180	1260	1090	1180	▪
2 Linery BS bars, 80 x 5	2010	1820	1920	1720	1800	1600	1720	1510	1610	1390	1510	▪

- Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

#### Up to 3200 A

##### Linery BS bars, 10 mm thick

Type of bars	Permissible current (A)											
	Ambient temperature around the switchboard											
	25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
Size per phase	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
1 Linery BS bar, 50 x 10	1330	1220	1260	1160	1200	1080	1130	1010	1060	940	990	▪
1 Linery BS bar, 60 x 10	1550	1400	1470	1320	1400	1250	1320	1160	1240	1070	1160	▪
1 Linery BS bar, 80 x 10	1990	1800	1890	1700	1800	1600	1700	1500	1600	1390	1500	▪
2 Linery BS bars, 80 x 10	2270	2090	2160	1980	2050	1850	1930	1740	1810	1610	1690	▪
2 Linery BS bars, 60 x 10	2550	2270	2420	2140	2300	2000	2170	1870	2030	1720	1900	▪
2 Linery BS bars, 80 x 10	3110	2820	2970	2660	2820	2500	2660	2330	2500	2160	2330	▪

- Connection impossible due to the operating-temperature limits of the devices installed in the switchboard.

**Note:** the values indicated above have been validated for PrismaSeT HD Active switchboards.



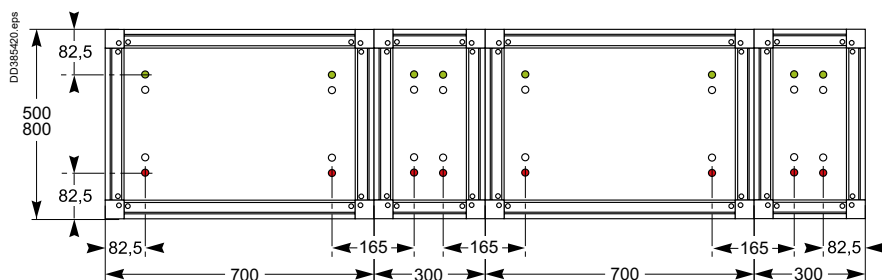
# Ground fastening

Characteristics  
Catalogue numbers

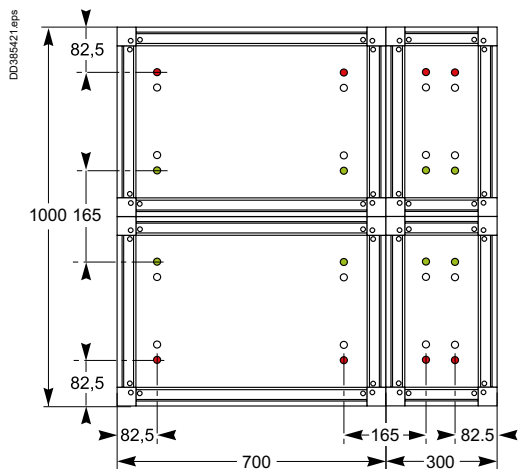
Seismic application 3G withstand					
		1600 A configuration		3200 A configuration	
		PrismaSeT HD Active	Busbar duct	PrismaSeT HD Active	Busbar duct
Nominal dimensions	Height	2000	2000	2000	2000
	Width	700	300	700	300
	Depth	500	500	800	800
Additional dummy load (kg)		350	350	450	450
Seismic plinth H100 mm - Cat. no.		<b>NSYS5GPC75</b>	<b>NSYS5GPC35</b>	<b>NSYS5GPC78</b>	<b>NSYS5GPC38</b>

**Note:** incoming by pre-fabricated busbar trunking is forbidden for seismic application.

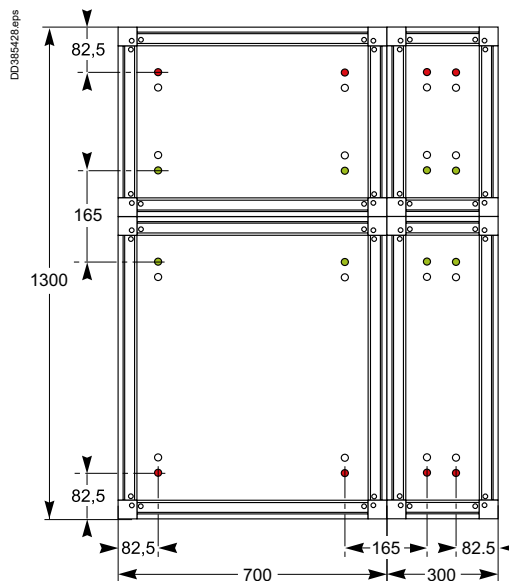
- Front connection (example: device cubicle W700 mm + compartment W300 mm)



- Rear connection D1000 (example: device cubicle + compartment D500 + D500 mm)



- Rear connection D1300 (example: device cubicle + compartment D800 + D500 mm)



- compulsory fixing point
- optional fixing point

- 8.8-class screws: screw M10 TH  
+ washers (external Ø 25 mm, thickness 3 mm)  
+ CS contact washers Ø 10 mm.



# Connection of busbar trunking

## Practical information

PrismaSeT HD Active switchboards come equipped with a special interface that allows them to be directly connected to Canalis KT trunking.

The electrical connection between the Canalis KT trunking and the PrismaSeT HD Active switchboard is just as easy to carry out as jointing between two busbar trunking sections.

The Canalis KT interface is totally integrated in the PrismaSeT HD Active switchboard volume.

It comprises a Canalis KT joint block and interface/circuit breaker connection terminals.

### Trunking connection via the top

- Dismantle the roof.
- Cut out a passage for the busbar trunking.
- Adjust the guides according to the KT width that will be connected.
- Unscrew the junction block screws.
- Ensure that the busbar trunking length to be connected to the switchboard is correctly supported and that it is not resting on the interface.
- Lower the element until it is in contact with the interface frame, without bearing on it.
- Tighten the junction torque nuts. When the head breaks, the torque of 60 Nm has been reached.

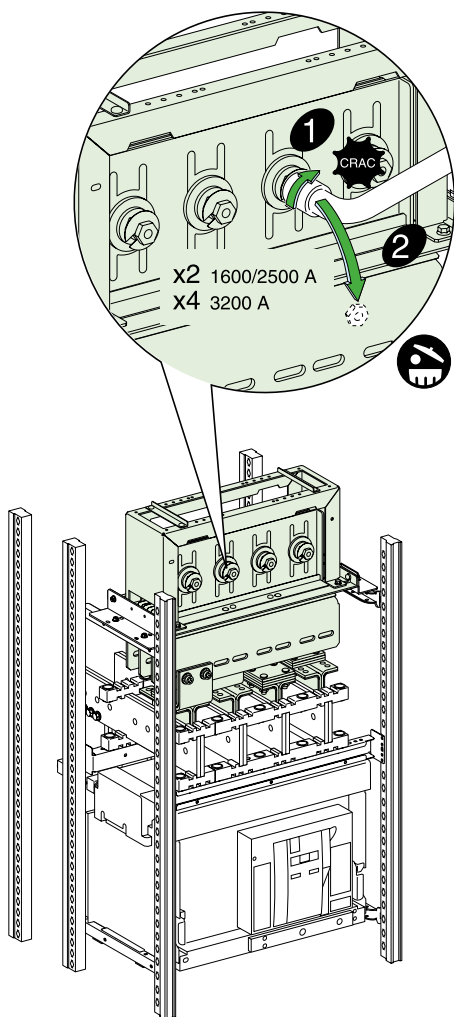
⚠ In certain cases, it is recommended to only tighten the 2 middle nuts to 60 Nm and the 2 outer nuts to 10 Nm.

- A red plastic washer that is ejected when the head breaks provides visual evidence that the joint tightening operation has been carried out correctly.
- For dismantling or maintenance operations, a second head is available on the nut and can be retightened using a conventional torque wrench. The recommended tightening torque is then 60 Nm.
- Reassemble the roof.

### Sealing kit

- In order to retain the original IP index, use the roof sealing kit ordered with the busbar trunking. This kit guarantees an IP52 degree of protection at the trunking passage.
- The kit is installed by cutting out the roof of the PrismaSeT HD Active switchboard. This cut-out, which is the same dimension for all Canalis KT busbar trunking ratings, is made using the template delivered with the sealing kit.

DC0363919.eps



# Notes



Life Is On

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