# PrismaSeT G Active

**Catalog 2023**
Wall-mounted
and floor-standing enclosures
for Electrical Distribution up to 630 A

se.com

Life Is On | Schneider Electric

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| LVS08821 | Trunking spreader pack 160 | F-6 |
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| LVS08824 | Trunking spreader for PrismaSeT G Active IP30 | E-11 |
| LVS08826 | 2 lifting x-member 2xW600+ 3xW300/g IP30 | E-9, E-10 |
| LVS08827 | IP41 canopy W600+W300+W300 g IP30/4X | E-7 |
| LVS08830 | IP41 canopy W600 PrismaSeT G Active IP30/4X | E-7, F-15 |
| LVS08831 | IP41 canopy W600+W600 PrismaSeT G Active IP30/4X | E-7 |
| LVS08832 | IP41 canopy W600+W300 PrismaSeT G Active IP30/4X | E-7, F-15 |
| LVS08833 | IP41 canopy W600+W300+W600 g IP30/4X | E-7 |
| LVS08836 | IP41 canopy W850 PrismaSeT G Active IP30/4X | E-7 |
| LVS08837 | IP41 canopy W850+W300 PrismaSeT G Active IP30/4X | E-7 |
| LVS08841 | IP43 door gasket l5300 PrismaSeT G Active IP30/4X | E-7, F-6, F-15 |
| LVS08842 | IP41 CANOPY W600 PRISMASET G ACTIVE | E-7 |
| LVS08843 | IP41 CANOPY W600+300 PRISMASET G ACTIVE | E-7 |
| LVS08844 | IP41 CANOPY ACTIVE L600+600 PRISMA G IP30/4X | E-7 |
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| LVS08898 | Gl.plate 39 in D7-26mm dir.mount.g IP55 | E-27 |
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| LVS08913 | 12 clip-on labels 18x35 | C-55 |
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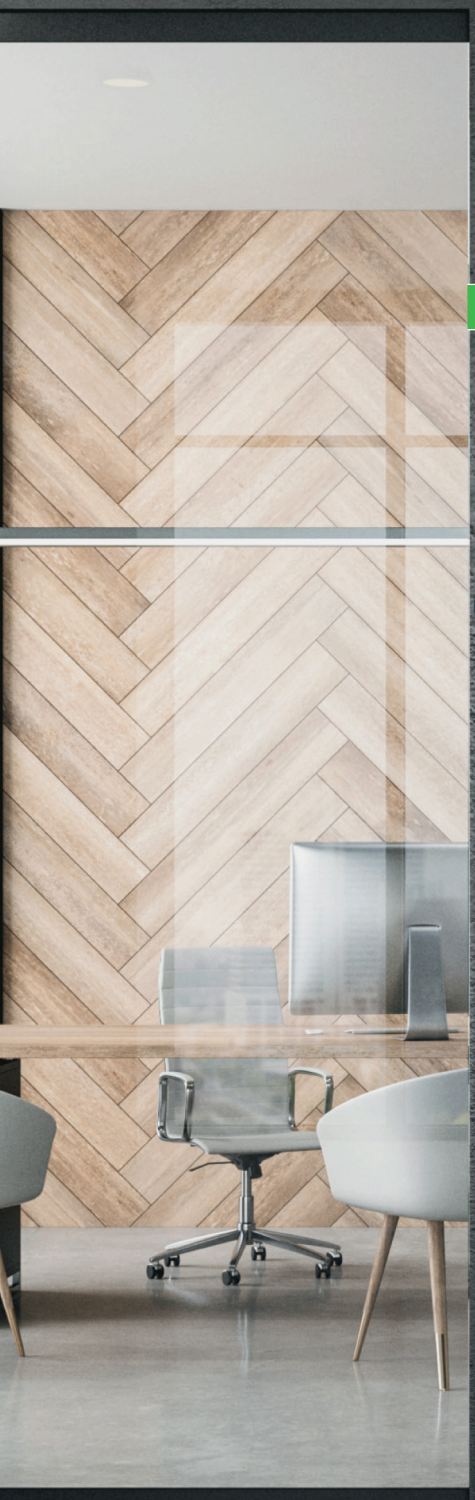
A

# Presentation

# Contents

# PrismaSeT G Active - Reliable, Easily connected



The new PrismaSeT G 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 G Active switchboard also allows easy wireless integration of sensors.

## Offer values

| | |
|---|---|
| Simplicity | • Deliver connectivity without any complexity |
| Easy installation | • Simple-to-install connected solution |
| Robustness and Design | • New design with increased Plinth Robustness |
| Win more business | • Increase the service business opportunities while offering an affordable connected panel |
| Protection | • Deliver greater peace of mind |



## Digital journey

### Peace of mind on the Cloud

- Electrical Fire Prevention
- Power availability at no cost
- Energy awareness

### Built-in connectivity

- Voltage loss alert free of charge
- Connection to cloud in less than 5 min without any IT skill

### Easy-to-install 100% wireless communication solutions

- User friendly installation instructions

### Easy installation and commissioning

- Less than 30 minutes for setting up the communication devices

# PrismaSeT G Active - Reliable, Easily connected

## New design with sustainable packaging

Enhance buildings with in-built connectivity and efficient design

The new design of PrismaSeT G Active increases the robustness of the panels, helps to gain efficiency on every level and provides peace of mind to the panel builders, electrical contractors and facility managers.

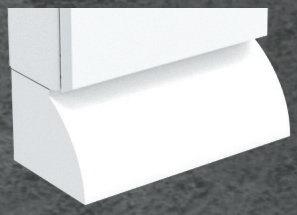
In addition, the new 100% green packaging decreases the quantity of waste and its disposal cost by using only cardboards.

### Green Packaging

- Progressive cancellation of plastic and polystyrene of packaging.
- 100% recyclable cardboards.
- Time & money saving to sort waste.
- New cross beam in cardboard for a more robust packaging.

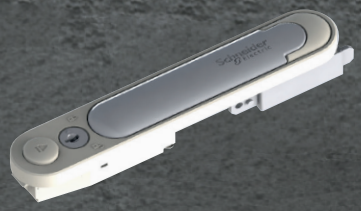

### Increase Plinth Robustness

- Metallic reinforcement all along the plinth to facilitate transportation.



### New Improved Handle

- More robust handle.
- Ergonomic handle design.
- Aesthetically appealing look.



### Digital Instruction Sheets

- Cancellation of systematic printed instruction in each packaging.
- 1 printed 'Super Leaflet' with all instructions (available to order once).
- 1 systematic QR code to link to the right instruction sheets.

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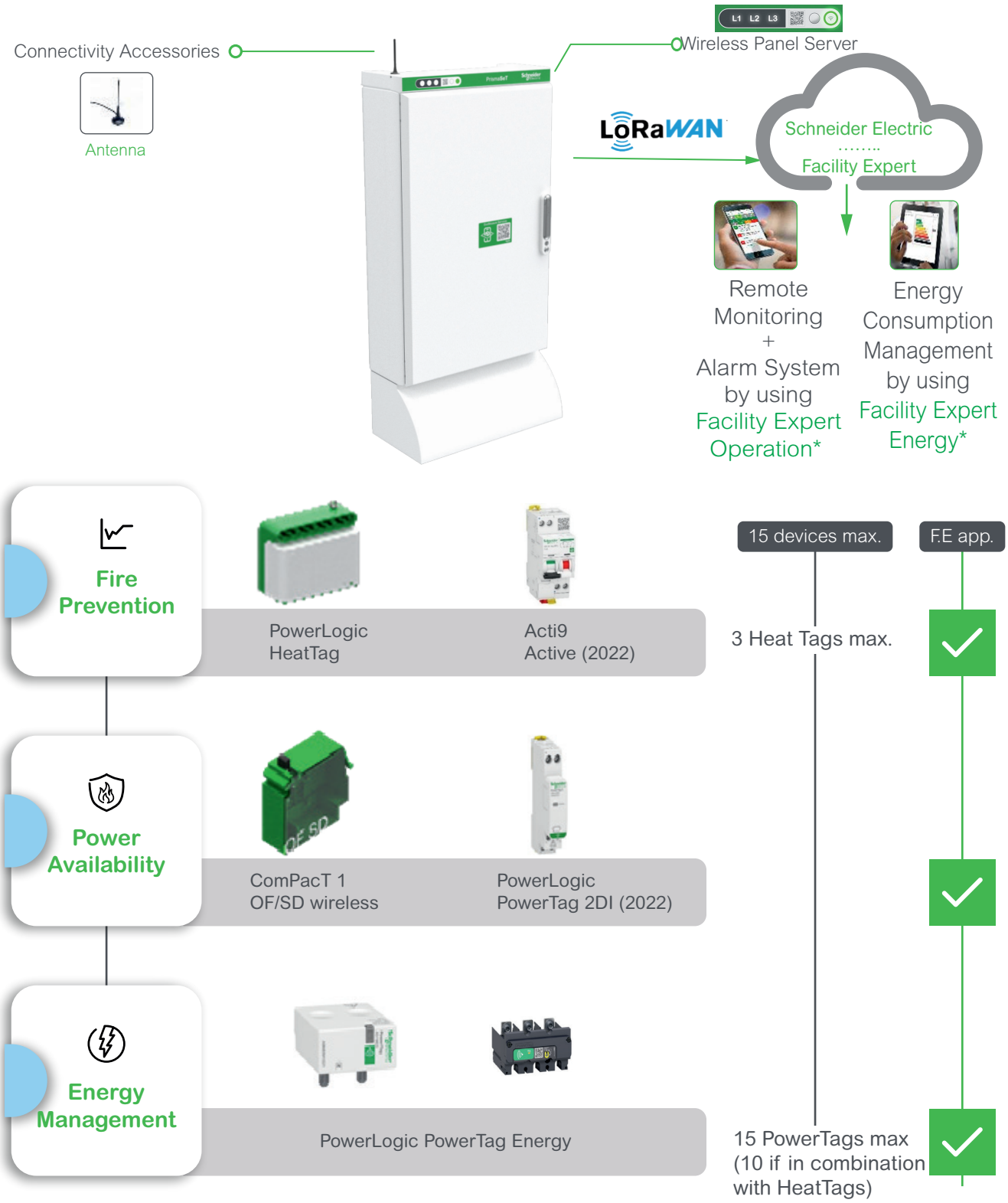
## Communication Architecture

# 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.

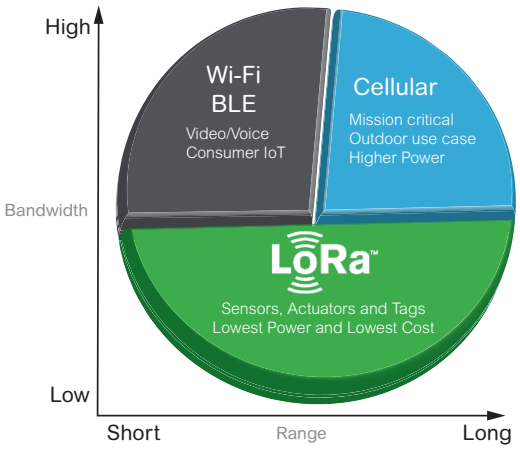
## Communication Architecture

# 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).







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

QR code compatible for scanning through any device.

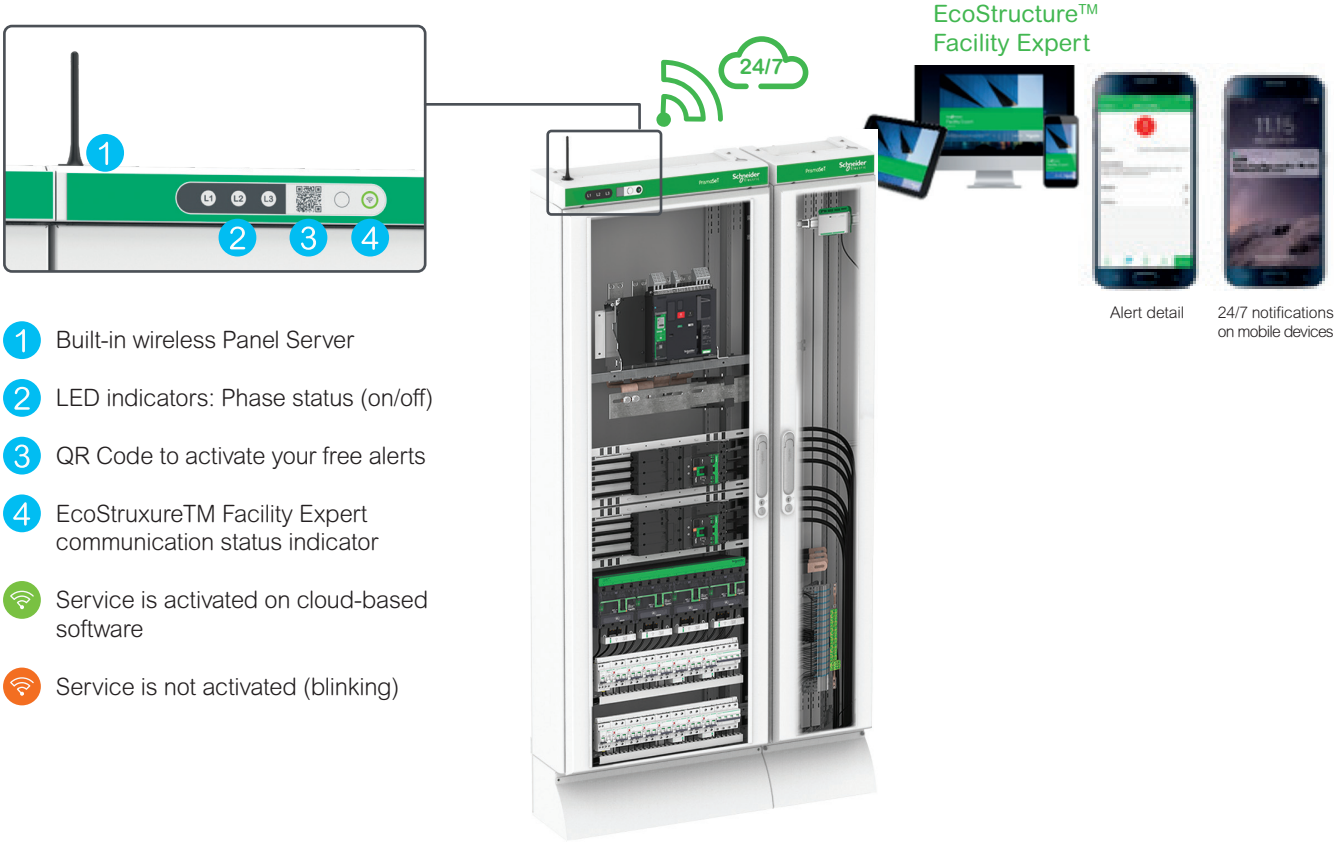
Free real time alarming in case of losing power.

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

EcoStruxure Power Commission application simplifies sensor integration and commissioning (upto 15 Nos. under 30 mins).

Periodic report and updates.

# For Commercial and Industrial application




1. Built-in wireless Panel Server
2. LED indicators: Phase status (on/off)
3. QR Code to activate your free alerts
4. EcoStruxureTM Facility Expert communication status indicator

Service is activated on cloud-based software

Service is not activated (blinking)

PrismaSeT G Active

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.

PrismaSeT G Active Wireless Panel Server installed into its environment.

# 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 |
| Gateway | PrismaSeT G Active W300 Green Cover with Wireless Panel Server | W300 | To add on PrismaSeT G Active Wall Mounted or Floor Standing (optional) |
| | PrismaSeT G Active W600 Green Cover with Wireless Panel Server | LVS08880D | To add on PrismaSeT G Active Wall Mounted (optional) |
| 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 wirelelss 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 |
| | PowerTag Energy Monoconnect 63A 1P+N top | A9MEM1521 | |
| | PowerTag Energy Monoconnect 63A 1P+N bottom | A9MEM1522 | |
| | PowerTag Energy Monoconnect 63A 3P top and bottom | A9MEM1540 | |
| | PowerTag Energy Monoconnect 63A 3P+N top | A9MEM1541 | |
| | PowerTag Energy Monoconnect 63A 3P+N bottom | A9MEM1542 | |
| | PowerTag Energy Flex 63A 1P+N top and bottom | A9MEM1560 | |
| | PowerTag Energy PhaseNeutral 63A 1P+N top | A9MEM1561 | |
| | PowerTag Energy PhaseNeutral 63A 1P+N bottom | A9MEM1562 | |
| | PowerTag Energy Flex 63A 3P+N top and bottom | A9MEM1570 | |
| | PowerTag Energy PhaseNeutral 63A 3P+N top | A9MEM1571 | |
| | PowerTag Energy PhaseNeutral 63A 3P+N bottom | A9MEM1572 | |
| | PowerTag Energy Flex 160A 3P/3P+N | A9MEM1580 | |
| | PowerTag Energy Monoconnect 250A 3P | LV434020 | |
| | PowerTag Energy Monoconnect 630A 3P | LV434022 | |
| | PowerTag Energy Monoconnect 250A 3P+N | LV434021 | |
| | PowerTag Energy Monoconnect 630A 3P+N | LV434023 | |
| | PowerTag Energy Rope 200A 3P/3P+N | A9MEM1590 | |
| | PowerTag Energy Rope 600A 3P/3P+N | A9MEM1591 | |
| | PowerTag Energy Rope 1000A 3P/3P+N | A9MEM1592 | |
| | PowerTag Energy Rope 2000A 3P/3P+N | A9MEM1593 | |
| Communication Accessories | LoRa additional length for Antenna - 5m | SMT10011 | Improve the reception infront of the panel (if needed) |
| | LoRa Tester | SMT10013 | Test the signal before and after installation |
| | LoRa /IP Plug & Play Bridge via SIM Card | SMT10014 | In case of no reception of LoRa public network on your site |

B

# 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 comparision 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 promotors occupant ecofriendly behaviours.

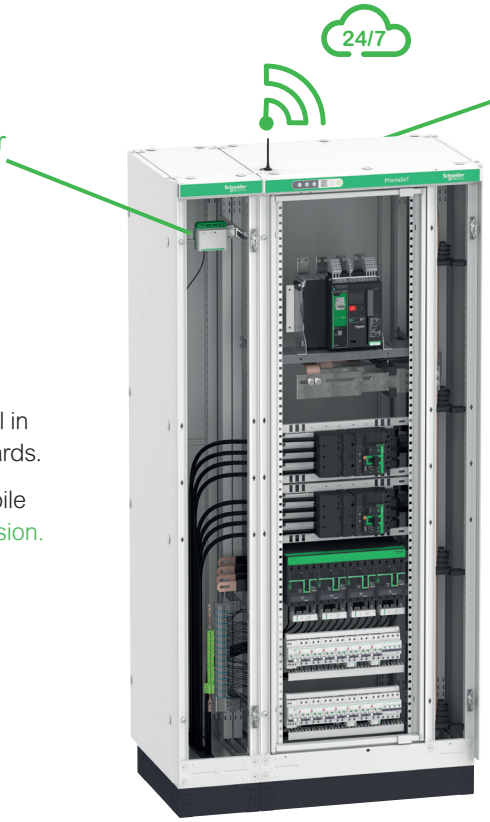
## Schneider Electric partners network

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.

# PowerLogic™ HeatTag sensor installed with PrismaSeT G Active Panel server and paired with EcoStructure™ Facility Expert

PrismaSeT G Active
Wireless Panel Server

PowerLogic™ HeatTag sensor

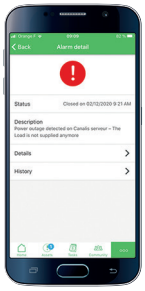



Easy to install: directly on a DIN rail in non-forced air-ventilated switchboards.

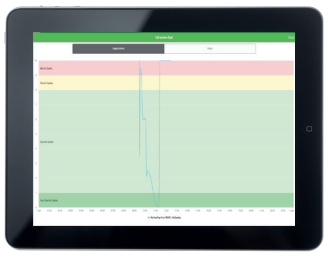
Easy to commission from your mobile with EcoStruxure™ Power Commission.

Note: Consider that 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.

EcoStructure™ Facility Expert



Alert detail



Cause and recommendations

# Wireless Sensor for Early Detection of Overheating Cables


SMT10020

HeatTag is a smart sensor for early detection of overheating wire connections or overheating cables. HeatTag helps prevent electrical switchboards from being damaged, by analyzing gas and particles in the air and sending alerts before any smoke or insulator browning.

## Standards

The HeatTag smart sensor complies with the following standards:
- IEC 61010-1:2017 UL/CSA/EU CENELEC deviations
- IEC/EN 61326-1b FCC Part 15B and 15C
- ETSI/EN 300328
- ETSI/EN 301489-1
- IEEE 802.15.4

**Note:**
Do not use HeatTag as a safety device. HeatTag does not replace the fire protection devices of the building.

## Presentation

**HeatTag smart sensor:**
- Sends three levels of alert depending on the severity of the situation it detects.
- Helps prevent potential fire damages by analyzing gas and micro-particles emitted by cable sheaths when overheating.
- Measures temperature and humidity.
- Communicates with all Schneider Electric EcoStruxure panel servers or gateways.
- Is integrated in EcoStruxure solutions.

The HeatTag sensor must be installed only in non-forced air ventilated switchboards. It must be mounted on a DIN rail.
During the first 30 minutes after commissioning, HeatTag can generate an alert for test. It then takes another 8 hours for HeatTag to define its nominal environment and to be fully operational. Each time the HeatTag sensor is powered on, these 30-minute and 8-hour sequences are repeated.

## Operation

**Paired with Schneider Electric panel servers or gateways, HeatTag reports:**
- Alerts
- Air quality index
- Temperature and humidity measurement
- Self-diagnosis information

## Air Quality

HeatTag provides an air quality index, ranging from 0 to 10, and displays the air quality evolution trend in a table.
When the air quality index is equal or above 10, HeatTag sends an alert. It has detected abnormal cable sheath heating in the switchboard.

## Detection Alert

An alert is triggered when HeatTag detects abnormal cable sheath heating in the switchboard, which can be caused by:
- One or more loose connections (too high contact resistance)
- A poorly sized cable compared to the rated current
- Overcurrent and poorly regulated protective equipment

Alerts are triggered with three severity levels:
- Low level: a cable is slowly overheating in the installation, you must plan a maintenance visit of the installation.
- Medium level: a cable is overheating in the installation, you must go quickly to the installation for maintenance.
- High level: a cable overheats very quickly, you must check the installation immediately.

The orange application led flashes when HeatTag sends an alert to the panel servers or gateways.

## Temperature

HeatTag provides a temperature value with a 30 second default transmission period. The transmission period can be increased by the system in case of high wireless data traffic.

## Humidity

The HeatTag provides a humidity rate with a 30 second default transmission period. The transmission period can be increased by the system in case of high wireless data traffic.

## Self-Diagnosis

HeatTag carries out two types of diagnosis:
- A minor alert is sent when the fan rpm is 80% of its nominal rpm, which means fan clogging.
- A major alert is sent when HeatTag is faulty. In this case it cannot report measures at all, nor reports incorrect measures.

# Wireless Sensor for Early Detection of Overheating Cables

## HeatTag Smart Design

- No settings
- Nominal environment auto-learning to avoid false alerts
- Concentrator auto-discovery
- Alerts generated by a powerful algorythm integrated in HeatTag

## Electrical Characteristics

| | |
|---|---|
| Supply voltage | 110-277 V AC, -15 % / +15 % |
| Frequency | 50-60 Hz |
| Max. consumption | 0.1 A |
| Operating temperature | -15 °C / +70 °C (5 °F to 158 °F) |
| Storage temperature | -20 °C / +85 °C (-4 °F to 185 °F) |
| Relative humidity in operation | 15-90 % |
| Altitude of use | 0-2000 m (0-6500 ft) |
| Degree of pollution (IEC 60664-1) | 3 |
| Overvoltage category | OVC III |

## Sensor Characteristics

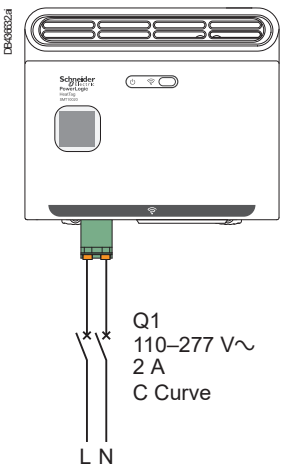
| | | |
|---|---|---|
| Temperature measurement | Measurement range | -15 °C / +70 °C (5 °F to 158 °F) |
| | Measurement accuracy | -1.1 °C / +1.1 °C |
| | Default transmission period | 30 seconds (higher in case of high wireless data traffic) |
| Humidity measurement | Measurement range | 15–90 % |
| | Measurement accuracy | ±9 RH % |
| | Default transmission period | 30 seconds (higher in case of high wireless data traffic) |
| Air quality | | Index (0 to 10), alert generation when index ⩾ 10 |
| Test alert after pairing | | During the first 30 minutes |
| Environment auto-learning phase | | 8 hours after the first 30 minutes |

## Installation

**Communication Architecture**
List of compatible communicators:

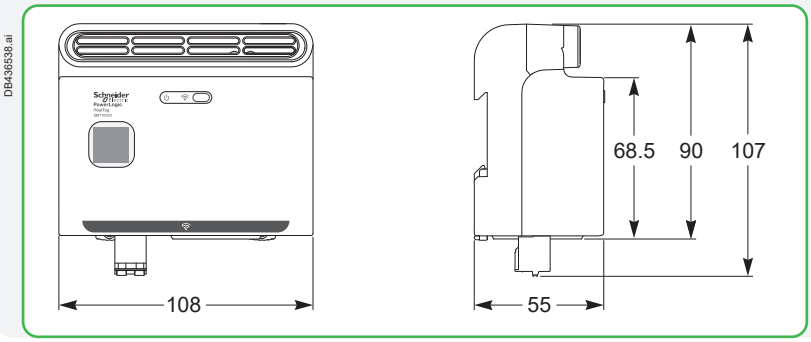
- EcoStruxure Panel Servers
- PowerTag Link
- PrismaSeT Wireless Panel Server

**Wiring**
HeatTag must be protected by 2 A breaker.
It is delivered with a separate connector.




## Mechanical Characteristics

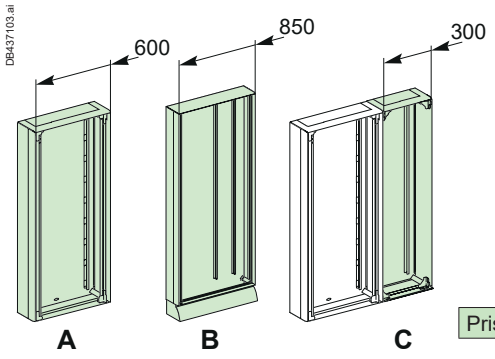
| | |
|---|---|
| Dimensions (w x h x d) | 108 x 107 x 55 mm |
| Weight | 270 g |
| Degree of protection (IEC 60529) | IP20 |



# Wireless Sensor for Early Detection of Overheating Cables

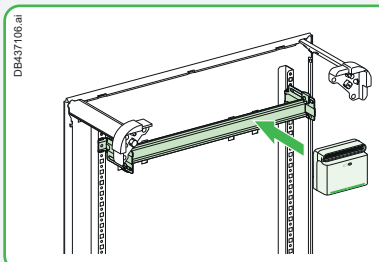
## Integration in PrismaSeT G Active

HeatTag must be installed following the Instruction Sheet recommendations (MFR5173801-02).

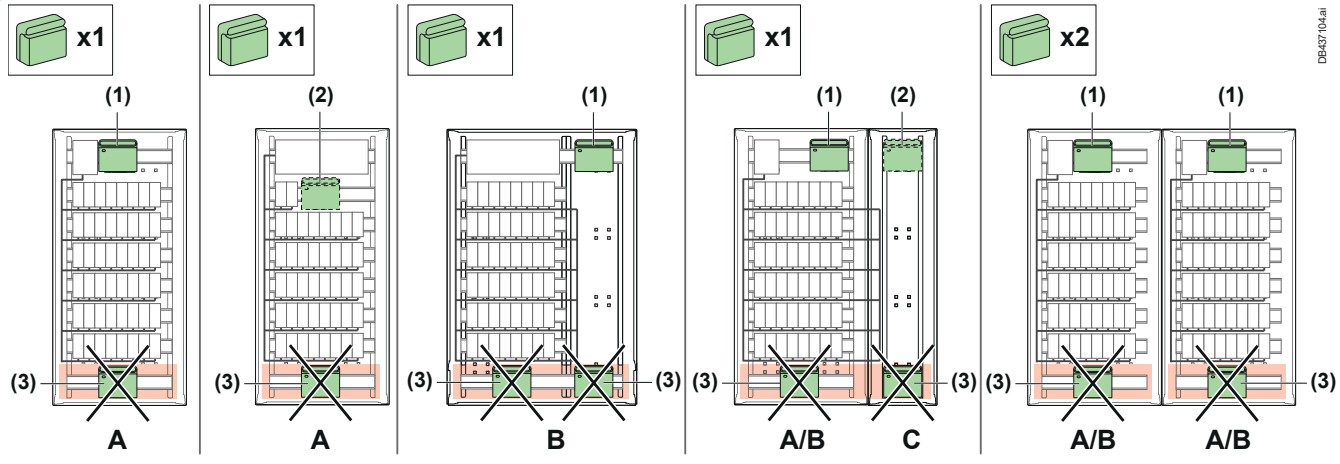



| | A | B | C |
|---|---|---|---|
| PrismaSeT G | ■ | ■ | ■ |


HeatTag must be installed on a DIN rail.

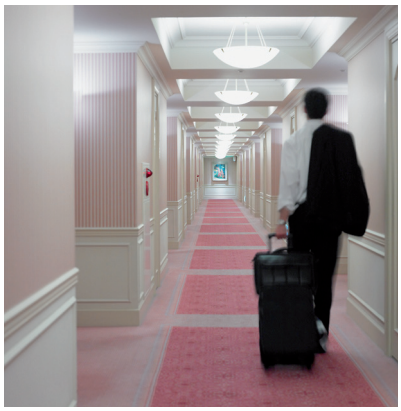



Ref.LVS03010 for width = 300 mm
Ref.LVS03001 for width = 600 mm
Ref.LVS03006 for width = 850 mm




(1) Recommended installation
(2) Possible
(3) Forbidden

# To respond to increasing building requirements

Improve the continuity of service

Ensure the safety of life and property

Control deadlines and costs

# PrismaSeT:

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



## PrismaSeT, a comprehensive range of enclosures and cubicles

> A solution based on more than **30 years of experience** in low voltage switchboards.

> Integrating Schneider Electric switchgear offerings and ensuring electrical, mechanical and communication **functions complete consistency**.

> Quality production, **certified ISO 9001** and manufactured in Montmélian (France).

# Pack 160 A enclosures
# PrismaSeT G Pack 250 A enclosures
# PrismaSeT G enclosures
# IP30 / IP4X, IP55, up to 630 A

PB115624_28.eps

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.

4000 A



- Hospitals
- Data centres
- Logistics centres
- Shopping centres
- Offices buildings
- Medium industrial solutions

PrismaSeT P Active

# Simple, functional systems for safe, up to 630 A

## Switchboards that are safe…

With **PrismaSeT G Active** you can be sure to build **100 % Schneider Electric** switchboards that are safe, optimised:

> All components (switchgear, distribution blocks, prefabricated connections, etc.) are perfectly rated and coordinated to work together;

> All switchboard configurations, even the most demanding ones, have been tested.

You can prove that your switchboard meets the current standards, at any time.

You can be sure to build a reliable electrical installation and give your customers full satisfaction in terms of dependability and safety for people.

## …aesthetics

PrismaSeT G Active with its discreet design, blends harmoniously into all tertiary buildings, including in entrance halls and passageways.

**Available** power

**Safety** of people and property

**Controlled** costs and delivery times

**Upgradeability**

# upgradeable LV switchboards



## …optimised and upgradeable

With **PrismaSeT G Active** you can build just the right switchboard for your customer, sized precisely to fit costs and needs. With this complete, prefabricated and tested system, it's easy to upgrade your installation and still maintain the performance levels.

> The wall-mounted and floor-standing enclosures combine easily with switchboards already in service.

> Devices can be replaced or added at any time.

### Simple gestures for cabling in the workshop

All connection points are fully accessible and easy to check.

### Efficient installation and connection work on site

Easy connection on site, whatever the cable cross-section or installation location.

### Easy maintenance throughout the switchboard

Easy and direct access to devices, in a switchboard in service.

# 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 organisation that performed the original design and associated verification of an assembly in accordance with the standard, and of the assembly manufacturer - the organisation 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 equirements 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 Active tested switchboards

**The conformity of the switchboard has been tested and proven.**

A PrismaSeT Active switchboard is:

> made up of Schneider Electric low voltage devices and components that all comply with the applicable standards;

> based on configurations in our catalog;

> made up of PrismaSeT Active 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.

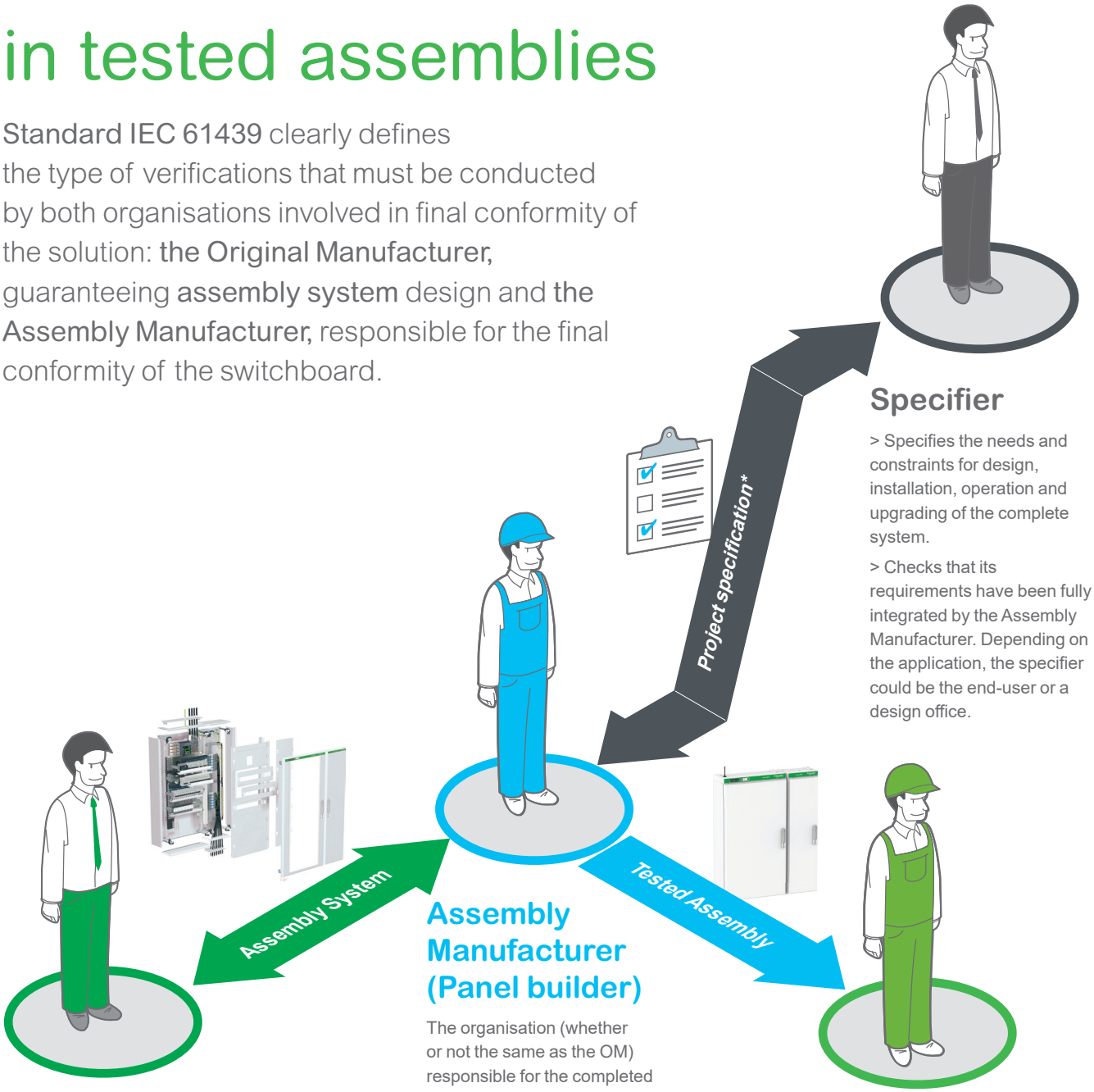
Schneider Electric makes available to the panelbuilder everything required to create tested PrismaSeT Active switchboards, including the basic configurations in the low voltage distribution catalog, all the documentation for switchboard design and mounting, calculation and design software, etc.

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.

# Original Manufacturer and Assembly Manufacturer:
# Both involved in tested assemblies

Standard IEC 61439 clearly defines the type of verifications that must be conducted by both organisations involved in final conformity of the solution: **the Original Manufacturer,** guaranteeing **assembly system** design and **the Assembly Manufacturer,** responsible for the final conformity of the switchboard.






## Specifier

> Specifies the needs and constraints for design, installation, operation and upgrading of the complete system.

> Checks that its requirements have been fully integrated by the Assembly Manufacturer. Depending on the application, the specifier could be the end-user or a design office.

## Assembly Manufacturer (Panel builder)

The organisation (whether or not the same as the OM) responsible for the completed **assembly**.

He is responsible for **"Routine verifications"** on each panel produced, according to the standard.

If he derivates from the instructions of the original manufacturer he has to carry out again design verifications.

## Original Manufacturer

The organisation that has carried out the original design and the associated verification of an **assembly system**.

He is responsible for the **"Design verifications"** listed by IEC 61439-2 including many electrical tests.

## End-User

Should ask for a certified LV switchboard.
By systematically requesting routine verifications, he ensures that the assembly system used is compliant.

** Schneider Electric has developed a specification guide.*

# The main 10 functions of standard IEC 61439

For each of the following 10 functions, the standard IEC 61439 requires design verifications from the system manufacturer - mainly through type-tests - and routine verifications on each panel from the Panel Builder to achieve 3 basic goals: safety, continuity of service and compliance with end-user requirements.

## Safety

### Voltage stresses withstand capability

To withstand long term voltages, and transient and temporary overvoltages according to the insulation coordination principles and requirements.

### Current-carrying capability

To protect against burns and to withstand temperature rise:
> when any circuit is continuously loaded, alone, to the specified current
> when the **assembly** is loaded to the specified current according to the specified load pattern (between circuits and/or as a function of the time).

### Short-circuit withstand capability

To withstand the stresses resulting from the prospective short-circuit current and from the associated data (High forces between conductors, temp. rise in a very short time, air ionization, overpressure).

### Protection against electric shock

> Hazardous-live-parts not to be accessible (basic protection)
> Accessible conductive parts not to become hazardous-live (fault protection).

### Protection against risk of fire or explosion

> Resistance to internal glowing elements
> **Note:** protection of persons, and optional protection of the **assembly**, against arcing due to internal fault can be specified through a "special test" according to IEC 61641.

## Continuity of service

### Maintenance and modification capability

Capability to preserve continuity of supply without impairing safety during **assembly** maintenance or modification
> Electrical condition of the **assembly** or various circuits
> Speed of exchange of the functional units
> Test facilities…

### Electro-Magnetic compatibility

To properly function (immunity) and not to generate EM disturbances (emission) in specified environmental conditions:
> Industrial networks or locations (Environment A)
> Domestic, commercial, and light industrial locations (Environment B).

## Compliance with end-user requirements

### Capability to operate the electrical installation

To properly function, according to:
> The electrical diagram of the overall system and related information (voltages, coordination…)
> The specified operating facilities (e.g. free or restricted access to Man Machine Interfaces, isolation of the outgoing circuits…).

### Capability to be installed on site

> To withstand handling, transport, storage… and installation constraints
> Capability to be erected and connected (type of enclosure, type, material and cross sectional areas of external conductors).

### Protection of the **assembly** against mechanical and atmospheric environmental conditions

> Presence of water or solid foreign bodies (IP according to IEC 60529)
> External mechanical impacts (optional IK according to IEC 62262)
> Indoor or outdoor installation (humidity, UV).

B

**IEC 61439-1 paragraph 11.4**

## Protection against electric shocks and integrity of protection circuits

The following should be checked visually:
> presence of protective shields against direct and indirect contacts on live parts;
> presence of the PE conductor.

The continuity of protection circuits is ensured by compliance with the assembly instructions delivered with each product.

**IEC 61439-1 paragraph 11.5**

## Integration of incorporated components

The assembly manufacturer must comply with the instructions of the original equipment manufacturer for installation and wiring of the components used.

**IEC 61439-1 paragraph 11.6**

## Internal electric circuits and connections

Schneider Electric recommends marking the nut with a tinted acrylic lacquer, indelible and temperature-resistant.

This allows:
> not only self-checking to check effective tightening to torque;
> but also identification of any loosening.

**IEC 61439-1 paragraphe 11.9**

## Dielectric properties

The main circuits, and the auxiliary and control circuits connected to the main circuit, shall be subjected to the test voltage in accordance.

**IEC 61439-1 paragraph 11.10**

## Wiring, operating performance and function

Verification of wiring and marking conformity with the drawings, parts list and diagram.

# Standard individual check sheet

in accordance with the IEC 61439-1 and 2 standard from the assembly manufacturer (panelbuilder)

Job No.: .....

Switchboard No.: .....

Drawing No./Rev. No.: .....

| | Chapter | Verified |
|---|---|---|
| Degrees of protection provided by enclosures | **11.2** | ☐ |
| Insulation clearances and creepage distances | **11.3** | ☐ |
| Protection against electric shocks and integrity of protection circuits | **11.4** | ☐ |
| Integration of incorporated components | **11.5** | ☐ |
| Internal electric circuits and connections | **11.6** | ☐ |
| Terminals for external conductors | **11.7** | ☐ |
| Mechanical operation | **11.8** | ☐ |
| Dielectric properties | **11.9** | ☐ |
| Wiring, operating performance and function | **11.10** | ☐ |

Date of verification:

..... / ..... /.....

Verifications performed by:

.....

The PrismaSeT G Active functional system can be used for all types of low voltage distribution switchboards up to 630 A, in commercial and industrial environments.



## Switchboard design is very simple

**1 A metal structure**
The switchboard is made up of one or more enclosures, combined width-wise and/or height-wise, with a choice of doors (plain or transparent).

**2 A distribution system**
A complete offer of centralised or row distribution blocks, with busbars in duct or on rear of enclosure, provides current distribution over the full height of the switchboard.

**3 Complete functional units**
Built around each device, the functional unit includes:
- a dedicated mounting plate for device installation
- a front plate to block direct access to live parts
- prefabricated busbar connections to connect devices to the busbar
- cable-running accessories can be clipped onto the back of double-profile modular rails.

Each functional unit contributes to a function in the switchboard.
The system includes everything required for functional unit mounting, supply and connection.
The PrismaSeT G Active and functional unit components, in particular, have been designed and tested according to device characteristics.
This design approach ensures a high degree of reliability in system operation and optimum safety.

## Assets of PrismaSeT switchboards

**1 A dependable electrical installation**
The total compatibility of Schneider Electric devices with the PrismaSeT enclosure is a key advantage in ensuring a high level of installation dependability.

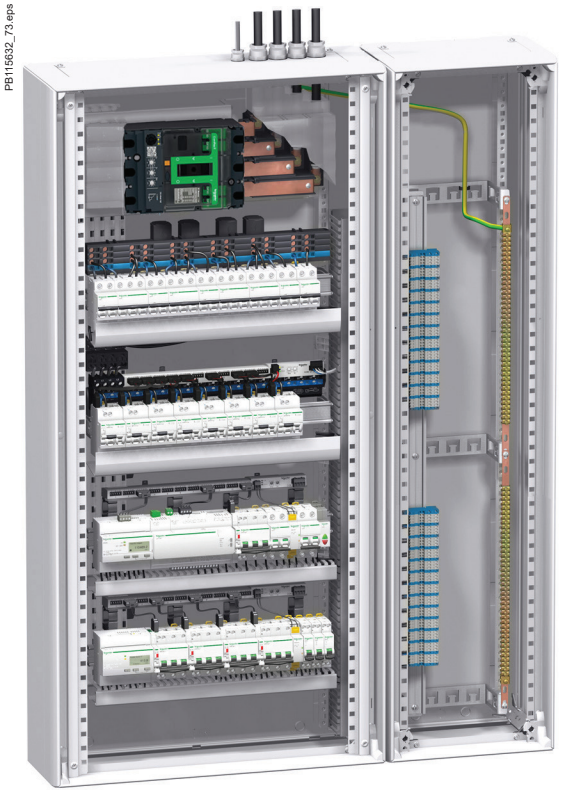
**2 An upgradeable electrical installation**
Thanks to modular design, PrismaSeT switchboards can be easily modified to integrate new functional units as needed.
Maintenance operations, carried out with the switchboard de-energised, are fast and straight-forward due to easy access to devices.

**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 protect against direct contact with live parts.
Terminal shields are mandatory for installing ComPacT NSX and INS/INV devices in PrismaSeT for even more personnel safety.

**4 Connected solution**
- fire prevention
- power availability
- energy management

System design has been validated by type tests as per standard IEC 61439-1 & 2 and benefits from the combined experience of Schneider Electric over many years.






## Electrical characteristics

Comply with IEC 62208 and EN 62208 standards:
- rated insulation of main busbars at rear of enclosure: 1000 V
- InA: 630 A
- rated peak withstand current Ipk: 53 kA
- short-circuit current Icc: 70 kA
- frequency: 50/60 Hz

## Mechanical characteristics

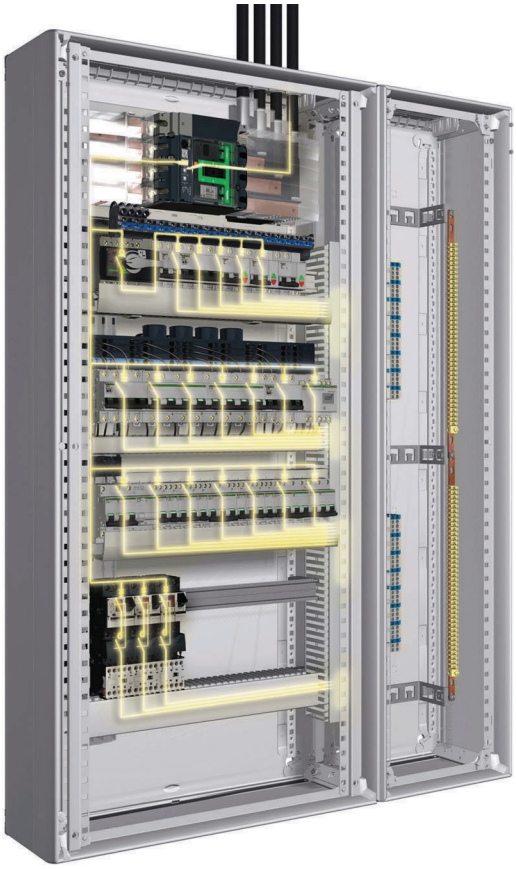
- Steel sheet metal
- Electrophoresis treatment + hot-polymerised polyester epoxy powder, white colour RAL 9003.
- Enclosures supplied in kit form, totally dismountable, designed to be assembled and wired horizontally on a work station.
- Can be combined side by side and one on top of another
- Degree of protection:
  - IP30: without door
  - IP40: with door
  - IP41: with door + canopy
  - IP43: with door + gasket + canopy
  - IP55: IP55 PrismaSeT G Active offer, supplied in kit form
- degree of protection against mechanical impacts:
  - IK07: without door
  - IK08: with door (transparent)
  - IK10: with plain door
  - IK10: for PrismaSeT G Active IP55
- Seismic characteristics: 2,5G without accessories
- Enclosure dimensions:
  - 3 widths:
    - W = 300: ducts 10 modules width
    - W = 600: Wall-mounted and floor-standing enclosures, 24 modules width
    - W = 850: Floor-standing enclosures 36 modules width
  - depth with door:
    - enclosures G IP30: 250 mm
    - enclosures G IP55: 260 mm
  - heights:
    - PrismaSeT G Active IP30: 12 heights: 330 mm to 1980 mm
    - PrismaSeT G Active IP55: 7 heights: 450 mm to 1750 mm
- Inside switchboards.

## Readily available close by

The kit concept makes handling and transport easier and you get to benefit from Schneider Electric's efficient international logistics. Your distributor, hand-picked by Schneider Electric, can give you the very best advice.

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

# With PrismaSeT, your solution is 100 % optimised



## Flexible design for building applications and their operation

Thanks to PrismaSeT solutions, design offices can design and customise switchboards easily and quickly:

> organisation by functional units, each corresponding to an application in the building (lighting, HVAC, lifts, etc.)

> organisation by dedicated physical zones: one for functional units (switchgear, mounting plates, front plates), one for power distribution, and one for connections.

## 100 % dependable and optimised design, in compliance with costs and deadlines

By supporting design offices with the services and software tools (Ecodial, Rapsody...) needed to quickly design switchboards, we help them to highlight their professionalism: switchboards with tested architectures to meet the most stringent specifications.
Our tools and services also enable them to meet requirements concerning compliance with costs and deadlines: optimised selection of the appropriate components for each switchboard (switchgear, distribution systems, enclosures with perfect electrical and mechanical consistency), front panel design and fast cost studies.

*

# 100 %

of dedicated building switchboard architectures are tested in compliance with IEC standards and can be customised.

# Modular devices

## Acti 9

NG125, C120 circuit breakers INS-INV40/160 switch disconnector



## Presentation

A double-profile modular rail offering a high level of performance
Made of an aluminium alloy with a magnetic properties, the
rail design is extremely rigid. The rail supports are crimp mounted.

### Fast mounting

The supports have positioning studs to guide the rail on the rear uprights. Only two mounting screws are required.

### Multiple functions

A number of devices can be clipped directly onto the rails, including Linergy FM 80 and 200 A distribution systems, all horizontal cable-running accessories such as cable straps and trunking supports, as well as the supports for Linergy TB earth bars.

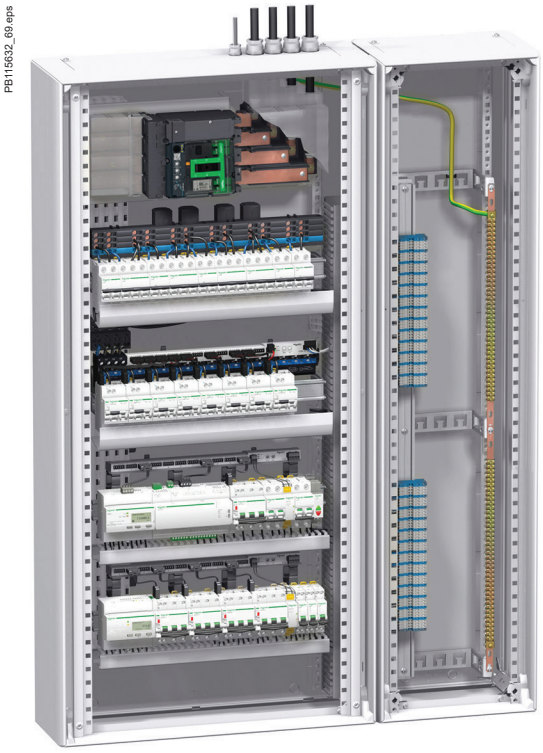
### Supply from all directions

Supply to the rows, using Linergy FH comb busbars or Linergy FM distribution systems via:

> Linergy BS or insulated busbar Linergy BW installed behind the devices.
> Linergy BS busbar installed in the duct.

### Centralised power supply

Via Linergy DX or DS distribution blocks, Linergy DP.




## Distribution

### Linergy FM 80 and 200 A device feeders

> Fast and secure front connection using spring terminals.
> Reliable connections, with balanced tightening, insensitive to vibrations and thermal variations.
> All types of modular devices can be mixed.
> Easy balancing of phases.
> Interchangeable devices.
> Easy installation upgrades.
> Fully insulated (IPxxB).

### Linergy FH comb busbars

> Direct connection to device terminals or via a connector.
> Fully insulated.
> Can be cut to length.

### Linergy DX quick distribution blocks

> See page D-10

### Linergy DP distribution blocks

> See pages D-12, D-13

### Linergy DS screw distribution blocks

> See page D-14

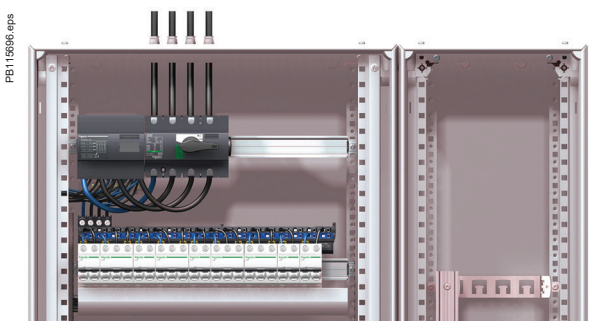
## Cable running

### Straps

> Easy and fast to install.
> Low cost.
> Perfectly organised and integrated cable running.
> Professional finish.
> Mounting at the back of modular rail, very comPacT dimensions.

### Trunking

> Traditional solution.



# Upgradeable PrismaSeT functional units = the best electrical + mechanical + communication consistency.

Functional units include switchgear mounting plates, front plates, connections, barriers for ensuring the best level of continuity of service, and helps in securing life and property.

ComPacT NSX up to 630 A
> page C-4

ComPacT NSXm up to 160
> page C-4

ComPacT INS-INV250-630 A
> page C-18

ComPacT INS-INV 40 to 60
> page C-34

Source changeover systems
ComPacT NSX
> page C-22

Source changeover systems
ComPacT INS-INV
> page C-23

FuPacT GS from 32 to 160 A
> page C-28

FuPacT ISFT from 160 to 250 A
> page C-30

NG125, INS-INV40 to 160,
C120 - Acti 9
> page C-34

Industrial control switchgears,
metering
> page C-38
Human-switchboard interface
> page C-40

# ComPacT NSX circuit breakers for PrismaSeT G Active Source changeover system



## Presentation

### A range of intelligent circuit breakers

ComPacT NSX improves management of electrical installations

In addition to protection functions, the new generation of ComPacT NSX moulded-case circuit breakers provides new features (analysis, measurements and communication) with access to information:

> either directly on the LCD screen of the trip unit to set the circuit breaker or read the main electrical values, including U, I, f, P(W) and E (kWh)
> or on the FDM 121 or FDM128 display on the front of the PrismaSeT switchboard (duct door with special front plate) for quick access to a greater wealth of information.

A cable connects the display to the trip unit without any special settings or configuration, making it easy to personalise alarms and displays or read event logs and maintenance indicators.

### Integration of ComPacT NSX in PrismaSeT

Installation of ComPacT NSX devices in a PrismaSeT functional switchboard is very easy and made of a functional unit system:

> dedicated mounting plates for ComPacT NSX offer
> matching power connections Linergy DP distribution block and prefabricated connections, connection blocks, power supply blocks)
> partitioning
> compliance with the safety perimeter, by design.

### Installation architectures for the measurement function

ComPacT NSX circuit breakers equipped with Micrologic 5/6 A or E trip units provide measurements that can be read on the FDM 121 or FDM128 display module or directly on the circuit breaker. This makes it possible to optimise the space required by the functional unit.

Installation times have also been reduced with respect to system with current transformers.

What is more, installation and connections are made easier because the FDM121 or FDM128 may be installed:

> via a direct cut-out in a plain door
> on the front of a W600 enclosure for one or four 96 x 96 devices on partial door cut-out.

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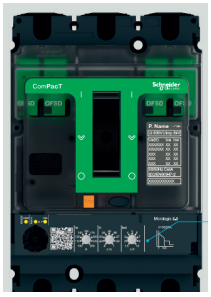
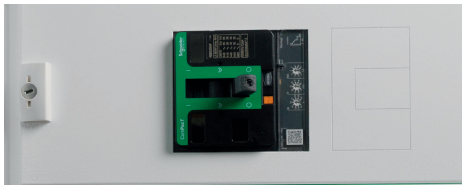


### A new front plate

The front of ComPacT NSX circuit breakers has an eye-pleasing curved profile, making PrismaSeT switchboards even more attractive. PrismaSeT front plates are designed for all types of controls (toggle, motor mechanism, rotary handle).



## Presentation

To ensure the supply of energy at all times, certain electrical installations are connected to two sources:

> normal source S1
> replacement source S2 which steps in to supply the installation if the normal source is not available.

A mechanical and/or electrical interlocking system between two ComPacT switch-disconnectors or circuit breakers (or a mixture) avoids simultaneous connection of the two sources during switching.
In PrismaSeT G Active, a manual changeover with mechanical interlocking of devices may be installed.

This is the simplest system. A human operator is required and consequently, the transfer from the normal source to the replacement source is delayed.

A manual source-changeover system comprises two or three manually controlled devices (circuit breakers or switch-disconnectors) that are mechanically interlocked.

The interlocking system avoids simultaneous connection (even transient) of the two sources.

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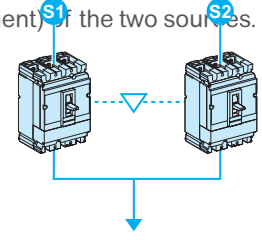



For more information on the communication functions of ComPacT NSX, see the ULP system user manual, ref. TRV99100, and the ComPacT NSX catalog, ref. LVPED208001_EN.
See catalog "ComPacT, MasterPacT source changeover systems", ref. LVPED21122EN

# Presentation of FuPacT fusegear for PrismaSeT G Active

## Presentation

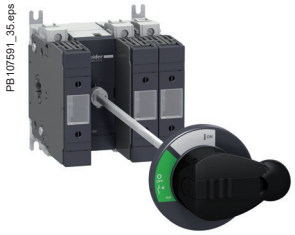
Whatever the switchboard configuration, PrismaSeT range offers tested and certified solution guaranteeing the safety of life and properties.

### 2 families of FuPacT fusegears

#### FuPacT GS

FuPacT GS ensures your power application for:
> distribution switchboards
> disconnection, isolation, locking and primary control of incoming circuits
> emergency stop,
> motor feeders (protect motors against single-phasing).

FuPacT fusegears have a test position for greater flexibility, easy to use.




#### FuPacT ISFT

FuPacT ISFT fuse-switch disconnectors are particularly suited for:
> secondary distribution circuits
> powering and control of industrial motors as local isolation device.


## Installation

> FuPacT fusegears have dedicated mounting plates and front plates.
> The upstream and downstream connections are made by the panelbuilder.
> Vertical mounting allows to install several FuPacT fusegears.

Positioning and mounting of the devices in the switchboard and filling rate of it take into account temperature rise, withstand short-circuit capacities, isolation clearances.

B

## Presentation

Get more out of your electrical panels with robust and ergonomic pushbuttons, switches.


Metal_Green-010-CMJN.psd

Robust performance that can withstand even the most severe environments.

A touch of style electrical panels and machines.

Modern design for customizing new and existing enclosures to meet the requirements of customers.

New offers, taking smart panels to the next level.

The new USB and RJ45 ports offer you a simple, effective way to connect a PC or USB memory device right to the front plate of your machine enclosure to:

> Export data
> Update the PLC and HMI program
> No need to open the door:
  - Eliminate electrical hazards
  - Keep dust out of the enclosure


CPSCT16028A.eps


CPSCT16027B.eps

## Standards

Harmony metal accessories for robust performance in all situations

From severe environments and potentially-explosive atmospheres, to extremely hot or cold temperatures, you can count on Harmony.

> Compliance with international standards (IEC, UL, CSA, CCC, EAC, JIS)
> Marine certified (BV, RINA, LROS, DNV, GL)
> Sealing effectiveness rated (IP66, IP67, IP69, IP69K, Type 4X)
> Operating temperature range of -40 °C
> to +70 °C
> High impact resistance: up to IK06
> High vibration resistance: shake-proof connector screws
> Standard and low-load, high-power electrical contact

## Installation

The Harmony range for faster, simpler installation

Designed for efficiency that helps keep costs down.

> Can be mounted with a single hand
> Fastens with a single anti-rotation locking screw
> Accessories compatible with the entire Harmony diameter 22 mm range

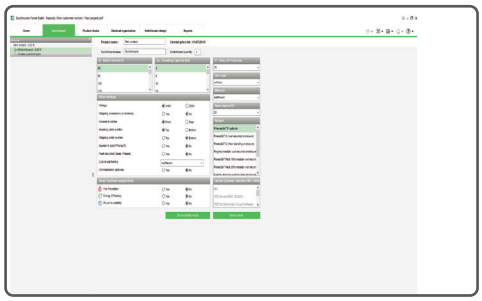
# Easy design with Rapsody software

A time-saver in the design and quotation phases.

More flexibility since modifications and upgrades are possible throughout the project.

## 5 easy steps to design a switchboard

**1**

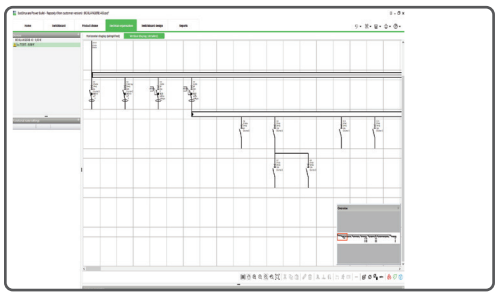


**Define** the switchboard's electrical and environmental characteristics, in a few clicks.

**2**

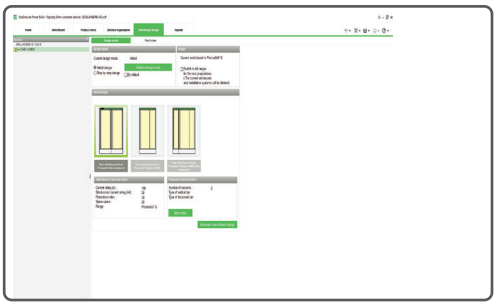
**Choose and configure**
the devices to be installed, with no risk of error.

**3**



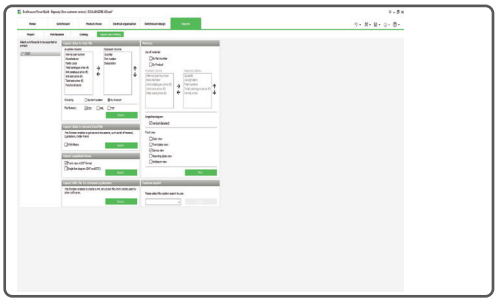
**Customise,** and easily modify the single-line diagram. **Move or duplicate** devices. **Generate** current distribution and connection systems.

**4**



**Choose the switchboard** and let the software set up the enclosure.
A list of mounting and connection accessories is proposed to make mounting work easier.

**5**



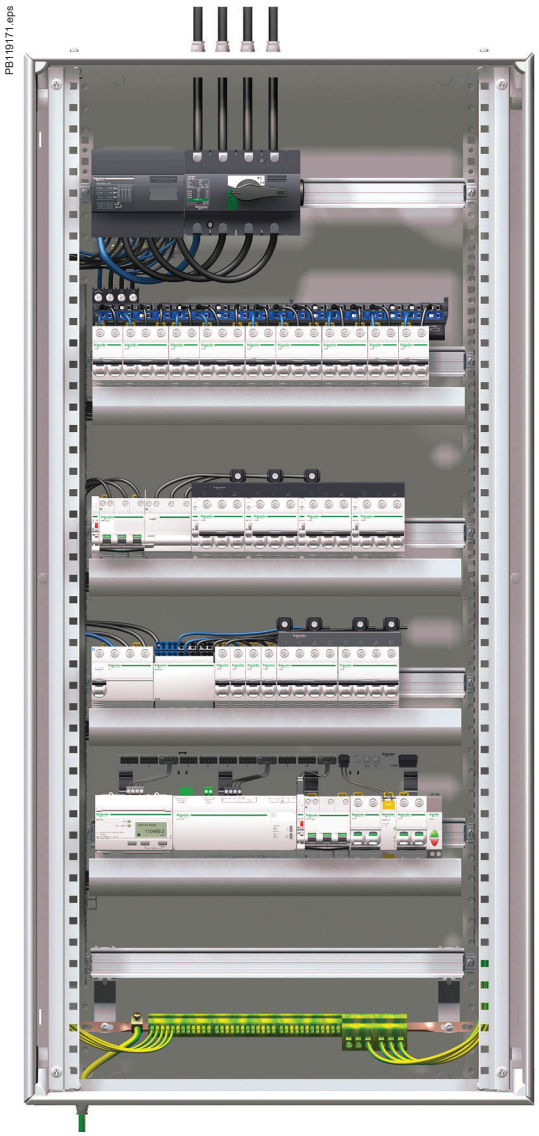
Automatically **export** the information required to make a clear, comprehensive and professional quotation.

| Incomer | |
|---|---|
| **INS-INV 160 A** | |
| Incoming cables via top | |

| Distribution |
|---|
| Linergy DX distribution block 4P |

| Outgoing devices | |
|---|---|
| **Acti 9 devices** | |
| Supply | Linergy FM distribution block + Linergy FH comb busbar |
| Cable running | Straps + cover + trunking |
| Connection | Linergy TR, TB terminal block at bottom of switchboard |

| IP30/IP4X enclosure |
|---|
| Wall-mounted enclosure, W = 595 mm, H = 1080 mm |



## Incomer

**ComPacT NSX250**

Fixed, front connection
Toggle
Incoming cables via top on incoming connection block

## Distribution

Linergy BW rear busbar

## Outgoing devices

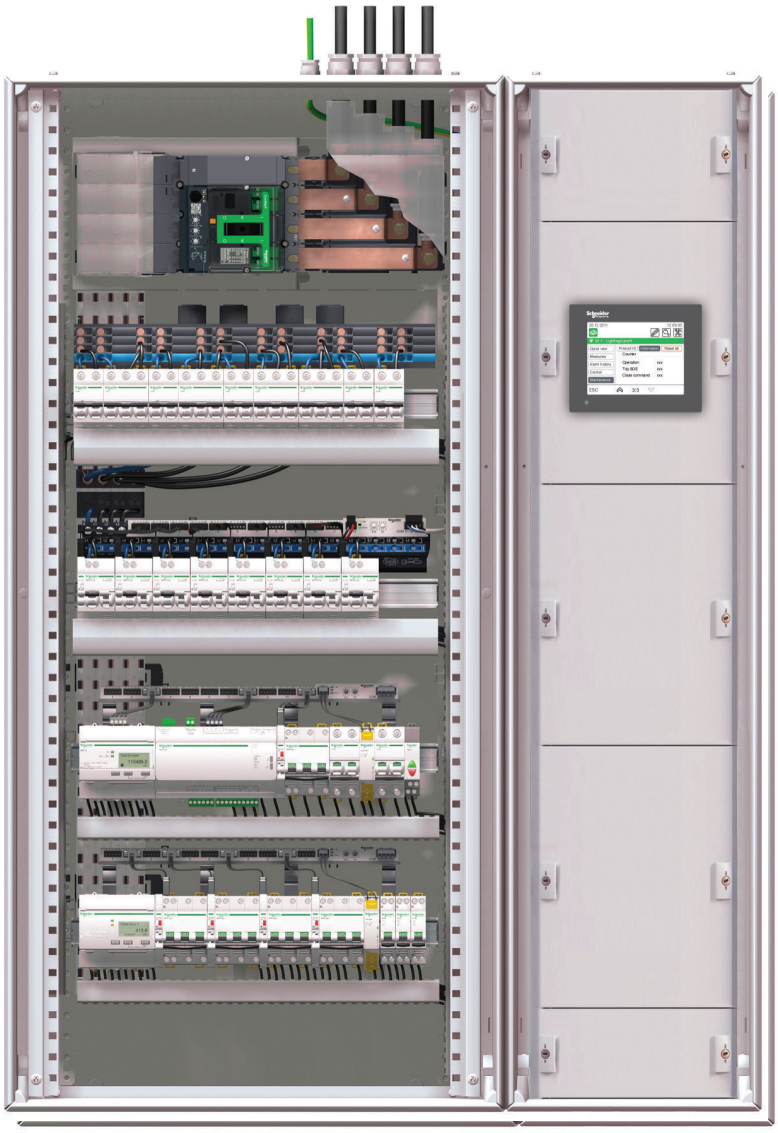
**Acti 9 + NG160 devices**

| | |
|---|---|
| Supply | Linergy FM + Linergy FH comb busbar + Linergy DS distribution block 4P + Linergy DX |
| Cable running | Straps + cover + trunking |
| Connection | Linergy TR, TB terminal block in duct |

## IP30/IP4X enclosure

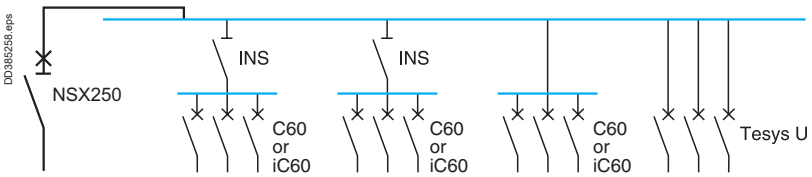
Wall-mounted enclosure, W = 595 mm, H = 1450 mm
Duct W = 305, H = 1450

PB119172.eps



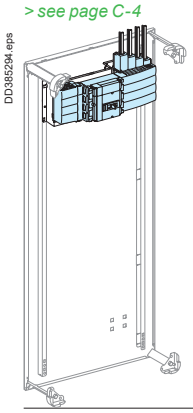
B

## Starting with the electrical diagram: IP30/IP4X switchboard



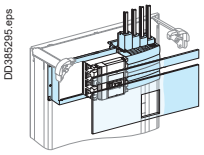

## Install the incomer

> see page C-4



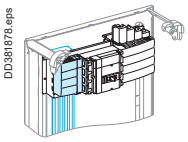

- order the mounting plates and the front plates
- the incoming connection block
- the power supply block for the Linergy BW busbars.

**1** **Installation / connection**



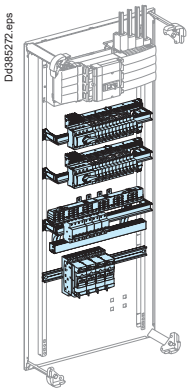

| Device | No. of vertical modules | Mounting plate | Cut-out front plate | Upstream front plate | Connection block Cables via top | Cables via bottom |
|---|---|---|---|---|---|---|
| **Fixed ComPacT NSX** | | | | | | |
| NSX100/250 | 5 | **LVS03030** | **LVS03232** | **LVS03801** | **LVS04066** | or LVS**04067** |

**2** **Distribution using Linergy BW busbars**




| Device | Power supply block | Terminal shields (set of 2) | Linergy BW busbars |
|---|---|---|---|
| **Fixed ComPacT NSX and VigicomPacT NSX** | | | |
| NSX100/250 | **LVS04060** | | |

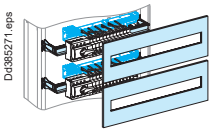
## Install the modular devices



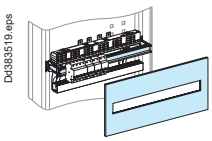

Order the mounting plates and front plates taking into account:
- supply to the rows
- cable running.

**1** **Acti 9**

> see page C-34



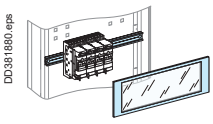

| Device | No. of vertical modules | Modular rail | Modular front plate |
|---|---|---|---|
| **All Multi 9 or Acti 9 devices** | | | |
| All supply systems (Linergy FH) with cable straps and trunking sections | 4 | **LVS03001** | **LVS03204** |
| **Multi 9 or Acti 9 devices y 40 A** | | | |
| Supply via 63/80 A Linergy FM or Linergy FH with cable straps | 3 | **LVS03001** | **LVS03203** |




| Device | No. of vertical modules | Modular rail | Modular front plate |
|---|---|---|---|
| **All Multi 9 or Acti 9 devices** | | | |
| All supply systems (Linergy FH) with cable straps and trunking sections | 4 | **LVS03001** | **LVS03204** |
| **Multi 9 or Acti 9 devices y 40 A** | | | |
| Supply via 63/80 A Linergy FM or Linergy FH with cable straps | 3 | **LVS03001** | **LVS03203** |

**2** **TeSys "U"**

> see page C-38




| Device | No. of vertical modules | Useful lenght of rail (mm) | Rear modular rail | Transparent front plate |
|---|---|---|---|---|
| **TeSys U model** | | | | |
| Tesys U model | 4 | **432** | **LVS03004** | **LVS03342** |

- Linergy FM distribution block > see page D-16
- Cable running > see page C-39

## Determine the size of the switchboard

- count the number of occupied modules

**19 modules**

- determine the corresponding wall-mount enclosure

**21 modules**

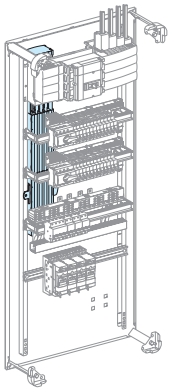
- order the additional plain front plate.

**Plain front plate**

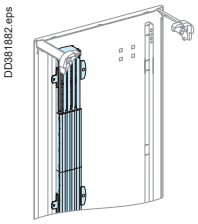
> see page C-54

| 500 mm wide plain front plate | Cat. no. |
|---|---|
| 1 module (H = 50 mm) | **LVS03801** |
| 2 modules (H = 100 mm) | |
| 3 modules (H = 150 mm) | **LVS03803** |

## Plan the distribution system



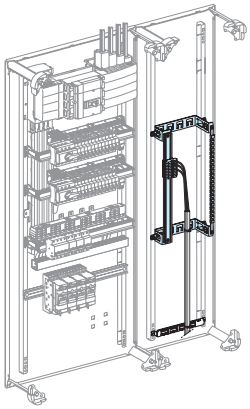

**Linergy BW busbars**
> see page B-39

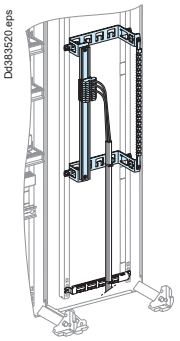



| Linergy BW busbars | | 160 A | 250 A | 400 A | 630 A |
|---|---|---|---|---|---|
| Three-pole | W = 1000 mm | LVS04111 | LVS04112 | LVS04113 | LVS04114 |
| | W = 1400 mm | LVS04116 | LVS04117 | LVS04118 | LVS04119 |
| Four-pole | W = 1000 mm | LVS04121 | LVS04122 | LVS04123 | LVS04124 |
| | W = 1400 mm | LVS04126 | LVS04127 | LVS04128 | LVS04129 |

## Select the Linergy TR terminal blocks and the Linergy TB earth bar

> see page D-23, page D-24

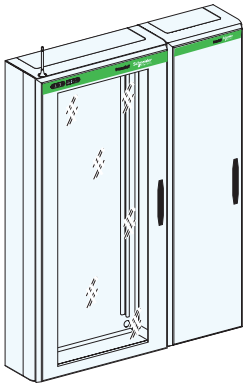


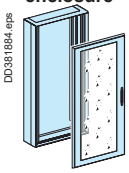

| Designation | Cat. no. |
|---|---|
| Mounting plate for terminal block and Linergy TB earth bar | LVS04220 |
| Modular rail, W = 1600 mm | LVS04226 |
| 12 x 3 mm direct earth bar with 1 terminal 352 L330 Linergy TB | LVS04201 |
| 4 earth block 12 x 42 quick connection Linergy TB | LVS04214 |
| 4 earth block 3 x 162 quick connection Linergy TB | LVS04215 |

## Select the enclosures

> see page E-4

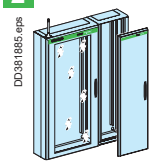



**1 IP wall-mount enclosure**




| No. of vertical modules | Height of enclosure | Enclosure | Plain door | Transparent door |
|---|---|---|---|---|
| **Wall-mount enclosure (IP30)** | | | | |
| 6 | 330 | LVS08102 | LVS08122 | LVS08132 |
| 9 | 480 | LVS08103 | LVS08123 | LVS08133 |
| 12 | 630 | LVS08104 | LVS08124 | LVS08134 |
| 15 | 780 | LVS08105 | LVS08125 | LVS08135 |
| 18 | 930 | LVS08106 | LVS08126 | LVS08136 |
| 21 | 1080 | LVS08107 | LVS08127 | LVS08137 |

**2 Duct, W = 300 mm**




| No. of vertical modules | Height of duct | Duct, W = 300 mm | Plain door | Transparent door |
|---|---|---|---|---|
| **Duct (IP30)** | | | | |
| 6 | 330 | LVS08172 | LVS08182 | |
| 9 | 480 | LVS08173 | LVS08183 | |
| 12 | 630 | LVS08174 | LVS08184 | |
| 15 | 780 | LVS08175 | LVS08185 | |
| 18 | 930 | LVS08176 | LVS08186 | |
| 21 | 1080 | LVS08177 | LVS08187 | LVS08197 |

**3 Cable tie supports**

| Designation | Cat. no. |
|---|---|
| 4 cable-tie supports for 300 mm wide ducts | LVS08868 |

**4 Accessories for lifting, handling, wall mounting, finishing parts, etc.**

# Green Premium™

## Endorsing eco-friendly products in the industry

Green Premium™
Product

Green Premium is the only label that allows you to effectively develop and promote an environmental policy whilst preserving your business efficiency. This ecolabel guarantees compliance with up-to-date environmental regulations, but it does more than this.

## Main Features

Over 75% of Schneider Electric manufactured products have been awarded the Green Premium ecolabel

Discover what we mean by green …

**Check your products!**

Schneider Electric's Green Premium ecolabel is committed to offering transparency, by disclosing extensive and reliable information related to the environmental impact of its products:

### RoHS

Schneider Electric products are subject to RoHS requirements at a worldwide level, even for the many products that are not required to comply with the terms of the regulation. Compliance certificates are available for products that fulfil the criteria of this European initiative, which aims to eliminate hazardous substances.

### REACh

Schneider Electric applies the strict REACh regulation on its products at a worldwide level, and discloses extensive information concerning the presence of SVHC (Substances of Very High Concern) in all of its products.

### PEP: Product Environmental Profile

Schneider Electric publishes complete set of environmental data, including carbon footprint and energy consumption data for each of the lifecycle phases on all of its products, in compliance with the ISO 14025 PEP ecopassport program. PEP is especially useful for monitoring, controlling, saving energy, and/or reducing carbon emissions.

### EoLI: End of Life Instructions

Available at the click of a button, these instructions provide:

- Recyclability rates for Schneider Electric products.
- Guidance to mitigate personnel hazards during the dismantling of products and before recycling operations.
- Parts identification for recycling or for selective treatment, to mitigate environmental hazards/ incompatibility with standard recycling processes.

# Functional system

# Contents

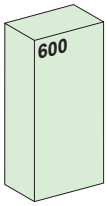
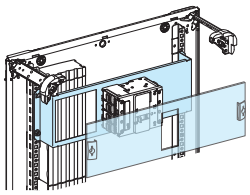
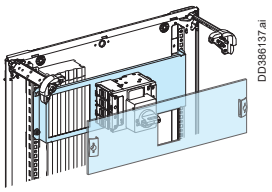


C

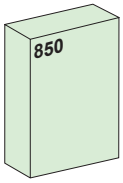
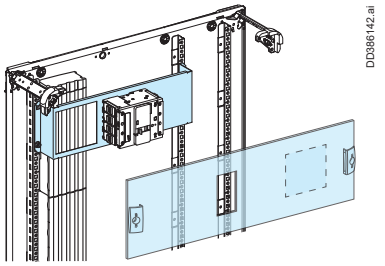
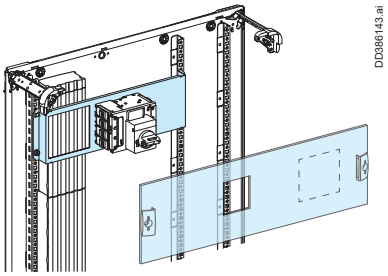
# Contents

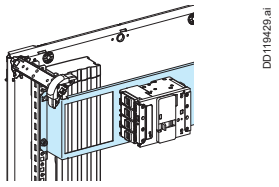
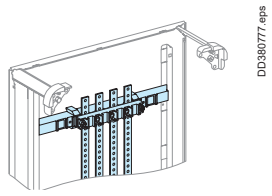
# ComPacT and ComPacT Vigi (ELCB) NSXm up to 160
## Horizontal mounting - Fixed - Toggle / Rotary handle
W600 - W850



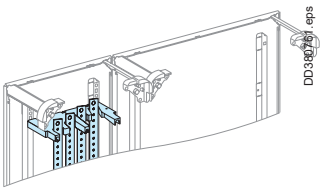
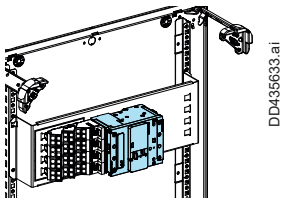
| Mounting | W600 Horizontal - Fixed - Toggle | | W600 Horizontal - Fixed - Rotary handle |
|---|---|---|---|
|  |  | |  |
| **Devices** | **NSXm** | **NSXm Vigi (ELCB)** | **NSXm** |
| Number of devices per row | 1 | 1 | 1 |
| Nb. of vertical modules | **3** | **3** | **3** |
| Mounting plates | **LVS03020** | **LVS03020** | **LVS03021** |
| Front plates with cut-out [Nb. of vertical modules] | **LVS03330** [3] | **LVS03330** [3] | **LVS03331** [3] |
| Long terminal shields | 3P : **LV426912**<br>4P : **LV426913** | 3P : **LV426912**<br>4P : **LV426913** | 3P : **LV426912**<br>4P : **LV426913** |
| Collar | | | |

**(1)** Maximum size of connection cables: 70 mm². For cable cross-sections greater than 70 mm², use of a cable duct is recommended.

| Mounting | W850 Horizontal - Fixed - Toggle | | W850 Horizontal - Fixed - Rotary handle |
|---|---|---|---|
|  |  | |  |
| **Devices** | **NSXm** | **NSXm Vigi (ELCB)** | **NSXm** |
| Number of devices per row | 1 | 1 | 1 |
| Nb. of vertical modules | **3** | **3** | **3** |
| Mounting plates | **LVS03020** | **LVS03020** | **LVS03021** |
| Front plate with cut-out [Nb. of vertical modules] | **LVS03332** [3] | **LVS03332** [3] | **LVS03333** [3] |
| Long terminal shields | 3P : **LV426912**<br>4P : **LV426913** | 3P : **LV426912**<br>4P : **LV426913** | 3P : **LV426912**<br>4P : **LV426913** |
| Collar | | | |

| Downstream distribution | Insulated Linergy BW busbars | Rear Linergy BS busbars |
|---|---|---|
|  |  |  |
| Busbars | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* |
| Prefabricated connection | **LVS04021**, **LVS04145**, **LVS04146**, **LVS04148** | **LVS04030** |

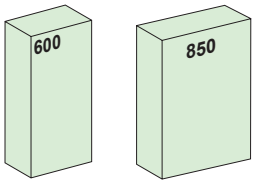
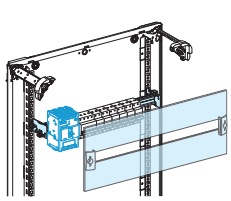
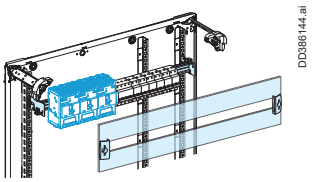
**Note:** For cable-tie function, add 2 modules above. *> page C-51*

| Downstream distribution | Linergy BS multi-stage busbars | Linergy DP |
|---|---|---|
|  |  |  |
| Busbars / Distribution block | **LVS04192** + copper bars *> pages D-7, D-8* | **LVS04038**,**LVS04039** *> page D-13* |
| Prefabricated connection | Connection must be made | |

**Note:** For cable-tie function, add 2 modules above. *> page C-51*

# ComPacT and ComPacT Vigi (ELCB) NSXm up to 160
# Vertical mounting on modular rail - Toggle
## W600 - W850 - W300



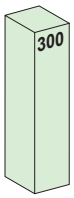
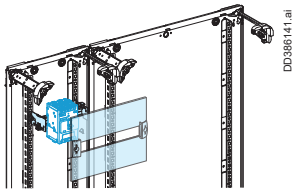
| Mounting | W600 Modular rail - Toggle | | W850 Modular rail - Toggle | |
|---|---|---|---|---|
|  |  | |  | |
| **Devices** | **NSXm** | **NSXm Vigi (ELCB)** | **NSXm** | **NSXm Vigi (ELCB)** |
| Nb. of vertical modules | **5** (1) | **5** (2) | **5** (1) | **5** (2) |
| Rail (48 modules of 9 mm) | **LVS03002** (adjustable) (3) | **LVS03002** (adjustable) (3) | **LVS03007** (adjustable) (3) | **LVS03007** (adjustable) (3) |
| Modular front plates [Nb. of vertical modules] With cut-out | **LVS03205** [5] | **LVS03205** [5] | **LVS03218** [5] | **LVS03218** [5] |
| Blanking plate Strip | **LVS03220** | **LVS03220** | **LVS03220** | **LVS03220** |
| Divisible | **LVS03221** | **LVS03221** | **LVS03221** | **LVS03221** |

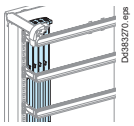
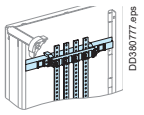
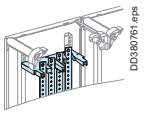
(1) With Linergy DP, the number of vertical modules will be 7 and must be used with downstream front plate; cat no.**LVS03802** for W600 (quantity:1) or cat no. **LVS03851** for W850 (quantity:2).

(2) With Linergy DP, the number of vertical modules will be 8 and must be used with downstream front plate; cat no. **LVS03803** for W600 or cat no. **LVS03853** for W850.

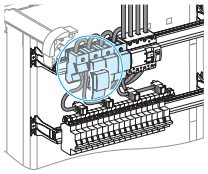
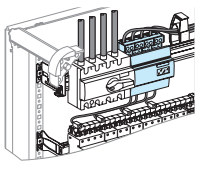
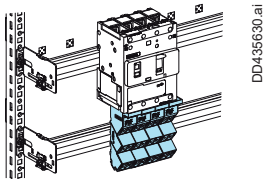
(3) Can be completed by a rail (cat no.**LVS04226**) + raiser (cat no.**LVS04225**) to install modular devices. *> page C-48, C-52*

(4) With Linergy DP, the number of vertical modules will be 9 and must be used with downstream front plate; cat no. **LVS03813** for W300.

| Mounting | W300 Modular rail - Toggle | |
|---|---|---|
|  |  | |
| **Devices** | **NSXm** | **NSXm Vigi (ELCB)** |
| Nb. of vertical modules | **8** (1) | **8** (2) |
| Rail (20 modules of 9 mm) | **LVS03011** (adjustable) | **LVS03011** (adjustable) |
| Front plate [Nb. of vertical modules] modular | **LVS03214** [4] | **LVS03214** [4] |
| upstream | **LVS03812** [2] | **LVS03812** [2] |
| downstream | **LVS03812** [2] | **LVS03812** [2] (4) |
| Blanking plate Strip | **LVS03220** | **LVS03220** |
| Divisible | **LVS03221** | **LVS03221** |

| Downstream distribution | Insulated Linergy BW busbars | Rear Linergy BS busbars | Linergy BS Multi-stage busbars in duct |
|---|---|---|---|
|  |  |  |  |
| Busbars | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Connection | **LVS04030**, **LVS04145**, **LVS04146**, **LVS04147**, **LVS04148** | **LVS04145**, **LVS04146** (centred device) | Must be made |

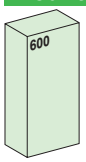
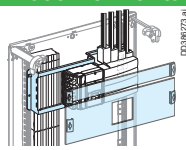
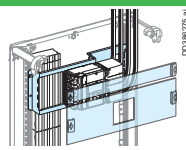
**Note:** For cable-tie function, add 2 modules above *> page C-51*

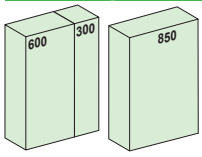
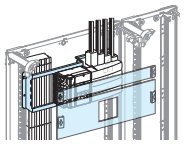
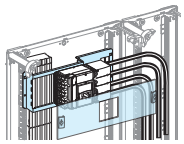
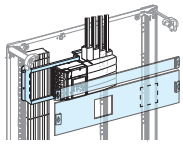
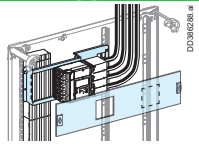
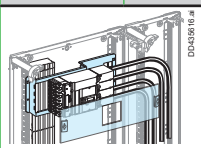
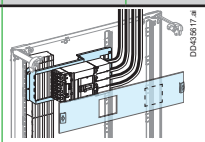
| Downstream distribution | Distributionblock Linergy DX 1P, 160 A | Distribution block Linergy DX 4P, 125 A/160 A | | Linergy DP, 3P/4P, 160 A |
|---|---|---|---|---|
|  |  |  | |  |
| Distribution block | **LVS04031** *> page C-16* | **LVS04045** *> page C-16* | **LVS04046** *> page C-16* | **LVS04038**,**LVS04039** *> page D-13* |
| Connection | **LVS04149** | **LVS04047** | included | |
| Rail | | | | **LVS03002** (W600)<br>**LVS03007** (W850)<br>**LVS03011** (W300) |

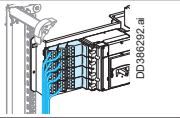
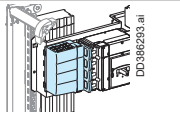
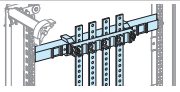
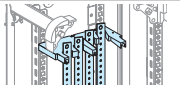
**Note:** For cable-tie function, add 2 modules above. *> page C-51*

# ComPacT and ComPacT Vigi (ELCB) NSX 100/160/250
## Horizontal mounting - Fixed - Toggle
### W600 - W600+W300 - W850

Designed for PowerTag NSX
Circuit breakers

| Mounting | W600 Horizontal - Fixed - Toggle | | | |
|---|---|---|---|---|
|  |  | |  | |
| **Devices** | **NSX / NSX Vigi (ELCB) 100/250** | | **NSX / NSX Vigi (ELCB) 100/160 (1)** | |
| |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **5** | **5** | **5** | **5** |
| Mounting plates | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** |
| Front plates cut-out | **LVS03232** [4] | **LVS03232** [4] | **LVS03232** [4] | **LVS03232** [4] |
| [Nb. of vertical modules] upstream | **LVS03801** [1] | | **LVS03801** [1] | |
| [Nb. of vertical modules] downstream | - | **LVS03801** [1] | - | **LVS03801** [1] |
| **Upstream connection** | | | | |
| Incoming connection block or cables + Long terminal shields | **LVS04066** *> page C-46*  | **LVS04067** *> page C-46*  | 3P : **LV429517**, 4P : **LV429518**  | |

| Mounting | W600+W300 Horizontal - Fixed - Toggle | | | | W850 Horizontal - Fixed - Toggle | | | |
|---|---|---|---|---|---|---|---|---|
|  |  | |  | |  | |  | |
| **Devices** | **NSX / NSX Vigi (ELCB) 100/250** | | | | **NSX / NSX Vigi (ELCB) 100/250** | | | |
| |  |  |  |  |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **5** | **5** | **4** | **4** | **5** | **5** | **4** | **4** |
| Standard Mounting plates | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** |
| Front plates cut-out | **LVS03232** [4] | **LVS03232** [4] | **LVS03232** [4] | **LVS03232** [4] | **LVS03294** [4] | **LVS03294** [4] | **LVS03294** [4] | **LVS03294** [4] |
| [Nb. of vert. mod.] upstream | **LVS03801** [1] | - | - | - | **LVS03851** [1] | - | - | - |
| [Nb. of vert. mod.] downstream | - | **LVS03801** [1] | - | - | - | **LVS03851** [1] | - | - |
| With PowerTag NSX | | | | | | | | |
| | - | - |  | | - | - |  | |
| Mounting plates | - | - | **LVS03033** | **LVS03033** | - | - | **LVS03033** | **LVS03033** |
| Front plates [Nb. of vert. mod.] cut-out | - | - | **LVS03334** [4] | **LVS03334** [4] | - | - | **LVS03335** [4] | **LVS03335** [4] |
| **Upstream connection** | | | | | | | | |
| Incoming connection block or cables + Long terminal shields | **LVS04066** *> page C-46*  | **LVS04067** *> page C-46*  | 3P : **LV429517** 4P : **LV429518**  | | **LVS04066** *> page C-46*  | **LVS04067** *> page C-46*  | 3P : **LV429517** 4P : **LV429518**  | |

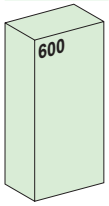
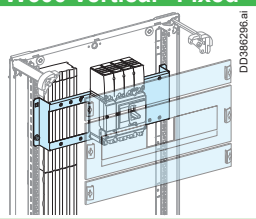
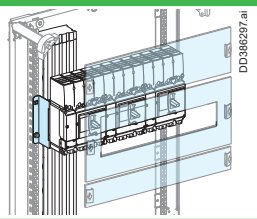
| Downstream distribution | Linergy DP 250 A distribution block | Linergy BW + Power supply block | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  |  |  |  |
| Busbars / Distrib blocks | 3P : **LVS04033** , 4P : **LVS04034** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | - | **LVS04060 (2)** *> page C-46*  | Connection must be made | |
| Long terminal shields | - | |  3P : **LV429517** 4P : **LV429518** | |

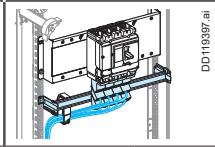
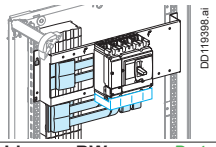
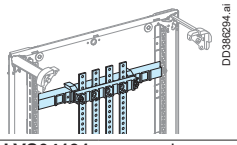
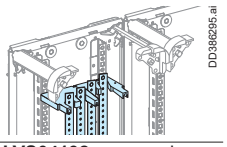
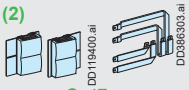
**Note:** For cable-tie function, add 2 modules above. *> page C-51*
**(1)** Maximum size of connection cables: 70 mm². For cable cross-sections greater than 70 mm², use of a cable duct is recommended.
**(2)** Supplied with connections.

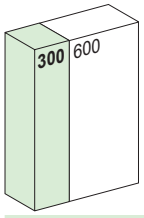
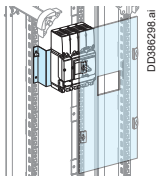
# ComPacT and ComPacT Vigi (ELCB) NSX 100/160/250
## Vertical mounting - Fixed - Toggle
## W600 - W300

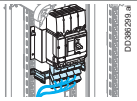
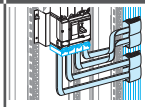
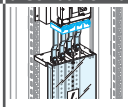
Designed for PowerTag NSX
Circuit breakers

C

| Mounting | | W600 Vertical - Fixed - Toggle | |
|---|---|---|---|
|  | |  DD386296.ai |  DD386297.ai |
| **Devices** | | **NSX / NSX Vigi (ELCB) 100/160** | **NSX / NSX Vigi (ELCB) 250** |
| Number of devices per row | | 1 or 4 x 3P or 3 x 4P | 1 or 4 x 3P or 3 x 4P |
| Nb. of vertical modules | | **9** or **10** | **11** or **12** |
| Mounting plates | | **LVS03040** | **LVS03040** |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03243** [5] | **LVS03243** [5] |
| | upstream | **LVS03802** [2] | **LVS03804** [4] |
| | downstream | **LVS03802** [2] | **LVS03802** [2] |
| | downstream with PowerTag NSX | **LVS03803** [3] | **LVS03803** [3] |
| **Upstream connection** | | | |
| Long terminal shields | |  DD386301.ai 3P : **LV429517** 4P : **LV429518** | |
| Divisible blanking plates (HxL) | 46 x 1000 mm |  DD386312.ai **LVS03220** ComPacT NSX 3P or 4P without electronic trip unit | |
| | 46 x 90 mm (x4) | **LVS03221** ComPacT NSX 3P or 4P with electronic trip unit | |

| Downstream distribution | Linergy DP 250 A distribution block | Linergy BW + Power supply block (1) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  DD119397.ai |  DD119398.ai |  DD386294.ai |  DD386295.ai |
| Busbars / Distrib blocks | 3P : **LVS04033** 4P : **LVS04034+ LVS03002** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | - | **LVS04061 + LVS04062** (2)  DD119400.ai DD386303.ai *> page C-47* | Connection must be made | |
| Long terminal shields | - |  DD386302.ai 3P : **LV429515** 4P : **LV429516** |  DD386301.ai 3P : **LV429517** 4P : **LV429518** | |

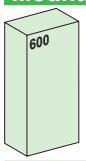
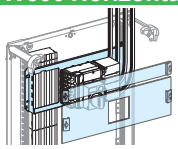
| Mounting | W300 Vertical Fixed - Toggle |
|---|---|
|  |  DD386298.ai |
| **Devices** | **NSX / NSX Vigi (ELCB)100/250** |
| Number of devices per row | 1 |
| Nb. of vertical modules | **9** or **10** |
| Mounting plates | **LVS03050** |
| Front plates [Nb. of vertical modules] cut-out | **LVS03253** [9] |
| downstream with PowerTag NSX | **LVS03811** [1] **(3)** |
| **Upstream connection** | |
| Cables + Long terminal shields | 3P : **LV429517** 4P : **LV429518**  DD386301.ai |

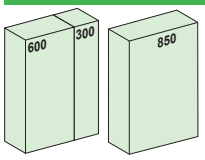
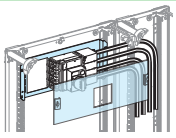
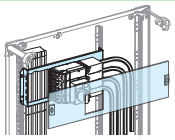
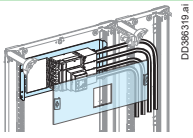
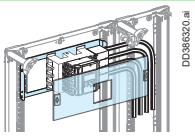
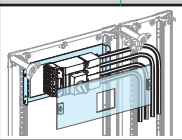
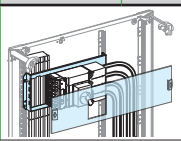
| Downstream distribution | Linergy DP 250 A distribution block in duct | Insulated Linergy BW busbars (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars or multi-stage distribution block |
|---|---|---|---|---|
|  |  DD386299.ai |  DD386300.ai |  DD386294.ai |  DD386304.ai |
| Busbars / Distrib blocks | 3P : **LVS04033** + 4P : **LVS04034** **LVS03011** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** copper bars *> page D-6* | **LVS04192** copper bars *> pages D-7, D-8* |
| Power supply block | - | **LVS04061** *> page C-47*  DD119400.ai | - | - |
| Connection | - | **LVS04064** *> page C-47*  DD385242.eps | Must be made | **LVS04065** *> page C-48*  DD385251.eps |
| Short / Long terminal shields | - | 3P : **LV429515** 4P : **LV429516**  DD386302.ai | 3P : **LV429517** 4P : **LV429518**  DD119385.ai | 3P : **LV429515** 4P : **LV429516**  DD386302.ai |

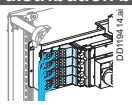
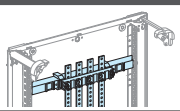
**Note:** For cable-tie function, add 1 module above. *> page C-51*
**(1)** 1 device centred on mounting plate.
**(2)** Space available at the top of the enclosure after mounting the universal power supply block: NSX100/250 = 7 modules.
**(3)** Mounting 1 module front plate (LVS03811) on the extreme top or bottom is not allowed.

# ComPacT and ComPacT Vigi (ELCB) NSX 100/160/250
# Horizontal mounting - Fixed - Rotary handle / Motor mechanism module / Plug-in
## W600 - W600+W300 - W850

Designed for PowerTag NSX
Circuit breakers

| Mounting | W600 Horizontal - Fixed - Rotary handle (1) | |
|---|---|---|
|  |  | |
| **Devices** | **NSX / NSX Vigi (ELCB) 100/160** | |
| |  |  |
| Number of devices per row | 1 | 1 |
| Nb. of vertical modules | **5** | **5** |
| Mounting plates | **LVS03031** | **LVS03031** |
| Front plates cut-out | **LVS03232** [4] | **LVS03232** [4] |
| [Nb. of vertical modules] upstream | **LVS03801** [1] | |
| downstream | | **LVS03801** [1] |
| **Upstream connection** | | |
| Long terminal shields |  3P : **LV429517** 4P : **LV429518** | |

| Mounting | W600+W300 Horizontal - Fixed - Rotary handle | | W850 Horizontal - Fixed - Rotary handle | | W600+W300 Horizontal - Fixed - Motor mechanism module | | W600+W300 Horizontal - Plug-in - Toggle | |
|---|---|---|---|---|---|---|---|---|
|  |  | |  | |  | |  | |
| **Devices** | **NSX / NSX Vigi (ELCB) 100/250** | | **NSX / NSX Vigi (ELCB) 100/250** | | **NSX / NSX Vigi (ELCB) 100/250** | | **NSX100/250** | |
| |  |  |  |  |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **4** | **4** | **4** | **4** | **4** | **4** | **4** | **4** |
| Mounting plates | **LVS03031** | **LVS03031** | **LVS03031** | **LVS03031** | **LVS03032** | **LVS03032** | **LVS03032** | **LVS03032** |
| Front plates [Nb. of vert. mod.] cut-out | **LVS03232** [4] | **LVS03232** [4] | **LVS03301** [4] | **LVS03301** [4] | **LVS03234** [4] | **LVS03234** [4] | **LVS03290** [4] | **LVS03290** [4] |
| With PowerTag NSX | | | | | | | | |
| |  | |  | | - | - | - | - |
| Front plates [Nb. of vert. mod.] cut-out | **LVS03334** [4] | **LVS03334** [4] | **LVS03335** [4] | **LVS03335** [4] | - | - | - | - |
| **Upstream connection** | | | | | | | | |
| Terminal shields |  3P : **LV429517** 4P : **LV429518** | | | | | | **Plug-in base**  3P : **LV429517** 4P : **LV429518** | **Device**  3P : **LV429515** 4P : **LV429516** |
| + connection adapter for plug-in base | | | | | | | 3P: **LV429306** 4P: **LV429307** | |

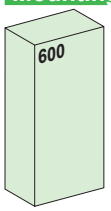
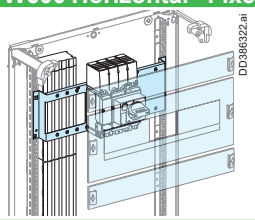
| Downstream distribution | Linergy DP 250 A distribution block | Linergy BW + Power supply block (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  |  |  |  |
| Busbars / Distrib blocks | 3P : **LVS04033**, 4P : **LVS04034** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | | **LVS04060** *> page C-46*  | Connection must be made | |
| Long terminal shields | - | |  3P : **LV429517** 4P : **LV429518** | |

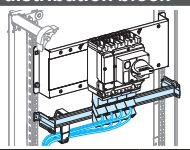
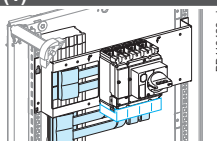
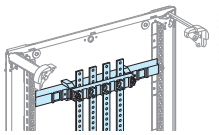
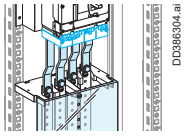
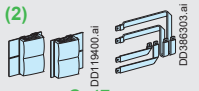
**Note:** For cable-tie function, add 2 modules above. *> page C-51*
**(1)** Maximum size of connection cables: 70 mm². For cable cross-sections greater than 70 mm², use of a cable duct is recommended.
**(2)** With motor mechanism, use power supply units with connections (cat no.LVS**04061**) + connection to make with Linergy BW. >page D5

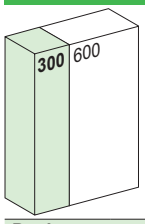
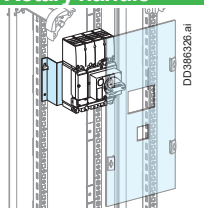
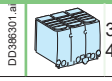
# ComPacT and ComPacT Vigi (ELCB) NSX 100/160/250
# Vertical mounting - Fixed - Rotary handle
## W600 - W300

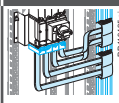
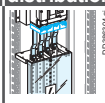
Designed for PowerTag NSX
Circuit breakers

C

| Mounting | W600 Horizontal - Fixed - Rotary handle (1) | |
|---|---|---|
| |   |   |
| **Devices** | **NSX / NSX Vigi (ELCB) 100/160** | **NSX / NSX Vigi (ELCB) 250** |
| Number of devices per row | 1 or 4 x 3P or 3 x 4P | 1 or 4 x 3P or 3 x 4P |
| Nb. of vertical modules | **9** or **10** | **11** or **12** |
| Mounting plates | **LVS03041** | **LVS03041** |
| Front plates cut-out | **LVS03243** [5] | **LVS03243** [5] |
| [Nb. of vertical modules] upstream | **LVS03802** [2] | **LVS03804** [4] |
| [Nb. of vertical modules] downstream | **LVS03802** [2] | **LVS03802** [2] |
| [Nb. of vertical modules] downstream with PowerTag NSX | **LVS03803** [3] | **LVS03803** [3] |
| **Upstream connection** | | |
| Long terminal shields |   3P : **LV429517** 4P : **LV429518** | |
| Divisible blanking plates (HxL) 46 x 1000 mm |   **LVS03220** ComPacT NSX 3P or 4P without electronic trip unit | |
| Divisible blanking plates (HxL) 46 x 90 mm (x4) | **LVS03221** ComPacT NSX 3P or 4P with electronic trip unit | |

| Downstream distribution | Linergy DP 250 A distribution block | Linergy BW + Power supply block (1) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
| |  |   |   |   |   |
| Busbars / Distrib blocks | 3P : **LVS04033** + 4P : **LVS04034** **LVS03002** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | | **LVS04061** + **LVS04062** **(2)**   *> page C-47* | Connection must be made | |
| Long terminal shields | |   3P : **LV429515** 4P : **LV429516** |   3P : **LV429517** 4P : **LV429518** | |

| Mounting | W300 Vertical - Fixed - Rotary handle |
|---|---|
| |     |
| **Devices** | **NSX / NSX Vigi (ELCB) 100/250** |
| Number of devices per row | 1 |
| Nb. of vertical modules | **9** or **10** |
| Mounting plates | **LVS03051** |
| Front plates cut-out | **LVS03253** [9] |
| [Nb. of vertical modules] downstream with PowerTag NSX | **LVS03811** [1] **(3)** |
| **Upstream connection** | |
| Long terminal shields |   3P : **LV429517** 4P : **LV429518** |

| Downstream distribution | Linergy DP 250 A distribution block in duct | Insulated Linergy BW busbars (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars or multi-stage distribution block |
|---|---|---|---|---|
| |   |   |   |   |
| Busbars / Distrib blocks | 3P : **LVS04033** + 4P : **LVS04034** **LVS03011** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** copper bars *> page D-6* | **LVS04192** copper bars *> pages D-7, D-8* |
| Power supply block | - | **LVS04061** *> page C-47*   | - | - |
| Connection block | - | **LVS04064** *> page C-47*   | Must be made | **LVS04065** *> page C-48*   |
| Short / Long terminal shields | - | 3P : **LV429515** 4P : **LV429516**   | 3P : **LV429517** 4P : **LV429518**   | 3P : **LV429515** 4P : **LV429516**   |

**Note:** For cable-tie function, add 1 module above. *> page C-51*

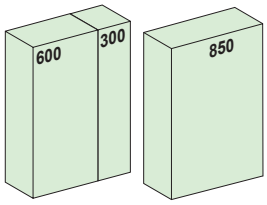
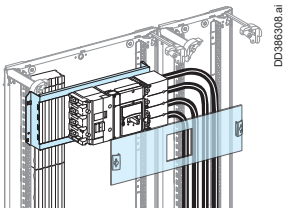
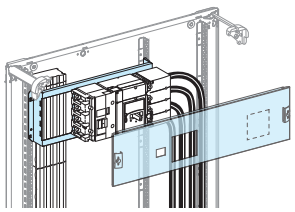
**(1)** 1 device centred on mounting plate.

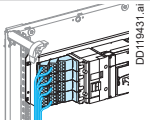
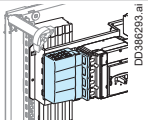
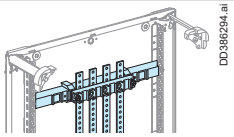
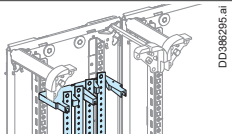
**(2)** Space available at the top of the enclosure after mounting the universal power supply block: NSX100/250 = 7 modules.

**(3)** Mounting 1 module front plate (LVS03811) on the extreme top or bottom is not allowed.

# VigicomPacT NSX100/160/250
# Horizontal mounting - Fixed - Toggle
## W600+W300 - W850



| Mounting | W600+W300 Horizontal - Fixed - Toggle | | W850 Horizontal - Fixed - Toggle | |
|---|---|---|---|---|
|  |  | |  | |
| **Devices** | **Vigi NSX100/250** with ammeter module or Vigi | | **Vigi NSX100/250** | |
| |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **4** | **4** | **4** | **4** |
| Mounting plates | **LVS03033** | **LVS03033** | **LVS03033** | **LVS03033** |
| Front plates cut-out [Nb. of vertical modules] | **LVS03292** [4] | **LVS03292** [4] | **LVS03295** [4] | **LVS03295** [4] |
| **Upstream connection** | | | | |
| Long terminal shields | 3P : **LV429517**<br>4P : **LV429518**<br>  | | | |

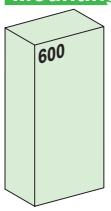
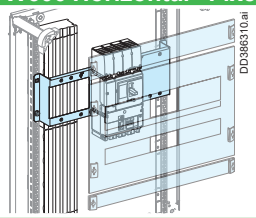
| Downstream distribution | Linergy DP 250 A distribution block | Linergy BW + Power supply block | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  |  |  |  |
| Busbars / Distrib blocks | 3P : **LVS04033**<br>4P : **LVS04034**<br>*> page D-12* | **Linergy BW**<br>*> page D-4* | **LVS04191** + copper bars<br>*> page D-6* | **LVS04192** + copper bars<br>*> pages D-7, D-8* |
| Power supply block / connection | - | **LVS04060** *> page C-46*<br>  | Connection must be made | |
| Long terminal shields | - | | 3P : **LV429517**<br>4P : **LV429518**<br>  | |

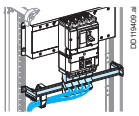
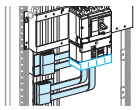
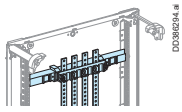
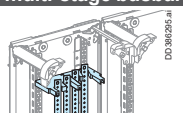
**Note:** For cable-tie function, add 2 modules above. *> page C-48*

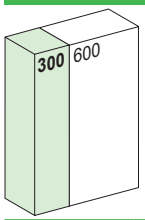
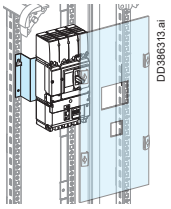
# VigicomPacT NSX100/160/250
# Vertical mounting - Fixed - Toggle
## W600 - W300

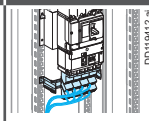
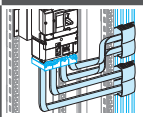
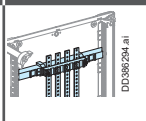
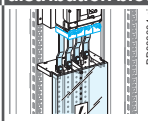




| Mounting | | W600 Horizontal - Fixed - Toggle (1) | |
|---|---|---|---|
| | |   |  DD386310.ai |
| **Devices** | | **Vigi NSX100/160** | **Vigi NSX250** |
| Number of devices per row | | 1 or 4 x 3P or 3 x 4P | 1 or 4 x 3P or 3 x 4P |
| Nb. of vertical modules | | **10** | **13** |
| Mounting plates | | **LVS03040** | **LVS03040** |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03241** [7] | **LVS03241** [7] |
| | upstream | **LVS03802** [2] | **LVS03804** [4] |
| | downstream | **LVS03801** [1] | **LVS03802** [2] |
| **Upstream connection** | | | |
| Long terminal shields | |  DD386301.ai 3P : **LV429517** 4P : **LV429518** | |
| Divisible blanking plates (HxL) | 107 x 147 mm |  DD386312.ai **LVS03222** ComPacT NSX 3P or 4P + Vigi without electronic trip unit | |
| | 85 x 147 mm | **LVS03249** ComPacT NSX 3P or 4P + Vigi with electronic trip unit - Set of 1 strip | |

| Downstream distribution | Linergy DP 250 A distribution block | Linergy BW + Power supply block (1) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
| |  |  DD119409.ai |  DD119411.ai |  DD386294.ai |  DD386295.ai |
| Busbars / Distrib blocks Power supply block | 3P : **LVS04033** + **LVS03002** 4P : **LVS04034** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | |  DD119400.ai **LVS04061** (2) *> page C-47* | Connection must be made | |
| Long terminal shields | - |  DD119385.ai 3P : **LV429517** 4P : **LV429518** | | |

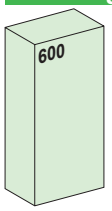
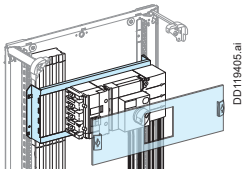
| Mounting | W300 Vertical - Fixed - Toggle |
|---|---|
|   |  DD386313.ai |
| **Devices** | **Vigi NSX100/250** |
| Number of devices per row | 1 |
| Nb. of vertical modules | **13** |
| Mounting plates | **LVS03050** |
| Front plates [Nb. of vertical modules] cut-out | **LVS03293** [11] |
| upstream | **LVS03812** [2] |
| **Upstream connection** | |
| Long terminal shields | 3P : **LV429517** 4P : **LV429518**  DD386301.ai |

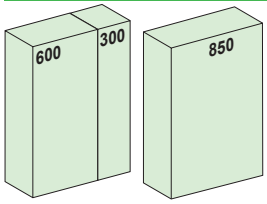
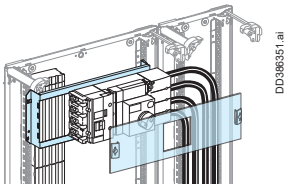
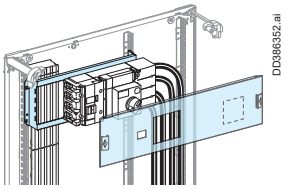
| Downstream distribution | Linergy DP 250 A distribution block in duct | Insulated Linergy BW busbars (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars or multi-stage distribution block |
|---|---|---|---|---|
|  |  DD119412.ai |  DD119413.ai |  DD386294.ai |  DD386304.ai |
| Busbars / Distrib blocks | 3P : **LVS04033** + **LVS03011** 4P : **LVS04034** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block | - | **LVS04061** *> page C-47*  DD119400.ai | - | - |
| Connection | - | Must be made | | **LVS04065** *> page C-48*  DD386251.eps |
| Short / Long terminal shields | - | 3P : **LV429517** 4P : **LV429518**  DD119385.ai | | 3P : **LV429515** 4P : **LV429516**  DD386302.ai |

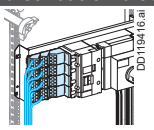
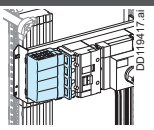
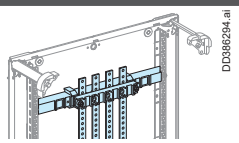
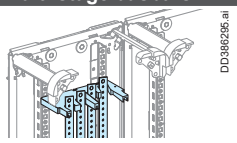
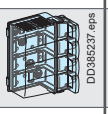
**New:** Earth leakage protection inside circuit breaker size NSX Vigi (ELCB) PrismaSeT functional units *> page C-7*
**Note:** For cable-tie function, add 1 module above. *> page C-51*
**(1)** 1 device centred on mounting plate.
**(2)** Space available at the top of the enclosure after mounting the universal power supply block:
- Vigi NSX100/250 = 9 modules.Space required by power supply block on Linergy BW busbars = 5 modules.

# VigicomPacT NSX100/160/250
# Horizontal mounting - Fixed - Rotary handle
## W600 - W600+W300 - W850



| Mounting | W600 Horizontal - Fixed - Rotary handle (1) | |
|---|---|---|
|  |  | |
| **Devices** | **Vigi NSX100/160** | |
| |  |  |
| Number of devices per row | 1 | 1 |
| Nb. of vertical modules | **5** | **5** |
| Mounting plates | **LVS03031** | **LVS03031** |
| Front plates cut-out | **LVS03292** [4] + **LV429285** (collar) | **LVS03292** [4] + **LV429285** (collar) |
| [Nb. of vertical modules] upstream | **LVS03801** [1] | - |
| [Nb. of vertical modules] downstream | - | **LVS03801** [1] |
| **Upstream connection** | | |
| Long terminal shields |  3P : **LV429517**<br>4P : **LV429518** | |

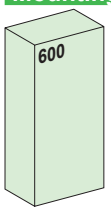
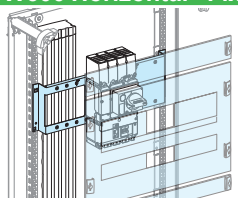
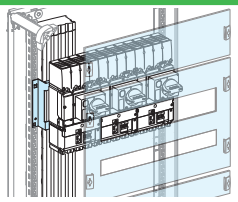
| Mounting | W600+W300 Horizontal - Fixed - Rotary handle | | W850 Horizontal - Fixed - Rotary handle | |
|---|---|---|---|---|
|  |  | |  | |
| **Devices** | **Vigi NSX100/250** | | **Vigi NSX100/250** | |
| |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **4** | **4** | **4** | **4** |
| Mounting plates | **LVS03031** | **LVS03031** | **LVS03031** | **LVS03031** |
| Front plates [Nb. of vertical modules] | **LVS03292** [4] + **LV429285** (collar) | **LVS03292** [4] + **LV429285** (collar) | **LVS03295** [4] + **LV429285** (collar) | **LVS03295** [4] + **LV429285** (collar) |
| **Upstream connection** | | | | |
| Long terminal shields |  3P : **LV429517**<br>4P : **LV429518** | | | |

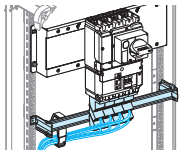
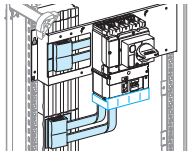
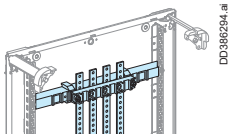
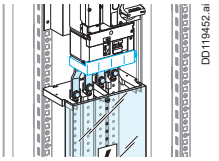
| Downstream distribution | Linergy DP 250 A distribution block | Linergy BW + Power supply block | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  |  |  |  |
| Busbars / Distrib blocks | 3P : **LVS04033**<br>4P : **LVS04034**<br>*> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** copper bars<br>*> page D-6* | **LVS04192** copper bars<br>*> pages D-7, D-8* |
| Power supply block / connection | - | **LVS04060** *> page C-46*  | Connection must be made | |
| Long terminal shields | - | |  3P : **LV429517**<br>4P : **LV429518** | |

**Note:** For cable-tie function, add 2 modules above. *> page C-51*
**(1)** Maximum size of connection cables: 70 mm². For cable cross-sections greater than 70 mm², use of a cable duct is recommended.

# VigicomPacT NSX100/160/250
## Vertical mounting - Fixed - Rotary handle
## W600



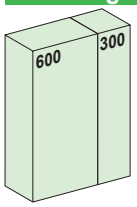
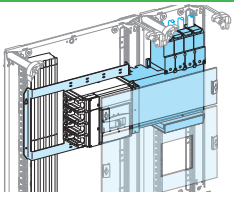
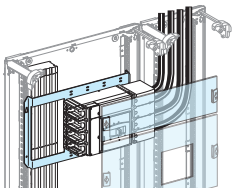
| Mounting | | W600 Horizontal - Fixed - Rotary handle (1) | |
|---|---|---|---|
|   | |  DD386324.ai |  DD386325.ai |
| **Devices** | | **Vigi NSX100/160** | **Vigi NSX250** |
| Number of devices per row | | 1 or 4 x 3P or 3 x 4P | 1 or 4 x 3P or 3 x 4P |
| Nb. of vertical modules | | **10** | **13** |
| Mounting plates | | **LVS03041** | **LVS03041** |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03244** [7] + **LV429285 (collar)** | **LVS03244** [7] + **LV429285 (collar)** |
| | upstream | **LVS03802** [2] | **LVS03804** [4] |
| | downstream | **LVS03801** [1] | **LVS03802** [2] |
| **Upstream connection** | | | |
| Long terminal shields | |  DD386301.ai 3P : **LV429517** 4P : **LV429518** | |
| Divisible blanking plates (HxL) | 107 x 147 mm |  DD386312.ai **LVS03222** ComPacT NSX 3P or 4P + Vigi without electronic trip unit | |
| | 85 x 147 mm | **LVS03249** ComPacT NSX 3P or 4P + Vigi with electronic trip unit - Set of 1 strip | |

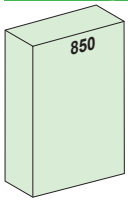
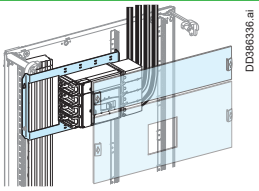
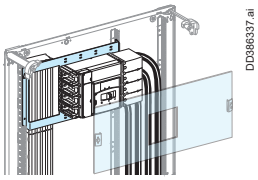
| Downstream distribution | Linergy DP 250 A distribution block | Linergy BW + Power supply block (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  DD119440.ai |  DD119441.ai |  DD386294.ai |  DD119452.ai |
| Busbars / Distrib blocks | 3P : **LVS04033** + **LVS03002**<br>4P : **LVS04034** + **LVS03002**<br>*> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** copper bars<br>*> page D-6* | **LVS04192** copper bars<br>*> pages D-7, D-8* |
| Power supply block / connection | - |  DD119400.ai **LVS04061** + connection must be made | Connection must be made | |
| Terminal shields | - |  DD386302.ai 3P : **LV429515** 4P : **LV429516** |  DD119385.ai 3P : **LV429517** 4P : **LV429518** | |

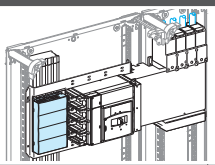
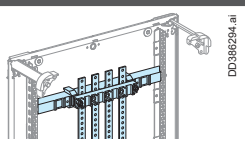
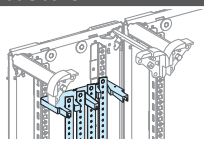
**New:** Earth leakage protection inside circuit breaker size NSX Vigi (ELCB) PrismaSeT functional units *> page C-9*
**Note:** For cable-tie function, add 1 module above. *> page C-51*
**(1)** 1 device centred on mounting plate.
**(2)** Space available at the top of the enclosure after mounting the universal power supply block:
- Vigi NSX100/250 = 9 modules.Space required by power supply block on Linergy BW busbars = 5 modules.

# ComPacT and ComPacT Vigi (ELCB) NSX 400/630
## Horizontal mounting - Fixed - Toggle
### W600+W300 - W850



| Mounting | W600+W300 Horizontal - Fixed - Toggle | | | |
|---|---|---|---|---|
| |  |  |  | |
| **Devices** | **NSX / NSX Vigi (ELCB) 400/630** | | **NSX / NSX Vigi (ELCB) 400/630** | |
| |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **9** | **6** | **9** | **6** |
| Mounting plates | **LVS03070** | **LVS03070** | **LVS03070** | **LVS03070** |
| Front plates cut-out | **LVS03296** [6] | **LVS03296** [6] | **LVS03296** [6] | **LVS03296** [6] |
| [Nb. of vertical modules] upstream | **LVS03803** [3] | - | **LVS03803** [3] | - |
| **Upstream connection** | | | | |
| Incoming connection block or cables + Long terminal shields | **LVS04076** *> page C-46* | **LVS04076** *> page C-46* | 3P : **LV432593**<br>4P : **LV432594** | |

| Mounting | W850 Horizontal - Fixed - Toggle | |
|---|---|---|
| |  |   |
| **Devices** | **NSX / NSX Vigi (ELCB) 400/630** | |
| |  |  |
| Number of devices per row | 1 | 1 |
| Nb. of vertical modules | **9** | **6** |
| Mounting plates | **LVS03070** | **LVS03070** |
| Front plates cut-out | **LVS03289** [6] | **LVS03289** [6] |
| [Nb. of vertical modules] upstream | **LVS03853** [3] | - |
| **Upstream connection** | | |
| Incoming connection block or cables + Long terminal shields |  3P : **LV432593**<br>4P : **LV432594** | |

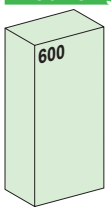
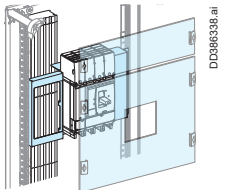
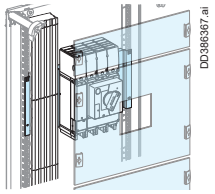
| Downstream distribution | Insulated Linergy BW busbars | | Rear Linergy BS busbars | | Linergy BS multi-stage busbars |
|---|---|---|---|---|---|
| |  |  |  | |  |
| **Type of connected devices** | **NSX400** | **NSX630** | **NSX400** | **NSX630** | **All types** |
| Busbars | **Linergy BW** *> page D-4* | | **LVS04191** + copper bars *> page D-6* | **LGY4193** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection |  **LVS04070** *> page C-46* |  **LVS04071** *> page C-46* | Connection must be made | | |
| Long terminal shields | - | |  3P : **LV429593**<br>4P : **LV429594** | | |

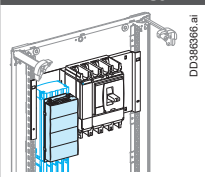
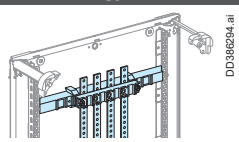
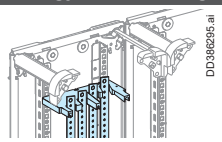
**Note:** For cable-tie function, add 2 modules above. *> page C-51*

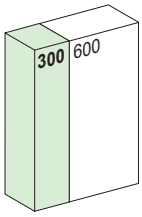
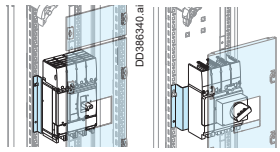
# ComPacT and ComPacT Vigi (ELCB) NSX 400/630
## Vertical mounting - Fixed - Toggle / Rotary handle
## W600 - W300

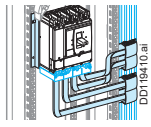
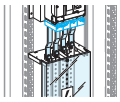
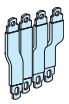
Designed for PowerTag NSX
Circuit breakers



| Mounting | W600 Vertical - Fixed - Toggle | | W600 Vertical - Fixed - Rotary handle |
|---|---|---|---|
| |   |   |   |
| **Devices** | **NSX / NSX Vigi (ELCB) 400** | **NSX / NSX Vigi (ELCB) 630** | **NSX / NSX Vigi (ELCB) 400/630** |
| Number of devices per row (2) | 1 | 1 | 1 |
| Nb. of vertical modules | **12** or **14** | **13** or **15** | **15** or **17** |
| Mounting plates | **LVS03073** | **LVS03073** | **LVS03074** |
| Front plates [Nb. of vertical modules] cut-out | **LVS03275** [9] | **LVS03275** [9] | **LVS03275** [9] |
| upstream | **LVS03803** [3] | **LVS03803** [3] | **LVS03803** [3] |
| downstream | - | **LVS03801** [1] | **LVS03803** [3] |
| downstream with PowerTag NSX | **LVS03802** [2] | **LVS03803** [3] | **LVS03805** [5] |
| **Upstream connection** | | | |
| Cables + Long terminal shields |   3P : **LV432593** 4P : **LV432594** | | |

| Downstream distribution | Insulated Linergy BW busbars (1) | Rear Linergy BS busbars | | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |   |   | |   |
| **Type of connected devices** | | **NSX400** | **NSX630** | **All types** |
| Busbars | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LGY4193** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection |   **LVS04074** Connection must be made *> page C-47* | Connection must be made | | |
| Long terminal shields |   3P : **LV432593** 4P : **LV432594** | | | |

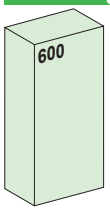
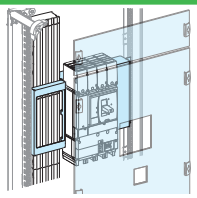
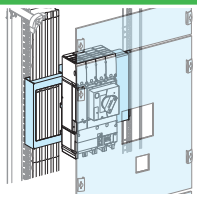
| Mounting | W300 Vertical - Fixed Toggle | Rotary handle |
|---|---|---|
| |   |   |
| **Devices** | **NSX / NSX Vigi (ELCB) 400/630** | |
| Number of devices per row | 1 | 1 |
| Nb. of vertical modules | **12 or 16** | **12 or 14** |
| Mounting plates | **LVS03080** | **LVS03081** |
| Front plates [Nb. of vertical modules] cut-out | **LVS03298** [8] | **LVS03283** [12] |
| upstream | **LVS03812** [2] | - |
| downstream | **LVS03812** [2] | - |
| downstream with PowerTag NSX | **LVS03814** [4] | **LVS03812** [2] |
| **Upstream connection** | | |
| Cables + Long terminal shields |   3P : **LV432593** 4P : **LV432594** | |

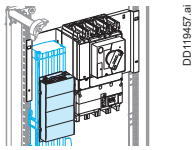
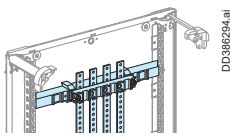
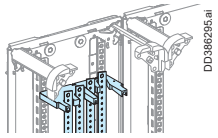
| Downstream distribution | Insulated Linergy BW busbars (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|
|  |   |   |   |
| Busbars | **Linergy BW** *> page D-4* | **LVS04191/LGY4193** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block | **LVS04074** *> page C-47*   | - | - |
| Connection | **LVS04073** *> page C-47*   | Must be made | **LVS04075** *> page C-48*   |
| Short/Long terminal shields | 3P : **LV432591** 4P : **LV432592**   | 3P : **LV432593** 4P : **LV432594**   | 3P : **LV432591** 4P : **LV432592**   |
| Barrier | Included | **LVS04198** | **LVS04197** |

**Note:** For cable-tie function, add 1 module above *> page C-51*
**(1)** Space required by power supply block on insulated Linergy BW busbars = 5 modules.
**(2)**1 device centred on mounting plate.

# VigicomPacT NSX400/630
## Vertical mounting - Fixed - Toggle / Rotary handle
## W600



| Mounting | W600 Vertical - Fixed - Toggle | | W600 Vertical - Fixed - Rotary handle |
|---|---|---|---|
|  |  | |  |
| **Devices** | **Vigi NSX400** (1) | **Vigi NSX630** (1) | **Vigi NSX400/630** (1) |
| Number of devices per row | 1 | 1 | 1 |
| Nb. of vertical modules | **14** | **15** | **18** |
| Mounting plates | **LVS03073** | **LVS03073** | **LVS03074** |
| Front plates cut-out | **LVS03297** [11] | **LVS03297** [11] | **LVS03297** [11] + **LV429285** (collar) |
| [Nb. of vertical modules] upstream | **LVS03803** [3] | **LVS03803** [3] | **LVS03803** [3] |
| downstream | | **LVS03801** [1] | **LVS03804** [4] |
| **Upstream connection** | | | |
| Cables + Long terminal shields |  3P : **LV432593**<br>4P : **LV432594** | | |

| Downstream distribution | Linergy BW + Power supply bloc (1) | Rear Linergy BS busbars | | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  |  | |  |
| **Type of connected devices** | | **NSX400** | **NSX630** | **All types** |
| Busbars | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LGY4193** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection |  **LVS04074** Connection must be made *> page C-47* | Connection must be made | | |
| Long terminal shields |  3P : **LV432593**<br>4P : **LV432594** | | | |

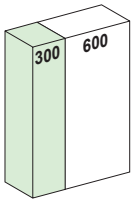
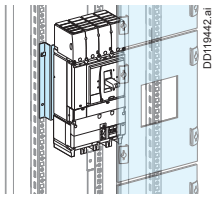
**(1)** Space required by power supply block on Linergy BW busbars = 5 modules.

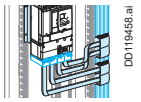
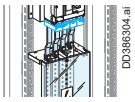
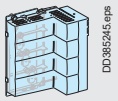
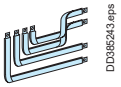
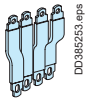
# PrismaSeT G Active - Functional units

## VigicomPacT NSX400/630

## Vertical mounting - Fixed - Toggle / Rotary handle

W300

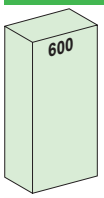
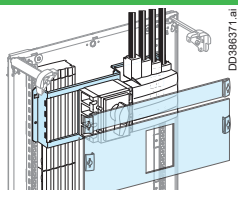
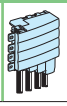
| Mounting | | W300 Vertical - Fixed - Toggle |
|---|---|---|
|  | |  |
| **Devices** | | **Vigi NSX400/630** |
| Number of devices per row | | 1 |
| Nb. of vertical modules | | **14** |
| Mounting plates | | **LVS03080** |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03299** [10] |
| | upstream | **LVS03812** [2] |
| | downstream | **LVS03812** [2] |
| **Upstream connection** | | |
| Cables + Long terminal shields | |  3P : **LV432593**<br>4P : **LV432594** |

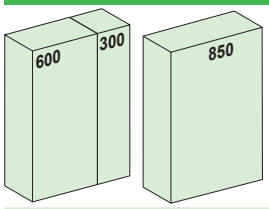
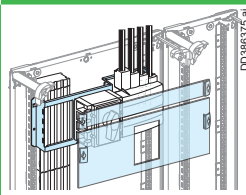
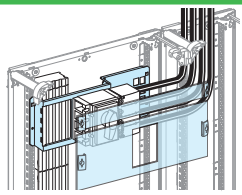
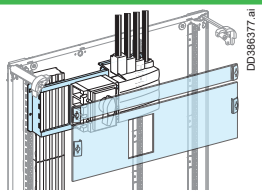
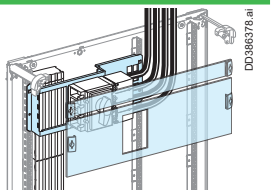
| Downstream distribution | Insulated Linergy BW busbars (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|
|  |  |  |  |
| Busbars | **Linergy BW** *> page D-4* | **LVS04191 / LGY4193** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block | **LVS04074** *> page D-5*  | - | - |
| Connection | **LVS04073** *> page D-5*  | Must be made | **LVS04075** *> page D-7*  |
| Short/Long terminal shields | 3P : **LV432591**<br>4P : **LV432592**  | 3P : **LV432593**<br>4P : **LV432594**  | 3P : **LV432591**<br>4P : **LV432592**  |
| Barrier | Included | **LVS04198** | **LVS04197** |

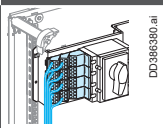
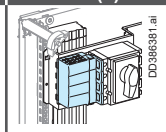
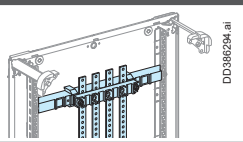
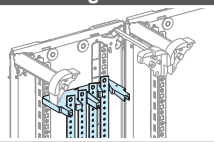
**New:** Earth leakage protection inside circuit breaker size NSX Vigi (ELCB) PrismaSeT functional units *> page C-15*
**Note:** For cable-tie function, add 1 module above. *> page C-51*
**(2)** Space required by power supply block on insulated Linergy BW busbars = 5 modules.

# Compact INS-INV100/160/250
# Horizontal mounting - Fixed - Direct front handle
## W600 - W600+W300 - W850

Switch-disconnector

| Mounting | W600 Horizontal - Fixed - Direct front handle | | | |
|---|---|---|---|---|
| |   |  | | |
| **Devices** | **INS250-INV100/160** | | **INS250-INV100/160** | |
| |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **5** | **5** | **5** | **5** |
| Mounting plates | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** |
| Front plates cut-out | **LVS03231** [4] | **LVS03231** [4] | **LVS03231** [4] | **LVS03231** [4] |
| [Nb. of vertical modules] upstream | **LVS03801** [1] | - | **LVS03801** [1] | - |
| [Nb. of vertical modules] downstream | - | **LVS03801** [1] | - | **LVS03801** [1] |
| **Upstream connection** | | | | |
| Incoming connection block or cables + Long terminal shields |  **LVS04066** *> page C-46* |  **LVS04067** *> page C-46* |  3P : **LV429517** 4P : **LV429518** | |

| Mounting | W600+W300 Horizontal - Fixed - Direct front handle | | | | W850 Horizontal - Fixed - Direct front handle | | | |
|---|---|---|---|---|---|---|---|---|
| |   |  | |  |  | |  | |
| **Devices** | **INS-INV100/160/250** | | **INS-INV100/160/250** | | **INS-INV100/160/250** | | **INS-INV100/160/250** | |
| |  |  |  |  |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **5** | **5** | **4** | **4** | **5** | **5** | **4** | **4** |
| Mounting plates | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** | **LVS03030** |
| Front plates cut-out | **LVS03231** [4] | **LVS03231** [4] | **LVS03231** [4] | **LVS03231** [4] | **LVS03239** [4] | **LVS03239** [4] | **LVS03239** [4] | **LVS03239** [4] |
| [Nb. of vertical modules] upstream | **LVS03801** [1] | - | - | - | **LVS03851** [1] | - | - | - |
| [Nb. of vertical modules] downstream | - | **LVS03801** [1] | - | - | - | **LVS03851** [1] | - | - |
| **Upstream connection** | | | | | | | | |
| Incoming connection block or cables + Long terminal shields | **LVS04066** *> page C-46*  | **LVS04067** *> page C-46*  | 3P : **LV429517** 4P : **LV429518**  | | **LVS04066** *> page C-46*  | **LVS04067** *> page C-46*  | 3P : **LV429517** 4P : **LV429518**  | |

| Downstream distribution | Linergy DP 250 A distribution block | Insulated Linergy BW busbars (1) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  |  |  |  |
| **Type of connected devices** | **INS250-INV100/250** | **INS250-INV100/250** | **INV-INV250** | **INV-INV250** |
| Busbars / Distrib blocks | 3P : **LVS04033** 4P : **LVS04034** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | Connection must be made | **LVS04060** *> page C-46* | Connection must be made | |
| Long terminal shields | - | | 3P : **LV429517** 4P : **LV429518**  | 3P : **LV429517** 4P : **LV429518**  |

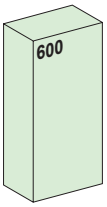
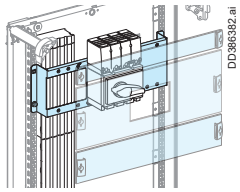
**Note:** For cable-tie function, add 2 modules above. *> page C-51*

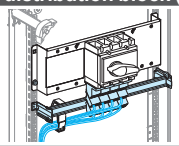
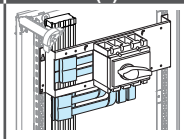
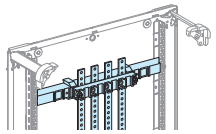
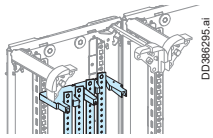
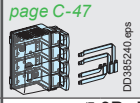
**(1)** Maximum size of connection cables: 70 mm². For cable cross-sections greater than 70 mm², use of a cable duct is recommended.

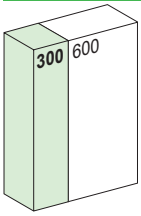
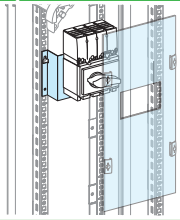
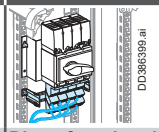
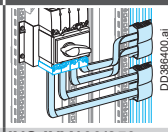
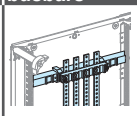
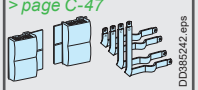
# Compact INS-INV100/250
# Vertical mounting - Fixed - Direct front handle
## W600 - W300

Designed for PowerTag NSX
Switch-disconnector

C

| Mounting | W600 Vertical - Fixed with or without spreaders | |
|---|---|---|
| |  |  |
| **Devices** | **INS250-INV100/160/250** | **INS-INV250 lateral handle** |
| Number of devices per row | 1 | 1 |
| Nb. of vertical modules | **8** or **9** | **8** or **9** |
| Mounting plates | **LVS03040** | **LVS03032** |
| Front plates cut-out | **LVS03248** [5] | **LVS03806** [6] (plain front plate) |
| [Nb. of vertical modules] upstream | **LVS03801** [1] | - |
| downstream | **LVS03802** [2] | **LVS03802** [2] |
| downstream with PowerTag NSX | **LVS03803** [3] | **LVS03803** [3] |
| **Upstream connection** | | |
| Cables + Long terminal shields |  3P : **LV429517** 4P : **LV429518** |  3P : **LV429517** 4P : **LV429518** |

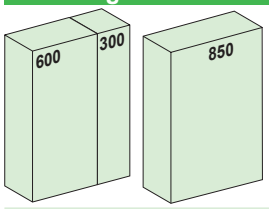
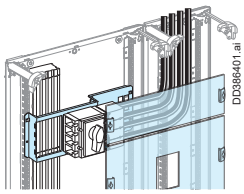
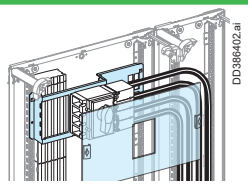
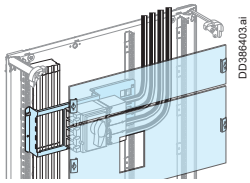
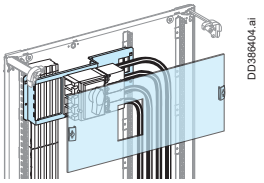
| Downstream distribution | Linergy DP 250 A distribution block (1) | | Insulated Linergy BW busbars (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **Type of connected devices** | **Direct front handle INS-INV100/250** | **Lateral handle INS-INV100/250** | **INS-INV100/250** | **INS-INV250** | **INS-INV250** |
| Busbars / Distrib blocks | 3P : **LVS04033** 4P : **LVS04034** + **LVS03002** *> page D-12* | 3P : **LVS04033** 4P : **LVS04034** + **LVS04037** (3) + **LVS03003** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | - | | **LVS04060** + **LVS04062** *> page C-47*  | Connection must be made | |
| Long terminal shields | - | |  3P : **LV429515** 4P : **LV429516** |  3P : **LV429517** 4P : **LV429518** |  3P : **LV429517** 4P : **LV429518** |

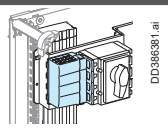
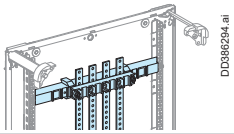
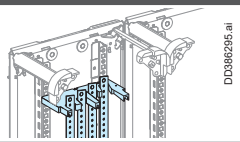
| Mounting | W300 Vertical - Fixed with or without spreaders | Downstream distribution | Linergy DP 250 A distribution block | Insulated Linergy BW busbars (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| | | **Type of connected devices** | **Direct front handle INS-INV100/250** | **INS-INV100/250** | **INS-INV100/250** | **INS-INV100/250** |
| | | Busbars / Distrib blocks | 3P : **LVS04033** 4P : **LVS04034** + **LVS03011** *> page D-12* | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| | | Power supply block / connection | - | **LVS04061** + **LVS04064** *> page C-47*  | Connection must be made | |
| | | Long terminal shields | - | 3P : **LV429515** 4P : **LV429516**  | 3P : **LV429517** 4P : **LV429518**  | 3P : **LV429517** 4P : **LV429518**  |
| **Devices** | **INS-INV100/160/250** | | | | | |
| Number of devices per row | 1 | | | | | |
| Nb. of vertical modules | **9** or **10** | | | | | |
| Mounting plates | **LVS03050** | | | | | |
| Front plates cut-out | **LVS03251** [9] | | | | | |
| [Nb. of vert. modules] downstream with PowerTag NSX | **LVS03811** [1] (4) | | | | | |
| **Upstream connection** | | | | | | |
| Cables + Long terminal shields |  3P : **LV429517** 4P : **LV429518** | | | | | |

**Note:** For cable-tie function, add 1 module above. *> page C-51*
**(1)** 1 device centred on mounting plate.
**(2)** Space available at the top of the enclosure after mounting the universal power supply block: 7 modules.
Space required by power on insulated Linergy BW busbars = 5 modules.
**(3)** Copper spacer.
**(4)** Mounting 1 module front plate (LVS03811) on the extreme top or bottom is not allowed.

# Compact INS-INV320/630
## Horizontal mounting - Fixed - Direct front handle
### W600+W300 - W850

Switch-disconnector

| Mounting | W600+W300 Horizontal fixed | | W850 Horizontal - Fixed | |
|---|---|---|---|---|
|  |   | |   | |
| **Devices** | **INS-INV320/630** | | **INS-INV320/630** | |
| |  |  |  |  |
| Number of devices per row | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | **9** | **6** | **9** | **6** |
| Mounting plates | **LVS03070** | **LVS03070** | **LVS03070** | **LVS03030** |
| Front plates cut-out | **LVS03271** [6] | **LVS03271** [6] | **LVS03287** [6] | **LVS03287** [6] |
| [Nb. of vertical modules] upstream | **LVS03803** [3] | - | **LVS03853** [3] | - |
| **Upstream connection** | | | | |
| Cables + Long terminal shields |  3P : **LV432593**<br>4P : **LV432594** | | | |

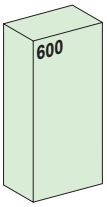
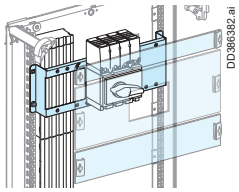
| W600 downstream distribution | Insulated Linergy BW busbars | | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  | |  |  |
| **Type of connected devices** | **INS-INV320/400** | **INS-INV500/630** | **INS-INV320/630** | **INS-INV320/630** |
| Busbars / Distrib blocks | **Linergy BW**<br>*> page D-4* | **Linergy BW**<br>*> page D-4* | **LVS04191 / LGY4193** + copper bars<br>*> page D-6* | **LVS04192** + copper bars<br>*> pages D-7, D-8* |
| Power supply block / connection | **LVS04070**<br>*> page C-46* | **LVS04071**<br>*> page C-46* | Connection must be made | |
| Long terminal shields | - | | 3P : **LV432593**<br>4P : **LV432594**<br>  | 3P : **LV432593**<br>4P : **LV432594**<br>  |

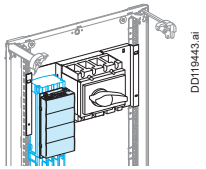
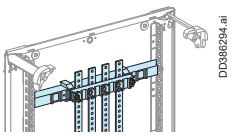
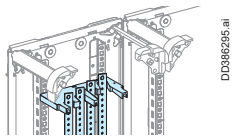
**Note:** For cable-tie function, add 2 modules above. *> page C-48*

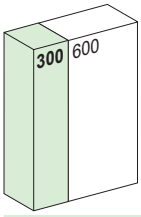
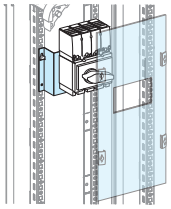
# Compact INS-INV320/630
# Vertical mounting - Fixed - Direct front handle
## W600 - W300

Designed for PowerTag NSX
Switch-disconnector

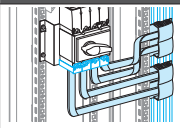
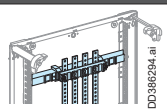
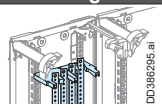
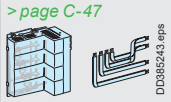
C

| Mounting | W600 Vertical - Fixed with or without spreaders | |
|---|---|---|
|  |  | |
| **Devices** | **INV320/400** | **INV500/630** |
| Number of devices per row | 1 | 1 |
| Nb. of vertical modules | **10** or **12** | **12** or **14** |
| Mounting plates | **LVS03073** | **LVS03073** |
| Front plates [Nb. of vertical modules] cut-out | **LVS03274** [10] | **LVS03274** [10] |
| upstream | - | **LVS03802** [2] |
| downstream with PowerTag NSX | **LVS03802** [2] | **LVS03804** [4] |
| **Upstream connection** | | |
| Cables + Long terminal shields |  3P : **LV429593**<br>4P : **LV429594** | |

| Downstream distribution | Insulated Linergy BW busbars | Rear Linergy BS busbars | | Linergy BS multi-stage busbars |
|---|---|---|---|---|
|  |  |  | |  |
| **Type of connected devices** | **INS-INV320/630** | **INS-INV320/400** | **INS-INV400/630** | **INS-INV320/630** |
| Busbars | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LGY4193** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | **LVS04074** *> page C-47*<br>Connection must be made  | Connection must be made | | |
| Long terminal shields |  3P : **LV429515**<br>4P : **LV429516** |  3P : **LV429517**<br>4P : **LV429518** | |  3P : **LV429517**<br>4P : **LV429518** |

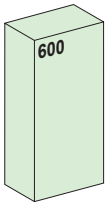
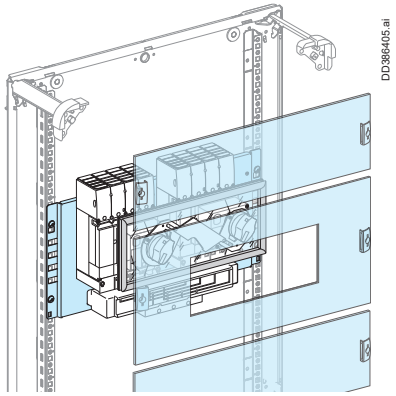
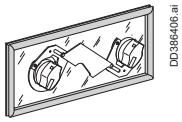
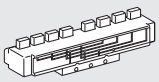
| Mounting | W300 Vertical - Fixed with or without spreaders | |
|---|---|---|
|  |  | |
| **Devices** | **INS-INV 320/400** | **INS-INV 500/630** |
| Number of devices per row | 1 | 1 |
| Nb. of vertical modules | **10** or **12** | **12** or **14** |
| Mounting plates | **LVS03080** | **LVS03080** |
| Front plates [Nb. of vertical modules] cut-out | **LVS03281** [10] | **LVS03281** [10] |
| upstream | - | **LVS03812** [2] |
| downstream with PowerTag NSX | **LVS03802** [2] | **LVS03802** [2] |
| **Upstream connection** | | |
| Cables + Long terminal shields |  3P : **LV429593**<br>4P : **LV429594** | |

**Note:** For cable-tie function, add 1 module above. *> page C-51*

| Downstream distribution | Insulated Linergy BW busbars | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|
|  |  |  |  |
| **Type of connected devices** | **INS-INV320/630** | **INS-INV320/630** | **INS-INV320/630** |
| Busbars / Distrib blocks | **Linergy BW** *> page D-4* | **LVS04191 / LGY4193** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block / connection | **LVS04074 + LVS04073** *> page C-47*  | Connection must be made | |
| Long terminal shields | 3P : **LV429593**<br>4P : **LV429594**  | 3P : **LV429593**<br>4P : **LV429594**  | 3P : **LV429593**<br>4P : **LV429594**  |

# Compact NSX100/250 circuit breakers changeover system
# Vertical mounting - Fixed - Manual source
## W600

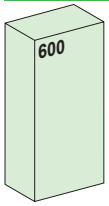
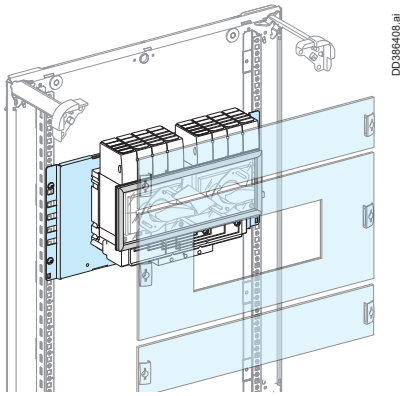
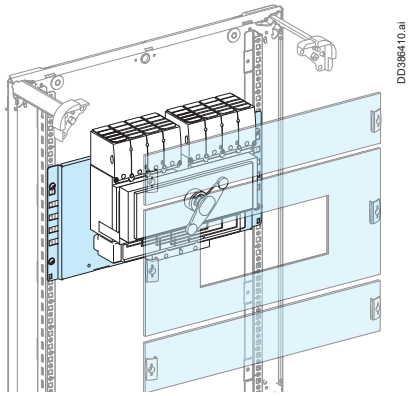
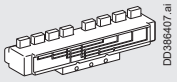
Changeover system

| Mounting | W600 Fixed - Changeover with mechanical interlocking |
|---|---|
|  |  |
| **Devices** | **NSX100/250** |
| Nb. of vertical modules | **11** |
| Mounting plates | **LVS03043** |
| Front plates cut-out | **LVS03245** [5] |
| [Nb. of vertical modules] upstream | **LVS03803** [3] |
| [Nb. of vertical modules] downstream | **LVS03803** [3] |
| Mechanical interlocking | **LV429369**  |
| **Upstream connection** | |
| Cable + Long terminal shields | 3P : **LV429517**<br>4P : **LV429518**  |
| Coupling accessory | 3P : **LV429358**<br>4P : **LV429359**  |
| **Downstream connection** | |
|  | |
| Cable + Long terminal shields | 3P : **LV429517**<br>4P : **LV429518**  |

# Compact INS-INV250 switch-disconnectors changeover system
# Vertical mounting - Fixed - Manual source
## W600

Changeover system



| Mounting | W600 Fixed - Changeover with mechanical interlocking) | W600 Fixed - Complete source changeover assembly | |
|---|---|---|---|
|  |  |  | |
| **Devices** | **INS-INV250** | **INS250** | |
| | | **3P** | **4P** |
| Nb. of vertical modules | **10** | **10** | **10** |
| Mounting plates | **LVS03043** + 2 x **LV431064** (raiser) | **LVS03043** | **LVS03043** |
| Front plates cut-out | **LVS03247** [5] | **LVS03235** [5] | **LVS03235** [5] |
| [Nb. of vertical modules] upstream | **LVS03803** [3] | **LVS03803** [3] | **LVS03803** [3] |
| [Nb. of vertical modules] downstream | **LVS03802** [2] | **LVS03802** [2] | **LVS03802** [2] |
| Mechanical interlocking / Complete source-changeover assembly | **31073**  | 100 A : **31140**<br>160 A : **31144**<br>200 A : **31142**<br>250 A : **31146** | 100 A : **31141**<br>160 A : **31145**<br>200 A : **31143**<br>250 A : **31147** |
| **Upstream connection** | | | |
| Cable + Long terminal shields | 3P : **LV429517**<br>4P : **LV429518**  | | |
| Coupling accessory | 3P : **LV429358**<br>4P : **LV429359**  | | |

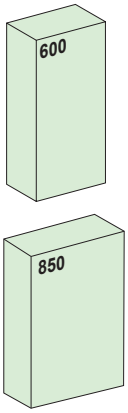
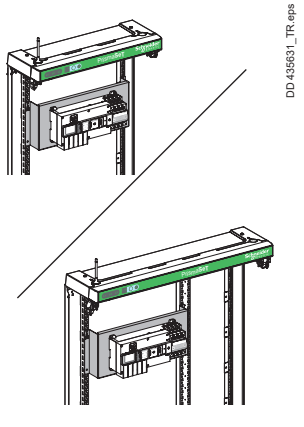
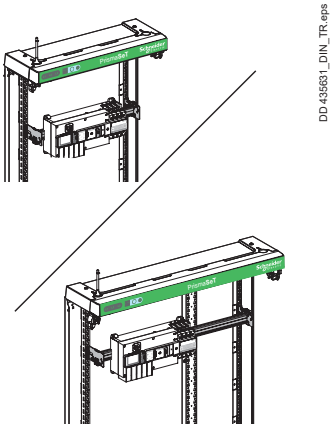
**Downstream connection**

| | |
|---|---|
| Cable + Long terminal shields | 3P : **LV429517**<br>4P : **LV429518**  |

**Note:** For cable-tie function, add 1 module above. *> page C-48*

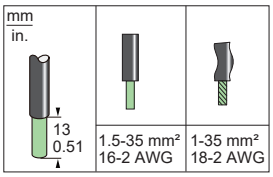
# TransferPacT Frame 100A Automatic source changeover system W600/850

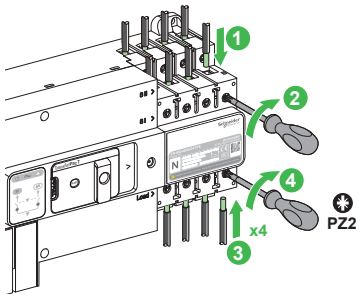
## Changeover system

| Mounting | | Vertical Fixed Front plate with cut-out | |
|---|---|---|---|
|  | |   | |
| **Devices** | | **TransferPacT Automatic / Active Automatic 32A-100A 2P/3P/4P** | |
| No. of devices per row | | **1** | |
| No. of vertical modules | | **6M** | |
| Mounting plate | | **LVS03426** | - |
| DIN Rail | W600 | - | **LVS03002 (adjustable)** |
| | W850 | - | **LVS03007 (adjustable)** |
| Front plate with cut-out | W600 | **LVS03206** | |
| | W850 | **LVS03208** | |

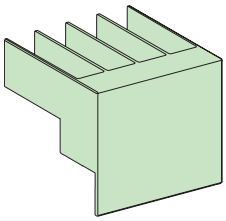
## Upstream / Downstream Connections

Cable



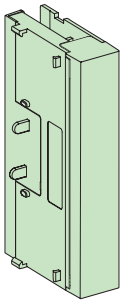

Long terminal shields



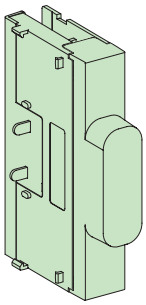
**TPSISO30**

## Auxiliary

Coupling auxiliary module



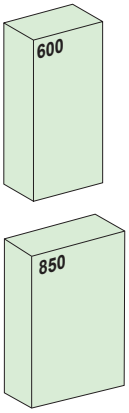
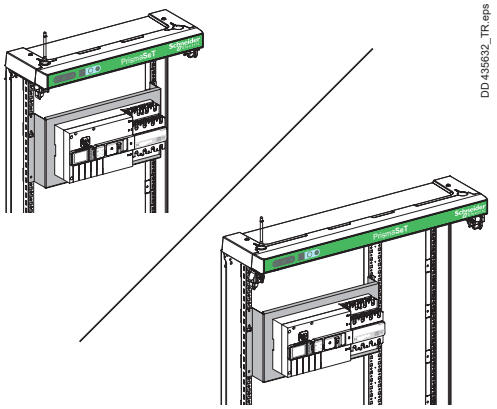
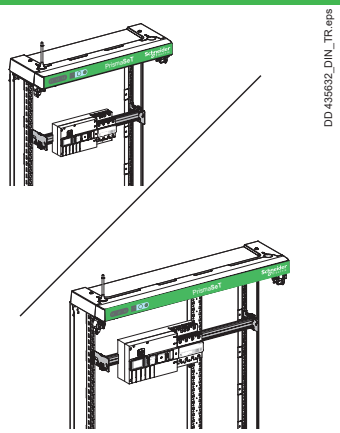
**TPSAUX32**



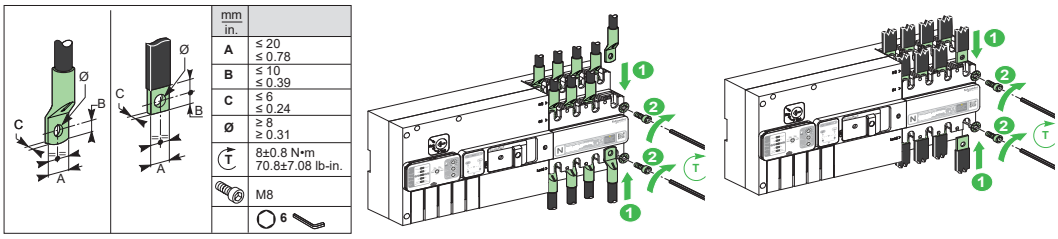
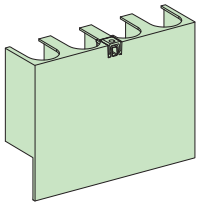
**TPSAUX33**

# TransferPacT Frame 160A Automatic source changeover system W600/850

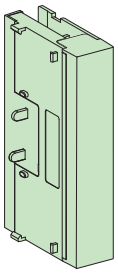
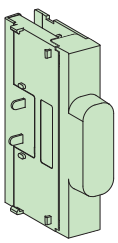
## Changeover system

| Mounting | | Vertical Fixed | |
|---|---|---|---|
|  | |   | |
| **Devices** | | **TransferPacT Automatic / Active Automatic 80A-160A 3P/4P** | |
| No. of devices per row | | **1** | |
| No. of vertical modules | | **8M** | |
| Mounting plate | | **LVS03427** | - |
| DIN Rail | W600 | - | **LVS03002 (adjustable)** |
| | W850 | - | **LVS03007 (adjustable)** |
| Front plate with cut-out | W600 | **LVS03207** | |
| | W850 | **LVS03209** | |

## Upstream / Downstream Connections

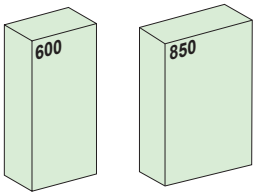
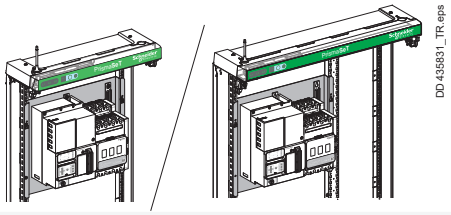
| | |
|---|---|
| Cable/Busbars |  |
| Long terminal shields |  |
| | **TPSISO31** |

## Auxiliary

| | | |
|---|---|---|
| Coupling auxiliary module |  |  |
| | **TPSAUX32** | **TPSAUX33** |

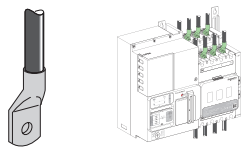
# TransferPacT Frame 250A Automatic source changeover system W600/850

## Changeover system

| Mounting | | Vertical Fixed |
|---|---|---|
| | |     |
| **Devices** | | **TransferPacT Active Automatic 100A-250A 3P/4P**<br>**TransferPacT Automatic 200A-250A 3P/4P**<br>**TransferPacT Remote 160A-250A 3P/4P** |
| No. of devices per row | | **1** |
| No. of vertical modules | | **11M** |
| Mounting plate | | **LVS03430** |
| Front plate with cut-out | **W600** | **LVS03212** [11] |
| | **W850** | **LVS03215** [11] |

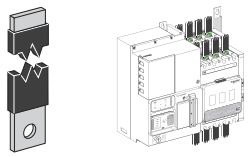
## Upstream / Downstream Connections

Cable

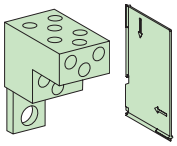
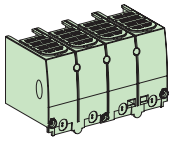
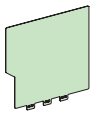


| CU | | | | AL | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **LV429252**<br>**LV429256** | **x3**<br>**x4** | **x2**<br>**x3** | **120 mm²**<br>**250 kcmil** | **LV429504**<br>**LV429505** | **x3**<br>**x4** | **x2**<br>**x3** | **150 mm²**<br>**300 kcmil** |
| **LV429253**<br>**LV429257** | **x3**<br>**x4** | **x2**<br>**x3** | **150 mm²**<br>**300 kcmil** | **LV429506**<br>**LV429507** | **x3**<br>**x4** | **x2**<br>**x3** | **185 mm²**<br>**350 kcmil** |
| **LV429254**<br>**LV429258** | **x3**<br>**x4** | **x2**<br>**x3** | **185 mm²**<br>**350 kcmil** | | | | |

Busbar

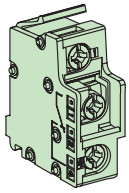
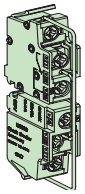


## Accessories

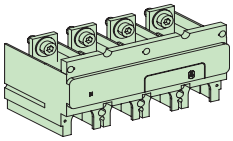
| Bare Cable Connector | Long Terminal Shield | Available Options (1) | | | | Insulating Screen |
|---|---|---|---|---|---|---|
| | | Cable Size | TransferPacT | NSX Solution | Long Terminal Shield | |
|  |  | 1.5 to 35 mm² | 3P: **TPSCON47** | **LV429248** | + **LV429518** |  |
| | | | 4P: **TPSCON48** | **LV429249** | | |
| | | 120 to 240 mm² | 3P: **TPSCON49** | **LV429244** | | |
| | | | 4P: **TPSCON50** | **LV429245** | | |
| | | 50 to 120 mm² | 3P: **TPSCON51** | **LV429218** | | |
| | | | 4P: **TPSCON52** | **LV429219** | | **TPSIS066** |

## Auxiliary

Coupling auxiliary module

| | |
|---|---|
|  |  |
| **TPSAUX43** | **TPSAUX44** |

Power Tag

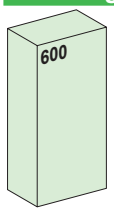
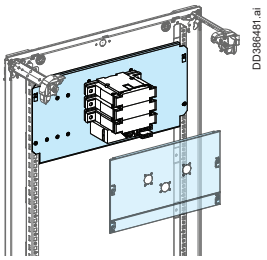
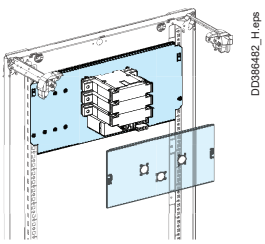


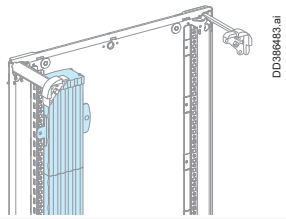
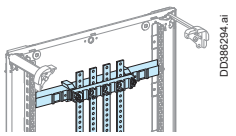
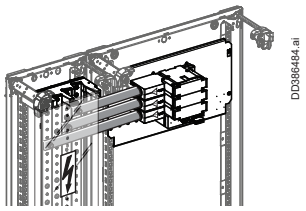
**LV434021**

(1) TransferPacT solution will be available in Q4/2023. Until then, an alternative NSX solution must be used.

# Fupact GS32/63/100/160
## Horizontal mounting - Fixed - Extended rotary handle
W600

Fusegear

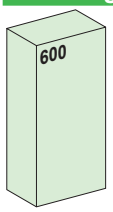
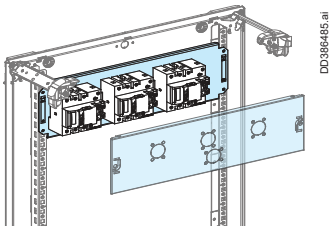
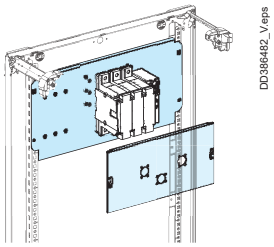
| Mounting | | W600 Horizontal - Fixed | | | |
|---|---|---|---|---|---|
|  | |  | |  | |
| **Devices** | | **GS32** | **GS63** | **GS100** (1) | **GS160** (1) |
| | | 3P or 4P | | | |
| Number of devices per row | | 1 | 1 | | |
| Nb. of vertical modules | | 3 | 5 | | |
| Mounting plates | | **LVS03117** | **LVS03118** | | |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03308** | **LVS03309** | | |
| | downstream | - | - | **LVS03801** [1M] | |
| **Upstream connection** | | | | | |
| Terminal Cover | 3P | - | - | **GS1AP33** | **GS1AP43** |
| | 4P | - | - | **GS1AP34** | **GS1AP44** |

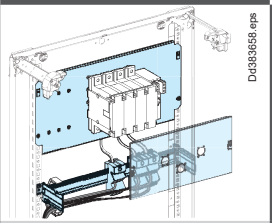
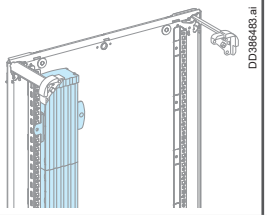
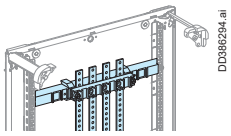
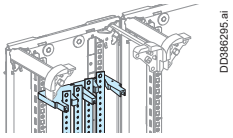
| Downstream distribution | Insulated Linergy BW busbars (2) | Rear Linergy BS busbars | Linergy BS multi-stage busbars |
|---|---|---|---|
|  |  |  |  |
| **Type of connected devices** | **GS100/160** | **All types** | **All types** |
| Busbars | **Linergy BW** *> page D-4* | **LVS04191** + copper bars *> page D-6* | **LVS04192** + copper bars *> pages D-7, D-8* |
| Power supply block | **LVS04061** *> page C-47* | - | - |
| Connection | Must be made | Must be made | Must be made |
| Long terminal shields | 3P : 3 x **LV480445**<br>4P : 4 x **LV480445** | 3P : 3 x **LV480445**<br>4P : 4 x **LV480445** | 3P : 3 x **LV480445**<br>4P : 4 x **LV480445** |

**(1)** For DIN fuses only.
**(2)** The mounting plate for GS Fupact does not leave a passage for the busbar; it can only be installed below the plate.
The distribution system is installed under the functional unit.

# Fupact GS32/63/100/160
## Vertical mounting - Fixed - Extended rotary handle
### W600



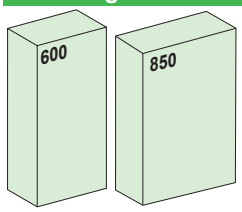
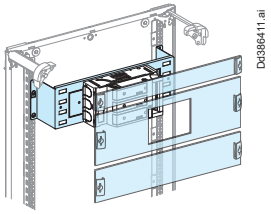
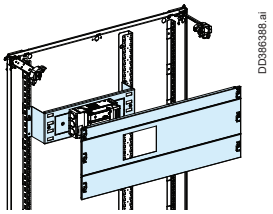
| Mounting | | W600 Vertical - Fixed | | | |
|---|---|---|---|---|---|
|  | |  | |  | |
| **Devices** | | **GS32** | **GS63** | **GS100** (1) | **GS160** (1) |
| | | 3P or 4P | | | |
| Number of devices per row | | 3 | 2 | | |
| Nb. of vertical modules | | 3 | 5 | | |
| Mounting plates | | **LVS03117** | **LVS03118** | | |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03308** | **LVS03309** | | |
| | downstream | - | - | **LVS03801** [1M] | |
| **Upstream connection** | | | | | |
| Terminal Cover | 3P | - | - | **GS1AP33** | **GS1AP43** |
| | 4P | - | - | **GS1AP34** | **GS1AP44** |

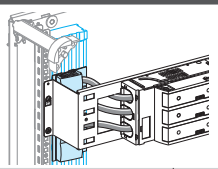
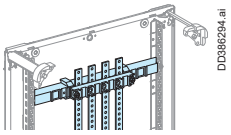
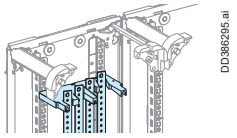
| Downstream distribution | | Distribution block Linergy DX 1P, 160 A | | Insulated Linergy BW busbars (2) | | Rear Linergy BS busbars | | Linergy BS multi-stage busbars | |
|---|---|---|---|---|---|---|---|---|---|
|  | |  | |  | |  | |  | |
| **Type of connected devices** | | **GS100/160** | | **GS100/160** | | **GS100/160** | | **GS100/160** | |
| | | 3P | 4P | 3P | 4P | 3P | 4P | 3P | 4P |
| Distribution block / busbars | | 3 x **LVS04031** + **LVS03002** *> page D-11* | 4 x **LVS04031** + **LVS03002** *> page D-11* | **Linergy BW** *> page D-4* | | **LVS04191** + copper bars *> page D-6* | | **LVS04192** + copper bars *> pages D-7, D-8* | |
| Power supply block | | - | | **LVS04061** *> page C-47* | | - | | - | |
| Connection | | Must be made | | Must be made | | Must be made | | Must be made | |
| Long terminal shields | | 3 x **LV480445** | 4 x **LV480445** | 3 x **LV480445** | 4 x **LV480445** | 3 x **LV480445** | 4 x **LV480445** | 3 x **LV480445** | 4 x **LV480445** |

**(1)** For DIN fuses only.
**(2)** The mounting plate for GS Fupact does not leave a passage for the busbar; it can only be installed below the plate.
The distribution system is installed under the functional unit.

# Fupact ISFT160/250
# Horizontal mounting - Fixed
## W600 - W850



| Mounting | W600 Horizontal - Fixed | | W850 Horizontal - Fixed | |
|---|---|---|---|---|
|  |  | |  | |
| **Devices** | **ISFT160** | **ISFT250** | **ISFT160** | **ISFT250** |
| Number of devices per row | 1 | 1 | 1 | 1 |
| Nb. of vertical modules | 6 | 6 | 6 | 6 |
| Mounting plates | **LVS03121** | **LVS03124** | **LVS03121** | **LVS03124** |
| Front plates [Nb. of vertical modules] cut-out | **LVS03326** [3] | **LVS03328**[5] | **LVS03336**[3] | **LVS03337**[5] |
| Front plates [Nb. of vertical modules] upstream | **LVS03801** [1] | - | **LVS03851** [1] | **LVS03851** [1] |
| Front plates [Nb. of vertical modules] downstream | **LVS03802** [2] (1) | **LVS03801** [1] | **LVS03809** [2] | - |
| **Upstream connection** | | | | |
| Long terminal shields | **LV480819** | | **LV480824** | |

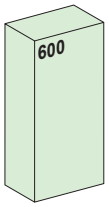
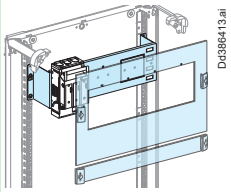
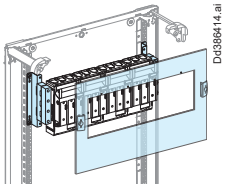
| Downstream distribution | Insulated Linergy BW busbars | | Rear Linergy BS busbars | | Linergy BS multi-stage busbars | |
|---|---|---|---|---|---|---|
|  |  | |  | |  | |
| **Type of connected devices** | **ISFT160** | **ISFT250** | **ISFT160** | **ISFT250** | **ISFT160** | **ISFT250** |
| Busbars | **Linergy BW** *> page D-4* | | **LVS04191** + copper bars *> page D-6* | | **LVS04192** + copper bars *> pages D-7, D-8* | |
| Power supply block | **LVS04061** *> page C-47* | | - | | - | |
| Connection | Must be made | | Must be made | | Must be made | |
| Long terminal shields | **LV480819** | **LV480824** | **LV480819** | **LV480824** | **LV480819** | **LV480824** |

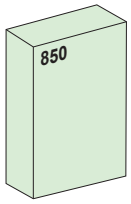
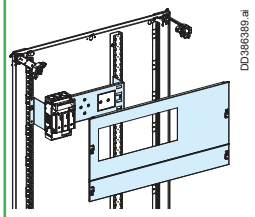
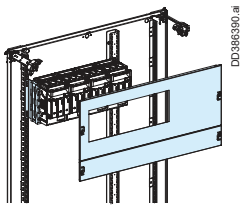
**(1)** Not needed if direct distribution.

# Fupact ISFT100/100N, ISFT160/250
## Vertical mounting - Fixed
### W600 - W850 - W300





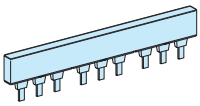
| Mounting | | W600 Vertical - Fixed | | | | |
|---|---|---|---|---|---|---|
|  | |  | | |  | |
| **Devices** | | **On mounting plate** | | | **On busbars (2)** | |
| | | **ISFT100** | **ISFT100N** | **ISFT160** | **ISFT100N** | **ISFT160** |
| Number of devices per row | | 5 | 8 | 4 | 6 | 4 |
| Nb. of vertical modules | | 6 | 8 | 8 | 8 | 8 |
| Mounting plates | | **LVS03120** | **LVS03126** | **LVS03121** | **LVS03122 (2)** | **LVS03122 (2)** |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03320** [6] | **LVS03325** [8] | **LVS03321** [6] | **LVS03325** [8] | **LVS03321** [6] |
| | upstream | - | - | - | - | - |
| | downstream | - | - | **LVS03802** [2] **(1)** | - | **LVS03802** [2] **(1)** |
| **Upstream connection** | | | | | | |
| Long terminal shields | | - | **LV480756** | **LV480819** | **LV480756** | **LV480819** |

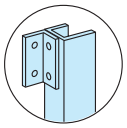
| Mounting | | W850 Vertical - Fixed | | | | |
|---|---|---|---|---|---|---|
|  | |  | | |  | |
| **Devices** | | **On mounting plate** | | | **On busbars (2)** | |
| | | **ISFT100** | **ISFT100N** | **ISFT160** | **ISFT100N** | **ISFT160** |
| Number of devices per row | | **5** | - | **4** | - | **4** |
| Nb. of vertical modules | | **6** | - | **8** | - | **8** |
| Mounting plates | | **LVS03120** | - | **LVS03121** | - | **LVS03122 (2)** |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03338** [6] | - | **LVS03318** [6] | - | **LVS03318** [6] |
| | upstream | - | - | - | - | - |
| | downstream | - | - | **LVS03809** [2] **(1)** | - | **LVS03809** [2] **(1)** |
| **Upstream connection** | | | | | | |
| Long terminal shields | | - | **LV480756** | **LV480819** | **LV480756** | **LV480819** |

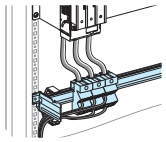
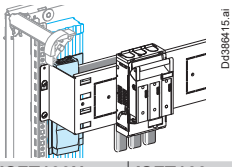
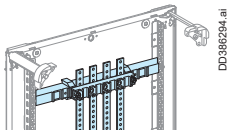
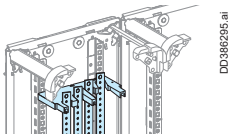
**(1)** Not needed if direct distribution.
**(2)** Only for 3P.

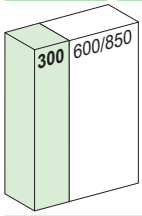
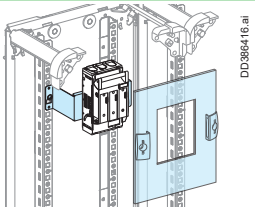
# Fupact ISFT100/100N, ISFT160/250
## Vertical mounting - Fixed
### W600 - W850 - W300

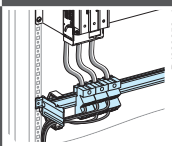
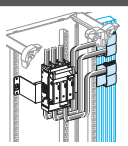
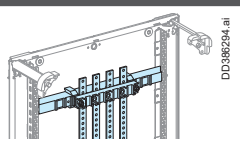
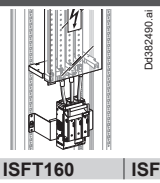
Fusegear

| Upstream connection | | Comb busbar | | |
|---|---|---|---|---|
| | |  | | |
| **Connected devices** | **Type** | **ISFT100** | | |
| | **Number** | **2** | **3** | **4** |
| Comb busbar | | **49861** | **49862** | **49863** |
| Set of 3 connectors | | **49865** (25 to 95 mm²) | | |
| | | **49860** (3 x 10 mm²) | | |

| Incoming connection | | Comb busbar | | |
|---|---|---|---|---|
| | |  | | |
| **Connected devices** | **Type** | **ISFT160** | | |
| | **Number** | **2** | **3** | **4** |
| Comb busbar | | **LV480811** | **LV480812** | **LV480813** |
| Set of 3 connectors | | **LV480818** (25 to 95 mm) | | |
| | | **LV480814** (3 x 16 mm²) | | |

| Downstream distribution | Distribution block Linergy DX 1 P, 160 A | | Insulated Linergy BW busbars | | Rear Linergy BS busbars | | Linergy BS multi-stage busbars | |
|---|---|---|---|---|---|---|---|---|
|  |  | |  | |  | |  | |
| **Type of connected devices** | **ISFT100N** | **ISFT160** | **ISFT100N** | **ISFT160** | **ISFT100N** | **ISFT160** | **ISFT100N** | **ISFT160** |
| Distribution block / busbars | 3 x **LVS04031** + **LVS03002** *> page D-11* | | **Linergy BW** *> page D-4* | | **LVS04191** + copper bars *> page D-6* | | **LVS04192** + copper bars *> pages C-25, D-8* | |
| Power supply block | - | | **LVS04061** *> page C-47* | | - | | - | |
| Connection | Must be made | | Must be made | | Must be made | | Must be made | |
| Long terminal shields | **LV480756** | **LV480819** | **LV480756** | **LV480819** | **LV480756** | **LV480819** | **LV480756** | **LV480819** |

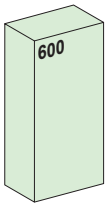
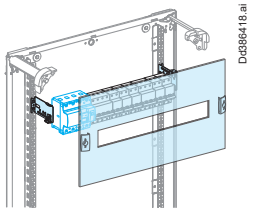
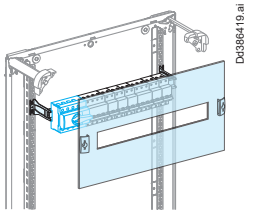
| Mounting | W300 Vertical - Fixed | |
|---|---|---|
|  |  | |
| **Devices** | **ISFT160** | **ISFT250** |
| Number of devices per row | 1 | 1 |
| Nb. of vertical modules | 6 | 9 |
| Mounting plates | **LVS03123** | **LVS03125** |
| Cut-out front plate | **LVS03327** | **LVS03329** |
| **Upstream connection** | | |
| Long terminal shields | **LV480819** | **LV480824** |

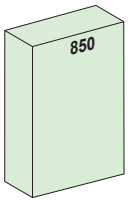
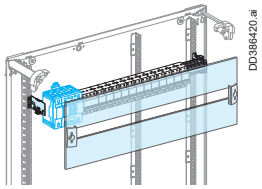
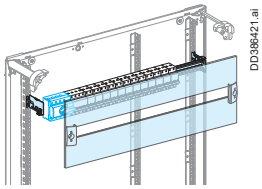
| Downstream distribution | Distribution block Linergy DX 1 P, 160 A | | Insulated Linergy BW busbars | | Rear Linergy BS busbars | | Linergy BS busbars in duct | |
|---|---|---|---|---|---|---|---|---|
|  |  | |  | |  | |  | |
| **Type of connected devices** | **ISFT160** | | **ISFT160** | **ISFT250** | **ISFT160** | **ISFT250** | **ISFT160** | **ISFT250** |
| Busbars / Distribution block | 3 x **LVS04031** + **LVS03002** *> page D-11* | | **Linergy BW** *> page D-4* | | **LVS04191** + copper bars *> page D-6* | | **LVS04192** + copper bars *> pages D-7, D-8* | |
| Power supply block | - | | **LVS04061** *> page C-47* | | - | | - | |
| Connection | Must be made | | Must be made | | Must be made | | Must be made | |
| Long terminal shields | **LV480819** | | **LV480819** | **LV480824** | **LV480819** | **LV480824** | **LV480819** | **LV480824** |

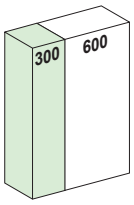
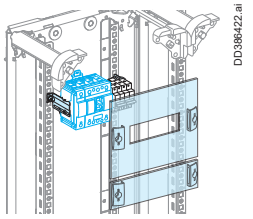
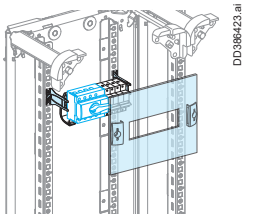
**(1)** Not needed if direct distribution.
**(2)** Only for 3P.

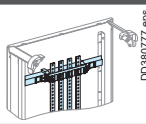
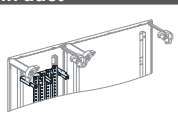
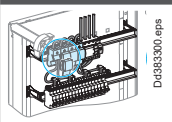
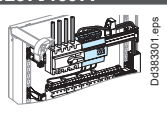
# Modular devices ⩽ 160 A switchboard incomer
## W600 - W850 - W300



| Mounting | | W600 Circuit breaker | | W600 Switch-disconnector | |
|---|---|---|---|---|---|
|  | |  | |  | |
| **Devices** | | **NG160, Vigi NG160 (1) (2)** | **NG125, Vigi NG125, C120, Vigi C120** | **INS-INV40/160** | **INS-INV100/160 with long terminal shields** |
| Nb. of vertical modules | | 5 | 5 | 4 | 5 |
| Rail (48 modules of 9 mm) | | **LVS03002** (adjustable) **(1)** | **LVS03001** | **LVS03001** | **LVS03001** |
| Modular front plates [Nb. of vertical modules] | | **LVS03205** [5] | **LVS03205** [5] | **LVS03204** [4] | **LVS03205** [5] |
| Blanking plates | strip | **LVS03220** | | **LVS03220** | |
| | divisible | **LVS03221** | | **LVS03221** | |

| Mounting | | W850 Circuit breaker | | W850 Switches | |
|---|---|---|---|---|---|
|  | |  | |  | |
| **Devices** | | **NG160, Vigi NG160 (1) (2)** | **NG125, Vigi NG125** | **Compact INS-INV40/160** | **Compact INS-INV100/160 with long terminal shields** |
| Nb. of vertical modules | | 5 | 5 | 4 | 5 |
| Rail (72 modules of 9 mm) | | **LVS03007** (adjustable) **(2)** | **LVS03006** | **LVS03006** | **LVS03006** |
| Modular front plates [Nb. of vertical modules] | | **LVS03218** [5] | **LVS03218** [5] | **LVS03217** [4] | **LVS03218** [5] |
| Blanking plates | strip | **LVS03220** | **LVS03220** | **LVS03220** | **LVS03220** |
| | divisible | **LVS03221** | **LVS03221** | **LVS03221** | **LVS03221** |

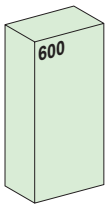
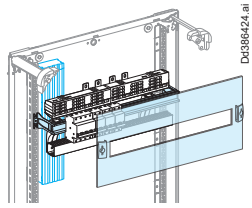
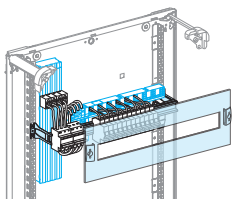
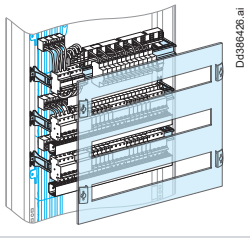
| Mounting | | W300 Circuit breaker | | W300 Switch-disconnector | |
|---|---|---|---|---|---|
|  | |  | |  | |
| **Devices** | | **NG160 (1)** | **NG125, Vigi NG125, C120, Vigi C120** | **INS-INV40/160** | **INS-INV100/160 with long terminal shields** |
| Nb. of vertical modules | | 6 | 4 | 4 | 6 |
| Rail (20 modules of 9 mm) | | **LVS03011** (adjustable) **(1)** | **LVS03010** | **LVS03010** | **LVS03010** |
| Front plates [Nb. of vertical modules] | modular | **LVS03214** [4] | **LVS03214** [4] | **LVS03214** [4] | **LVS03214** [4] |
| | downstream | **LVS03812** [2] | - | - | **LVS03812** [2] |
| Blanking plates | strip | **LVS03220** | **LVS03220** | **LVS03220** | **LVS03220** |
| | divisible | **LVS03221** | **LVS03221** | **LVS03221** | **LVS03221** |

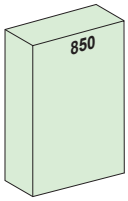
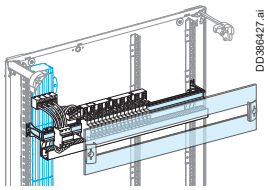
| Downstream distribution | Insulated Linergy BW busbars | Rear Linergy BS busbars | Linergy BS Multi-stage busbars in duct | Distribution block, Linergy DX 1P, 160 A | Distribution block, Linergy DX 4P, 125 A/160 A | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  | |
| **Type of connected devices** | **All types** | **All types** | **All types** | **All types** | **125A** | **160A** |
| Busbars / Distrib blocks | **Linergy BW** *> page D-4* | **LVS04191**+ copper bars *> page D-6* | **LVS04192**+ copper bars *> pages D-7, D-8* | **LVS04031** *> page C-16* | **LVS04045** *> page C-16* | **LVS04046** *> page C-16* |
| Connection | *> page D-5* | Must be made | Must be made | **LVS04149** | **LVS04047** | supplied with |

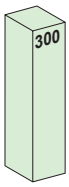
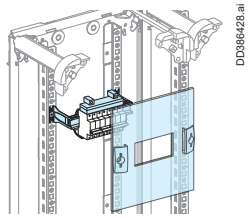
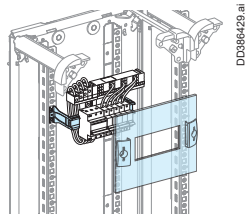
**(1)** End of life mid 2018 substituted by NSXm *> page C-4.*
**(2)** Can be completed by a rail + raiser (cat no. **LVS04227**) to install modular devices on.

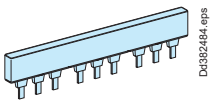
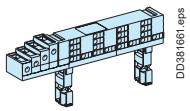
# Modular devices outgoers ⩽ 63 A
## W600 - W850 - W300



| Mounting | W600 Distances between centres : 200 mm | W600 Distances between centres : 150 mm | |
|---|---|---|---|
|  |  |  |  |
| **Devices** | **All modular devices** | **Modular devices ⩽ 40 A** | |
| Rail length (modules of 9 mm) | 48 | 48 | 48 x 3 |
| Nb. of vertical modules | 4 (1) | 3 | 8 |
| Rail (48 modules of 9 mm) | **LVS03001** | **LVS03001** | **LVS03001** x 3 |
| Modular front plates [Nb. of vertical modules] | **LVS03204** [4] | **LVS03203** [3] | **LVS03223** [8] |
| Blanking plates strip | **LVS03220** | **LVS03220** | **LVS03220** |
| Blanking plates divisible | **LVS03221** | **LVS03221** | **LVS03221** |

| Mounting | W850 distance between centres : 200 mm | W850 Distance between centres : 150 mm |
|---|---|---|
|  |  | |
| **Devices** | **All modular devices** | **Modular devices ⩽ 40 A** |
| Rail length (modules of 9 mm) | 72 | 72 |
| Nb. of vertical modules | 4 | 3 |
| Rail (72 modules of 9 mm) | **LVS03006** | **LVS03006** |
| Modular front plates [Nb. of vertical modules] | **LVS03217** [4] | **LVS03216** [3] |
| Blanking plates strip | **LVS03220** | **LVS03220** |
| Blanking plates divisible | **LVS03221** | **LVS03221** |

| Mounting | W300 Distance between centres : 200 mm | W300 Distance between centres : 150 mm |
|---|---|---|
|  |  |  |
| **Devices** | **All modular devices** | **Modular devices ⩽ 40 A** |
| Rail length (modules of 9 mm) | 20 | 20 |
| Nb. of vertical modules | 4 | 3 |
| Rail (20 modules of 9 mm) | **LVS03010** | **LVS03010** |
| Modular front plate [Nb. of vertical modules] | **LVS03214** [4] | **LVS03213** [3] |
| Blanking plates strip | **LVS03220** | **LVS03220** |
| Blanking plates divisible | **LVS03221** | **LVS03221** |

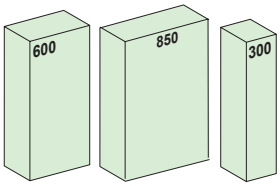
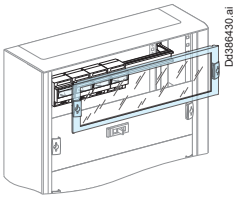
| Downstream distribution | Linergy FH comb busbar | Distribution system Linergy FM 63 A |
|---|---|---|
|  |  |  |
| **Type of connected devices** | **According devices** | **LVS04008** |
| Comb Busbars / Distrib system | *> page D-18* | *> page D-16* |

(1) For a modular row with Linergy FM160 or 200 A positioned directly below a non-modular mounting plate (Compact…) or at the top of a switchboard, add 1 module (4+1) and a plain upstream front plate (cat no. **LVS03801**).

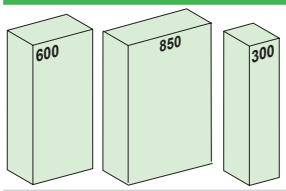
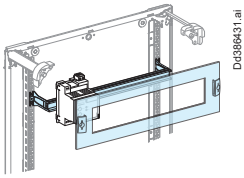
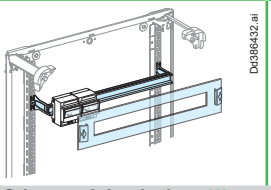
# Other modular devices
# Switchboard lighting
## W600 - W850 - W300



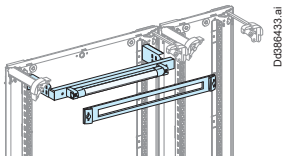
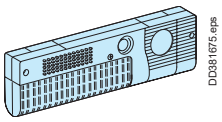
## Other devices behind transparent front plates

| | | W600 | W850 (4) | W300 |
|---|---|---|---|---|
|  | |  | | |
| **Nb. of modules** | **Height** | | | |
| 4 | 200 mm | **LVS03342** | **-** | **LVS03352** |
| 6 | 300 mm | **LVS03343** | **LVS03363** | **LVS03353** |
| 9 | 450 mm | **LVS03344** | **LVS03364** | **LVS03354** |
| 12 | 600 mm | **LVS03345** | **-** | **-** |

## Vigirex, Vigilohm and other modular devices

| | W600 | W600 | W850 | W300 |
|---|---|---|---|---|
|  |  |  | | |
| **Devices** | **Vigirex (1), Vigilohm (2)** | **Other modular devices (3)**<br>**ammeter, voltmeter, lamp, pushbuttons** | | |
| Nb. of vertical modules | **3** | **2** | **3** | **3** |
| Rail (48 modules of 9 mm) | **LVS03001** | **LVS03001** | **LVS03006** | **LVS03010** |
| Cut-out front plates | **LVS03203** | **LVS03202** | **LVS03216** | **LVS03213** |

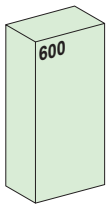
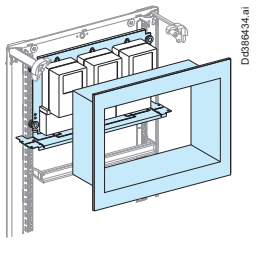
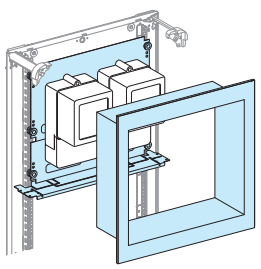
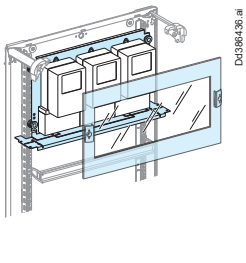
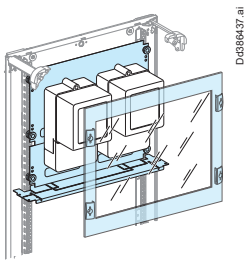
## Lighting

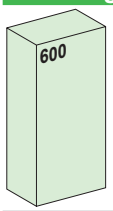
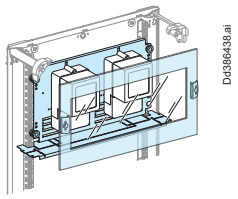
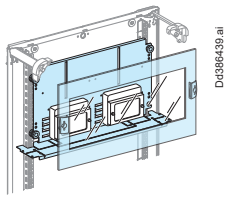
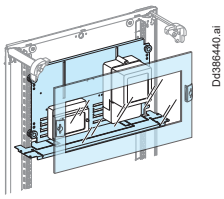
| | W600 fixed lighting | Switchboard portable lamp |
|---|---|---|
| |  |  |
| Catalog number | **LVS08964** | **LVS08965** |
| Presentation | This system is generally used to illuminate the front of a switchboard. | ■ Lamp with a magnetic base for installation behind a door or directly on the cubicle framework.<br>■ Supplied without a power cord<br>■ H x W x D: 90 x 345 x 42 |
| Characteristics | ■ Supply voltage: 220/240 V<br>■ Power rating: 8 W<br>■ Height: 1 module vertical (50 mm) | ■ Supply voltage: 220/240 V<br>■ Power rating: 11 W<br>■ Lamp: picoline OSRAM 8W (supplied)<br>■ Class 2<br>■ IP20 |

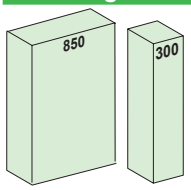
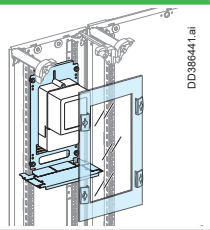
(1) RH10, RH21, RH99, RMH relay and RM12T Multiplexer.
(2) IM9, IM9-0L, IM20, IM20H.
(3) For installation at the top or bottom of the enclosure, use a 3-modules modular front plate (LVS**03203**).
(4) 2/3 transparent front plate.

# Kilowatt-hour meters
# Class II
## W600 - W850 - W300

Other devices

| Mounting | W600 Accessible (1) | | W600 Behind front plate (1) | |
|---|---|---|---|---|
| |  |  |  |  |  |
| **Devices** | **1-phase (Ph + N)** | **3-phase (3 Ph + N)** | **1-phase (Ph + N)** | **3-phase (3 Ph + N)** |
| Number of devices per row | 3 | 2 | 3 | 2 |
| Nb. of vertical modules | **6** | **8** | **6** | **9** |
| Mounting plates | - | **LVS03152** | - | **LVS03152** |
| Metering front plate | **LVS03155** [6] | **LVS03158** [8] | - | - |
| Front plates transparent | - | - | **LVS03343** [6] | **LVS03344** [9] |
| at your choice plain | - | - | **LVS03806** [6] | - |
| Horizontal partitioning | **LVS04331** | **LVS04331** | **LVS04331** | **LVS04331** |
| Insulating Plate (class II) | - | - | - | - |
| Accessories | M5 spacers for mounting plate *> page C-51* | | | |

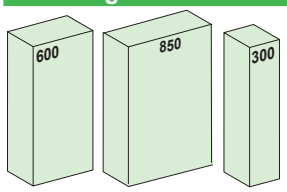
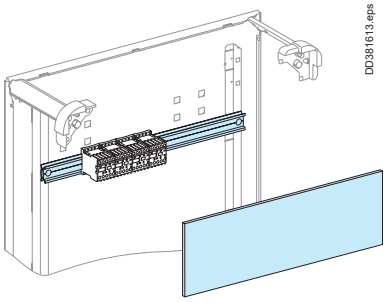
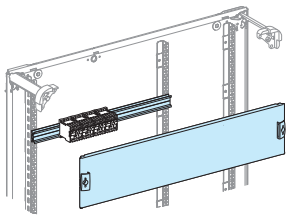
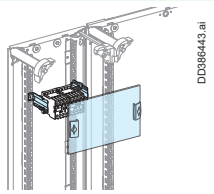
| Mounting | W600 Behind front plate (1) | | |
|---|---|---|---|
| |  |  |  |  |
| **Devices** | **3-phase kilowatt-hour meters (3 Ph + N)** | **Connection blocks** | **3-phase kilowatt-hour meters (3 Ph + N) + connection blocks** |
| Number of devices per row | 2 | 2 | 1+1 |
| Nb. of vertical modules | **6** | **6** | **6** |
| Mounting plates | **LVS03160** | **LVS03160** | **LVS03160** |
| Front plates transparent | **LVS03343** [6] | **LVS03343** [6] | **LVS03343** [6] |
| at your choice plain | **LVS03806** [6] | **LVS03806** [6] | **LVS03806** [6] |
| Horizontal partitioning | **LVS04331** | **LVS04331** | **LVS04331** |
| Earthing braid **(2)** | **LVS08910** | **LVS08910** | **LVS08910** |
| Accessories | M5 spacers for mounting plate *> page C-51* | | |

| Mounting | W850 Behind front plate (3) | | | W300 Behind front plate (1) |
|---|---|---|---|---|
| |   | | |  |
| **Devices** | **1-phase (Ph + N)** | **3-phase (3 Ph + N)** | **3-phase (3 Ph + N)** | **3-phase (3 Ph + N)** |
| Number of devices per row | 3 | 2 | 2 | 1 |
| Nb. of vertical modules | **6** | **9** | **6** | **9** |
| Mounting plates | - | **LVS03152** | **LVS03160** | **LVS03156** |
| Front plates transparent | **LVS03363** | **LVS03364** | **LVS03363** | **LVS03354** [9] |
| at your choice plain | **LVS03856** | - | **LVS03856** | **LVS03817** [9] |
| Horizontal partitioning | - | - | - | **LVS04332** |
| Earthing braid **(2)** / Insulating plate | - | - | **LVS08910** | **LVS08910** |
| Accessories | - | - | - | M5 spacers for mounting plate *> page C-51* |

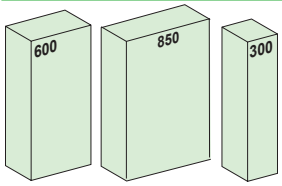
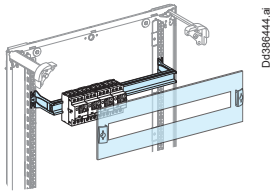
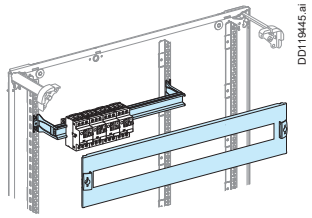
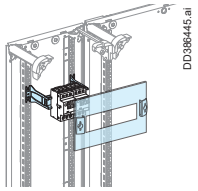
**(1)** Order one additional horizontal partition in case of installation other than at the top of enclosure.
**(2)** Meters can be installed directly on mounting plate equipped with 6 mm² earthing braid (cat.no LVS**08910**) and combined with partitioning or front plates.
**(3)** On the right of the front plate, possibility to install 96 x 96 device *> page C-40*.

Industrial control devices

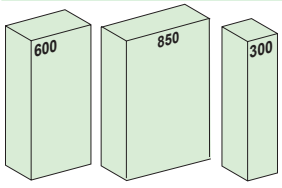
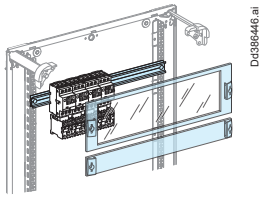
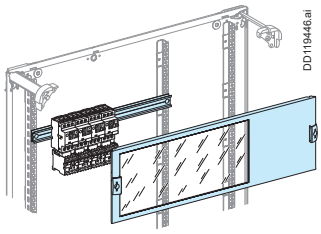
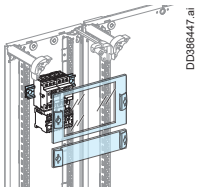
## TeSys D, TeSys K contactors

| Mounting | W600 | W850 | W300 |
|---|---|---|---|
|  |  |  |  |
| **Devices** | **LC1D● or LC1K● (≤ 40 A)** | **LC1D● or LC1K● (≤ 40 A)** | **LC1D● or LC1K● (≤ 40 A)** |
| Useful length for rail | 432 mm | 648 mm | 180 mm |
| Nb. of vertical modules | **3** | **3** | **3** |
| Modular rail | **LVS03004** (in rear) | **LVS03007** | **LVS03011** (adjustable) |
| Plain front plate | **LVS03803** | **LVS03853** | **LVS03813** |

## TeSys GV2/GV3 circuit breakers

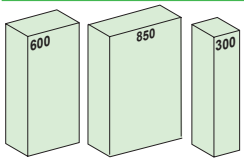
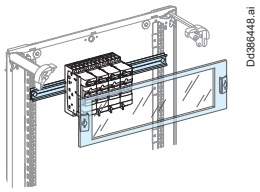
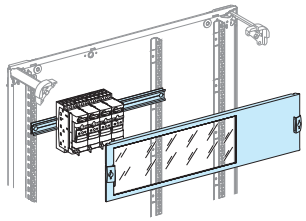
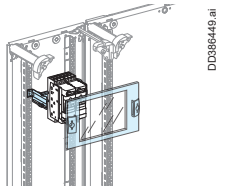
| Mounting | | W600 | | | W850 | | | W300 | | |
|---|---|---|---|---|---|---|---|---|---|---|
|  | |  | | |  | | |  | | |
| **Devices** | | **TeSys GV2L, GV2P** | **TeSys GV2RT, GV2ME, GV2LE** | **TeSys GV3** | **TeSys GV2L, GV2P** | **TeSys GV2RT, GV2ME, GV2LE** | **TeSys GV3** | **TeSys GV2L, GV2P** | **TeSys GV2RT, GV2ME, GV2LE** | **TeSys GV3** |
| Useful length for rail | | 432 mm | 432 mm | 432 mm | 648 mm | 648 mm | 648 mm | 180 mm | 180 mm | 180 mm |
| Nb. of vertical modules | | **3** | **3** | **5** | **3** | **3** | **5** | **3** | **3** | **7** |
| Modular rail | | **LVS03002** | **LVS03001** | **LVS03002** | **LVS03007** | **LVS03006** | **LVS03007** | **LVS03011** | **LVS03010** | **LVS03011** (adjustable) |
| Front plates [Nb. of vertical modules] | cut-out | **LVS03203** [3] | **LVS03203** [3] | **LVS03205** [5] | **LVS03216** [3] | **LVS03216** [3] | **LVS03218** [3] | **LVS03213** [3] | **LVS03213** [3] | **LVS03213** [3] |
| | upstream | - | - | - | - | - | - | - | - | **LVS03812** [2] |
| | downstream | - | - | - | - | - | - | - | - | **LVS03812** [2] |
| Blanking plates *> page C-52* | strip | **LVS03220** | | | | | | | | |
| | divisible | **LVS03221** | | | | | | | | |

## Combined TeSys GV2 circuit breaker + TeSys GV3P●●1 contactor

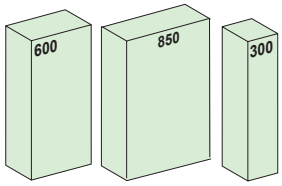
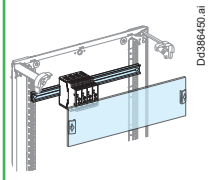
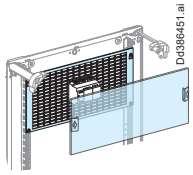
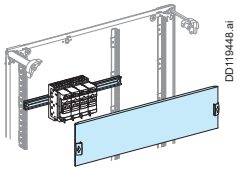
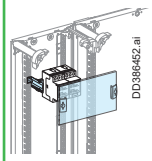
| Mounting | | W600 | | W850 | | W300 | |
|---|---|---|---|---|---|---|---|
|  | |  | |  | |  | |
| **Devices** | | **GV2 + LC1D● or LC1K● (≤ 40 A)** | **GV3P●●1** | **GV2 + LC1D● or LC1K● (≤ 40 A)** | **GV3P●●1** | **GV2 + LC1D● or LC1K● (≤ 40 A)** | **GV3P●●1** |
| Useful length for rail | | 432 mm | 432 mm | 648 mm | 648 mm | 180 mm | 180 mm |
| Nb. of vertical modules | | **5** | **7** | **6** | **9** | **6** | **8** |
| Modular rail | | **LVS03004** (in rear) | **LVS03004** | **LVS03007** | **LVS03007** | **LVS03011** (adjustable) | **LVS03011** |
| Front plates [Nb. of vertical modules] | transparent | **LVS03342** [4] | **LVS03343** [6] | **LVS03363** [6] | **LVS03364** [9] | **LVS03352** [4] | **LVS03353** [6] |
| | downstream | **LVS03801** [1] | **LVS03801** [1] | | | **LVS03812** [2] | **LVS03812** [2] |

Industrial control devices

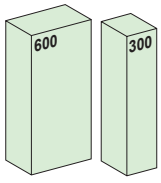
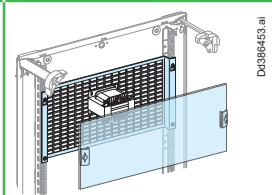
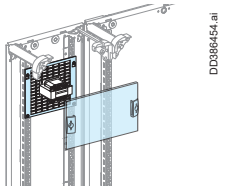
## Tesys U starter-controler

| Mounting | | W600 behind front plate | | W850 behind front plate | W300 behind front plate | |
|---|---|---|---|---|---|---|
|  | |  | |  |  | |
| **Devices** | | **TeSys U** | **TeSys U (1)** | **TeSys U** | **TeSys U** | **TeSys U (1)** |
| Useful length for rail | | 432 mm | 432 mm | 648 mm | 180 mm | 180 mm |
| Nb. of vertical modules | | **5** | **4** | **6** | **6** | **4** |
| Rail | | **LVS03004** (in rear) | **LVS03004** (in rear) | **LVS03007** | **LVS03011** (adjustable) | **LVS03011** (adjustable) |
| Front plates | transparent | **LVS03342** [4] **(2)** | **LVS03342** [4] **(3)** | **LVS03363** [6] | **LVS03352** [4] **(2)** | **LVS03352** [4] **(3)** |
| [Nb. of vertical modules] | downstream | **LVS03801** [1] | - | - | **LVS03812** [2] | - |

## Soft starters Altistart 01

| Mounting | | W600 behind front plate | | | | W850 behind front plate | | W300 behind front plate |
|---|---|---|---|---|---|---|---|---|
|  | |  | | |  |  | |  |
| **Devices** | | **On rail** | | | **On recessed slotted mounting plate** | **On rail** | | **On rail** |
| | | **ATS01N103FT ATS01N106FT** | **ATS01N109FT ATS01N112FT ATS01N206 to 212 ATS01N230LY ATS01N244LY ATS01N244Q** | **ATS01N222 to 232** | **ATS01N272LY, ATS01N285LY ATS01N272Q, ATS01N285Q** | **ATS01N103FT ATS01N106FT** | **ATS01N109FT ATS01N112FT ATS01N206 to 212 ATS01N222 to 232 ATS01N230LY ATS01N244LY ATS01N244Q** | **ATS01N103FT ATS01N106FT** |
| Useful length | | 432 mm | 432 mm | 432 mm | 420 mm | 648 mm | 648 mm | 180 mm |
| Nb. of vertical modules | | **4** | **5** | **6** | **6** | **4** | **6** | **4** |
| Rail | | **LVS03004** (in rear) | **LVS03003** | **LVS03003** | - | **LVS03007** | **LVS03007** | **LVS03011** (adjustable) |
| Slotted plate | | - | - | - | **LVS03172** | - | - | - |
| Front plates | transparent | **LVS03342** [4] | - | **LVS03343** [6] | **LVS03343** [6] | **LVS03342** [4] | **LVS03343** [6] | **LVS03352** [4] |
| [Nb. of vertical modules] | plain | **LVS03804** [4] | **LVS03805** [5] | **LVS03806** [6] | **LVS03806** [6] | **LVS03804** [4] | **LVS03806** [6] | **LVS03814** [4] |

## Supply and LV/LV Phaseo transformer

| Mounting | | W600 behind front plate | W300 behind front plate |
|---|---|---|---|
|  | |  |  |
| **Devices** | | **On recessed slotted mounting plate ABL6TS/TD, ABL6-RF** | **On slotted plate ABL6TS/TD, ABL6-RF** |
| Useful length for mounting plate | | 420 mm | 172 mm |
| Nb. of vertical modules | | **4** | **4** |
| Slotted plates | | **LVS03171** | **LVS03175** |
| Front plates | transparent | **LVS03342** [4] | **LVS03352** [4] |
| [Nb. of vertical mod.] | plain | **LVS03804** [4] | **LVS03814** [4] |

**(1)** TeSys U without communication module, neither auxiliary contact, neither inverter module.
**(2)** If the communication module is installed, the transparent front plate is mandatory. If not, the 2 front plates can be replaced by one plain front plate (cat.no LVS**03805**) in wall-mounted or floor-standing enclosure, LVS**03815** in duct).
**(3)** Or plain front plate (cat.no LVS**03804** in wall-mounted or floor-standing enclosure, LVS**03814** in duct).

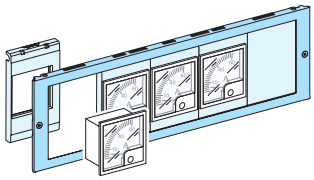
Other devices

## 2 types of device mounting 72 x 72 and 96 x 96

1

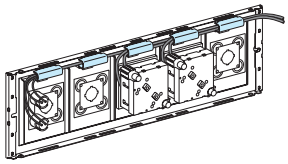
> On an interface with plastic mounting plates clipped onto the metal front plate with cut-outs

Dd381705.eps



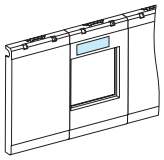
- The interface is made up of a metal front plate and plastic mounting plates that clip onto the front plate.
- The devices are attached in the cut-outs of the plastic mounting plates and insulated from the front plate.

Dd381687.eps



- A system at the rear of the mounting plates guides the wires.

Dd381688.eps

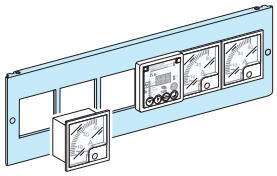


- Each mounting plate can receive an adhesive label.
- Plain mounting plates are available to blank off any unused locations.

2

> Directly on a metal front plate with cut-outs

Dd381689.eps



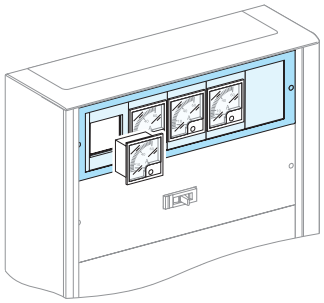
- Devices are attached directly to the metal front plate.
- Blanking plates are available to blank off any unused locations.

## 2 mounting types in PrismaSeT G Active

1

> In the device zone of wall-mounted and floor-standing enclosures

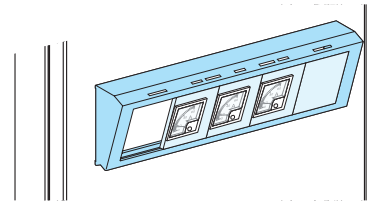
Dd381685.eps



2

> On a plain door with cut-outs, on an inclined visor by 30°

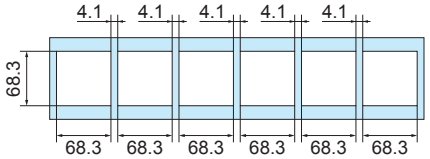
DD385895.eps



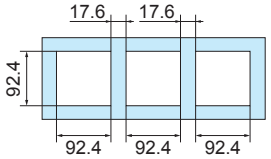
- With cut-out plastic mounting plate directly clipped on the visor.
- Supplied with a drilling diagram for mounting on a plain door.

### Precut dimensions

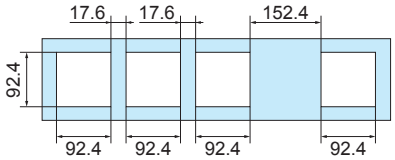
- Cat. number LVS**03910**




- Cat. number LVS**03911**




- Cat. number LVS**03925**



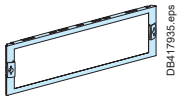
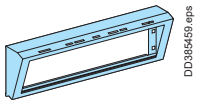
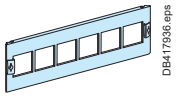
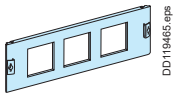
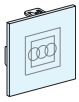
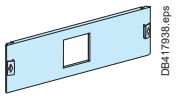
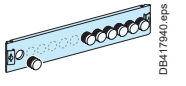

**Note:** device mounting on door: earthing braid (ref. LVS08910) or earthing wire (ref. **LVS08911**).

# Human-switchboard interface

## Devices 72 x 72 - 96 x 96

## Ø22 Lamps and pushbuttons

Other devices

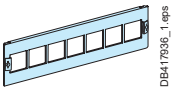
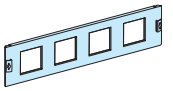
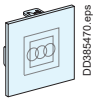
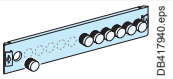
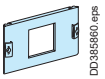
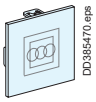
| No. and type of devices per row | Metal front plate with cut-outs | Nb. of vertical modules | Plastic mounting plates cut-out | Blanking plate or devices support |
|---|---|---|---|---|
| **Mounted on W600 front plate with interface and/or plastic plate** | | | | |
| **5** x 72 x 72 Vigirex and other devices 72 x 72 |  DB417935.eps | 3 |  DD385465.eps |  DD385466.eps To blank-off or install: - from 1 to 4 buttons ø 16 or 22 mm - 1 device, 45 x 45 |
| | | | **LVS03902** | **LVS03900** |
| **4** x or 2 x (3) 96 x 96 Power Meter and others devices 96 x 96 For PM200, 200P, PM5 & PM8 series meters | | |  DD385467.eps |  DD385468.eps To blank-off or install: - from 1 to 4 buttons ø 16 or 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72 |
| | **LVS03904** | | **LVS03903** | **LVS03901** |
| **Mounted on W600 canopy tilted to 30° with plastic plate** | | | | |
| **5** x 72 x 72 Vigirex and other devices 72 x 72 |  DD385459.eps | 3 |  DD385465.eps |  DD385466.eps To blank-off or install: - from 1 to 4 buttons ø 16 or 22 mm - 1 device, 45 x 45 |
| | | | **LVS03902** | **LVS03900** |
| **4** x or **2** x (3) 96 x 96 Power Meter and others devices 96 x 96 For PM200, 200P, PM5 & PM8 series meters | | |  DD385467.eps |  DD385468.eps To blank-off or install: - from 1 to 4 buttons ø 16 or 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72 |
| | **LVS03928** (1) | | **LVS03903** | **LVS03901** |
| **Directly mounted on W600 metal front plate with cut-out** | | | | |
| **72 x 72 devices** | | | | |
| **6** x 72 x 72 Vigirex and other devices 72 x 72 |  DB417936.eps | 3 | Direct mounting |  DD385469.eps To blank-off or install: - from 1 or 2 buttons Ø 22 mm - 1 device, 45 x 45 |
| | **LVS03910** (2) | | - | **LVS03907** |
| **96 x 96 devices** | | | | |
| **3** x 96 x 96 Power Meter and other devices 96 x 96 |  DD119465.eps | 3 | Direct mounting |  DD385470.eps To blank-off or install: - from 1 or 2 buttons Ø 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72 |
| | **LVS03911** (2) | | - | **LVS03908** |
| **1** x 96 x 96 Power Meter and other devices 96 x 96 |  DB417938.eps | 3 | Direct mounting |  DD385470.eps To blank-off or install: - from 1 or 2 buttons Ø 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72 |
| | **LVS03913** | | - | **LVS03908** |
| **Pushbuttons and lamps Ø22 mm** | | | | |
| **20** x Ø 22 mm |  DB417940.eps | 2 | Direct mounting | |
| | **LVS03914** | | - | - |

**Note:** To maintain the IP55 degree of protection, the measurement devices must be installed behind a transparent door.
(1) The visor (cat. no. LVS**03928**) can be installed on a plain door with cut-out.
(2) Precut dimensions"Human-switchboard interface", page C-40.
(3) For PM200, 200P, PM5 & PM 8 series meters, use 2 no. blank off sheets between each meter.

# Human-switchboard interface

## Devices 72 x 72 - 96 x 96
## Ø22 Lamps and pushbuttons

Other devices

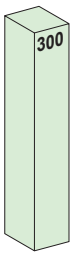
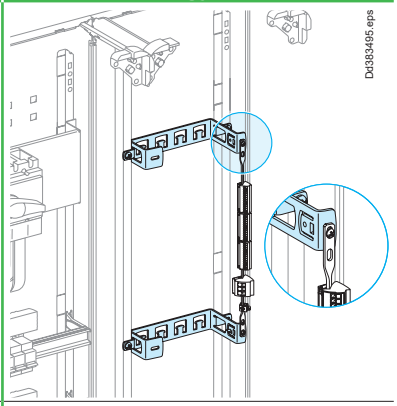
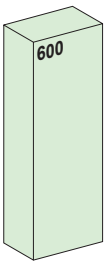
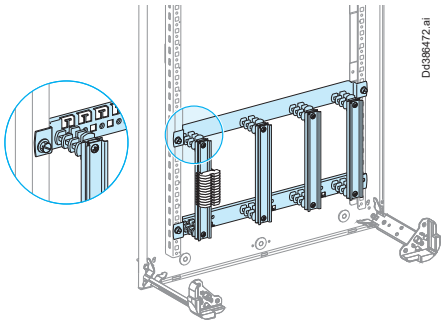
| | | | | | |
|---|---|---|---|---|---|
| **Directly mounted on W850 metal front plate with cut-out** | | | | | |
| **72 x 72 devices** | | | | | |
| **7** x 72 x 72 Vigirex and other devices 72 x 72 |  DB417936_1.eps | **3** | Direct mounting |  DD385469.eps | To blank-off or install:<br>- from 1 or 2 buttons Ø 22 mm<br>- 1 device, 45 x 45 |
| | **LVS03909** (1) | | - | **LVS03907** | |
| **96 x 96 devices** | | | | | |
| **4** x 96 x 96 Power Meter and other devices 96 x 96 |  DD385861.eps | **3** | Direct mounting |  DD385470.eps | To blank-off or install:<br>- from 1 or 2 buttons Ø 22 mm<br>- 1 device, 45 x 45<br>- 1 device, 72 x 72 |
| | **LVS03925** (1) | | - | **LVS03908** | |
| **Pushbuttons and lamps Ø22 mm** | | | | | |
| **12** x Ø 22 mm |  DB417940.eps | **2** | Direct mounting | | |
| | **LVS03919** | | - | - | |
| **Directly mounted on W300 metal front plate with cut-outs** | | | | | |
| **1** x 96 x 96 Power Meter and other devices 96 x 96 |  DD385860.eps | **3** | Direct mounting |  DD385470.eps | To blank-off or install:<br>- from 1 or 2 buttons Ø 22 mm<br>- 1 device, 45 x 45<br>- 1 device, 72 x 72 |
| | **LVS03923** | | - | **LVS03908** | |

**Note:** To maintain the IP55 degree of protection, the measurement devices must be installed behind a transparent door.
**(1)** Precut dimensions"Human-switchboard interface", page C-40.

## Accessories

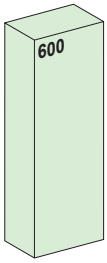
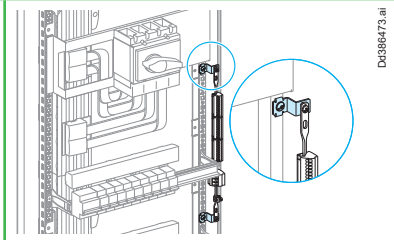
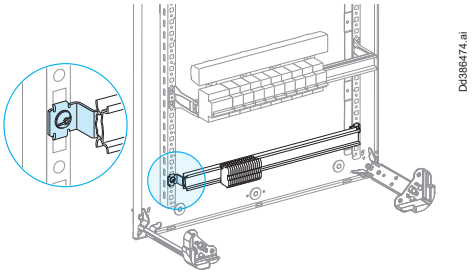
### Support plate and dedicated mounting plate, in device compartment

This mounting assembly is used to easily install and connect a large number of terminal blocks in a minimum amount of space. It is particularly useful when a duct is not warranted or cannot be installed.

| Used for | On mounting plate for terminal block and Linergy TB earth bar | Used for | In device compartment |
|---|---|---|---|
|  |  |  |  |
| Number of vertical modules | - | | 5 (250 mm) |
| Catalog number | **LVS04220** | | **LVS04223** |
| Characteristics | ■ A mounting plate made up of two supports, is equipped with:<br>□ a 1600 mm modular rail (LVS04226) for terminal blocks<br>□ Linergy TB earth bar *> page D-23*<br>■ The supports have cut-outs that can be used to easily tie down the connection wires. | | ■ Mounting brackets, fixed to the functional uprights at the top or bottom of the enclosure, is equipped with four 200 mm symetrical rails. They are installed vertically to facilitate cable running.<br>■ To facilitate mixing of different size terminal blocks and ensure convenient connections from the front or the side, the distance between rails and the depth of each rail can be adjusted.<br>■ The assembly has cut-outs that can be used to easily tie down the connection wires.<br>■ Linergy TB earth bars and Linergy TR terminal blocks layout, supplied separately, can be installed between the rows of terminal blocks to form different configurations, e.g.:<br>□ four sets of terminal blocks<br>□ 3 sets of terminal blocks + one or two Linergy TB earth bars (W = 290 mm).<br>*> page D-23* |

### Installation on the side or in the width of the enclosure

This solution saves considerable space in the device zone and avoids the need for the 300 mm wide duct.

| Fixing mode | 2 fixing brackets for the earth bar on the functional uprights | | | Horizontally on brackets | | |
|---|---|---|---|---|---|---|
|  |  | | |  | | |
| Catalog numbers | **LVS04206** | **LVS04207** | **LVS04208** | **LVS04206** | **LVS04207** | **LVS04208** |
| Characteristics | H = 15 mm | H = 45 mm | H = 80 mm | H = 15 mm | H = 45 mm | H = 80 mm |
| | Set of 2 brackets | | | Set of 2 brackets | | |

### Linergy TR terminal blocks

*> page D-24*

### Linergy TB earth bars

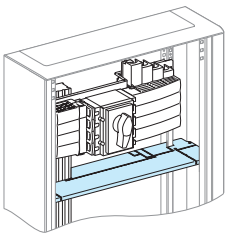
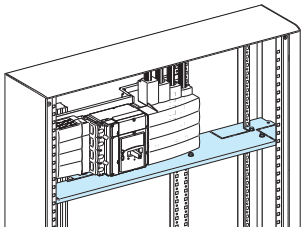
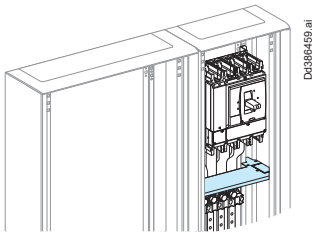
*> page D-23*

# Partitioning in PrismaSeT G Active IP30 and PrismaSeT G IP55 Horizontal and Vertical system

## Partitioning of functional units

### Horizontal partitioning

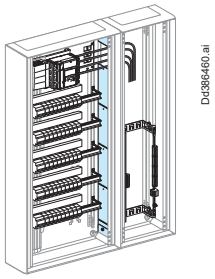
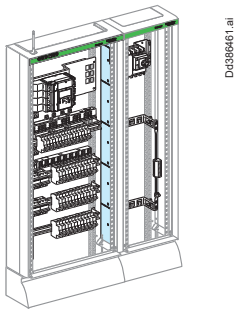
The metal partitions are used to:
- separate the functional units from one to another
- create a physical separation between devices and a terminal block, for example.

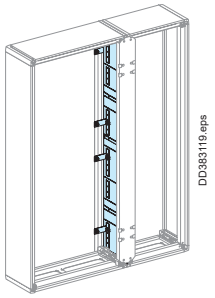
| Used for | W600 | W850 | W300 |
|---|---|---|---|
| **IP30**<br>**IP55** |  |  |  |
| Catalog numbers | **LVS04331** | **LVS04336** | **LVS04332** |
| Characteristics | Metal.<br>It is mounted directly on the functional uprights.<br>Lateral and rear cut-outs are available for cable running or the installation of busbars at the rear of the switchboard. | | |

### Vertical partitioning

The metal partition creates a physical separation between the device compartment and a wide duct, or enclosure.

It is used to:
- separate the devices from busbars or a distribution block installed in the duct,
- set up a special zone for terminal blocks in the duct.

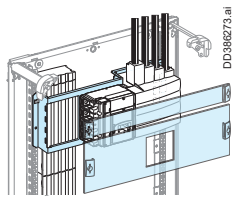
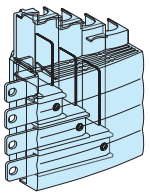
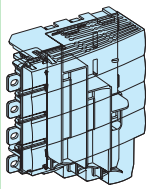
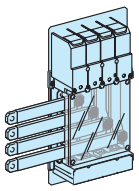
| Used for | From 6 to 33 modules | 36 modules |
|---|---|---|
| **IP30** |  |  |
| Cat. no. | **LVS04330** | **LVS04335** |
| Description | Can be used for partitioning up to 33-modules.<br>It can be cut to length every 150 mm. | Can be used for partitioning in 36-module floor standing enclosure. |

| Used for | From 7 to 33 modules | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **IP55** |  | | | | | | | |
| Cat. no. | **LVS08384** | | | | | | | |
| Description | Metal.<br>There are cut -outs for cable running. Quantity to order according to height. | | | | | | | |
| | Nb. of vertical modules | 7 | 11 | 15 | 19 | 23 | 27 | 33 |
| | Height (mm) | 450 | 650 | 850 | 1050 | 1250 | 1450 | 1750 |
| | Quantity | 1 | | 2 | | 3 | | |

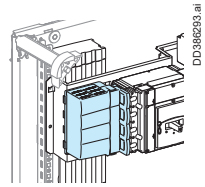
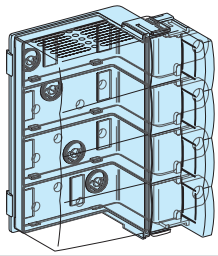
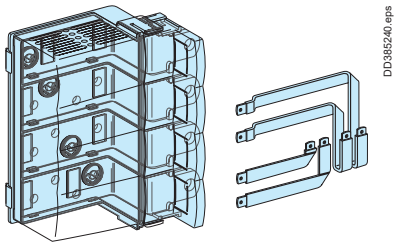
# Connections blocks
# Power supply blocks
## Horizontal / Vertical mounting

Prefabricated connections

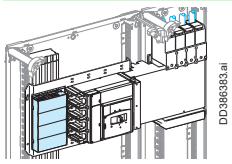
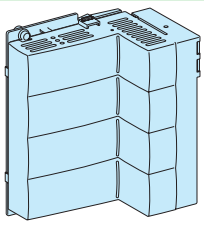
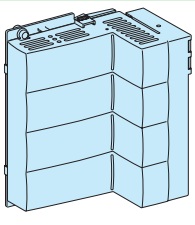
### Incoming connection blocks

| Upstream connection | Incoming connection block 250 A via top | | Incoming connection block 250 A via bottom | | Connection block 630 A (top/bottom) |
|---|---|---|---|---|---|
|  |  | |  | |  |
| **Devices** | **ComPacT NSX100/250** | **ComPacT INS250, INV100/250** | **ComPacT NSX100/250** | **ComPacT INS250, INV100/250** | **ComPacT NSX400/630** |
| Mounting | Horizontal | Horizontal | Horizontal | Horizontal | Horizontal, in duct |
| Catalog number | **LVS04066** | **LVS04066** | **LVS04067** | **LVS04067** | **LVS04076** |
| Configuration | *> page C-7* | *> page C-19* | *> page C-7* | *> page C-19* | *> page C-14* |
| Characteristics | Optimize the dimension of the enclosure, avoid the contraints of cables bending radius, and IPxxB solution | | | | |

### Power supply block with connections between ComPacT device and Linergy BW isolated busbar

| Downstream connection | Power supply block 250 A | | Power supply block 250 A + prefabricated connections 250 A |
|---|---|---|---|
|  |  | |  |
| **Devices** | **ComPacT NSX100/250** | **ComPacT INS250, INV100/250** | **ComPacT INS250, INV100/250** |
| Mounting | Horizontal | Horizontal | Vertical |
| Catalog number | **LVS04060** | **LVS04060** | **LVS04060** + connection **LVS04062** |
| Configuration | *> page C-7* | *> page C-19* | *> page C-20* |

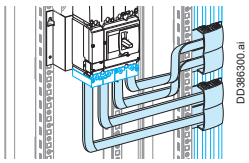
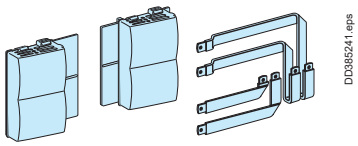
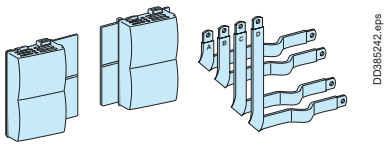
### Power supply block with connections between ComPacT device and Linergy BW isolated busbar
#### Devices 400-630 A

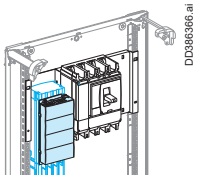
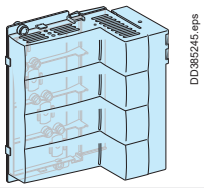
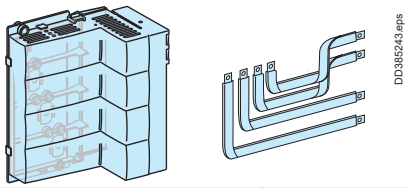
| Downstream connection | Power supply block 400 A | | Power supply block 630 A | |
|---|---|---|---|---|
|  |  | |  | |
| **Devices** | **ComPacT NSX400** | **ComPacT INS-INV320/400** | **ComPacT NSX630** | **ComPacT INS-INV500/630** |
| Mounting | Horizontal | Horizontal | Horizontal | Horizontal |
| Catalog number | **LVS04070** | **LVS04070** | **LVS04071** | **LVS04071** |
| Configuration | *> page C-14* | *> page C-21* | *> page C-14* | *> page C-20* |

# Connections blocks
# Power supply blocks
## Vertical mounting

Prefabricated connections

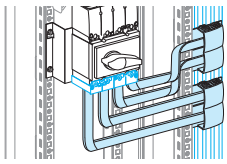
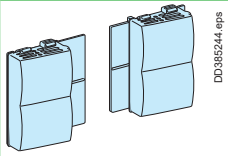
### Universal power supply block + prefabricated connections between ComPacT device and Linergy BW isolated busbar

| Downstream connection | Universal power supply 250 A + prefabricated connections 250 A | Universal power supply 250 A + prefabricated connections 250 A | |
|---|---|---|---|
|  |  |  | |
| **Devices** | **ComPacT NSX100/250** | **ComPacT NSX100/250** | **ComPacT INS250, INV100/250** |
| Mounting | Vertical | Vertical, in duct | Vertical, in duct |
| Catalog number | **LVS04061** + connection **LVS04062** | **LVS04061** + connection **LVS04064** | **LVS04061** + connection **LVS04064** |
| Configuration | *> page C-8* | *> page C-8* | *> page C-8* |

| Downstream connection | Universal power supply 400/630 A + connection must be made | | Universal power supply 400/630 A + prefabricated connections 400/630 A | |
|---|---|---|---|---|
|  |  | |  | |
| **Devices** | **ComPacT NSX400/630** | **ComPacT INS-INV320/630** | **ComPacT NSX400/630** | **ComPacT INS-INV320/630** |
| Mounting | Vertical | Vertical | Vertical, in duct | Vertical, in duct |
| Catalog number | **LVS04074** + connection must be made | **LVS04074** + connection must be made | **LVS04074** + connection **LVS04073** | **LVS04074** + connection **LVS04073** |
| Configuration | *> page C-16* | *> page C-21* | *> page C-17* | *> page C-21* |

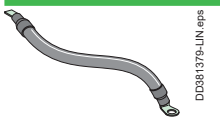
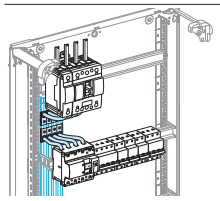
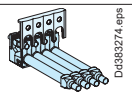
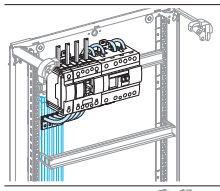
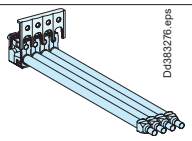
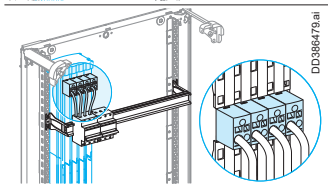
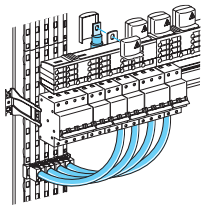
### Universal power supply block, connections to make between ComPacT device and Linergy BW isolated busbar

Devices ⩽ 250 A

| Downstream connection | Universal power supply 250 A + connection must be made | |
|---|---|---|
|  |  | |
| **Devices** | **ComPacT NSX100/250** | |
| Mounting | Horizontal - Motor mechanism module | Vertical - Direct rotary handle |
| Catalog number | **LVS04061** + connection must be made | **LVS04061** + connection must be made |
| Configuration | *> page C-8* | *> page C-13* |

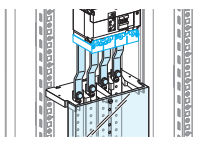
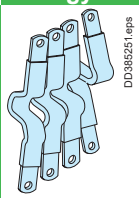
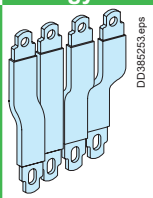
# Linergy BW and devices connections
# Other prefabricated connections

## Prefabricated connections

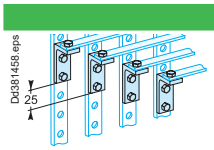
| | Description | Allows connection of | Cat. no. |
|---|---|---|---|
|  DD381379-LIN.eps | **Set of 4** - 125 A - L = 230 mm<br>■ + 45° angle connector<br>■ 35 mm² ferrule | NSXm125, NG125, INS-INV with enclosed terminals cat. no. **28947** or **28948** | **LVS04145** (1) |
| | **Set of 4** - 160 A - L = 250 mm<br>■ + 45° angle connector<br>■ 45 mm² ferrule | NSXm160, INS-INV160 cat. no. **28947** or **28948** | **LVS04146** (1) |
|  DD386477.ai | **One-piece connection 3/4P - 160 A, L = 165 mm**<br>■ Fast connection to Linergy BW busbars<br>■ Equipped with male fittings one end for tunnel terminals<br>■ Respects the degree of protection IPxxB<br>■ Neutral is clearly indicated (blue)<br>  Dd383274.eps | NSXm, NSXm Vigi, NG125, INS-INV160, C120 | **LVS04147** (1) |
|  DD386478.ai | **One-piece connection 3/4P - 160 A, L = 440 mm**<br>■ Fast connection to Linergy BW busbars<br>■ Equipped with male fittings one end for tunnel terminals<br>■ Respects the degree of protection IPxxB<br>■ Neutral is clearly indicated (blue)<br>  Dd383276.eps | NSXm, NSXm Vigi, NG125, INS-INV160, C120 | **LVS04148** (1) |
|  DD386479.ai | **12 tap-off blocks**<br>for 1 cable of 6 mm² (32 A max.) and 1 of 10 mm² (40 A max.)<br>Respects the degree of protection IPxxB.<br>In: 55 A max., Ui: 750 V | All types of device, equipped with tunnel terminals, Linergy FM 160/200 A | **LVS04151** |
| | **12 tap-off blocks**<br>for 1 cable of 16 mm² (50 A max.)<br>Respects the degree of protection IPxxB.<br>In: 55 A max., Ui: 750 V | All types of device, equipped with tunnel terminals, Linergy FM 63/80/160/200 A | **LVS04152** |
|  Dd383472.eps | **Set of 4 connections 4P - 200 A , L = from 230 to 330 mm**<br>Supplied with mounting hardware<br>**+ insulated covers** | Linergy FM 200 A | **LVS04021 + LVS04150** |

When mounting Schneider Electric prefabricated connections, short terminal shields can be used. If the function is already integrated in prefabricated connections, no need for terminal shields.

## Devices/Linergy BS multi-stage busbars connections

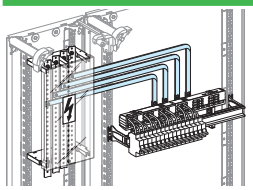
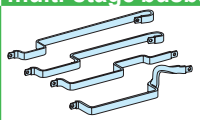
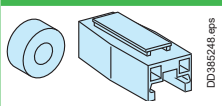
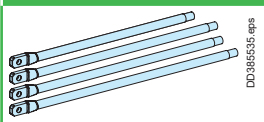
| | Linergy BS multi-stage lateral busbars, 250 A | Linergy BS multi-stage lateral busbars, 630 A |
|---|---|---|
|  DD386316.ai |  DD385251.eps |  DD385253.eps |
| **Devices** | **ComPacT NSX-INS-INV 100/160/250** | **ComPacT NSX-INS-INV 400/630** |
| Mounting | Vertical, in duct | Vertical, in duct |
| Catalog number | **LVS04065** | **LVS04075** |
| Configuration | *> page C-7* | *> page C-16* |

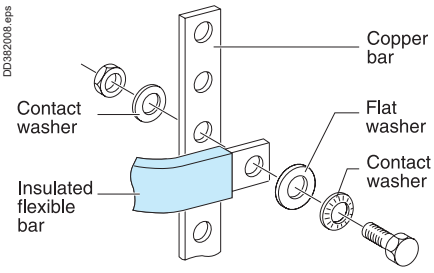
## Connections between two sets of Linergy BS rear busbars

| | Connection between 2 sets of Linergy BS rear busbars |
|---|---|
|  Dd381458.eps 25 | |
| **Devices** | **Set of 4 copper angle brackets - 250 A** |
| Catalog number | **LVS04190** |
| Allows connection of | Electrical connections between two sets of rear busbars |

**Note:** for some devices, it is recommended to use Schneider Electric prefabricated connections. If not, switchgears must be equipped with long terminal shields for personnel safety.
**(1)** Adaptation with references **28947** and **28948** for INS-INV 160.

## Linergy BS
## and Linergy FM busbars connections ≤ 200 A / NSXm

| | Linergy BS multi-stage busbars | Rear Linergy BS busbars | Linergy FM 160A / NSXm160 |
|---|---|---|---|
|  |  |  |  |
| **Devices** | | | |
| Catalog number | **LVS04024** | **LVS04029** | **LVS04030** |
| Configuration | *> page C-4* | *> page C-4* | *> page C-4* |
| Allows supply of a distribution block | Linergy FM 200 A | Linergy FM 200 A<br>Set of 4 | Linergy FM 160 device feeders / NSXm160<br>Lugs Ø 6 mm<br>L1: 398 mm, L2: 418 mm, L3: 438 mm, N: 378 mm<br>160 A |




## Insulated flexible bars

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 |

## Connection between device busbar

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) | Catalog numbers |
|---|---|---|
| NSX100 | 20 x 2 | **LVS04742** |
| NSX160/250 | 20 x 3 (1) | **LVS04743** |
| NSX400 | 32 x 5 | **LVS04751** |
| NSX630 | 32 x 8 | **LVS04753** |
| INS-INV125/160 | 20 x 2 | **LVS04742** |
| INS-INV250 | 20 x 3 | **LVS04743** |
| INS-INV400 | 32 x 5 | **LVS04751** |
| INS-INV630 | 32 x 6 | **LVS04752** |
| Linergy FM 200 | 20 x 3 | **LVS04743** |
| FuPacT 250 | 24 x 5 | **LVS04746** |
| FuPacT 400 | 32 x 5 | **LVS04751** |
| FuPacT 630 | 32 x 8 | **LVS04753** |

**(1)** To connect a ComPacT NSX250 to Linergy BW busbars, use a 24 x 5 mm flexible bar (LVS**04746**).

## Connection between busbars

Flexible bars are designed for connections between busbars taking into account the following characteristics:

- a maximum temperature of 60 °C inside the switchboard. This corresponds to the average temperature inside a switchboard for an ambient temperature of 35 °C
- the maximum withstand temperature for the insulating material is 125 °C.

| Ie (1) max | Size (mm) | Catalog numbers |
|---|---|---|
| 200 A | 20 x 2 | **LVS04742** |
| 250 A | 20 x 3 | **LVS04743** |
| 400 A | 24 x 5 | **LVS04746** |
| 520 A | 32 x 5 | **LVS04751** |
| 580 A | 32 x 6 | **LVS04752** |
| 660 A | 32 x 8 | **LVS04753** |

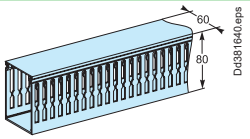
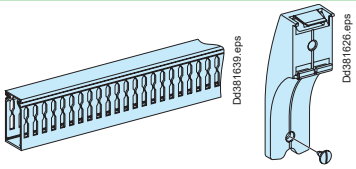
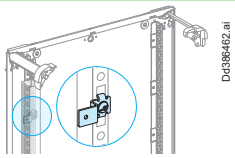
### Designing connections

*> page G-3*

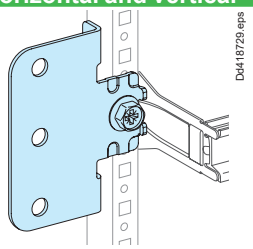
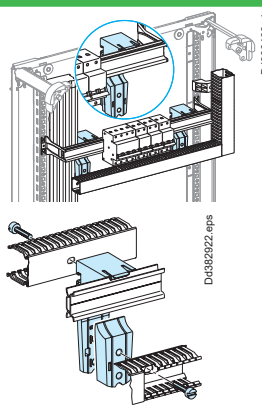
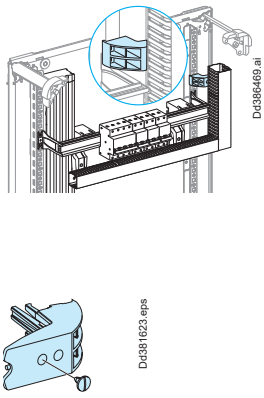
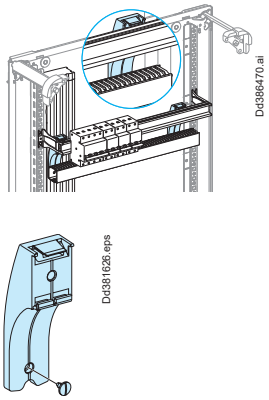
**(1)** Rated operational current.

## Organisation of switchboard

### Trunking

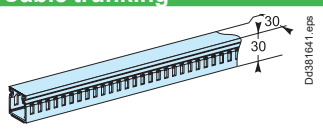
| Type | Vertical trunking 80 x 60 mm | Horizontal trunking 60 x 30 mm | Brackets |
|---|---|---|---|
| |  |  |  |
| Catalog numbers | **LVS04267** | **LVS04257** | **LVS04206** |
| Characteristics | Set of 18<br>L = 2000 mm | Set of 4<br>L = 450 mm<br>Supplied with 8 supports | H = 15 mm<br>For vertical trunking installation |
| Used with | PrismaSeT G Active wall-mounted and floor-standing enclosures | PrismaSeT G Active wall-mounted and floor-standing enclosures + Pack 160 enclosures | Pack 160 enclosures |

### Trunking supports

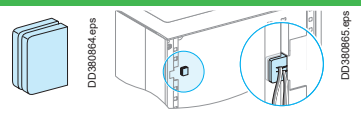
| Type | Horizontal and vertical | | Vertical | Horizontal |
|---|---|---|---|---|
| |  |  |  |  |
| Catalog numbers | **LVS04266** (1) | **LVS04256** | **LVS04265** | **LVS04255** |
| Characteristics | Set of 10<br>Vertical trunking metal support plates (80x60 mm) for wall mounted and floor standing enclosures.<br>The support is screwed in at the same time as the modular rail.<br>Supplied with 10 plastic screws to fix the trunking.<br>Used to align the cover of a horizontal trunking section (H = 80 mm) with that of a vertical trunking section (H = 80 mm). | Set of 10<br>Aligns the cover of a horizontal trunking section (H = 80 mm) with that of a vertical trunking section (H = 80 mm) | Set of 12 | Set of 12 |
| Used | PrismaSeT G Active wall-mounted and floor standing enclosures for trunkings LVS04267 and LVS04257 | PrismaSeT G Active wall-mounted and floor-standing enclosures | PrismaSeT G Active wall-mounted and floor standing enclosures for trunkings LVS04267 and LVS04257 | PrismaSeT G Active wall-mounted and floor-standing enclosures + Pack enclosures, for trunking LVS04267 |

(1) Horizontal mounting not possible with Linergy BW.

### Cable trunking for doors

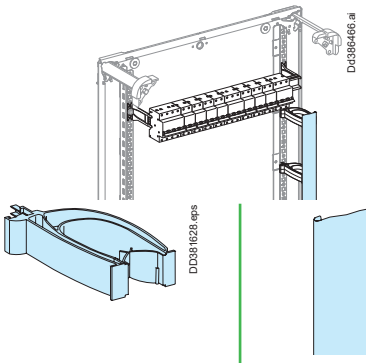
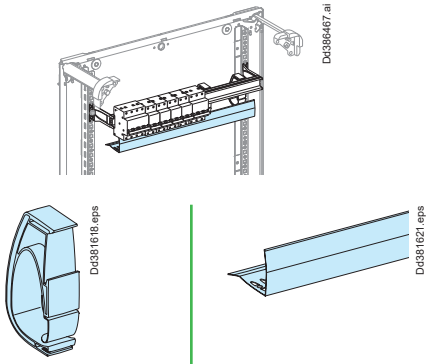
| Type | Flexible trunking for wiring to door | Cable trunking |
|---|---|---|
| |  |  |
| Catalog numbers | **LVS04235** | **LVS04233** |
| Characteristics | L = 500 mm, inner Ø = 19 mm | Set of 30 adhesive trunking 30 x 30 mm, L = 2000 mm |

### Grommets for wiring through front

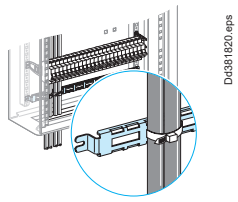
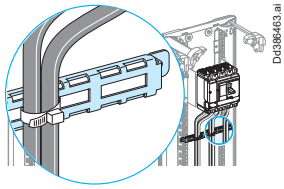
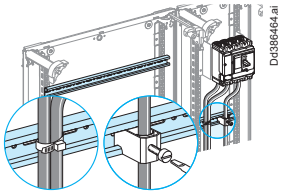
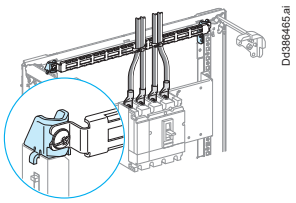
| Grommets | |
|---|---|
| |  |
| Catalog number | **LVS04234** |
| Characteristics | Set of 10. For wiring through front. |

Organisation of switchboard

## Straps and covers

| Type | Vertical cable straps | Covers for vertical cable straps | Horizontal cable straps | Covers for horizontal cable straps |
|---|---|---|---|---|
| |   | |   | |
| Catalog numbers | **LVS04264** | **LVS04263** | **LVS04239** | **LVS04243** |
| Characteristics | Set of 12 | Set of 2 x 1 m | Set of 12<br>Have the same capacity as 60 x 30 mm trunking | Set of 4 covers of 430 mm |
| Used | PrismaSeT G Active wall-mounted and floor-standing enclosures | | PrismaSeT G Active wall-mounted and floor-standing enclosures<br>+ Pack enclosures | PrismaSeT G Active wall-mounted and floor-standing enclosures<br>+ Pack enclosures |

## Cable-tie supports

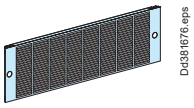
| Used for | Cable-tie supports for wall-mounted or floor-standing enclosures | Cable-tie supports in a duct | C-shaped cable-tie supports for wall-mounted or floor-standing enclosures and ducts | Cable-tie support adapters |
|---|---|---|---|---|
| |   |   |   |   |
| Catalog numbers | **LVS08867** | **LVS08868** | **LVS08783** | **LVS08866** |
| Characteristics | ■ Set of 2<br>■ Supplied with hardware for mounting on the functional uprights of the enclosure. | ■ Set of 4<br>■ Supplied with hardware for mounting on the functional uprights of the duct. | ■ W = 1600 mm, can be cut to length as needed.<br>■ Cables secured by ties or cable clamps.<br>■ Supplied with hardware for mounting on the functional uprights of the enclosure or duct. | ■ Set of 2<br>■ Makes it possible to tie down the cables next to the gland plate and gain one module in height.<br>■ Only for use in 33- and 36-module enclosures. |

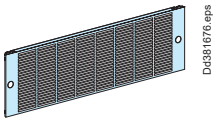
**Note:** for the connection of power cables, see *page G-8* .

## Ventilation

In most cases and notably for IP30 switchboards, the heat dissipation by convection takes place naturally and does not require fans.
However, when the switchboard is installed in temperate environments or when the degree of protection is high (IP54), ventilation accessories are indispensable.

For more in-depth information on selecting air-conditioning accessories and the thermal management of switchboards *> page G-25*.

| **Front plate W = 600** | **Ventilated front plate** | |
|---|---|---|
| |  | |
| Catalog number | **LVS03891** | **LVS03895** |
| Height | 1 module,<br>H = 50 mm | 3 modules,<br>H = 150 mm |
| Characteristics | Degree of protection: IP30.<br>Located at the top and bottom of the switchboard, IP30 ventilated front plates facilitate natural convection in the switchboard. | |
| Surface area of the openings | 80 cm² | 250 cm² |

| **Front plate W = 850** | **Ventilated front plate** | |
|---|---|---|
| |  | |
| Catalog number | **LVS03892** | **LVS03894** |
| Height | 1 module,<br>H = 50 mm | 3 modules,<br>H = 150 mm |
| Characteristics | Degree of protection: IP30.<br>Located at the top and bottom of the switchboard, IP30 ventilated front plates facilitate natural convection in the switchboard. | |
| Surface area of the openings | 100 cm² | 350 cm² |

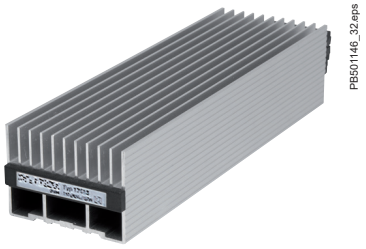
| **Forced-air ventilation** | | **85 m³/h** | **165 m³/h** |
|---|---|---|---|
| | |  |  |
| Catalog numbers | | **NSYCVF85M230PF** | **NSYCVF165M230PF** |
| Free flow rate with filter (m3/h) | 50 Hz | 85 | 165 |
| | 60 Hz | 98 | 193 |
| Flow rate with outlet grille (m3/h) | 50 Hz | 63 | 153 |
| | 60 Hz | 72 | 171 |
| Power consumption (W) (max. current (A)) | | 17/15<br>(0,121/0,097) | 16,3/14,3<br>(0,12/0,94) |
| Sound level (dB (A)) | | 46/49 | 50/51 |
| External dimensions (cut-out) | | 170 x 150 x 62<br>(125 x 125)<br>Plain front plate (≥ 4 modules) to cut out | 268 x 248 x 104<br>(223 x 223)<br>Plain front plate (≥ 6 modules) to cut out |
| Weight (kg) | | 0,780 | 1,140 |
| Operating temp. | | -20...+60 °C | -20...+60 °C |
| Installation | | Generally installed at the bottom of floor-standing enclosures:<br>■ by cutting out a side panel,<br>■ on front of switchboard by cutting out a 4M (LVS03804) or 6M (LVS03806) plain front plate. | |
| Characteristics | | The set comprises the fan with a grill and a standard filter.<br>■ Input voltage: 230 V (50/60 Hz).<br>■ Degree of protection: IP54.<br>■ RAL 7035.<br>■ Material: ABS, V0 | |

| **Outlet grille filters, set of 5, spare parts** | | |
|---|---|---|
| |  | |
| Standards filters G2 M1 | **NSYCAF125** | **NSYCAF223** |
| Fine filters G3 M1 | **NSYCAF125T** | **NSYCAF223T** |

## Heating elements

The resistors prevent condensation, corrosion and superficial leakage currents.
They maintain a positive temperature in the enclosures when external temperatures drop very low.
Install heaters according to the desired power level at the bottom of the enclosure, respect a safety area of a least 10 cm around the device.
Vertical installation is recommended to ensure optimum convection.
The resistance heaters are equipped with a PTC - type sensor (positive temperature coefficient). Thanks to these heaters, the surface temperature stabilises at 75 °C when the ambient is at -5 °C.

### Heating resistor





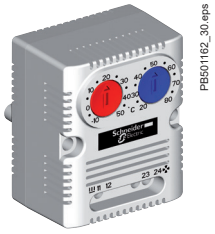
| Catalog numbers | NSYCR55WU2 | NSYCR100WU2 | NSYCR250W230VV |
|---|---|---|---|
| Power rating | 55 W | 90 W | 250 W |
| Characteristics | ■ Vertical mounting.<br>■ Aluminium case with fins.<br>■ Temperature:<br>□ turns off at 60 °C,<br>□ turns on at 25-30 °C<br>(temperature of the resistor itself).<br>■ Equipped with a symetrical rail for rapid mounting (clips on).<br>■ Input voltage: 110-250 V. | | ■ Vertical mounting.<br>■ Aluminium case with fins.<br>■ Temperature:<br>□ turns off at 60 °C,<br>□ turns on at 25-30 °C<br>(temperature of the resistor itself).<br>■ Equipped with a symetrical rail for rapid mounting (clips on).<br>■ Input voltage: 230 V. |

## Regulating

Used to control the temperature inside electrical switchboards in conjunction with heating resistors and fans.
This thermostat can control the activation of a fan and a heater and regulate their temperature independently.

**Double adjustable thermostat**
Double temperature control with a resistance heater and a fan with separate operation
■ Red button: with normally closed contact (NC) for controlling the resistance heaters.
■ Blue button: with normally open contact (NO) for controlling the fans, signalling systems or alarms.

### Thermostat




| Catalog number | NSYCCOTHD |
|---|---|
| Characteristics | ■ Setting range: 0 °C to +60 °C.<br>■ Power rating: 30 W<br>■ Input voltage: 120 V AC: 15 A - 230 V AC: 10 A<br>■ Fixing: clips onto a modular rail. |

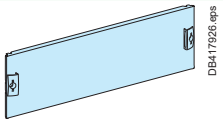
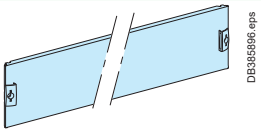
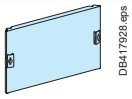
## Thermal management of switchboards

*> page G-25*

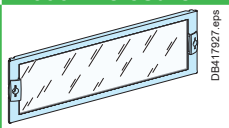
# Front plates
## W600 - W850 - W300

Front plates and accessories

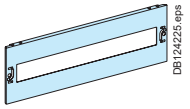
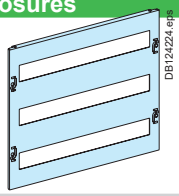
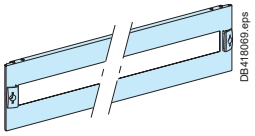
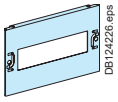
### Plain front plates

| Used for | | W600 Enclosure | W850 Enclosure | W300 Duct |
|---|---|---|---|---|
| | |  DB417926.eps |  DB385896.eps |  DB417928.eps |
| **Nb. of vertical modules** | **Height** | **Plain** | **Plain** | **Plain** |
| 1 | 50 mm | **LVS03801** | **LVS03851** | **LVS03811** (2) |
| 2 | 100 mm | **LVS03802** | - | **LVS03812** |
| 3 | 150 mm | **LVS03803** | **LVS03853** | **LVS03813** |
| 4 | 200 mm | **LVS03804** | **LVS03854** | **LVS03814** |
| 5 | 250 mm | **LVS03805** | - | **LVS03815** |
| 6 | 300 mm | **LVS03806** | **LVS03856** | **LVS03816** |
| 9 | 450 mm | - | - | **LVS03817** |
| 11 | 550 mm | - | **LVS03861** | - |
| 12 | 600 mm | **LVS03808** | - | - |

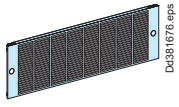
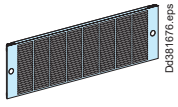
### Transparent front plates

| Used for | | W600 Enclosure | W850 Enclosure | W300 Duct |
|---|---|---|---|---|
| | |  DB417927.eps |  DB418068.eps |  DB417929.eps |
| **Nb. of vertical modules** | **Height** | **Transparent** | **Transparent** (1) | **Transparent** |
| 4 | 200 mm | **LVS03342** | - | **LVS03352** |
| 6 | 300 mm | **LVS03343** | **LVS03363** | **LVS03353** |
| 9 | 450 mm | **LVS03344** | **LVS03364** | **LVS03354** |
| 12 | 600 mm | **LVS03345** | - | - |

### Modular front plates

| Used for | | W600 Enclosure | W600 wall mounted and floor standing enclosures | W850 Enclosure | W300 Duct |
|---|---|---|---|---|---|
| | |  DB124225.eps |  DB124224.eps |  DB418069.eps |  DB124226.eps |
| **Nb. of vertical modules** | **Height** | **1 row of modular devices** | **3 rows of modular devices** | **1 row of modular devices** | **1 row of modular devices** |
| 2 | 100 mm | **LVS03202** | - | - | - |
| 3 | 150 mm | **LVS03203** | - | **LVS03216** | **LVS03213** |
| 4 | 200 mm | **LVS03204** | - | **LVS03217** | **LVS03214** |
| 5 | 250 mm | **LVS03205** | **LVS03223** | **LVS03218** | - |

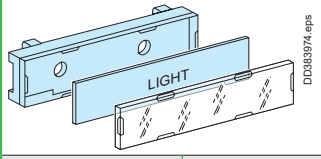
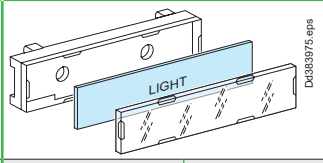
### Other front plates

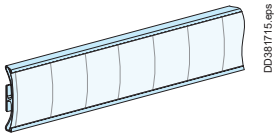
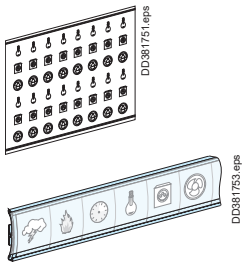
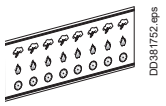
| Used for | | W600 wall mounted and floor standing enclosures | |
|---|---|---|---|
| | |  Dd381676.eps |  Dd381676.eps |
| **Nb. of vertical modules** | **Height** | **Ventilated** | **Ventilated** |
| 1 | 50 mm | **LVS03892** | **LVS03891** |
| 3 | 150 mm | **LVS03894** | **LVS03895** |
| 7 | 350 mm | - | - |
| 8 | 400 mm | | |

(1) 2/3 transparent front plate
(2) Mounting 1 module front plate (LVS03811) on the extreme top or bottom is not allowed.

## Finishing parts

### Identification labels

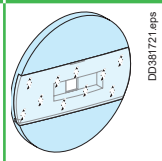
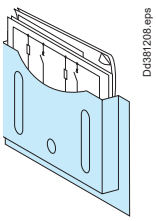
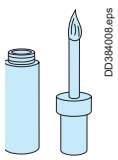
| | Clip-on labels | | | Engraving plates | | |
|---|---|---|---|---|---|---|
| |   | | |   | | |
| Catalog numbers | **LVS08913** | **LVS08915** | **LVS08917** | **LVS08914** | **LVS08916** | **LVS08918** |
| Dimensions (mm) | 18 x 35 | 18 x 72 | 25 x 85 | 18 x 35 | 18 x 72 | 25 x 85 |
| Characteristics | ■ Set of 12<br>■ The clip-on support is supplied with a paper label and a transparent cover.<br>■ It clips onto the front plate horizontally or vertically and can be screwed to any support (plain door, plain front plate, etc.). | | | ■ Set of 12<br>■ These plates simply replace the paper labels. | | |

| | Adhesive labels | | | | | | Symbol sheets | |
|---|---|---|---|---|---|---|---|---|
| |   | | | | | |   |   |
| Width | **W600** | | **W300** | | **W850** | | | |
| Catalog numbers | **LVS08903** | **LVS08904** | **LVS08905** | **LVS08906** | **LVS08907** | **LVS08908** | **13735** | **13736** |
| Dimensions (mm) | 24 x 432 | 36 x 432 | 24 x 180 | 36 x 180 | 24 x 650 | 36 x 650 | | |
| Characteristics | ■ Set of 12<br>■ The adhesive label holders are supplied with a paper label and a transparent cover. | | | | | | ■ Set of 10 adhesive symbol sheets<br>■ Standard symbols:<br>□ loads: sockets, lights, heating units, etc.<br>□ rooms: bedroom, bathroom, etc. | ■ Set of 10 adhesive symbol sheets<br>■ Special symbols:<br>□ loads: lightning arrestor, gate, swimming pool, etc.<br>□ rooms: technical room, computer room, etc. |

### Adhesive labels for mimic diagrams

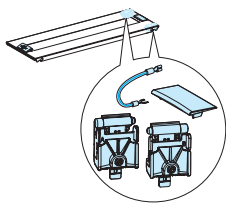
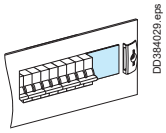
| | Lines, 900 mm long (7 mm thick) | Outgoing arrows | Incoming arrows | Transformers |
|---|---|---|---|---|
| |  x 10 |  x 10 |  x 10 |  x 10 |
| Catalog numbers | **LVS01005** | **LVS01006** | **LVS01007** | **LVS01008** |
| Characteristics | Set of 10<br>Colour: black | | | |

### Accessories

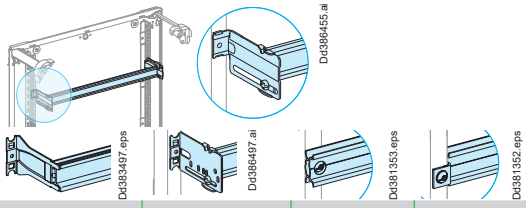
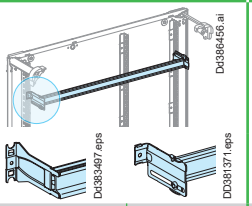
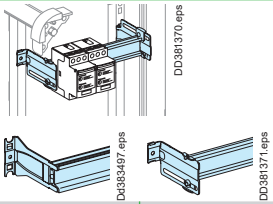
| | Switchboard identification plate | Adhesive drawing holder | Touch-up paint brush |
|---|---|---|---|
| |   |   |   |
| Catalog numbers | **LVS08900** | **LVS08963** | **LVS08961** |
| Characteristics | Colour: RAL 9003 | Colour: RAL 9003 | Colour: RAL 9003 |

## Front plates and accessories

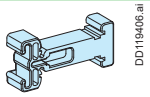
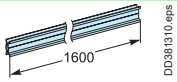
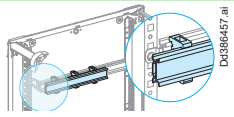
### Front plates accessories

| Used for | Front plate hinge kit | Front-plate locking handles | Blanking plates | | | |
|---|---|---|---|---|---|---|
| |  |  |  | | | |
| Catalog numbers | **LVS08585** | **LVS01094** | **LVS03220** | **LVS03221** | **LVS03222** | **LVS03249** |
| Characteristics | Set of 2 hinges | Set of 10 | ■ Strip<br>■ H = 46 mm, L = 100 mm | ■ Divisible<br>■ Set of 4<br>■ H = 46 mm, L = 90 mm | ■ H = 107 mm, L = 147 mm | ■ Strip<br>■ Set of 1<br>■ H = 85 mm, L = 147 mm |

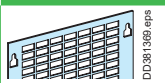
### Rails

| Used for | W600 Enclosure | | | | W850 Enclosure | | W300 Duct | |
|---|---|---|---|---|---|---|---|---|
| |  | | | |  | |  | |
| | **Fixed** | **Adjustable** | **Rear** | **Surbaissé** | **Fixed** | **Adjustable** | **Fixed** | **Adjustable** |
| Catalog numbers | **LVS03001** | **LVS03002** | **LVS03004** | **LVS03003** | **LVS03006** | **LVS03007** | **LVS03010** | **LVS03011** |
| Useful length | 432 mm | 432 mm | 432 mm | 432 mm | 648 | 648 | 180 mm | 180 mm |
| 9 mm pitch number | 48 | 48 | 48 | 48 | 72 pitch (36 modules) | 72 pitch (36 modules) | 20 | 20 |
| Useful depth behind front plate | 50 mm | from 47 to 114 mm | 128 mm | 158 mm | 50 | from 47 to 114 mm | 50 mm | from 47 to 114 mm |

### Adjustable rails

| | Raiser | Rail | Rail + raiser |
|---|---|---|---|
| |  |  |  |
| Catalog numbers | **LVS04225** | **LVS04226** | **LVS04227** |
| Characteristics | Set of 12 raisers (NSXm)<br>Raiser height 11 mm<br>To be completed with LVS**04226** rail | Set of 2 rails, useful length: 1600 mm with 4 holes, dia. 6.4 mm, 450 mm between centres<br>To be cut | Rail and 4 modular raisers (NG160)<br>Useful length: 342 mm<br>Raiser height: NG160-31 mm, NSXm-24 mm |

### Slotted mounting plate **(1)**

| Used for | W600 Enclosure | | | | W300 Duct | | | |
|---|---|---|---|---|---|---|---|---|
| |  | | | |  | | | |
| | **Flat** | **Recessed** | | | **Flat** | **Recessed** | | |
| Catalog numbers | **LVS03170** | **LVS03171** | **LVS03172** | **LVS03173** | **LVS03175** | **LVS03176** | **LVS03177** | **LVS03178** |
| Nb. of vertical modules | 4 | 4 | 6 | 9 | 4 | 4 | 6 | 9 |
| Height | 200 mm | 200 mm | 300 mm | 450 mm | 200 mm | 200 mm | 300 mm | 450 mm |
| Useful width | 440 mm | 420 mm | | | 172 mm | 152 mm | | |
| Useful depth behind front plate | 140 mm | 160 mm | | | 140 mm | 160 mm | | |

### Dedicated mounting plate (LVS**04223**)

*> page C-55.*

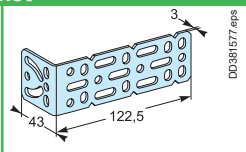
**(1)** For 850 width floor standing enclosure, fit a W600 mounting plate plus a W300.

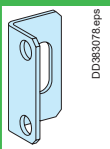
Accessories

## Self-tapping screws


| | |
|---|---|
| M5 | **LVS03183** |
| Characteristics | Set of 20, mounting on functional uprights |

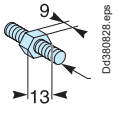
## Universal angle bracket

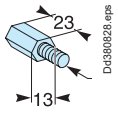


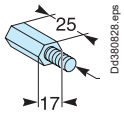



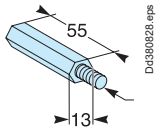

| | | |
|---|---|---|
| Catalog numbers | **LVS03581** | **LVS03583** |
| Characteristics | Set of 2 | Set of 6 |

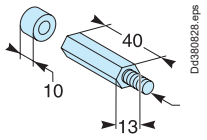
## Hexagonal spacers



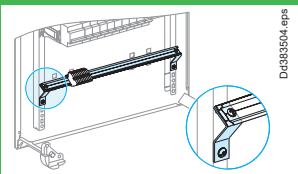



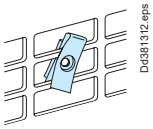

| | | | | | |
|---|---|---|---|---|---|
| M5 | **LVS03185** | **LVS03186** | **-** | **LVS03187** | **-** |
| M6 | **LVS03195** | **LVS03196** | **LVS03198** | **LVS03197** | **-** |
| M8 | **-** | **-** | **-** | **-** | **LVS03199** |
| Characteristics | Height: 9 mm<br>Set of 4 | Height: 23 mm<br>Set of 4 | Height: 25 mm<br>Set of 4 | Height: 55 mm<br>Set of 4 | Height: 40 + 10 mm<br>Set of 4 |

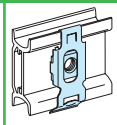
## 30° supports

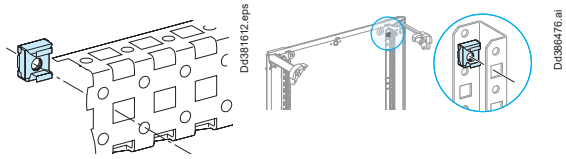



| | |
|---|---|
| Catalog numbers | **LVS03005** |
| Characteristics | Set of 2 supports (to fix a modular rail, earth bar, etc.) |

## Clip-nuts

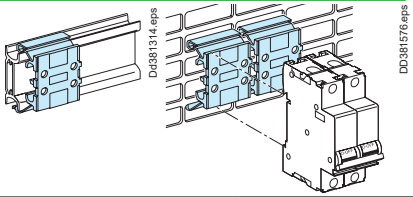



| | | | |
|---|---|---|---|
| M4 | **LVS03180** | **LVS03164** | **-** |
| M5 | **LVS03181** | **LVS03165** | **-** |
| M6 | **LVS03182** | **LVS03166** | **LVS03194** |
| Mounting on | Slotted mounting plate and also on cable-tie support (LVS08876) | Rail | Functional uprights of IP30/55 enclosures |
| Characteristics | Set of 20, mounting of various devices | Set of 20 | Set of 20 |

## Raiser for rails and slotted mounting plates




| | |
|---|---|
| Catalog number | **LVS04224** |
| Characteristics | Set of 5, height: 10 mm, length 27 mm<br>Colour: RAL 9003, insulating material |

# Linergy distribution and connection systems

# Contents



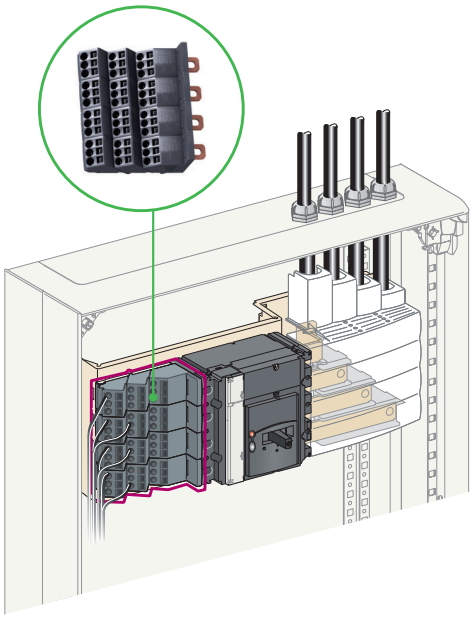
D

Distribution and connection

# Linergy and Prisma**SeT** G Active: an optimised and high-performance type-tested offer (IEC 61439-1 and 2 standard)

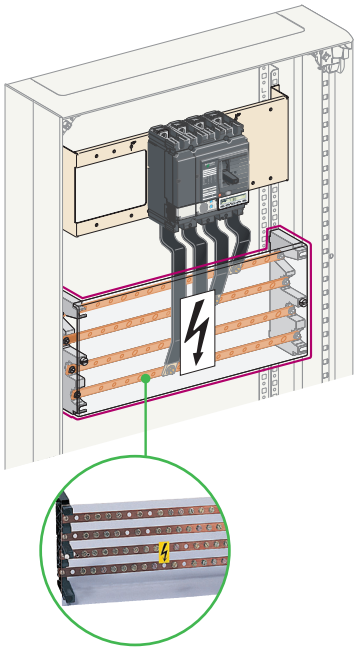
## > For incoming devices

**Linergy DX 160 A and Linergy DP upto 250 A distribution block**



- Reliable spring-terminal connections for outgoing circuits, requiring no maintenance
- Horizontal or vertiical installation in minimum space

**Linergy BS 160 to 630 A** distribution block

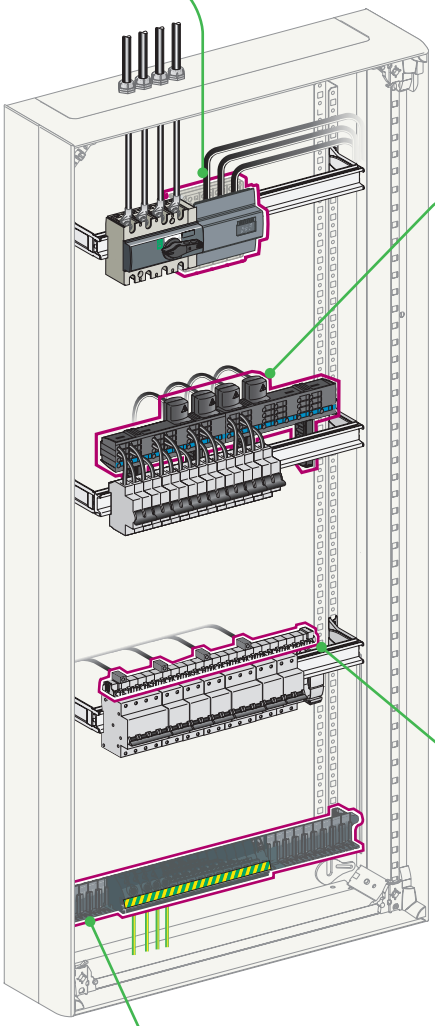


- Traditional, highly polyvalent solution
- Many installation possibilities

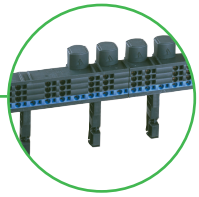
## > For rows of modular devices

**Linergy DX 125 at 160 A distribution block**

- Spring terminals for electrical connections that stay tight
- Front designed to integrate perfectly with modular devices

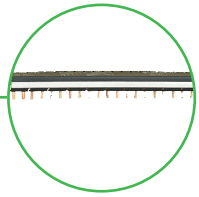


**Linergy FM 63/200 A**



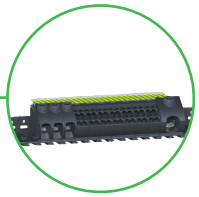
- Reliable spring-terminal connections requiring no maintenance
- Fast installation
- Easy upgrades through replacement or addition of devices
- Easy balancing of phases

**Linergy FH 100 to 125 A comb busbars**



- Fast and direct connections, adaptable to all needs
- Easy, economical connections

**Linergy TR**



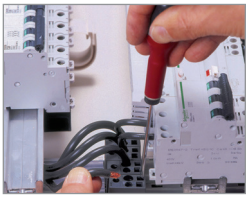
- Fast and simple installation
- Multiple connection options (screw, spring or push-in connections)

Distribution and connection

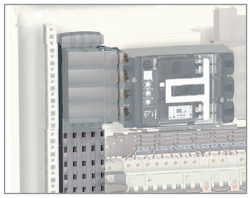
# Customised organisation of your switchboard

## > Busbars up to 630 A for all switchboard architectures

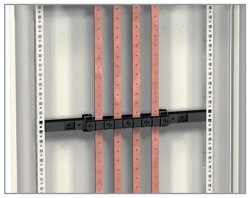
**Linergy BW** busbars:
comPacT and insulated for fast upgrades.



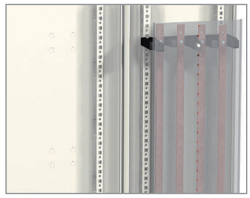
*Prefabricated connections, optimised and fully insulated.*



**Linergy BS** busbars:
for traditional distribution.



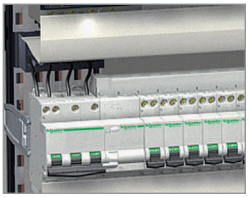
*Rear Linergy BS busbars.*



*Lateral busbars. The bars are staggered for easy access to connection points.*

## > Row distribution blocks for modular devices

**Linergy FH comb busbars:**
a simple, cost-effective solution.

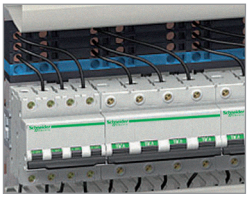


*Linergy FH comb busbars.*

*Linergy FH comb busbars are fully insulated.*
*Device can de connected in a single operation.*

**Linergy FM device feeder:**
a fast, flexible and reliable solution.

*Linergy FM device feeder 80 A.*



*Linergy FM device feeder 200 A.*

*The Linergy FM device feeder snaps easily onto the back of the rails.*
*All types of modular devices can be mixed in the same row and phase balancing is simple. It's easy to change or add devices.*

## > Centralised distribution blocks for switchboard incomers

**Linergy DX 160 A 4P: practical and aesthetic.**

*Modular monobloc distribution block for fast connections*

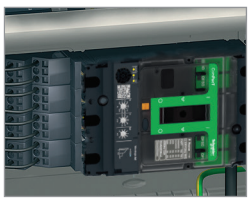
**Linergy DX 160 A 1P: "Quick" distribution block.**

*Modular combinable components for fast connections.*

**Linergy DS 160 A: a traditional solution.**

*Installation on modular rail on mounting-plate.*
*Screw-terminal connections.*

**Linergy DP 160 A: modular and comPacT.**



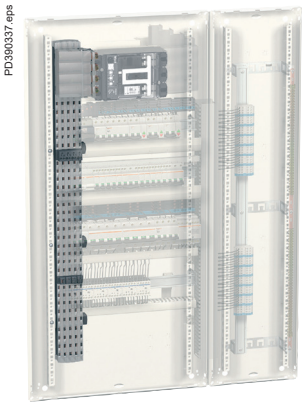
**Linergy DP 250 A: modular and comPacT.**

*Installed directly downstream of ComPacT circuit breakers and switches without taking up any extra vertical modules. Fast connections in spring-loaded terminals.*

D

# Linergy BW
## Insulated busbars

### Power busbars up to 630 A




## Description

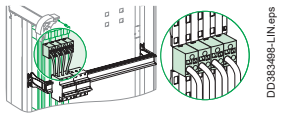
- ComPacT busbar, **IPxxB**, ready for installation (supplied complete with supports and end caps)
- Shaped busbar, threaded M6 with 25-mm pitch, can be cut with 200-mm pitch (150 mm for the 125 A)
- Busbar installed on insulating supports, screwed onto the rear uprights
- Wide selection of tested pre-wired connectors
- Clip-on covers to protect against direct contact (IPxxB). Can easily be cut to allow connections to pass through to the switchgear
- Ends protected by end caps

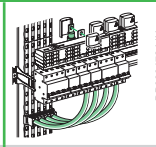
Linergy BW (160 to 630 A) is fully compatible with seismic constraints. Just add a seismic kit (LVS**04130**) to Linergy BW 160/250/400.

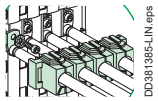
## Linergy BW busbar

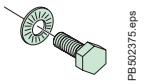
| | | 125 A (1) | | 160 A | | 250 A | | 400 A | | 630 A | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rated peak withstand current / 60 ms | (Ipk) | 20 kA | | 30 kA | | 30 kA | | 52.5 kA | | 52.5 kA | |
| Rated insulation voltage | (Ui) | 500 V AC | | 750 V AC | | 750 V AC | | 750 V AC | | 1000 V AC | |
| Rated impulse withstand voltage | (Uimp) | 8 kV | | 8 kV | | 8 kV | | 8 kV | | 8 kV | |
| Rated short-time current | (Isc) | 50 kA | | 150 kA | | 150 kA | | 150 kA | | 150 kA | |
| Thermal stress | ($I^2.t$) | $7.225 \times 10^7$ | | $1.000 \times 10^8$ | | $1.690 \times 10^8$ | | $4.000 \times 10^8$ | | $6.250 \times 10^8$ | |
| Rated short-time withstand current | (Icw) | 8.5 kA rms/1 second | | 10 kA rms/1 second | | 13 kA rms/1 second | | 20 kA rms/1 second | | 25 kA rms/1 second | |
| **Length (mm)** | | **450** | **750** | **1000** | **1400** | **1000** | **1400** | **1000** | **1400** | **1000** | **1400** |
| **Catalog numbers** | **3P** | **LVS04103** | **LVS04107** | **LVS04111** | **LVS04116** | **LVS04112** | **LVS04117** | **LVS04113** | **LVS04118** | **LVS04114** | **LVS04119** |
| | **4P** | **LVS04104** | **LVS04108** | **LVS04121** | **LVS04126** | **LVS04122** | **LVS04127** | **LVS04123** | **LVS04128** | **LVS04124** | **LVS04129** |

## Accessories



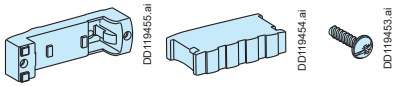



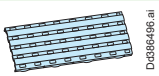




| | **IPxxB tap-off terminals** | | **200 A connections** | **IPxxB insulating covers** | **Class 8.8 fixing accessories** |
|---|---|---|---|---|---|
| | 12 tap-off blocks<br>For 1 cable of 6 mm²<br>(32 A max.)<br>and 1 cable of 10 mm²<br>(40 A max.)<br>Ui: 750 V<br>In: 55 A max. (2) | 12 tap-off blocks<br>For 1 cable of 1 to 16 mm²<br>Ui: 750 V<br>In: 55 A max. with only<br>1 cable | | Covers which can be clipped on and cut to size are used to isolate the connectors of a connection with cables of cross-section 10 to 25 mm² | M6 x 12 screws + M6 contact washers |
| Used for connecting | ■ All switchgear equipped with enclosed terminals<br>■ Linergy FM 160/200 A | ■ All switchgear equipped with enclosed terminals<br>■ Linergy FM 63/80/160/200 A | ■ Linergy FM 200 A | | |
| Set of | 12 | 12 | 4 | 8 | 20 |
| **Catalog numbers** | **LVS04151** | **LVS04152** | **LVS04021** | **LVS04150** | **LVS04158** |

## Spare parts




| | | **Linergy BW busbar supports** | | | |
|---|---|---|---|---|---|
| Rated operational current at 40 °C | (Ie) | 160 A | 250 A | 400 A | 630 A |
| Composition | | 2 busbar supports + 2 end caps + packet of fixing accessories | | | |
| **Catalog numbers** | | **LVS01210** | **LVS01210** | **LVS01210** | **LVS01211** |

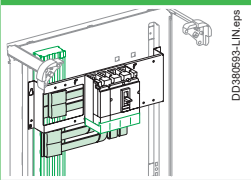
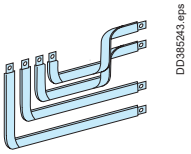
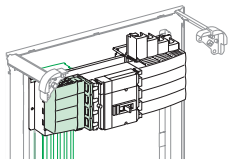



| | **IPxxB clip-on covers** | | | |
|---|---|---|---|---|
| Length (mm) | 200 | | | |
| Set of | 2 | | | |
| **Catalog numbers** | **LVS01201** | **LVS01201** | **LVS01201** | **LVS01201** |

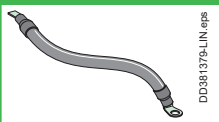
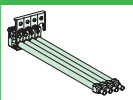
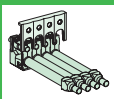
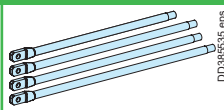
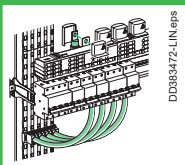
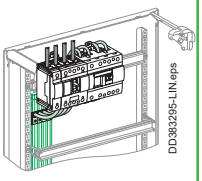
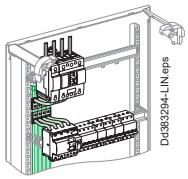
**Note:** Electrical characteristics. *> page D-27*
**(1)** Not compatible with seismic kit.
**(2)** Imax = 55 A for all connected cables.

# Linergy BW
## Insulated busbars

### Power busbars up to 630 A

| Mounting | Vertical | | | | | Horizontal | | |
|---|---|---|---|---|---|---|---|---|
| |  DD380693-LIN.eps | |  DD385243.eps | | |  DD380522-LIN.eps | | |
| | **Power supply units without connections** | | **Universal power supply units** | | | **Universal power supply units with connections** | | |
| Switchgear | **Fixed**<br>■ Enclosed horizontal NSX100/250 with rotary handle or remote control<br>■ Vertical FuPacTGS 100/160, FuPacT ISFT100/250 | **Fixed**<br>■ Enclosed NSX400/630 with or without Vigi<br>■ Enclosed INS-INV320/630 | **Fixed**<br>■ Enclosed NSX100/250 with toggle switch<br>■ Enclosed Vertical INS-INV250 | **Fixed**<br>■ In duct NSX100/250 with or without Vigi<br>■ In duct Vertical INS-INV250 | **Fixed**<br>■ In duct NSX400/630 with or without Vigi<br>■ In duct INS-INV320/630 | **Fixed**<br>■ NSX100/250 horizontal with or without Vigi<br>■ INS-INV250 horizontal | **Fixed**<br>■ NSX400 horizontal<br>■ INS-INV320/400 horizontal | **Fixed**<br>■ NSX630 horizontal<br>■ INS-INV500/630 horizontal |
| **Catalog numbers** | **LVS04061** | **LVS04074** | **LVS04062** | **LVS04064** | **LVS04073** | **LVS04060** (1) | **LVS04070** | **LVS04071** |

### Pre-wired connectors

| |  DD381379-LIN.eps | |  DD383276-LIN.eps |  DD383274-LIN.eps |  DD385535.eps |  DD383472-LIN.eps |
|---|---|---|---|---|---|---|
| | **Connections** | | **IPxxB 3/4P monobloc connection** | **IPxxB 3/4P monobloc connection** | **Connections 4P** | **Connections 4P** |
| | 35 mm² ferrule + 45°angled connector | 45 mm² ferrule + 45°angled connector | Quick connection on the busbar equipped with a male ferrule for enclosed terminals. Neutral identified by the colour blue. | | Lugs Ø 6 mm | Supplied with mounting hardware |
| Rated operational current at 40 °C (Ie) | 125 A | 160 A | 160 A | 160 A | 160 A | 200 A |
| Length | 230 mm | 250 mm | 440 mm | 165 mm | L1: 398 mm, L2: 410mm, L3: 438 mm, N: 378 mm | 230 to 330 mm |
| Used for connecting | ■ NSXm125, NG125, INS-INV with enclosed terminals cat. no. **28947** or **28948** | ■ INS-INV160, NSXm160 | ■ NSXm160, NSXm Vigi 160 (left-hand position),<br>■ NG125, INS-INV160, C120<br>  DD383295-LIN.eps | ■ NSXm160 (left-hand position), NG125, INS-INV160, C120<br>  Dd383294-LIN.eps | ■ Linergy FM 160<br>■ NSXm160 | ■ Linergy FM 200 A |
| Set of | 4 | 4 | 1 | 1 | | 4 |
| **Catalog numbers** | **LVS04145** | **LVS04146** | **LVS04148** | **LVS04147** | **LVS04030** + **LVS04150** insulated covers | **LVS04021** + **LVS04150** insulated covers |

### Seismic kit for Linergy BW 160 up to 400 A (1)

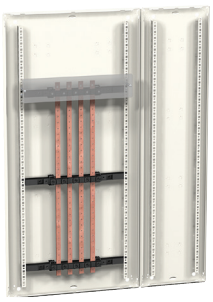

Use the seismic kit **LVS04130** when using Linergy BW - 3 metallic support.

**Catalog numbers** **LVS04130**

(1) Not compatible with Linergy BW 125 A. Not requested for Linergy BW 630A which is compatible with seismic constraints.

# Linergy BS
## Rear flat busbars

Power busbars up to 630 A

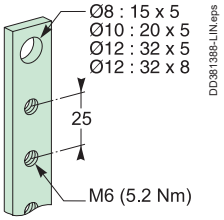



## IEC 61439-1 & 2

### Description

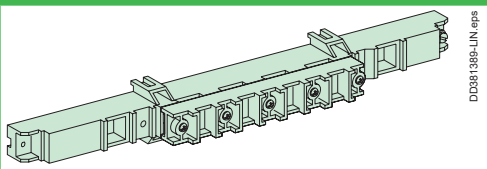
The busbar can be 3-pole or 4-pole with ratings between 160 A and 630 A.
2 lengths are available: 1000 and 1400 mm, which can be cut as required.
The number of supports depends on the installation maximum rated current.
The supports allow installation of a 5th bar with 15 or 20 x 5 mm cross-section to create the earth collector.

## Copper busbars 160 to 630 A

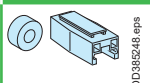
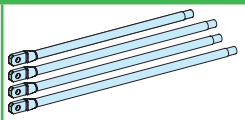
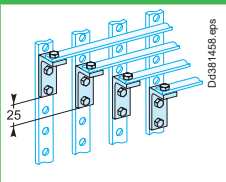
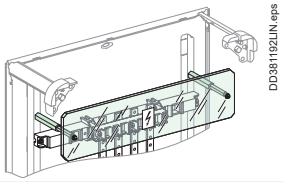



| | | 160 A | 250 A | 400 A | 630 A |
|---|---|---|---|---|---|
| Rated peak withstand current / 60 ms | (Ipk) | 30 kA | 40 kA | 55 kA | 77 kA |
| Rated insulation voltage | (Ui) | 1000 V AC | 1000 V AC | 1000 V AC | 1000 V AC |
| Rated short-time current | (Isc) | 150 kA | 150 kA | 150 kA | 150 kA |
| Thermal stress | (I²t) | 1.000 x $10^8$ | 2.250 x $10^8$ | 6.250 x $10^8$ | 1.225 x $10^9$ |
| Rated short-time withstand current | (Icw) | 10 kA rms/1 second | 15 kA rms/1 second | 25 kA rms/1 second | 35 kA rms/1 second |
| Conductor cross-section | | 15 x 5 mm | 20 x 5 mm | 32 x 5 mm | 32 x 8 mm |
| Installation | | Threaded M6 holes every 25 mm all the way up<br>Connection by: 16 to 50 mm² flexible cables with crimped lugs | | | |
| Set of | | 4 | | | |
| **Length (mm)** | | **1000** / **1400** | **1000** / **1400** | **1000** / **1400** | **1400** |
| **Catalog numbers** | | **LVS04161** / **LVS04171** | **LVS04162** / **LVS04172** | **LVS04163** / **LVS04173** | **LVS04174** |

## Insulating busbar support



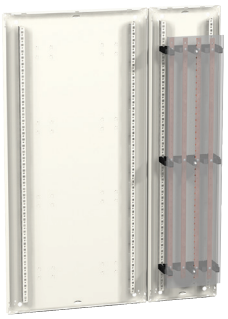

| | | | | | |
|---|---|---|---|---|---|
| Distance between supports depending on Icw (1) | ≤ 10 kA eff / 1 s | 450 mm | 450 mm | 450 mm | 450 mm |
| | ≤ 13 kA eff / 1 s | - | 450 mm | 450 mm | 450 mm |
| | ≤ 15 kA eff / 1 s | - | 450 mm | 450 mm | 450 mm |
| | ≤ 20 kA eff / 1 s | - | - | 300 mm | 300 mm |
| | ≤ 25 kA eff / 1 s | - | - | 225 mm | 225 mm |
| | ≤ 30 kA eff / 1 s | - | - | - | 225 mm |
| | ≤ 35 kA eff / 1 s | - | - | - | 175 mm |
| Installation | | On the rear uprights<br>Screwed onto a solid or pre-slotted plate (fixing centres 450 x 200 mm) | | | |
| **Catalog numbers** | | **LVS04191** | **LVS04191** | **LVS04191** | **LGY4193** |

| | Prefabricated connections | | | IPxxB insulated protective shield |
|---|---|---|---|---|
| |  |  |  |  |
| **Devices** | **Rear Linergy BS busbars** | **Linergy FM & NSXm160** | **Connection between 2 sets of Linergy BS rear busbars** | |
| | set of 4 | Lugs Ø 6 mm<br>L1: 398 mm, L2: 410mm, L3: 438 mm, N: 378 mm<br>160 A | Set of 4 copper angle brackets - 250 A<br>Electrical connection between two sets of rear busbars | Length 470 mm, height 100 mm<br>Supplied with fixings |
| **Cat. numb.** | **LVS04029** | **LVS04030** | **LVS04190** | **LVS04198** |

**Note:** Electrical characteristics. *> page D-27*
**(1)** Linergy FM 200 A distribution blocks with connections ref. LVS**04029** can act as intermediate supports (max. distance apart 200 mm) in addition to the support ref. LVS**04191** at the top and bottom.

# Linergy BS
## Multi-stage busbars

Power busbars up to 630 A

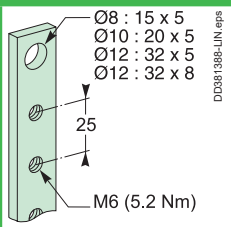

PD390533_SE.eps

## IEC 61439-1 & 2

### Description

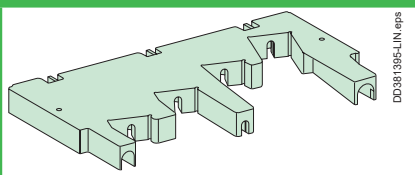
Multi-stage busbars are installed in a duct W = 300 mm.
It could be interesting to install it in a duct between 2 enclosures for dividing the current.
All the connection points are easily accessible from the front.
The busbar orientation makes them easier to tighten and facilitates running the cables between them.
The current can be 3-pole or 4-pole with ratings between 160 A and 630 A.
2 lengths are available: 1000 and 1400 mm, which can be cut as required.
The number of supports depends on the installation maximum rated current.

## 160 to 630 A copper busbars

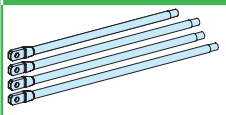
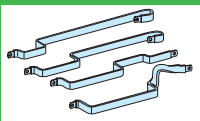
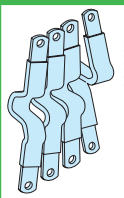
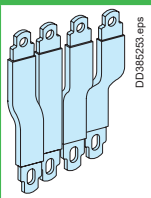
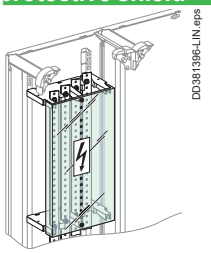



| | | 160 A | 250 A | 400 A | 630 A |
|---|---|---|---|---|---|
| Rated peak withstand current / 60 ms | (Ipk) | 30 kA | 40 kA | 55 kA | 55 kA |
| Rated insulation voltage | (Ui) | 750 V AC | 750 V AC | 750 V AC | 750 V AC |
| Rated short-time current | (Isc) | 150 kA | 150 kA | 150 kA | 150 kA |
| Thermal stress | ($I^2$.t) | 1.000 x $10^8$ | 1.690 x $10^8$ | 4.000 x $10^8$ | 6.250 x $10^8$ |
| Supply at incoming terminals | | Connection by: 16 to 50 $mm^2$ flexible cables with crimped lugs | | | |
| Conductor cross-section | | 15 x 5 mm | 20 x 5 mm | 32 x 5 mm | 32 x 8 mm |
| Installation | | Flat copper busbar with threaded M6 holes every 25 $mm^2$ all the way up | | | |
| Set of | | 4 | | | |
| **Length (mm)** | | **1000** / **1400** | **1000** / **1400** | **1000** / **1400** | **1000** / **1400** |
| **Catalog numbers** | | **LVS04161** / **LVS04171** | **LVS04162** / **LVS04172** | **LVS04163** / **LVS04173** | must be made / **LVS04174** |

## Insulating busbar support



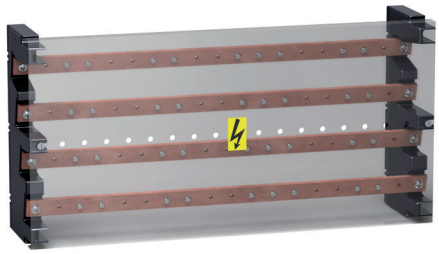

| | | | | | |
|---|---|---|---|---|---|
| Distance between supports depending on Icw (1) | ≤ 10 kA rms / 1 s | 450 mm | 450 mm | 450 mm | 450 mm |
| | ≤ 13 kA rms / 1 s | - | 450 mm | 450 mm | 450 mm |
| | ≤ 15 kA rms / 1 s | - | | 450 mm | 450 mm |
| | ≤ 20 kA rms / 1 s | - | - | 300 mm | 300 mm |
| | ≤ 25 kA rms / 0.6 s | - | - | 300 mm | - |
| | ≤ 25 kA rms / 1 s | - | - | - | 300 mm |
| Installation | | Installation on functional uprights of duct (PrismaSeT G Active).<br>Screwed onto a solid or pre-slotted plate (450 x 200 mm fixing centres) | | | |
| **Catalog numbers** | | **LVS04192** | **LVS04192** | **LVS04192** | **LVS04192** |

| | Prefabricated connections | | | | IPxxB insulated protective shield |
|---|---|---|---|---|---|
| |  DD385535.eps |  DD385247.eps |  DD385251.eps |  DD385253.eps |  DD381396-LIN.eps |
| **Devices** | **NSXm160, Linergy FM 160A** | **Linergy FM 200A** | **ComPacT NSX-INS-INV 100/160/250** | **ComPacT NSX-INS-INV 400/630** | |
| | Lugs Ø 6 mm<br>L1: 398 mm, L2: 410mm, L3: 438 mm, N: 378 mm<br>160 A | 200 A | Vertical mounting, in duct | Vertical mounting, in duct | Length 250 mm, height 1500 mm<br>Fixing accessories supplied with support cat no. LVS**04192** |
| Configuration | | | *> page C-7* | *> page C-16* | |
| **Catalog numbers** | **LVS04030** | **LVS04024** | **LVS04065** | **LVS04075** | **LVS04197** |

**Note:** Electrical characteristics. *> page D-27*

# Linergy BS
## Multi-stage distribution blocks

Power busbars up to 630 A

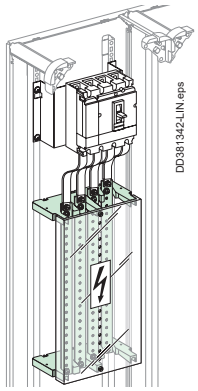


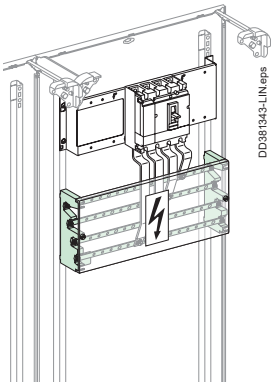

## IEC 61439-1 and 2

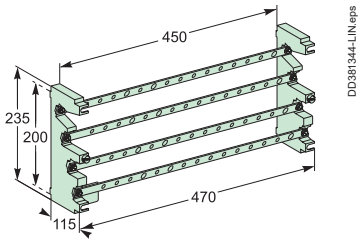
### Description

The multi-stage distribution block can be installed horizontally in the device zone or vertically in the 300 mm wide duct of enclosures and cubicles.
The distribution block is made up of:
- two staggered supports made of an insulating material
- four slanted copper bars with holes every 25 mm.

## Multi-stage distribution blocks



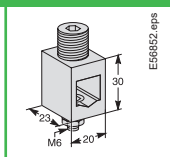

| | | 160 A | 250 A | 400 A | 630 A |
|---|---|---|---|---|---|
| Rated peak withstand current / 60 ms | (Ipk) | 30 kA | 40 kA | 55 kA | 55 kA |
| Rated insulation voltage | (Ui) | 750 V AC | | | |
| Rated operational voltage | (Ue) | 440 V AC | | | |
| Rated impulse withstand voltage | (Uimp) | 8 kV | | | |
| Rated short-time current | (Isc) | 150 kA | 150 kA | 150 kA | 150 kA |
| Thermal stress | ($I^2.t$) | 1.000 x $10^8$ | 1.690 x $10^8$ | 4.000 x $10^8$ | 6.250 x $10^8$ |
| Rated short-time withstand current | (Icw) | 25 kA rms/1 second | 25 kA rms/1 second | 25 kA rms/1 second | 25 kA rms/1 second |
| Total connection capacity | | 4 incomers per phase: Ø from 8 to 12 mm clearance holes<br>13 outgoers per phase 16 to 50 $mm^2$: M6 tapped holes | | | |
| Busbar cross-section | | 15 x 5 mm | 20 x 5 mm | 32 x 5 mm | 32 x 8 mm |
| Dimensions (mm) | |  | | | |
| Installation | | Screwed in horizontal position on functional uprights in enclosures and cubicles (PrismaSeT G Active)<br>Screwed in vertical position on sheathed uprights (PrismaSeT G Active)<br>Screwed onto a solid or pre-slotted plate (fixing centres 450 x 200 mm) | | | |
| Composition | | 2 multi-stage supports made of an insulating material<br>4 slanted copper busbars, with holes every 25 mm<br>1 pack of 36 M6 x 16 screws + contact washers<br>1 IPxxB front insulating shield | | | |
| **Catalog numbers** | | **LVS04052** | **LVS04053** | **LVS04054** | **LVS04055** |

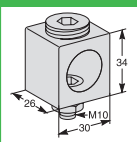


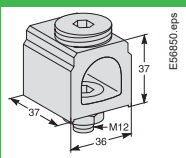
| | A | B |
|---|---|---|
| **LVS04052** | 4 x Ø 8.2 | 13 x M6 |
| **LVS04053** | 4 x Ø 10.2 | 13 x M6 |
| **LVS04054** | 4 x Ø 12.2 | 13 x M6 |
| **LVS04055** | 4 x Ø 12.2 | 13 x M6 |

## Power busbars up to 630 A

## Incomer accessories

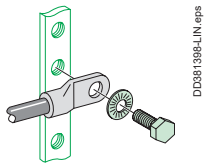


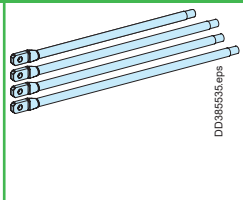

| | | | |
|---|---|---|---|
| | **Connectors for copper or aluminium cables** | | |
| Rated operational current at 40 °C (Ie) | 160 A | 250 A | 400 A |
| Supply at incoming terminals | 70 mm² Cables | 16 - 185 mm² Cables | 70 - 300 mm² Cables |
| Composition | Supplied with fixings at busbar end | | |
| Set of | 4 | | |
| **Catalog numbers** | **LVS07051** | **LVS07052** | **LVS07053** |

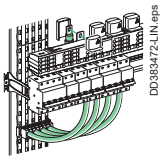
## Outgoer accessories

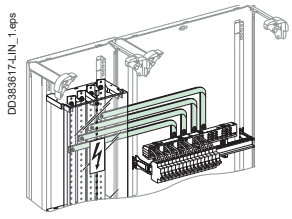


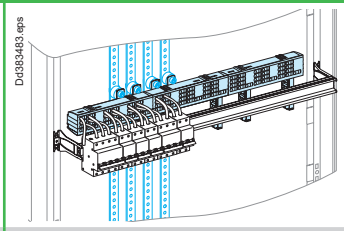

| | | |
|---|---|---|
| | **Class 8.8 fixings** | |
| Composition | 20 M6 x 20 screws + 20 nuts + 40 contact washers | 40 M6 x 16 screws + 40 contact washers |
| **Catalog numbers** | **LVS04194** | **LVS04195** |

## Connections to device and Linergy FM



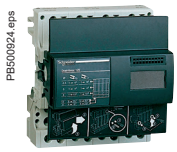




| | | | | |
|---|---|---|---|---|
| | **4P 160 A connection** | **4P 200 A connection (Supplied with mounting hardware)** | **4P 200 A connection (supplied with fixings)** | **4P 200 A connection (supplied with fixings)** |
| Allows supply of | Linergy FM 160 A | Linergy FM 200 A | Linergy BS busbars in duct | Rear Linergy BS busbars |
| **Catalog numbers** | **LVS04030** | **LVS04021** | **LVS04024** | **LVS04029** |

**Note:** Electrical characteristics. *> page D-27*

D

Distribution blocks


## IEC 60947-7-1, IEC 61439-2
## Description

- Downstream circuits are connected from the front, to spring terminals.
- Contact pressure automatically adapts to the size of the conductor.
- Contacts are insensitive to vibrations and thermal variations.
- Only one cable (flexible or rigid) can be inserted per terminal.

## Quick distribution blocks

| Number of poles | | 4P, upstream incoming | 4P, downstream incoming |
|---|---|---|---|
| | |   |   |
| Rated operational current at 40 °C | (Ie) | 63 A | 63 A |
| Rated conditional short-circuit breaker of an assembly | (Isc) | The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained.<br>The worst-case situations have been tested.<br>150 kA | |
| Rated peak withstand current | (Ipk) | 10 kA | 10 kA |
| Rated insulation voltage | (Ui) | 500 V AC | 500 V AC |
| Rated operational voltage | (Ue) | 440 V AC | 440 V AC |
| Rated impulse withstand voltage | (Uimp) | 6 kV | 6 kV |
| Rated short-time current Icw | (Icc) | 150 kA | 150 kA |
| Thermal stress | ($I^2.t$) | 9,03 x $10^6$ | 9,03 x $10^6$ |
| Rated operational frequency | | 50/60 Hz | 50/60 Hz |
| Degree of protection | | IPxxB | IPxxB |
| Incoming terminals | | 1 tunnel terminal 25²/Ph | 1 tunnel terminal 25²/Ph |
| Total connection capacity, outgoing terminals | | 24 connections:<br>4 x 6²/phase<br>12 x 6²/neutral | 24 connections:<br>4 x 6²/phase<br>12 x 6²/neutral |
| Dimensions (H x W x D) | | 96.5 x 72 x 62<br>8 x 9 mm pitch | 96.5 x 72 x 62<br>8 x 9 mm pitch |
| Installation | | Clipped onto a DIN rail | Clipped onto a DIN rail |
| Other | | | |
| Standard for installation inside PrismaSeT | | IEC 61439-2 | IEC 61439-2 |
| Glow-wire 60695-2-11 | | 960 °C | 960 °C |
| Degree of pollution | | 3 | 3 |
| **Catalog numbers** | | **LVS04040** | **LVS04041** |

## Accessories

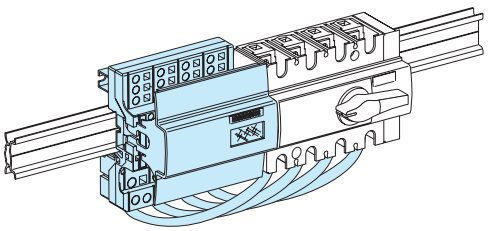
| | | | |
|---|---|---|---|
| **Catalog numbers** | | **-** | **-** |

## Advantages

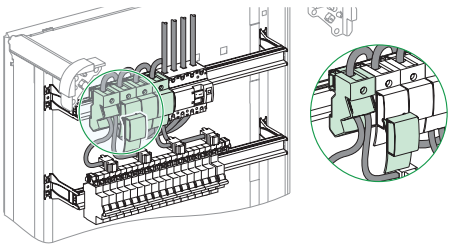
- A reliable electrical connection, no maintenance required (tightness guaranteed over time).
- Quick connection.
- Easy phase balancing.
- Ease of rewiring if the switchboard is expanded or modified.

| | 4P | | 1P |
|---|---|---|---|
| |  PB500924-75.eps |  DD386251.eps |  PB111453_10.eps |
| | 125 A | 160 A | 160 A |
| | The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained.<br>The worst-case situations have been tested.<br>150 kA | | |
| | 20 kA | 20 kA | 24 kA |
| | 750 V AC | 750 V AC | 750 V AC |
| | 690 V AC | 690 V AC | 690 V AC |
| | 8 kV | 8 kV | 8 kV |
| | 150 kA | 150 kA | 150 kA |
| | 2.025 x $10^7$ | 2.025 x $10^7$ | 3.025 x $10^7$ |
| | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| | IPxxB | IPxxB | IPxxB |
| | 1 tunnel terminal 35²/Ph | Supplied with a prefabricated flexible connection equipped with tunnel terminals. | 1 tunnel terminal 70²/Ph |
| | 52 connections:<br>7 x 4²/phase<br>3 x 6²/phase<br>2 x 10²/phase<br>1 x 16²/phase (screw terminal) | 52 connections:<br>7 x 4²/phase<br>3 x 6²/phase<br>2 x 10²/phase<br>1 x 16²/phase (screw terminal) | 6 connections:<br>6 x 16²/phase |
| | 127 x 108 x 48<br>12 x 9 mm pitch | 127 x 108 x 48<br>12 x 9 mm pitch | 95 x 36 x 70<br>4 x 9 mm pitch |
| | Screwed to plain or slotted backplate or onto DIN rail | Screwed to plain or slotted backplate or onto DIN rail | Onto DIN rail |
| | Possible to combine 2 terminal blocks<br>(2nd terminal block supplied from enclosed terminals in the 1st, Imax of 2nd terminal block: 80 A) | | |
| | IEC 61439-2 | IEC 61439-2 | IEC 61439-2 |
| | 960 °C | 960 °C | 960 °C |
| | 3 | 3 | 3 |
| | **LVS04045** | **LVS04046** (1) | **LVS04031** |
| | 4 x 125A flexible connections, L=240 mm with end fiiting for tunnel terminals | | 4 x 160 A flexible connections, L = 380 mm with 2 x 45 mm² end fittings for tunnel terminals |
| | **LVS04047** (1) | - | **LVS04149** |

PB502370-55.eps



DD383300-LIN.eps

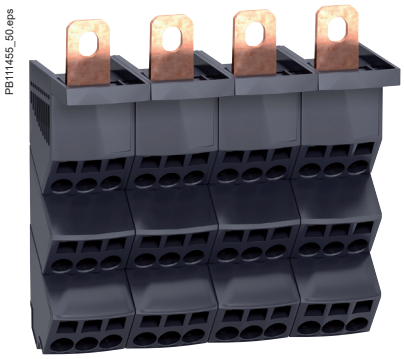


**Nota:** Electrical characteristics. > *page D-27*
**(1)** For INS-INV160: adaptation with references **28947** and **28948**

# Linergy DP

## Quick distribution blocks - ComPacT NSX and INS-INV up to 250 A






## IEC 60947-7-1, IEC 61439-1 and 2

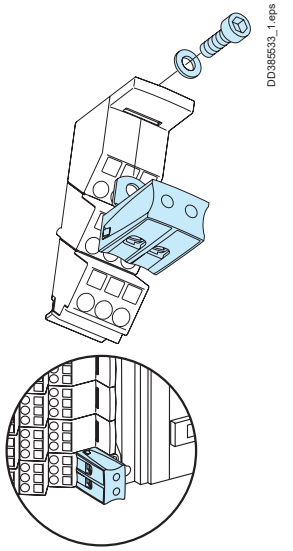
## Description

- The Linergy DP quick distribution block is designed for installation directly downstream of ComPacT NSX and INS-INV up to 250 A. It can also be clipped onto a modular rail.

## Advantages

- It is quick to mount in the horizontal position. Electrical connections are made directly to the device terminals.
- It is the same width as the devices and does not take up any additional space in the switchboard.
- The connection terminals are slanted to facilitate cable entry and avoid exceeding the bending radius of the flexible and rigid cables.

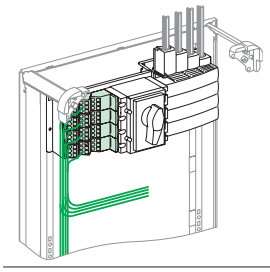
| Quick distribution blocks for ComPacT devices | | | | Additional block |
|---|---|---|---|---|
| **Number of poles** | | **3P** | **4P** | **3P/4P** |
| | |  PB111454-15-r.eps |  PB111455-15-r.eps |  PB502519-11_r.eps |
| Rated operational current | (Ie) | 250 A | 250 A | 250 A |
| Rated peak withstand current | (Ipk) | 30 kA | 30 kA | 30 kA |
| Rated short-time current with upstream protection of 150 kA Icc | (Icc) | 150 kA | 150 kA | 150 kA |
| Thermal stress | ($I^2$.t) | 7.225 x $10^7$ | 7.225 x $10^7$ | |
| Total connection capacity, outgoing terminals | | 27 connections:<br>6 x $10^2$/phase<br>3 x $16^2$/phase | 36 connections:<br>6 x $10^2$/phase<br>3 x $16^2$/phase | 2 connections:<br>2 x $35^2$/pole |
| Incomer terminals | | 1 cable lug 120 mm² per pole | | |
| Dimensions (H x W x D) | | 105 x 138 x 63 | 140 x 138 x 64 | |
| Installation | | On mounting plate or DIN rail | | On mounting plate |
| Product certifications | | ASEFA | | |
| Standard for installation inside PrismaSeT | | IEC 61439-1-2 | | |
| Glow-wire 60695-2-11 | | 960 °C | | |
| **Catalog numbers** | | **LVS04033** | **LVS04034** | **LVS04155 (3P)**<br>**LVS04156 (4P)** |




## Technical Data

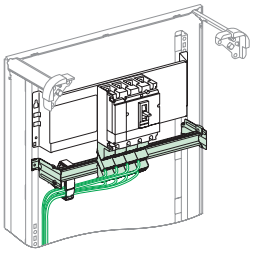
| | | |
|---|---|---|
| **Common characteristics** | | |
| Rated conditional short-circuit current of an assembly | (Isc) | The reinforced breaking capacity due to cascading in circuit-breaker combinations is maintained.<br>The worst-case situations have been tested. |
| Rated insulation voltage | (Ui) | 750 V AC |
| Rated operational voltage | (Ue) | 690 V AC |
| Rated impulse withstand voltage | (Uimp) | 8 kV |
| Network frequency | | 50/60 Hz |
| Degree of protection | | IPxxB |
| Degree of pollution | | 3 |
| Overvoltage category | | III |
| **Additional technical characteristics** | | |
| Reference temperature | | 40 °C |
| Operating temperature | | -25 °C to 55 °C |

## Installation




Directly on the mounting plates of horizontally mounted **ComPacT NSX100/250 and ComPacT INS-INV250** devices in the enclosures.

For details on mounting plates, refer *pages C-4, C-6, C-8, C-10,* and *C-11.*



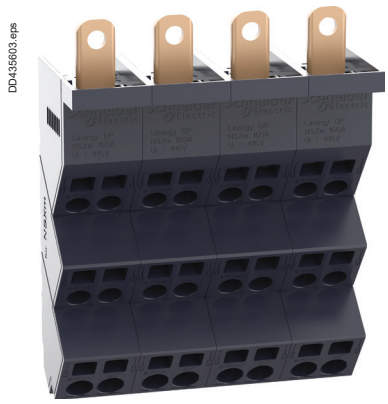

It can also be mounted downstream of vertically mounted **ComPacT NSX100/250 and ComPacT INS-INV250** devices in the enclosures.
In this case, the Linergy DP is mounted on a depth-adjustable modular rail.

**Note:** Electrical characteristics > *page D-27*

# Linergy DP

## Quick distribution blocks - Com**PacT** NSXm up to 160 A






## IEC 60947-7-1, IEC 61439-1 and 2

## Description

- The Linergy DP quick distribution block is designed for installation directly downstream of ComPacT NSXm up to 160 A. It can also be clipped onto a modular rail.

## Advantages

- It is quick to mount in the horizontal position. Electrical connections are made directly to the device terminals.
- It is the same width as the devices and does not take up any additional space in the switchboard.
- The connection terminals are slanted to facilitate cable entry and avoid exceeding the bending radius of the flexible and rigid cables.

## Quick distribution blocks for ComPacT devices

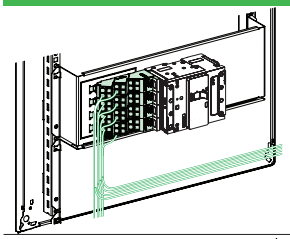
| **Number of poles** | | **3P** | **4P** |
|---|---|---|---|
| | |  DD435604.eps |  DD435605.eps |
| Rated operational current | (Ie) | 160 A | 160 A |
| Rated peak withstand current | (Ipk) | 20 kA | 20 kA |
| Rated short-time current | (Icc) | 70 kA | 70 kA |
| Thermal stress | ($I^2$.t) | 4.7 x $10^6$ $A^2S$ | 4.7 x $10^6$ $A^2S$ |
| Total connection capacity, outgoing terminals | | 18 connections:<br>4 x $10^2$/phase<br>2 x $16^2$/phase | 24 connections:<br>4 x $10^2$/phase<br>2 x $16^2$/phase |
| Incomer terminals | | 1 cable lug 70 $mm^2$ per pole | |
| Dimensions (H x W x D) | | 140 X 81 X 58 mm | 140 X 108 X 58 mm |
| Installation | | On mounting plate or DIN rail | |
| Product certifications | | ASEFA | |
| Standard for installation inside PrismaSeT | | IEC 61439-1-2 | |
| Glow-wire 60695-2-11 | | 960 °C | |
| **Catalog numbers** | | **LVS04038** | **LVS04039** |

D

## Technical Data

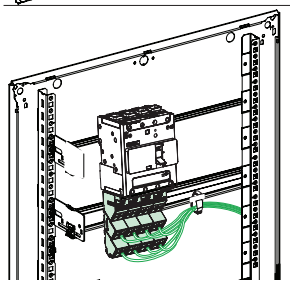
| | | |
|---|---|---|
| **Common characteristics** | | |
| Rated conditional short-circuit current of an assembly | (Isc) | The reinforced breaking capacity due to cascading in circuit-breaker combinations is maintained.<br>The worst-case situations have been tested. |
| Rated insulation voltage | (Ui) | 800 V AC |
| Rated operational voltage | (Ue) | 690 V AC |
| Rated impulse withstand voltage | (Uimp) | 8 kV |
| Network frequency | | 50/60 Hz |
| Degree of protection | | IPxxB |
| Degree of pollution | | 3 |
| Overvoltage category | | III |
| **Additional technical characteristics** | | |
| Reference temperature | | 40 °C |
| Operating temperature | | -25 °C to 55 °C |

## Installation




Directly on the mounting plates of horizontally mounted **ComPacT NSXm** devices in the enclosures.

For details on mounting plates, refer *page C-4*.




It can also be mounted downstream of vertically mounted **ComPacT NSXm** devices in the enclosures.
In this case, the Linergy DP is mounted on a depth-adjustable modular rail.

**Note:** Electrical characteristics > *page D-27*

# Linergy DS
## Screw distribution blocks





## IEC/EN 60947-7-1, IEC/EN 61439-1 & 2
## Description

- Single-pole or four-pole distribution block that can be installed on a standard DIN rail or on a mounting plate.
- Compatible with PrismaSeT G Active and P, Pragma, Mini Pragma and Resbo series switchboards.
- Incomers and feeders are connected to screw terminals that accept rigid or flexible cables with ferrule.
- Optional: additional neutral terminal strip for four-pole distribution block.

## Avantages

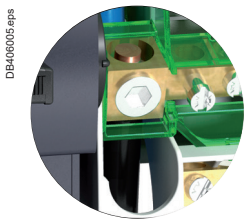
- Simplified power supply for main incomers.
- Easy phase balancing.
- Easy, effortless cabling due to excellent accessibility.
- Visible cabling.
- Insulation between phases.
- The single-pole distribution blocks are adjacent and bridgeable via the second incoming hole for parallel connection.

## Screw distribution blocks

| Number of poles | | 1P | | | 4P |
|---|---|---|---|---|---|
| | |   |   |   |   |
| Rating | | 125 A | 160 A | 250 A | 100 A |
| Number of connections | | 10 | 13 | 14 | 4 x 7 |
| **Terminal capacity** | | | | | |
| Diameter | | 2 x Ø 9.5 mm | 2 x Ø 12 mm | 1 x Ø 15.3 mm | 2 x Ø 7.5 mm |
| | | 2 x Ø 7.5 mm | 3 x Ø 7.5 mm | 1 x Ø 10 mm | 5 x Ø 5.5 mm |
| | | 6 x Ø 5.8 mm | 8 x Ø 5.8 mm | 4 x Ø 6 mm | - |
| | | - | - | 8 x Ø 7.5 mm | - |
| Rated peak withstand current (Ipk) | Ipk/60 ms | 25 kA | 36 kA | 60 kA | 14 kA |
| | Ipk/6 ms | - | - | - | 24 kA |
| Rated short-time withstand current (Icc) (IEC/EN 60947-7-1) | | 36 kA | 36 kA | 36 kA | 20 kA |
| Width (number of 9 mm pitches) | | 3 | 4 | 5 | 8 |
| Dimension (H x W x D) | | 85 x 27 x 50.5 | 85 x 36 x 50.5 | 85 x 45 x 50.5 | 100 x 71 x 50.5 |
| Weight (g) | | 125 | 163 | 239 | 210 |
| Neutral terminal strip (optional) | | - | - | - | LGYN1007 |
| **Catalog numbers** | | **LGY112510** | **LGY116013** | **LGY125014** | **LGY410028** |

# Linergy DS
## Screw distribution blocks

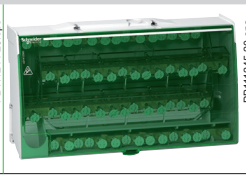
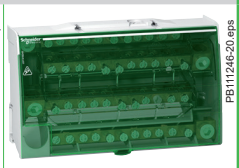





On **LGY412560** and **LGY416048** references.
Input cabling facilitated by side terminals.

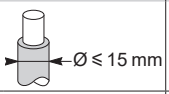
## Technical data

| Common characteristics | |
|---|---|
| **In compliance with IEC/EN 60947-7-1 and IEC/EN 61439-1 & 2** | |
| Rated insulation voltage (Ui) | 500 V AC |
| Rated operational voltage (Ue) | 230 V AC (Ph/N)<br>440 V AC(Ph/Ph) |
| Rated impulse withstand voltage (Uimp) | 8 kV |
| Rated conditional short-circuit current of an assembly | Up to the breaking capacity of Schneider Electric feeder circuit breakers, even in cascading configuration |
| Network frequency | 50/60 Hz |
| Pollution degree | 3 |
| Overvoltage category | III |
| **Additional technical characteristics** | |
| Reference temperature | 40 °C |
| Operating temperature | -25 °C to 55 °C |
| Dielectric withstand (IEC/EN 60947-1) | 2500 V AC |

| | | | | Neutral terminal strip | | |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| | 125 A | | 160 A | 100 A | 125 A | |
| | 4 x 12 | 4 x 15 | 4 x 12 | 7 | 12 | 15 |
| | | | | | | |
| | 1 x Ø 9 mm | 1 x Ø 9.5 mm | 1 x Ø 12 mm | 2 x Ø 7.5 mm | 1 x Ø 9 mm | 1 x Ø 9.5 mm |
| | 7 x Ø 7.5 mm | 3 x Ø 8.5 mm | 3 x Ø 9 mm | 5 x Ø 5.5 mm | 7 x Ø 7.5 mm | 3 x Ø 8.5 mm |
| | 4 x Ø 6.5 mm | 11 x Ø 6.5 mm | 8 x Ø 7.5 mm | - | 4 x Ø 6.5 mm | 11 x Ø 6.5 mm |
| | - | - | - | - | - | - |
| | 18 kA | 18 kA | 22 kA | - | - | - |
| | 26 kA | 28 kA | 36 kA | - | - | - |
| | 36 kA | 36 kA | 36 kA | - | - | - |
| | 14 | 20 | 18 | 7 | 14 | 17 |
| | 100 x 126 x 50.5 | 100 x 162 x 50.5 | 100 x 174 x 50.5 | 20 x 70 x 35 | 20 x 125 x 35 | 20 x 155 x 35 |
| | 390 | 559 | 567 | 63 | 111 | 149 |
| | LGYN12512 | LGYN12515 | LGYN12512 | - | - | - |
| | **LGY412548** | **LGY412560** | **LGY416048** | **LGYN1007** | **LGYN12512** | **LGYN12515** |

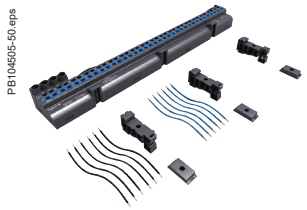
## Terminal technical data

| **Type** | **PZ2 screw** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Diameter | Ø 5.5 mm | Ø 5.8 mm | Ø 6 mm | Ø 6.5 mm | Ø 7.5 mm | Ø 8.5 mm | Ø 9 mm | Ø 9.5 mm |
| Section Rigid cable | 1.5 to 16 mm² | 1.5 to 16 mm² | 1.5 to 16 mm² | 1.5 to 16 mm² | 2.5 to 25 mm² | 6 to 35 mm² | 10 to 35 mm² | 10 to 35 mm² |
| Section Flexible cable or with ferrule | 1.5 to 10 mm² | 1.5 to 10 mm² | 1.5 to 10 mm² | 1.5 to 10 mm² | 1.5 to 16 mm² | 4 to 25 mm² | 4 to 25 mm² | 6 to 35 mm² |
| Tightening torque | 2 N.m | 2 N.m | 2 N.m | 2 N.m | 2 N.m | 2 N.m | 2.5 N.m | 2.5 N.m |

| **Type** | **Hc screw** | | | | |
|---|---|---|---|---|---|
| Diameter | Ø 9.5 mm | Ø 10 mm | Ø 12 mm | | Ø 15.3 mm |
| Section Rigid cable | 10 to 35 mm² | 1.5 to 50 mm² | 25 to 70 mm² |  Ø ≤ 15 mm | 35 to 120 mm² |
| Section Flexible cable or with ferrule | 6 to 35 mm² | 1.5 to 35 mm² | 16 to 50 mm² | | 25 to 95 mm² |
| Tightening torque | 8 N.m | 4 N.m | 1P: 10 N.m | 4P: 5 N.m | 14 N.m |

# Linergy FM
## Quick device feeders

Device feeders




## IEC60947-7-1 and IEC61439-1 and 2

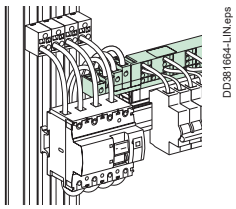
### Description

- Distribution over full rows of modular devices.
- The distribution block is generally supplied by busbars in enclosures and cubicles.
- Easy phase balancing.
- Mix of devices and functions in the same row.
- Installation ≥ 160 A: clipped onto the back of a modular rail or screwed onto a solid or pre-slotted plate

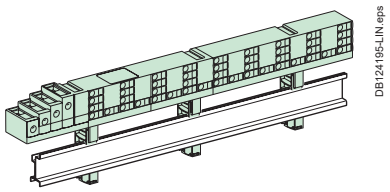
## Distribution blocks

| Number of poles | | | 4P | 4P | 4P |
|---|---|---|---|---|---|
| | | |  PB502496-31_r.eps |  PB104501-52-r.eps |  PB502500-18_r.eps |
| | | | **63 A** | **80 A** | **160 A** |
| Rated peak withstand current | | (Ipk) 60ms | 12 kA | 13 kA | 20 kA |
| Rated conditional short-circuit current of an assembly | | (Isc) | The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested. The characteristics are exactly right for the connected devices. Circuit breakers and switches still have their temperature derating curves, and their whole performance is maintained. 150 kA | | |
| Insulation voltage | | (Ui) | 500 V AC | 500 V AC | 750 V AC |
| Rated voltage | | (Ue) | 440 V AC | 440 V AC | 690 V AC |
| Rated impulse withstand voltage | | (Uimp) | 6 kV | 8 kV | 8 kV |
| Maximum current | | (Imax) | - | - | 50 A for feeder for 1 10 mm² cable/63 A for feeder for 2 10 mm² cables |
| Thermal stress | | (I²t) | 9.03 x $10^6$ | 9.03 x $10^6$ | 3600 x $10^7$ |
| Rated operational frequency | | | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Degree of protection | | | IPxxB | IPxxB | IPxxB |
| Width | 9 mm modules | | 24 | 48 | 24 |
| | 18 mm modules | | 12 | 24 | 12 |
| Supply at incoming terminals | | | Enclosed terminals for cables up to 25 mm² | Enclosed terminals for cables up to 25 mm² | Direct onto the row by cable 70 mm² with crimped lug, or flexible bar 20 x 3 from busbar with prefabricated connection |
| Downstream connection capacity (1) | | Phase | (6 x 4 mm²) + (2 x 6 mm²) | (7 x 4 mm²) + (2 x 6 mm²) | 18 x 10 mm² |
| | | Neutral | (4 x 4 mm²) + (4 x 6 mm²) | (13 x 4 mm²) + (4 x 6 mm²) | 9 x 10 mm² |
| Accessories included | Pre-stripped copper connections | | 10 x 4 mm² + 6 x 6 mm² (W = 100 mm) | 20 x 4 mm² + 6 x 6 mm² (W = 100 mm) | 12 of 10 mm² |
| | Protection cover | | - | - | 4 |
| | Fixing legs | | 2 | 3 | 2 |
| **Catalog numbers** | | | **LVS04008** (1) | **LVS04004** | **LVS04018** (1) |

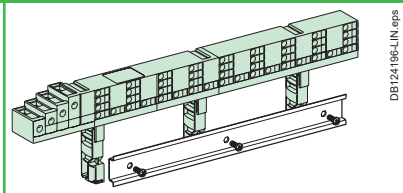
## Installation




Clipped onto the back of a modular rail, or screw fixing.

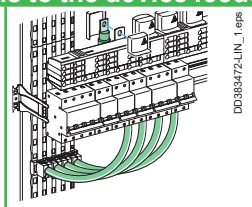
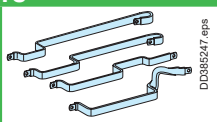
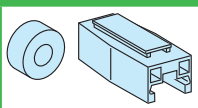
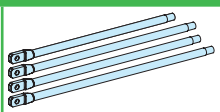
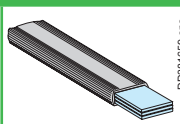



Clipped onto the back of a modular rail, or screw fixing.



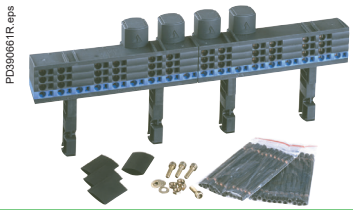

Can be mounted in Pragma Evolution enclosures and in PrismaSeT Pack 160.

## Connections to the device feeders

| | | | | | |
|---|---|---|---|---|---|
| |  DD383472-LIN_1.eps |  DD385247.eps |  DD385248.eps |  DD385535.eps |  DD381659.eps |
| | 4P 200 A connection (supplied with fixing accessories) | 4P 200 A connection (supplied with fixing accessories) | 4P 200 A connection (supplied with fixing accessories) | 4P 160 A connection for Linergy FM 1/2 row | 200 A connection (20 x 3) for Linergy FM |
| Allows power supply from | Linergy BW busbar | Multi-stage Linergy BS busbar | Rear Linergy BS busbar | Device | Device |
| **Catalog numbers** | **LVS04021 + LVS04150** *insulating covers* | **LVS04024** | **LVS04029** | **LVS04030** | **LVS04743** |

# Linergy FM
## Quick device feeders

### Device feeders




| | 1P+N | 3P | 4P (1) | 4P - L = 36 modules |
|---|---|---|---|---|
| |  PB502499-23_r.eps |  PB502498-27_r.eps |  PB502497-27-r.eps |  PB502501-27_r.eps |
| | **200 A** | **200 A** | **200 A** | **200 A** |
| | 20 kA | 20 kA | 20 kA | 20 kA |
| | 750 V AC | 750 V AC | 750 V AC | 750 V AC |
| | 690 V AC | 690 V AC | 690 V AC | 690 V AC |
| | 8 kV | 8 kV | 8 kV | 8 kV |
| | 50 A for feeder for 1 10 mm² cable/63 A for feeder for 2 10 mm² cables | | | |
| | 3600 x $10^7$ | 3600 x $10^7$ | 3600 x $10^7$ | 3600 x $10^7$ |
| | 50/60 Hz AC | 50/60 Hz AC | 50/60 Hz AC | 50/60 Hz AC |
| | IPxxB | IPxxB | IPxxB | IPxxB |
| | 48 | 48 | 48 | 72 |
| | 24 | 24 | 24 | 36 |
| | Direct onto the row by cable 70 mm² with crimped lug, or flexible bar 20 x 3 from busbar with prefabricated connection | | | |
| | 12 x 10 mm² | 36 x 10 mm² | 36 x 10 mm² | 54 x 10 mm² |
| | 12 x 10 mm² | - | 18 x 10 mm² | 27 x 10 mm² |
| | 24 of 10 mm² | 24 of 10 mm² | 24 of 10 mm² | 36 of 10 mm² |
| | 2 | 3 | 4 | 4 |
| | 4 | 4 | 4 | 6 |
| | **LVS04012** (1) (2) | **LVS04013** (1) | **LVS04014** (1) (2) | **LVS04026** (1) |

## Spare parts

| |  PB502502-8_r.eps |
|---|---|
| | 4 covers for 160/200 A Linergy FM rows |
| **Catalog numbers** | **LVS01202** |

**Nota:** modular row with Linergy FM 200 A (24 or 36 modules) and 160 A (12 modules) positioned directly below a non-modular mounting plate (ComPacT, etc.), or at the top of a switchboard: add 1 additional module and a plain upstream front plate.

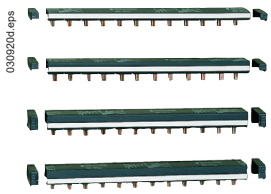
Electrical characteristics. > page D-27

(1) Cable to be used without ferrules.
(2) The Linergy FM 200 (LVS**04012** and LVS**04014**) can be used with direct current. The upstream and downstream terminal type ( ⊕ and ⊖ ) must be marked on the device. For more information, please contact our customer services.

# Linergy FH

## Horizontal comb busbar for 27 mm pitch for NG125






## IEC 60664-1

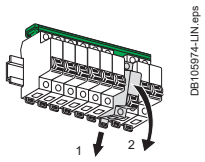
## Description

Comb busbars make it easier to install NG125 circuit breakers.

- Supplied with 2 lateral end-caps, IP 2.
- Outgoing feeders can be marked.
- Cutting markings on the copper bars and the insulating material.

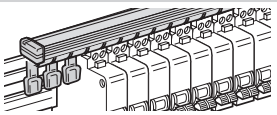
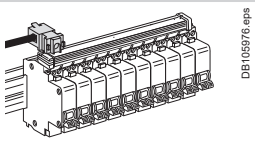
| **NG125** | **27 mm poles, cuttable** | | | |
|---|---|---|---|---|
| **Number of poles** | **1P** | **2P** | **3P** | **4P** |
| |   | | | |
| | Each com busbar reference includes:<br>■ 1 x single or 2 pole comb busbar + 8 tooth-caps + 2 side plates<br>■ 1 x 3 or 4 pole comb busbar + 4 tooth-caps + 2 side plates<br>To insulate teeth that have been left free can be insulated by tooth-caps | | | |
| Rated operational current at 40 °C (Ie) | 125 A (63 A max by outgoer ) | | | |
| Rated conditional short-circuit current of an assembly (Isc) | Compatible with the breaking capacity of NG125 circuit breakers | | | |
| Insulation voltage (Ui) | 620 V AC | | | |
| Rated voltage (Ue) | 500 V AC | | | |
| Fire resistance to IEC 695-2-1 | Self-extinguishing 960 °C, 30 s | | | |
| Colour | RAL 7016 (anthracite grey) | | | |
| **Use** | | | | |
| | Power supply by connector recommended | | | |
| Number of 27 mm modules | 16 | 16 | 15 | 16 |
| Set of | 1 | | | |
| **Catalog numbers** | **14811** | **14812** | **14813** | **14814** |

## Installation




Comb busbars allow dismountability (1-2)

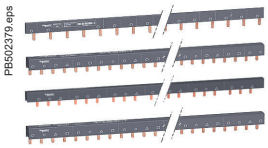
## Accessories

| **Number of poles** | **1P, 2P, 3P, 4P** | |
|---|---|---|
| |   |   |
| | **Tooth covers** | **Insulated connector** |
| | | Compatible with all Schneider Electric comb busbars.<br>Clip onto the comb busbar's insulating material, which gives them very great stability<br>Receive clip-on markers allowing circuit identific |
| **Use** | | |
| | | For 25 mm² semi-rigid cable |
| Set of | 20 | 4 |
| **Catalog numbers** | **14818** | **14885** |
| **Installation** | | |
| |   |   |

# Linergy FH

## Horizontal comb busbar for 18 mm pitch for Acti 9






## IEC 60947-7-1, IEC 61439-2

## Description

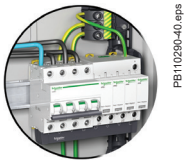
Comb busbars make it easier to install Acti 9 circuit breaker.

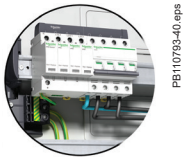
- Can be sawn and cut in a single pass.
- Supplied with two IP20 lateral end-caps except for 57 module references.
- Cutting marks on the insulating material for easy adaptation.
- The phases are identified by symbols on each side of the comb busbar for installation in all positions.
- The special comb busbars for circuit breakers with 9 mm auxiliaries have a 9 mm gap for inserting iOF and iSD.

| **Acti 9** | **18 mm poles, cuttable** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Number of poles** | **1P** | **2P** | **3P** | **4P** | **3 (N+P)** | **Aux+1P** | **Aux+2P** | **Aux+3P** | **Aux+4P** | **3 (Aux+1P)** | **3 (Aux+N+1P)** |
| |   | | | | | | | | | | |
| Rated operational current at 40 °C (Ie) | 100 A | | | | | | | | | | |
| Rated conditional short-circuit current of an assembly (Isc) | Compatible with the breaking capacity of Acti 9 circuit breakers | | | | | | | | | | |
| Insulation voltage (Ui) | 500 V AC | | | | | | | | | | |
| Rated voltage (Ue) | 415 V AC | | | | | | | | | | |
| Fire resistance to IEC 695-2-1 | Self-extinguishing 960 °C, 30 s | | | | | | | | | | |
| Colour | RAL 7016 (anthracite grey) | | | | | | | | | | |
| **Use** | | | | | | | | | | | |
| | Power supply by connector recommended | | | | | | | | | | |
| Type | L1… | L1L2… | L1L2L3... | NL1L2L3… | NL1NL2… …NL3 | AuxL1... | AuxL1L2… | AuxL1L2L3 | AuxNL1… …L2L3 | AuxL1… …AuxL2… …AuxL3 | AuxL1… …AuxL2… …AuxL3 |
| Set of | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Catalog numbers** | | | | | | | | | | | |
| 6 modules of 18 mm | **A9XPH106** | - | - | - | - | - | - | - | - | - | - |
| 12 modules of 18 mm | **A9XPH112** | **A9XPH212** | **A9XPH312** | **A9XPH412** | **A9XPH512*** | - | - | - | - | - | - |
| 18 modules of 18 mm | - | - | - | - | **A9XPH518*** | - | - | - | - | - | - |
| 24 modules of 18 mm | **A9XPH124** | **A9XPH224** | **A9XPH324** | **A9XPH424** | **A9XPH524*** | - | - | - | - | - | - |
| 57 modules of 18 mm | **A9XPH157** | **A9XPH257** | **A9XPH357** | **A9XPH457** | **A9XPH557*** | **A9XAH157** | **A9XAH257** | **A9XAH357** | **A9XAH457** | **A9XAH657** | **A9XAH557*** |

* This comb busbar is only compatible in top feeding for simple lug devices and bottom feeding on double lug devices.

## Installation




## Accessories

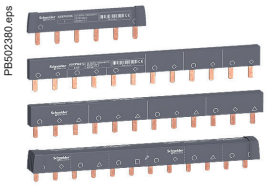
| **Number of poles** | **1P** | **2P** | **3P** | **4P** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| |   | | | |   |   |   |
| | **Side plates** | | | | **Tooth covers** | **Connectors** | |
| | | | | | | **Monoconnect** | **Double terminals** |
| | Lateral end-caps providing IP20 protection | | | | To insulate teeth that have been left free | Comb busbar power supply. Horizontal incomer on each side. For 35 mm2 cable. Tightening torque 4 N.m   | |
| Set of | 10 | 10 | 10 | 10 | 20 | 4 | 4 |
| **Catalog numbers** | **A9XPE110** | **A9XPE210** | **A9XPE310** | **A9XPE410** | **A9XPT920** | **A9XPCM04** | **A9XPCD04** |

D

# Linergy FH

## Horizontal comb busbar for 18 mm pitch for Acti 9

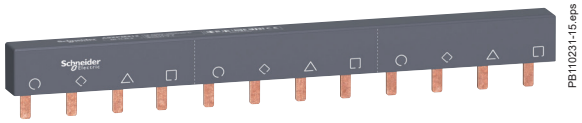




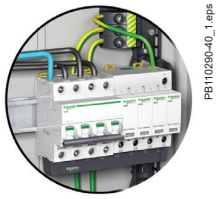

## IEC 60947-7-1, IEC 61439-2

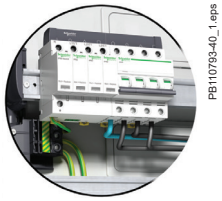
## Description

- Comb busbars make it easier to install Acti 9 circuit breakers.
- The phases are identified by symbols on each side of the comb busbar for installation in all positions.

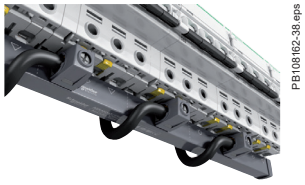
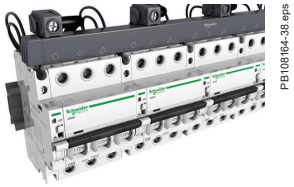
| Acti 9 | 18 mm poles, not cuttable | | | | |
|---|---|---|---|---|---|
| **Number of poles** | **1P** | **2P** | **3P** | **4P** | **3 (N+P)** |
| |   | | | | |
| Rated operational current at 40 °C (Ie) | 100 A | | | | |
| Rated conditional short-circuit current of an assembly (Isc) | Compatible with the breaking capacity of Acti 9 circuit breaker | | | | |
| Insulation voltage (Ui) | 500 V AC | | | | |
| Rated voltage (Ue) | 415 V AC | | | | |
| Fire resistance to IEC 695-2-1 | Self-extinguishing 960 °C, 30 s | | | | |
| Colour | RAL 7016 (anthracite grey) | | | | |
| **Use** | | | | | |
| | Power supply by connector recommended | | | | |
| Type | L1 | L1L2 | L1L2L3 | NL1L2L3 | NL1NL2NL3 |
| Set of | 1 | 1 | 1 | 1 | 1 |
| **Catalog numbers** | | | | | |
| 12 modules of 18 mm | - | **A9XPM212** | - | **A9XPM412** | **A9XPM512** (1) |

## Installation




## Accessories

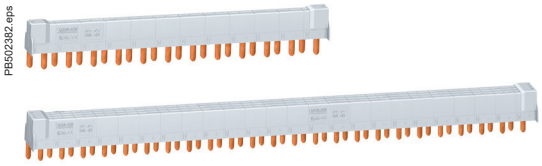
| | | | |
|---|---|---|---|
| |   |   |   |
| | **Tooth covers** | **Connectors** | |
| | | **Double terminals** | **Monoconnect** |
| | To insulate teeth that have been left free | Comb busbar power supply | |
| **Use** | | | |
| | | Horizontal incomer on each side<br>For 35 mm² cable<br>Tightening torque 4 N.m | |
| Set of | 20 | 4 | 4 |
| **Catalog numbers** | **A9XPT920** | **A9XPCD04** | **A9XPCM04** |
| **Installation** | | | |
| |   |   | |

(1) This comb busbar is only compatible in top feeding for simple lug devices and bottom feeding on double lug devices.

# Linergy FH

## Horizontal comb busbar for 9 mm pitch for Acti 9, C60






## IEC 60439-1
## Description

- Easy, reliable mounting of 1P+N and 3P+N, TL, CT, ID, V, BP and Cm switchgear: tooth positioning opposite the device terminals is ensured by indexing of copper parts

C60/ID Group Feeder comb busbars contain two different parts:

- connection of Group Feeder switchgear: C60 (3P + N) or ID (3P + N) circuit breaker in 18 mm modules, powered by cables, through the bottom, directly by the terminals
- connection of Acti 9 switchgear in 9 mm modules.

| Acti 9 Ph+N | | 9 mm poles, cuttable | | | | | |
|---|---|---|---|---|---|---|---|
| **Number of poles** | | **1P+N** | | | **3P+N** | | |
| | |   21501 | | |   21505 | | |
| | | Complete comb busbars (supplied with 4 side plates and 1 tooth-cover) | | | | | |
| Rated operational current at 40 °C | (Ie) | 80 A | | | | | |
| Rated conditional short-circuit current of an assembly | (Isc) | Compatible with the breaking capacity of Acti 9 and C60 circuit breakers | | | | | |
| Insulation voltage | (Ui) | 440 V AC | | | | | |
| Rated voltage | (Ue) | 230 V AC (P + N) - 400 V AC (3P + N) | | | | | |
| Rated impulse withstand voltage | (Uimp) | 6 kV | | | | | |
| Degree of protection | | IP20 | | | | | |
| Fire resistance to IEC 695-2-1 | | Self-extinguishing 960 °C, 30 s | | | | | |
| Colour | | RAL 7035 | | | | | |
| Number of 18 mm modules | Comb busbar | 12 | 18 | 24 | 12 | 18 | 24 |
| | Tooth cover | 3 | 3 | 6 | 3 | 3 | 6 |
| **Catalog numbers** | | **21501** | **19512** | **21503** | **21505** | **19516** | **21507** |
| **Comb busbars alone** | | | | | | | |
| Number of 18 mm modules | Comb busbar | 48 | | | 48 | | |
| **Catalog numbers** | | **21089** | | | **21093** | | |

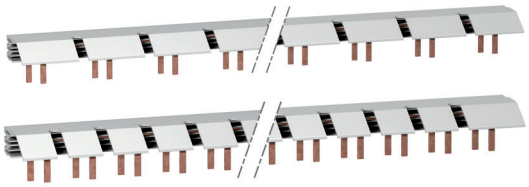
| C60/ID Group Feeder comb busbars alone | | | | |
|---|---|---|---|---|
| **Number of poles** | | **3P+N** | | |
| | |   | | |
| Rated operational current at 40 °C | (Ie) | 80 A | | |
| Rated conditional short-circuit current of an assembly | (Isc) | Compatible with the breaking capacity of Schneider Electric circuit breakers | | |
| Insulation voltage | (Ui) | 440 V AC | | |
| Rated voltage | (Ue) | 230 V AC (P + N) - 400 V AC (3P + N) | | |
| Rated impulse withstand voltage | (Uimp) | 6 kV | | |
| Degree of protection | | IP20 | | |
| Fire resistance to IEC 695-2-1 | | Self-extinguishing 960 °C 30 s | | |
| Colour | | RAL 7035 | | |
| Number of 18 mm modules | | 12 | 48 | 48 |
| Power supply | | Through left-hand | Through left-hand | Through right-hand |
| **Catalog numbers** | | **10545** | **10546** | **10547** |

| Accessories | | | | | |
|---|---|---|---|---|---|
| **Number of poles** | **1P+N** | **3P+N** | | | |
| |   | |   | |   |
| | **Side plates** | | **Tooth caps (3 x 18-mm module)** | **Tooth caps (1 x 18-mm module)** | **Connectors (grey)** |
| Set of | 40 | | 12 | 10 | 4 |
| **Catalog numbers** | **21094** | **21095** | **21096** | **10405** | **21098** |

# Linergy FH

## Horizontal comb busbar for 9 mm pitch for Acti 9, C60

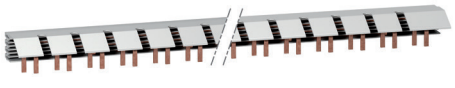





## IEC 60439-1

## Description

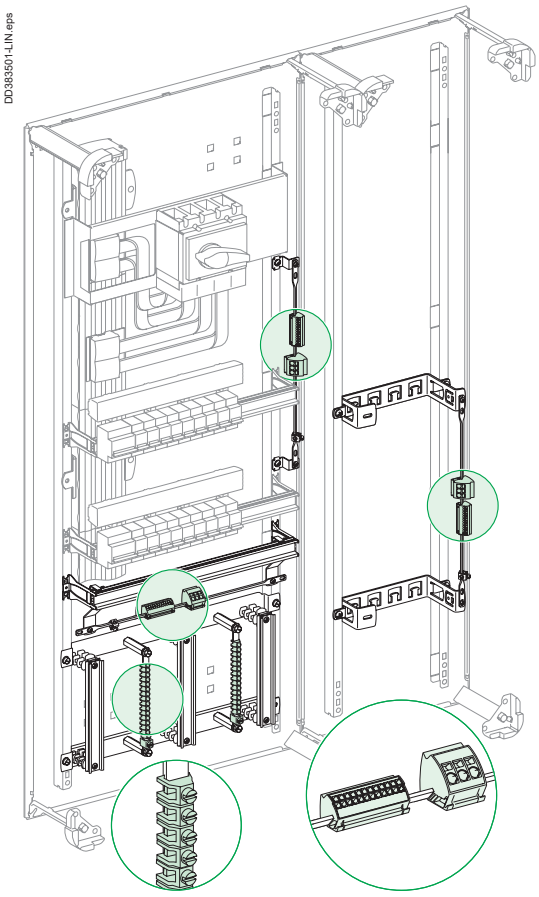
- Connection of Clario, Prodis and Librio switchgear in 9 mm modules.
- The special comb busbars for circuit breaker have a gap of 9 mm for inserting OF, SD, OF-SD/OF auxiliaries.
- The comb busbars for 3P + N circuit breakers and auxiliaries are compatible with PrismaSeT switchboard.
- 1P + N comb busbars are compatible with PrismaSeT and Pragma 24.

| Acti 9 | | 9 mm poles, cuttable | | | |
|---|---|---|---|---|---|
| **Number of poles** | | **1P + N** | **3P + N** | **1P + N** | **3P + N** |
| | |  PB110801-10.eps<br>A9N21036 | | | |
| | | **Comb busbars** | | **Comb busbars DPN Vigi** | |
| Rated operational current at 40 °C | (Ie) | 63 A | | | |
| Rated conditional short-circuit current of an assembly | (Isc) | Compatible with the breaking capacity of Acti 9 circuit breaker | | | |
| Insulation voltage | (Ui) | 500 V AC | | | |
| Rated voltage | (Ue) | 230 V AC (P + N) - 400 V AC (3P + N) | | | |
| Degree of protection | | IP20 | | | |
| Degree of pollution | | 3 | | | |
| Fire resistance to IEC 695-2-1 | | Self-extinguishing 960 °C, 30 s | | | |
| Colour | | RAL 7035 | | | |
| Number of 18 mm modules | | 56 | 56 | 56 | 56 |
| **Catalog numbers** | | **A9N21035** | **A9N21036** | **A9N21037** | **A9N21038** |

| Accessories | | | | | | |
|---|---|---|---|---|---|---|
| **Number of poles** | | **1P+N** | **3P+N** | | | |
| | |  PB110804-10.eps | |  PB110805-10.eps |  PB110806-10.eps |  PB110807-10.eps |
| | | **Side plates** | | **Connectors (grey)** | **Neutral connectors (blue)** | **Tooth caps (1 x 18 mm module)** |
| Set of | | 20 | | 10 | 10 | 10 |
| **Catalog numbers** | | **A9N21039** | **A9N21040** | **A9N21041** | **A9N21042** | **A9N21050** |

# Linergy TB
## Earth bars

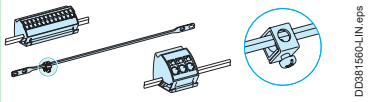





## Description

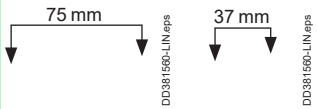
This range of earth bars is installed:
- in the duct which can constitute a dedicated area, completely separate from the equipment
- or in the switchgear compartment, at the top or the bottom.

## Fast-connecting earth bar



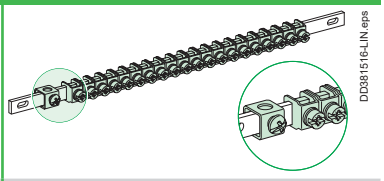

| | Copper earth bar |
|---|---|
| Cross-section (mm) | 12 x 3 |
| Effective length (mm) | 330 |
| Total length (mm) | 450 |
| Composition | Copper bar with 1 terminal 16 to 35 mm² |
| **Catalog numbers** | **LVS04201** |

## Accessories



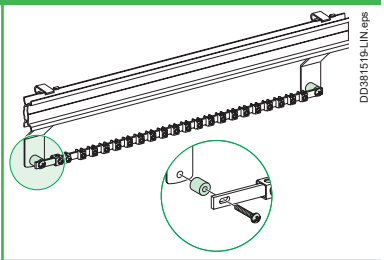

| | Earth blocks with terminals | |
|---|---|---|
| | Spring-fixing (clip onto the earth bar) | |
| Total connection capacity | 12 x 4 mm² | 3 x 16 mm² |
| Composition | 4 earth blocks | 4 earth blocks |
| **Catalog numbers** | **LVS04214** | **LVS04215** |

## Accessories




| | Earth bar with jumper | |
|---|---|---|
| Total connection capacity | 40 x 2.5 to 16 mm² | 20 x 2.5 to 16 mm² |
| Cross-section (mm) | 12 x 3 | 12 x 3 |
| Length (mm) | 450 | 200 |
| Composition | 40 jumpers and a terminal (16 to 35 mm²) | 20 jumpers and a terminal (16 to 35 mm²) |
| **Catalog numbers** | **LVS04200** | **LVS04202** |

## Accessories




| | Neutral bar |
|---|---|
| | Converts an earth bar to a neutral bar |
| Composition | 2 insulating spacers |
| **Catalog numbers** | **LVS04210** |

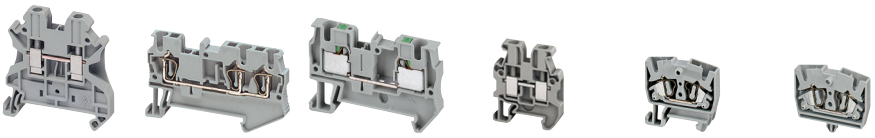
## Installation accessories

*> pages C-47 to C-53*

D

# Linergy TR
## Terminal blocks



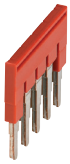


| | | | Connection technology | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Type of terminal block** | **Cross section area** | **Color** | **Screw tech**  | **Spring tech**  | **Push-in tech**  | **Miniature screw for 15 mm DIN rail** | **Miniature spring for 15 mm DIN rail** | **Miniature spring for direct mount** |
| Passthrough | 2.5 mm² (2 pts) | Grey | **NSYTRV22** | **NSYTRR22** | **NSYTRP22** | **NSYTRV22M** | **NSYTRR22M** | **NSYTRR22MF** |
| | | Blue | **NSYTRV22BL** | **NSYTRR22BL** | **NSYTRP22BL** | **NSYTRV22MBL** | **NSYTRR22MBL** | **NSYTRR22MFBL** |
| | | Orange | **NSYTRV22AR** | **NSYTRR22AR** | **NSYTRP22AR** | - | - | **NSYTRR22MFF*** |
| | 2.5 mm² (3 pts) | Grey | **NSYTRV23** | **NSYTRR23** | **NSYTRP23** | - | - | - |
| | | Blue | **NSYTRV23BL** | **NSYTRR23BL** | **NSYTRP23BL** | - | - | - |
| | | Orange | - | **NSYTRR23AR** | **NSYTRP23AR** | - | - | - |
| | 2.5 mm² (4 pts) | Grey | **NSYTRV24** | **NSYTRR24** | **NSYTRP24** | - | **NSYTRR24M** | **NSYTRR24M** |
| | | Blue | **NSYTRV24BL** | **NSYTRR24BL** | **NSYTRP24BL** | - | **NSYTRR24MBL** | **NSYTRR24MBL** |
| | 2.5 mm² (4 pts, 2 levels) | Grey | **NSYTRV24D** | **NSYTRR24D** | **NSYTRP24D** | - | - | - |
| | | Blue | **NSYTRV24DBL** | **NSYTRR24DBL** | **NSYTRP24DBL** | - | - | - |
| | 2.5 mm² (6 pts, 3 levels) | Grey | **NSYTRV26T** | **NSYTRR26T** | **NSYTRP26T** | - | - | - |
| | | Blue | **NSYTRV26TBL** | **NSYTRR26TBL** | **NSYTRP26TBL** | - | - | - |
| | 4 mm² (2 pts) | Grey | **NSYTRV42** | **NSYTRR42** | **NSYTRP42** | **NSYTRV42M** | - | - |
| | | Blue | **NSYTRV42BL** | **NSYTRR42BL** | **NSYTRP42BL** | **NSYTRV42MBL** | - | - |
| | | Orange | **NSYTRV42AR** | **NSYTRR42AR** | - | - | - | - |
| | 4 mm² (3 pts) | Grey | **NSYTRV43** | **NSYTRR43** | **NSYTRP43** | - | - | - |
| | | Blue | **NSYTRV43BL** | **NSYTRR43BL** | **NSYTRP43BL** | - | - | - |
| | 4 mm² (4 pts) | Grey | **NSYTRV44** | **NSYTRR44** | **NSYTRP44** | - | - | - |
| | | Blue | **NSYTRV44BL** | **NSYTRR44BL** | **NSYTRP44BL** | - | - | - |
| | 4 mm² (4 pts, 2 levels) | Grey | **NSYTRV44D** | **NSYTRR44D** | - | - | - | - |
| | | Blue | **NSYTRV44DBL** | **NSYTRR44DBL** | - | - | - | - |
| | 6 mm² (2 pts) | Grey | **NSYTRV62** | **NSYTRR62** | - | - | - | - |
| | | Blue | **NSYTRV62BL** | **NSYTRR62BL** | - | - | - | - |
| | 10 mm² (2 pts) | Grey | **NSYTRV102** | **NSYTRR102** | - | - | - | - |
| | | Blue | **NSYTRV102BL** | **NSYTRR102BL** | - | - | - | - |
| | 16 mm² (2 pts) | Grey | **NSYTRV162** | **NSYTRR162** | - | - | - | - |
| | | Blue | **NSYTRV162BL** | **NSYTRR162BL** | - | - | - | - |
| Earth protection | 2.5 mm² (2 pts) | Green/Yellow | **NSYTRV22PE** | **NSYTRR22PE** | **NSYTRP22PE** | **NSYTRV22MPE** | **NSYTRR22MPE** | - |
| | 2.5 mm² (3 pts) | Green/Yellow | **NSYTRV23PE** | **NSYTRR23PE** | **NSYTRP23PE** | - | - | - |
| | 2.5 mm² (4 pts) | Green/Yellow | **NSYTRV24PE** | **NSYTRR24PE** | **NSYTRP24PE** | - | - | - |
| | 4 mm² (2 pts) | Green/Yellow | **NSYTRV42PE** | **NSYTRR42PE** | **NSYTRP42PE** | **NSYTRV42MPE** | - | - |
| | 4 mm² (3 pts) | Green/Yellow | **NSYTRV43PE** | **NSYTRR43PE** | **NSYTRP43PE** | - | - | - |
| | 4 mm² (4 pts) | Green/Yellow | **NSYTRV44PE** | **NSYTRR44PE** | **NSYTRP44PE** | - | - | - |
| | 6 mm² (2 pts) | Green/Yellow | **NSYTRV62PE** | **NSYTRR62PE** | - | - | - | - |
| | 10 mm² (2 pts) | Green/Yellow | **NSYTRV102PE** | **NSYTRR102PE** | - | - | - | - |
| | 16 mm² (2 pts) | Green/Yellow | **NSYTRV162PE** | **NSYTRR162PE** | - | - | - | - |
| Knife Disconnect | 2.5 mm² (2 pts) | Grey | **NSYTRV22SC** | **NSYTRR22SC** | **NSYTRP22SC** | - | - | - |
| | | Orange | **NSYTRV22ST** (1) | **NSYTRR22SCAR** | - | - | - | - |
| | 2.5 mm² (3 pts) | Grey | - | **NSYTRR23SC** | **NSYTRP23SC** | - | - | - |
| | | Orange | - | **NSYTRR23SCAR** | - | - | - | - |
| | 2.5 mm² (2 levels) | Grey | **NSYTRV24SCD** | **NSYTRR24SCD** | - | - | - | - |
| Fuse Disconnect | 4 mm² (2 pts) 5 x 20 mm fuse | Black | **NSYTRV42SF5** | - | - | - | - | - |
| | | Black (12 V) | **NSYTRV42SF5LD** (2) | - | - | - | - | - |
| | | Black (230 V) | **NSYTRV42SF5LA** (2) | - | - | - | - | - |
| Basic Disconnect (3) | 4 mm² (2 pts) | Grey | **NSYTRV42TB** | **NSYTRR42TB** | **NSYTRP42TB** | - | - | - |
| Measuring transducer | 6 mm² (2 pts) Disconnect | Grey | **NSYTRV62TTD** | - | - | - | - | - |
| | 6 mm² (2 pts) | Grey | **NSYTRV62TT** | - | - | - | - | - |
| | 6 mm² (2 pts) | Green/Yellow | **NSYTRV62TTPE** | - | - | - | - | - |

* Grey terminal with flange.

(1) Grey disconnect terminal with 2 test points.
(2) With light indicator.
(3) Fuse or component carrier not supplied.



| | Accessories | | | | |
|---|---|---|---|---|---|
| Miniature spring for direct mount | End plate for screw TBs | End plate for spring TBs | End plate for push-in TBs | Plug-in bridge | Marking strips 10 characters |
| NSYTRR22MP | NSYTRAC22 | NSYTRACR22 | NSYTRACR22 | NSYTRAL22 | NSYTRABF510 |
| NSYTRR22MPBL | NSYTRAC22BL | NSYTRACR22BL | NSYTRACR22BL | NSYTRAL23 | NSYTRABF520 |
| - | - | - | | NSYTRAL24 | NSYTRABF530 |
| - | NSYTRAC23 | NSYTRACR23 | NSYTRACR23 | NSYTRAL25 | NSYTRABF540 |
| - | - | NSYTRACR23BL | NSYTRACR23BL | NSYTRAL210 | NSYTRABF550 |
| - | - | - | - | NSYTRAL210BL | NSYTRAB560 |
| NSYTRR24MP | NSYTRAC24 | NSYTRACR24 | NSYTRACR24 | NSYTRAL210GR | NSYTRAB570 |
| NSYTRR24MPBL | - | NSYTRACR24BL | NSYTRACR24BL | NSYTRAL220 | NSYTRAB580 |
| - | NSYTRACE24 | NSYTRACRE24 | NSYTRACRE24 | | NSYTRAB590 |
| - | - | - | - | | NSYTRAB5100 |
| - | NSYTRACE26 | NSYTRACRE26 | NSYTRACPE26 | | NSYTRAB51100 |
| - | - | - | - | | |
| - | NSYTRAC22 | NSYTRACR42 | NSYTRACR42 | NSYTRAL42 | NSYTRAB610 |
| - | NSYTRAC22BL | - | - | NSYTRAL43 | NSYTRAB620 |
| - | - | - | - | NSYTRAL44 | NSYTRAB630 |
| - | NSYTRAC23 | NSYTRACR43 | NSYTRACP43 | NSYTRAL45 | NSYTRAB640 |
| - | - | - | - | NSYTRAL410 | ... |
| - | NSYTRAC24 | NSYTRACR44 | NSYTRACP44 | NSYTRAL410BL | NSYTRAB690 |
| - | - | - | - | NSYTRAL410GR | NSYTRAB6100 |
| - | NSYTRACE24 | NSYTRACRE44 | - | NSYTRAL420 | NSYTRAB61100 |
| - | - | - | - | | |
| - | NSYTRAC22 | NSYTRACR62 | - | NSYTRAL62 | NSYTRAB810 |
| - | NSYTRAC22BL | - | - | NSYTRAL65 | NSYTRAB820 |
| - | NSYTRAC22 | NSYTRACR102 | - | NSYTRAL102 | NSYTRAB1010 |
| - | NSYTRAC22BL | - | - | | NSYTRAB1020 |
| - | NSYTRAC162 | NSYTRACR162 | - | NSYTRAL162 | NSYTRAB1010 |
| - | - | - | - | | NSYTRAB1020 |
| - | NSYTRAC22 | NSYTRACR22 | NSYTRACR22 | | |
| - | NSYTRAC23 | NSYTRACR23 | NSYTRACR23 | | |
| - | NSYTRAC24 | NSYTRACR24 | NSYTRACR24 | | |
| - | NSYTRAC22 | NSYTRACR42 | NSYTRACR42 | | |
| - | NSYTRAC23 | NSYTRACR43 | NSYTRACP43 | | |
| - | NSYTRAC24 | NSYTRACR44 | NSYTRACP44 | | |
| - | NSYTRAC22 | NSYTRACR62 | - | | |
| - | NSYTRAC22 | NSYTRACR102 | - | | |
| - | NSYTRAC162 | NSYTRACR162 | - | | |
| - | NSYTRAC23 | NSYTRACR23 | NSYTRACPK22 | | |
| - | NSYTRAC23 | - | - | | |
| - | - | NSYTRACR24 | NSYTRACPK23 | | |
| - | - | - | - | | |
| - | NSYTRACED24 | Included | - | | |
| - | Included | - | - | | |
| - | Included | - | - | | |
| - | Included | - | - | | |
| - | Included | Included | NSYTRACR42 | | |
| - | NSYTRACT22 | - | - | | |
| - | NSYTRACT22 | - | - | | |
| - | NSYTRACT22 | - | - | | |

| Cable ends compatible with all technologies | |
|---|---|
| Wires corss section area | References |
| 0.5 mm² | DZ5CE005 |
| | DZ5CA005 |
| 0.75 mm² | DZ5CE007 |
| | DZ5CA007 |
| 1 mm² | DZ5CE010 |
| | DZ5CA010 |
| 1.5 mm² | DZ5CE015 |
| | DZ5CA015 |
| 2.5 mm² | DZ5CE025 |
| | DZ5CA025 |
| 4 mm² | DZ5CE042 |
| | DZ5CA042 |
| 6 mm² | DZ5CE062 |
| | DZ5CA062 |
| 10 mm² | DZ5CE102 |
| | DZ5CA102 |
| 16 mm² | DZ5CE162 |
| | DZ5CA162 |
| 25 mm² | DZ5CE252 |
| | DZ5CA253 |
| 35 mm² | DZ5CE352 |
| | DZ5CA352 |
| 50 mm² | DZ5CE502 |
| | DZ5CA502 |

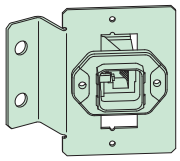
DZ5CE*** = standard insulated cable ends.
DZ5CA*** = markable insulated cable ends.

D

## Connectors

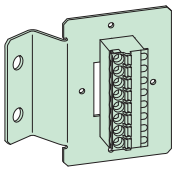
For plug & play interconnection between electrical switchboard for control and communication wires.

DD385854.ai



| RJ45 female-female connector with mounting plate | | |
|---|---|---|
| Connector type | | 8 wires RJ45; 1 Gbps |
| For ethernet cable | | CAT5e SFTP (IEC 11801) or higher |
| Degree of protection | | IP67 for direct mount |
| Dimensions (H x W x D) | (mm) | 75 x 70 x 45 |
| **Catalog number** | | **LGY4230** |

DD385855.ai

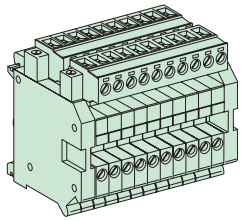


| 8P male-female connector with mounting plate | | |
|---|---|---|
| Rated operational current at 40 °C | (Ie) | 12 A |
| Rated operational voltage | (Ue) | 320 V |
| Rated impulse withstand voltage | (Uimp) | 4 kV |
| Connection method | | Push-in spring connection |
| Connection capacity | Input | 8 |
| | Output | 8 |
| Dimensions (H x W x D) | (mm) | 75 x 70 x 45 |
| Wire size | | 0.2 to 2.5 mm² |
| **Catalog number** | | **LGY4231** |

## Terminal block

For distributing auxiliary voltages in power and regulation equipment.

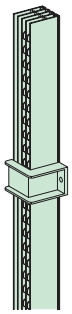
DD381644-LIN-30.eps



| Terminal block for auxiliary wiring | | | |
|---|---|---|---|
| Standards | | IEC | UL |
| Rated operational current at 40 °C | (Ie) | 12 A | 20 A |
| Rated operational voltage | (Ue) | 250 V AC | 300 V AC |
| Rated impulse withstand voltage | (Uimp) | 4 kV | |
| Connection capacity | Input | 10 (grey) | |
| | Output | 2 x 10 (grey) | |
| Dimensions (H x W x D) | (mm) | 61 x 48 x 45 | |
| Wire size | | 0.2 to 2.5 mm² | |
| Tightening torque | | 0.5 to 0.6 N.m | |
| Composition | | 3.5 18-mm modules | |
| **Catalog number** | | **LVS04228** | |

## Bus duct

DB406327.eps



| Four-pole auxiliary bus duct | | |
|---|---|---|
| | | **Duct for 4 conductors** |
| | | 166 tap-off points with Faston connectors, per linear meter |
| Rated operational current at 40° | (Ie) | 32 A |
| Rated insulation voltage | (Ui) | 660 V AC |
| Width (mm) | | 1755 |
| Composition | | Supplied with 2 end clamps and 1 lateral clamp for mounting on cable-tie supports |
| **Catalog number** | | **LVS04203** |

XB5_633_CPSCT16028A_24.eps

ZBSP2_24.ai

| USB and RJ45 ports Ø 22 | | | | | |
|---|---|---|---|---|---|
| **Description** | **Interface type** | **Connection type** | **Degree of protection** | | **Reference** |
| Panel-mounted USB and RJ45 ports in 22.5 mm hole with notch | USB interface, jack type A | USB port 3.0 A-A | IP20 | | **XB5PUSB3** |
| | | | IP65, IP67, IP69K with protection cover | | |
| | Ethernet interface, RJ45 jack | RJ45 port Cat. 6 | IP20 | | **XB5PRJ45** |
| | | | IP65, IP67, IP69K with protection cover | | |
| | Plastic protection cover IP65/IP67 | Ø 22 mm/0.866 in. USB and RJ45 ports | Black | 10 | **ZBSP1** |
| | Rigid plastic protection cover IP65/IP67 | Ø 22 mm/0.866 in. USB and RJ45 ports | Transparent | 1 | **ZBSP2** |
| | Metal protection cover IP65/IP67/IP69K | Ø 22 mm/0.866 in. USB and RJ45 ports | Silver | 1 | **ZBSP3** |

# Designing connection ⩽ 630 A

## Electrical characteristics

| Device | 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 |
| | Rated current of a circuit $I_{nc}$ (A) | | | | | | | | | | | |
| **Linergy BW** | | | | | | | | | | | | |
| Insulated bus bar Linergy BW 125 A | 134 | 125 | 129 | 120 | 125 | 116 | 120 | 111 | 116 | 106 | 111 | ■ |
| Insulated bus bar Linergy BW 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Insulated bus bar Linergy BW 250 A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| Insulated bus bar Linergy BW 400 A | 428 | 400 | 414 | 385 | 400 | 370 | 385 | 355 | 370 | 338 | 355 | ■ |
| Insulated bus bar Linergy BW 630 A | 673 | 630 | 652 | 607 | 630 | 583 | 607 | 558 | 583 | 532 | 558 | ■ |
| **Linergy BS** | | | | | | | | | | | | |
| Rear flat busbars 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Rear flat busbars 250 A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| Rear flat busbars 400 A | 428 | 400 | 414 | 385 | 400 | 370 | 385 | 355 | 370 | 338 | 355 | ■ |
| Rear flat busbars 630 A | 673 | 630 | 652 | 607 | 630 | 583 | 607 | 558 | 583 | 532 | 558 | ■ |
| **Linergy BS** | | | | | | | | | | | | |
| Multi-stage busbars 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Multi-stage busbars 250 A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| Multi-stage busbars block 400 A | 428 | 400 | 414 | 385 | 400 | 370 | 385 | 355 | 370 | 338 | 355 | ■ |
| Multi-stage busbars block 630 A | 673 | 630 | 652 | 607 | 630 | 583 | 607 | 558 | 583 | 532 | 558 | ■ |
| **Linergy BS** | | | | | | | | | | | | |
| Multi-stage distribution block 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Multi-stage distribution block 250 A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| Multi-stage distribution block 400 A | 428 | 400 | 414 | 385 | 400 | 370 | 385 | 355 | 370 | 338 | 355 | ■ |
| Multi-stage distribution block 630 A | 673 | 630 | 652 | 607 | 630 | 583 | 607 | 558 | 583 | 532 | 558 | ■ |
| **Linergy DX** | | | | | | | | | | | | |
| Quick distribution block Linergy DX 4P 125 A | 134 | 125 | 129 | 120 | 125 | 116 | 120 | 111 | 116 | 106 | 111 | ■ |
| Quick distribution block Linergy DX 4P 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Quick distribution block Linergy DX 1P 1P 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| **Linergy DP** | | | | | | | | | | | | |
| Quick distribution block Linergy DP 3P-4P 160 A | 160 | 160 | 155 | 155 | 150 | 150 | 145 | 145 | 140 | 140 | 135 | ■ |
| Quick distribution block Linergy DP 3P-4P 250 A | 267 | 250 | 259 | 241 | 250 | 231 | 241 | 222 | 231 | 211 | 222 | ■ |
| **Linergy FM** | | | | | | | | | | | | |
| Quick device feeders Linergy FM 4P 63 A | 67 | 63 | 65 | 61 | 63 | 58 | 61 | 56 | 58 | 53 | 56 | ■ |
| Quick device feeders Linergy FM 4P 80 A | 86 | 80 | 83 | 77 | 80 | 74 | 77 | 71 | 74 | 68 | 71 | ■ |
| Quick device feeders Linergy FM 4P 160 A | 171 | 160 | 166 | 154 | 160 | 148 | 154 | 142 | 148 | 135 | 142 | ■ |
| Quick device feeders Linergy FM 2P 200 A | 214 | 200 | 207 | 193 | 200 | 185 | 193 | 177 | 185 | 169 | 177 | ■ |
| Quick device feeders Linergy FM 3P 200 A | 214 | 200 | 207 | 193 | 200 | 185 | 193 | 177 | 185 | 169 | 177 | ■ |
| Quick device feeders Linergy FM 4P 200 A | 214 | 200 | 207 | 193 | 200 | 185 | 193 | 177 | 185 | 169 | 177 | ■ |
| Quick device feeders Linergy FM 4P 200 A (36 modules) | 214 | 200 | 207 | 193 | 200 | 185 | 193 | 177 | 185 | 169 | 177 | ■ |

■ Check the concordance between Linergy derating value and upstream protection device derating value.

D

# IP30/IP4X
# IP55 enclosures

# Contents

## PrismaSeT G Active IP30, IP4X



## PrismaSeT G IP55



E

# For safe and upgradeable electrical switchboards

**> 100 % reliable and in compliance with existing standards**
All the components (switchgear, splitter blocks, prefabricated connections, etc.) have been designed to work together. All switchboard configurations have been tested.

**> Optimised, upgradeable installation**
With PrismaSeT G Active, you can build the right switchboard for your customer, sized precisely to fit costs and needs.
Thanks to the organisation around functional units, the installation evolves simply while preserving its original performance.

**> Ease of setup**
The complete accessibility of all mounting and connection points facilitates assembly and cabling in the workshop. The functional units are clearly identified: operations are intuitive and reliable, and connection and checking are performed naturally.

**> Safety of people and property**
**> Continuity of service**
**> Optimisation and upgradeability**
**> Ergonomics and complete accessibility**
**> Controlled costs (installation, maintenance) and delivery times**
**> Seismic characteristics: 2,5G without accessory**

# PrismaSeT G Active IP30/IP4X enclosures - W600, W850, W300
## Presentation

Up to 630 A

Metallic indoor enclosures to compose.
Commercial buildings: hotels, offices, shops, etc.
Industry: technical room, etc.

**Enclosure delivered flat in kit form: total accessibility**
**Designed for electrical continuity**

- **630 A**
- **IP30/IP4X**
- **IK07/08/10**
- **Seismic characteristics: 2,5G**

PB115630_39.eps

Easy design with
Rapsody software
> page B-34

## Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:
- width: 595 mm, 850 and 305 mm
- height: 385 to 2030mm
- depth: 205 mm without door / 259 mm with door (including the handle : 13.5 mm)
- properties of metal enclosures *> page G-16.*

## Main characteristics

| PrismaSeT G Active IP30 - IP4X enclosures | |
|---|---|
| Rated operational current | $I_n$ = 630 A - Isc = 50 kA, Icw = 25 kA rms / 1 s, Ipk = 53 kÂ |
| Colour | White colour RAL 9003 |
| Standards conformity | EN 62208, IEC 61439-2 |
| Degree of protection | IP30 without door,<br>IP40 with door<br>IP41 with canopy + door,<br>IP43 with canopy + door + gasket |
| Degree of protection against mechanical impacts | IK07 without door<br>IK08 with door (transparent)<br>IK10 with plain door |
| Seismic characteristics | 2,5G without accessory (IEC 60068-2-57) |
| Isolation | Class 1 |
| Doors | ■ Plain or transparent, opening to right or left, 130°<br>■ Earthed by design<br>■ Supplied with a handle and keylock (key 405)<br>■ Distance behind door = 58 mm (possibility of push-buttons, lamps installation).<br>■ 2 closing points on 15- to 24-module doors<br>■ 3 closing points on 27-, 30-, 33- and 36-module doors. |
| Mounting | Surface mounting, floor-standing, flush mounting via a kit<br>*> page E-11* |

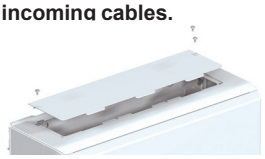
# Presentation

Up to 630 A

**3 widths available: 300/600/850**

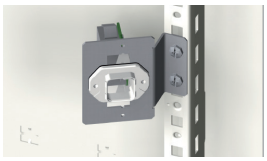
**Lengthened rear upright to facilitate the fitting of accessories (cables tying) and installation of earth, neutral terminals, etc....**

**New removable gland plate for quick on-site connection of incoming cables.**

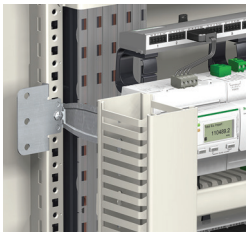


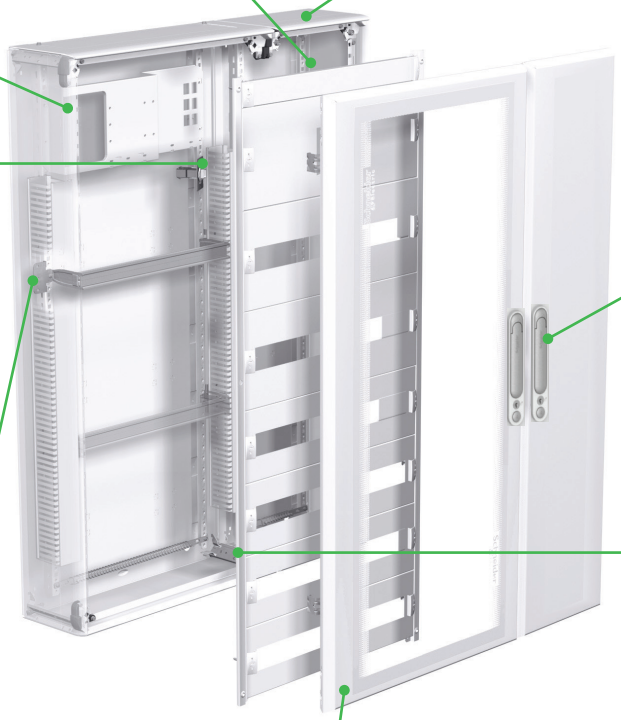
**Hooks for quick plate pre-mounting**

**Plates for connecting control, command and communication circuits**



**Trunking support plate, fixed at the same time as the modular rail**





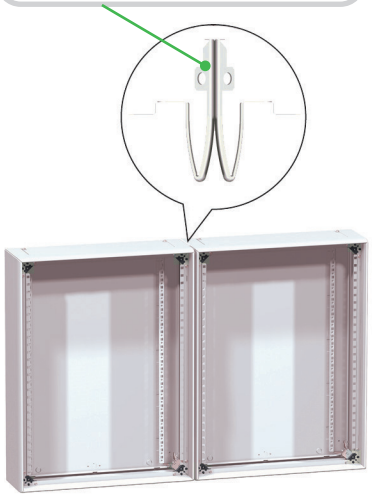
**Ergonomic handle**

**New pillar with natural positioning**

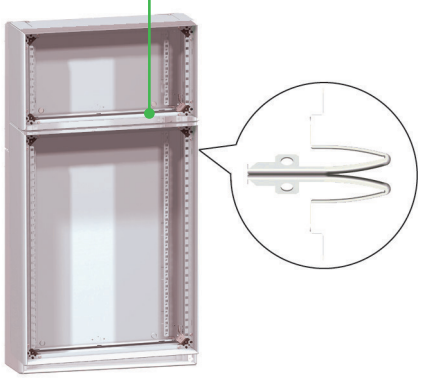
**without door: IP30**
**with door: IP40**
**plain door: IK10**
**transparent door: IK08**

**Combination: old and new versions fully compatible**

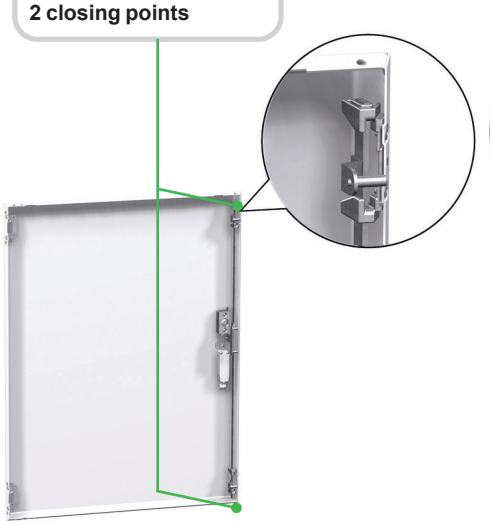
**Assembly of 2 enclosures facilitated by creating extension enclosures, including all necessary assembly parts**



**Vertical combination of 2 enclosures: simplified by creating a dedicated horizontal combination strip**



**15M to 24M doors with 2 closing points**



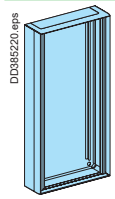
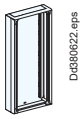
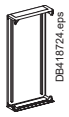
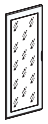
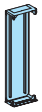
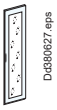
E

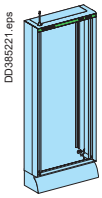
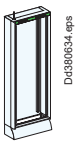
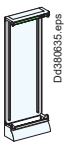
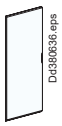
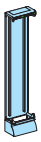
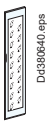
## Up to 630 A

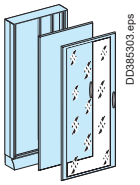
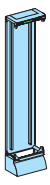
### IP30, 630 A wall-mounted and floor-standing enclosures

Reversible doors (opening 130° to left or right), supplied equipped with a handle and keylock (key 405).
Equiped with a door the IP30 enclosure reaches IP4X.

- To create switchboard combinations (horizontal combination of enclosures of the same height), use a basic enclosure plus enclosure extensions, or W300 ducts.
- Enclosure extensions are supplied with a combination kit.
- In case of floor-standing enclosure combination, cables can be run on the sides of the plinth (diameter ≤ 140 mm).

| Wall-mounted enclosures W600 | | | Extensions W600 | Doors W600 | | Ducts W300 | Doors W300 | |
|---|---|---|---|---|---|---|---|---|
|  | |  |  |  |  |  |  |  |
| Nb. of vertical modules of 50 mm | Height in mm | Enclosure | Rear + top and bottom plates + combination upright | Plain door | Transparent door | Rear + top and bottom plates + combination upright | Plain door | Transparent door |
| 6 | 330 | LVS08102 | - | LVS08122 | LVS08132 | LVS08172 | LVS08182 | - |
| 9 | 480 | LVS08103 | LVS08113 | LVS08123 | LVS08133 | LVS08173 | LVS08183 | - |
| 12 | 630 | LVS08104 | LVS08114 | LVS08124 | LVS08134 | LVS08174 | LVS08184 | - |
| 15 | 780 | LVS08105 | LVS08115 | LVS08125 | LVS08135 | LVS08175 | LVS08185 | - |
| 18 | 930 | LVS08106 | LVS08116 | LVS08126 | LVS08136 | LVS08176 | LVS08186 | - |
| 21 | 1080 | LVS08107 | LVS08117 | LVS08127 | LVS08137 | LVS08177 | LVS08187 | LVS08197 |
| 24 | 1230 | LVS08108 | LVS08118 | LVS08128 | LVS08138 | LVS08178 | LVS08188 | LVS08198 |
| 27 | 1380 | LVS08109 | LVS08119 | LVS08222 | LVS08232 | LVS08179 | LVS08282 | LVS08292 |

| Floor Standing enclosures W600 incl Wireless Panel Server (2) | | | Extensions W600 | Doors W600 | | Ducts W300 | Doors W300 | |
|---|---|---|---|---|---|---|---|---|
|  | |  |  |  |  |  |  |  |
| Nb. of vertical modules of 50 mm | Height in mm | Basic enclosure | Rear + top plates + combination upright + plinth | Plain door | Transparent door | Rear + top plates + combination upright + plinth | Plain door | Transparent door |
| 27 | 1580 | LVS08202D | LVS08212 | LVS08222 | LVS08232 | LVS08272 | LVS08282 | LVS08292 |
| 30 | 1730 | LVS08203D | LVS08213 | LVS08223 | LVS08233 | LVS08273 | LVS08283 | LVS08293 |
| 33 | 1880 | LVS08204D | LVS08214 | LVS08224 | LVS08234 | LVS08274 | LVS08284 | LVS08294 |
| 36 | 2030 | LVS08205D | LVS08215 | LVS08225 | LVS08235 | LVS08275 | LVS08285 | LVS08295 |

| Floor Standing enclosures W850 incl Wireless Panel Server (2) | | | Doors W850 | | Ducts W300 | Doors W300 | |
|---|---|---|---|---|---|---|---|
|  | |  |  |  |  |  |  |
| Nb. of vertical modules of 50 mm | Height in mm | Basic enclosure | Plain door | Transparent door | Rear + top plate + combination upright + plinth | Plain door | Transparent door |
| 27 | 1580 | LVS08242D | LVS08252 | LVS08262 | LVS08272 | LVS08282 | LVS08292 |
| 30 | 1730 | LVS08243D | LVS08253 | LVS08263 | LVS08273 | LVS08283 | LVS08293 |
| 33 | 1880 | LVS08244D | LVS08254 | LVS08264 | LVS08274 | LVS08284 | LVS08294 |
| 36 | 2030 | LVS08245D | LVS08255 | LVS08265 | LVS08275 | LVS08285 | LVS08295 |

(2) Floor Standing Enclosure including Wireless Panel Server

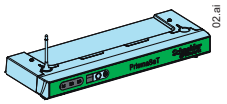
Switchgear on the door > page E-11
Spare parts > page E-14
Partitionning > page C-45

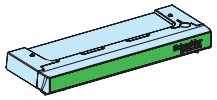
# Wall-mounted and floor-standing enclosures

## Accessories

Up to 630 A

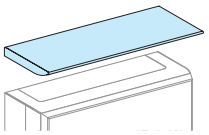
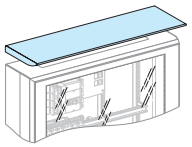
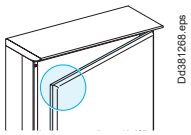
### Accessory for Wireless communication - For Wall Mounted G IP30/4x

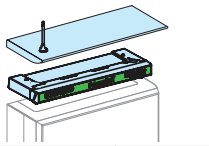
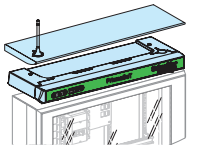
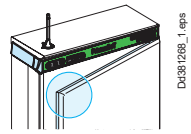


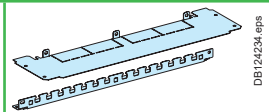
| Assembly | By replacing the standard roof top | | By replacing the standard roof top | |
|---|---|---|---|---|
| Description | W300 Green roof with wireless panel server IP30 | W600 Green roof with wireless panel server IP30 | W300 Basic Green roof IP30 for extensions | W600 Basic Green roof IP30 for extensions |
| Commercial References | **LVS08884D** | **LVS08880D** | **LVS08886** | **LVS08893** |

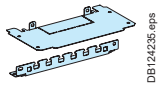
## Accessories to increase the IP value

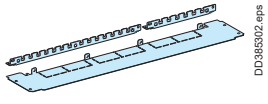
| | Accessories to increase the IP value from IP30 to IP41 - Wall mounted enclosure without Wireless panel server | | | | | | | Gasket for the door to increase the IP value from IP41 to IP43 |
|---|---|---|---|---|---|---|---|---|
| |   | | | | |   | |   |
| **Used with** | **1 enclosure W = 600** | **1 enclosure + 1 duct W600 + 300 (1)** | **2 enclosures W600 + 600** | **1 enclosure + 2 ducts W600 + 300 + 300 (2)** | **2 enclosures + 1 duct W600 + 600 + 300(1)** | **1 floor-standing enclosure W = 850** | **1 floor-standing enclosure + 1 duct W850 + 300 (1)** | **Enclosures or duct from 6 to 36 modules** |
| |  |  |  |  |  |  |  | |
| Catalog numbers | **LVS08830** | **LVS08832** | **LVS08831** | **LVS08827** | **LVS08833** | **LVS08836** | **LVS08837** | **LVS08841 (3)** |
| Total length | 600 | 900 | 1200 | 1200 | 1500 | 850 | 1150 | 5300 |
| Designation | The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP41. When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. | | | | | | | |

| | Accessories to increase the IP value from IP30 to IP41 | | | | | | | Gasket for the door to increase the IP value from IP41 to IP43 |
|---|---|---|---|---|---|---|---|---|
| |   | | | | |   | |   |
| **Used with** | **1 enclosure W = 600** | **1 enclosure + 1 duct W600 + 300 (1)** | **2 enclosures W600 + 600** | **1 enclosure + 2 ducts W600 + 300 + 300 (2)** | **2 enclosures + 1 duct W600 + 600 + 300(1)** | **1 floor-standing enclosure W = 850** | **1 floor-standing enclosure + 1 duct W850 + 300 (1)** | **Enclosures or duct from 6 to 36 modules** |
| |  |  |  |  |  |  |  | |
| Catalog numbers | **LVS08842** | **LVS08843** | **LVS08844** | **LVS08845** | **LVS08846** | **LVS08847** | **LVS08848** | **LVS08841 (3)** |
| Total length | 600 | 900 | 1200 | 1200 | 1500 | 850 | 1150 | 5300 |
| Designation | The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP41. When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. | | | | | | | |

### Metal gland plates for plinth




| Used with | Floor-standing enclosure W600 | Duct W300 | Floor-standing enclosure W850 |
|---|---|---|---|
| Catalog numbers | **LVS08887** | **LVS08888** | **LVS08889 (4)** |
| Designation | Between the plinth and the bottom of a floor-standing enclosure or duct, for ensuring IP20. | | |

Spare parts > *page E-14* Dimensions > *page E-17*

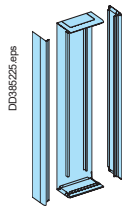
**(1)** Whatever the duct position. **(2)** Ducts on the sides. **(3)** x2 for width 850 mm. **(4)** Not compatible with 36-module height.

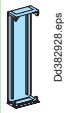
# Wall-mounted and floor-standing enclosures

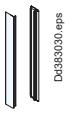
## Accessories

Up to 630 A

### Wall-mounted enclosures W300



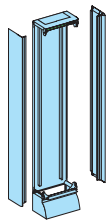



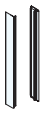



| Nb. of vertical modules of 50 mm | Height in mm | Rear + top plate + plinth | Side panels | Plain door | Transparent door |
|---|---|---|---|---|---|
| **6** | 330 | **LVS08172** | 2 x **LVS01040** | **LVS08182** | - |
| **9** | 480 | **LVS08173** | 2 x **LVS01041** | **LVS08183** | - |
| **12** | 630 | **LVS08174** | 2 x **LVS01042** | **LVS08184** | - |
| **15** | 780 | **LVS08175** | 2 x **LVS01043** | **LVS08185** | - |
| **18** | 930 | **LVS08176** | 2 x **LVS01044** | **LVS08186** | - |
| **21** | 1080 | **LVS08177** | 2 x **LVS01045** | **LVS08187** | **LVS08197** |
| **24** | 1230 | **LVS08178** | 2 x **LVS01046** | **LVS08188** | **LVS08198** |
| **27** | 1380 | **LVS08179** | 2 x **LVS01035** | **LVS08282** | **LVS08292** |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |

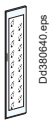
### Floor-standing enclosures W300












| Nb. of vertical modules of 50 mm | Height in mm | Rear + top plate + plinth | Side panels | Plain door | Transparent door |
|---|---|---|---|---|---|
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| **27** | **1580** | **LVS08272** | 2 x **LVS01035** | **LVS08282** | **LVS08292** |
| **30** | **1730** | **LVS08273** | 2 x **LVS01034** | **LVS08283** | **LVS08293** |
| **33** | **1880** | **LVS08274** | 2 x **LVS01033** | **LVS08284** | **LVS08294** |
| **36** | **2030** | **LVS08275** | 2 x **LVS01047** | **LVS08285** | **LVS08295** |

Spare parts *> page E-14* Dimensions *> page E-17*

**(1)** Whatever the duct position. (2) Ducts on the sides.
**(3)** x2 for width 850 mm.
**(4)** Not compatible with 36-module height.

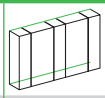
# Wall-mounted and floor-standing enclosures

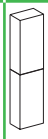
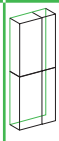
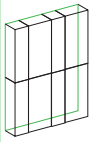
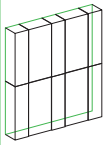
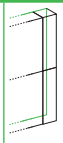
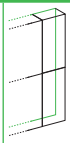
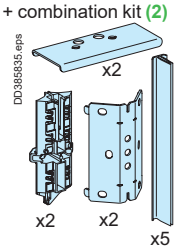
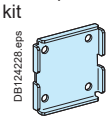
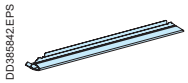
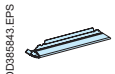
## Combination kits

Up to 630 A

### Combinations

To make the combination more rigid, particularly during transport, it is mandatory to use a set of cross-members secured to the rear of the switchboard.
A combination kit is delivered with each duct and each enclosure extension.
It is sometime necessary to use a combination kit (Catalog number LVS08816) in addition to those already delivered.

| Combination kits | Horizontal | | | | | |
|---|---|---|---|---|---|---|
| Possible combinations |  |  |  |  |  |  |
| **For enclosure W600/W300** | **1 wall-mounted enclos. + 1 duct** | **1 wall-mounted enclos. + 2 ducts** | **1 wall-mounted enclos. + 1 enclos. extension** | **1 wall-mounted enclos. + 1 duct + 1 enclos. extension** | **1 wall-mounted enclos. + 2 ducts + 1 enclos. extension** | **1 wall-mounted enclos. + 3 ducts + 1 enclos. extension** |
| Lifting/reinforcement cross-members width | 900 | 1200 | 1200 | 1500 | 1800 | 2100 |
| Set of two lifting/reinforcement cross-members | **LVS08812** | **LVS08811** | **LVS08811** | **LVS08813** | **LVS08814** | **LVS08826** |
| **For floor-standing enclosure W850/W300** | **1 fl. standing enclos. + 1 duct** | **1 fl. standing enclos. + 2 ducts** | | | | |
| Lifting/reinforcement cross-members width | 1150 | must be made | - | - | - | - |
| Set of two lifting/reinforcement cross-members or vertical uprights | **LVS08809** | **-** | **-** | **-** | **-** | **-** |

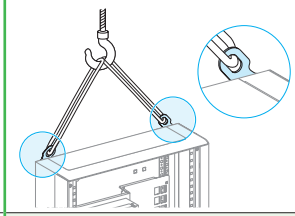
| Combination kits | Vertical | Multiple | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Possible combinations |  |  |  |  |  |  |  |  |
| **For enclosure W600** | **2 wall-mounted enclos.** | **2 enclos. + 2 ducts** | **2 enclos. + 2enclos. extension** | **2 enclos. + 2enclos. extension + 2 ducts** | **2 enclos. + 2enclos. extension + 4 ducts** | **2 enclos. + 2enclos. extension + 6 ducts** | **2 additional ducts** | **2 additional enclosures** |
| Lifting/reinforcement cross-members width | - | 900 | 1200 | 1500 | 1800 | 2100 | - | - |
| Set of two lifting/ reinforcement cross-members | **-** | **LVS08812** | **LVS08811** | **LVS08813** | **LVS08814** | **LVS08826** | must be made | must be made |
| Set of two vertical uprights (1) | **LVS08817** | **LVS08817** | **LVS08817** | **LVS08817** | **LVS08817** | **LVS08817** | **LVS08817** | **LVS08817** |
| + combination kit (2)   | **LVS08816** | **LVS08816** | **LVS08816** | **LVS08816** | **LVS08816** | **LVS08816** | **LVS08816** | **LVS08816** |
| + multiple combination kit   | **-** | **LVS08818** | **LVS08818** | 2 x **LVS08818** | 3 x **LVS08818** | 4 x **LVS08818** | **+ LVS08818** | **+ LVS08818** |
| + 2 horizontal combination strip W=600   | **LVS08882** | **LVS08882** | 2 x **LVS08882** | 2 x **LVS08882** | 2 x **LVS08882** | 2 x **LVS08882** | **-** | **LVS08882** |
| + 2 horizontal combination strip W=300   | **-** | **LVS08885** | **-** | **LVS08885** | 2 x **LVS08885** | 3 x **LVS08885** | **+ LVS08885** | **-** |

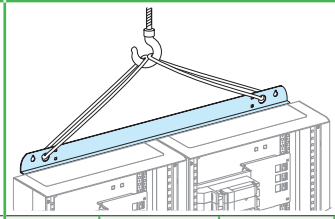
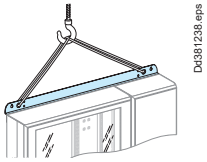
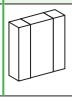
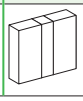
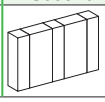
(1) For more than 33 combined modules, these vertical uprights (1676 mm) are mandatory.
(2) Floor standing enclosure combination kit (LVS**08815**) > *page E-14*

Up to 630 A

## Lifting accessories

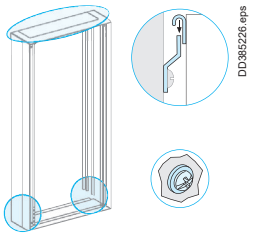
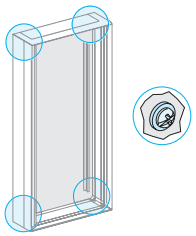
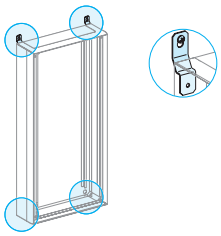
The lifting rings are used to move a single wall-mounted or floor-standing enclosure.
For combined enclosures, use the lifting/reinforcement cross-members (see below).

| | 2 lifting rings for single wall-mounted or floor standing enclosures |
|---|---|
| |  |
| Catalog numbers | **LVS08801** |
| Characteristics |  |
| | Set of two lifting rings |

| | 2 Lifting/reinforcement cross-members for combined enclosures W600 + W300 | | | | | | 2 Lifting/reinforcement cross-members for combination wall-mounted enclosure W850 + duct W300 |
|---|---|---|---|---|---|---|---|
| |  | | | | | |   |
| Catalog numbers | **LVS08812** | **LVS08811** | **LVS08811** | **LVS08813** | **LVS08814** | **LVS08826** | **LVS08809** |
| Characteristics |  |  |  |  |  |  | |
| | Have 2 types of holes: for lifting and for mounting on a wall | | | | | | |

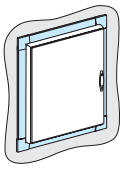
## Installation possibilities

Switchboards can be mounted on a wall in three manners: with the hook-on rail system, via the inside of the enclosure or using external wall-mounted brackets.
Combined enclosures can be mounted using the lifting/reinforcement cross-members set of two lifting/reinforcement cross-members.

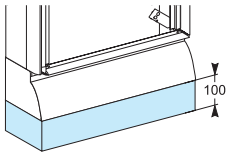
| | Hook-on rail system | Mounting via the inside | Mounting using the external wall-mounted brackets |
|---|---|---|---|
| |   |  |  |
| Catalog numbers | Delivered with the enclosure | - | **LVS08804** |
| Characteristics | The enclosure comes with 2 cross-members secured to the back of the enclosure (top and bottom) and a support rail (with levelling adjustment) for screw-mounting on the wall. The enclosure is easily mounted on the hook-on rail system.<br>End the fixation with 2x 8mm diameter screws, at the bottom of enclosure | The enclosure can be mounted through the spacers in the 4 holes provided on the enclosure using 8 mm diameter screws (2 knockouts can be removed if necessary to provide 2 other holes). | 4 external wall-mounted brackets. |

Up to 630 A

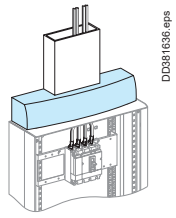
## Flush-mounting kit

| For wall-mounted enclosure | | |
|---|---|---|
| |  | |
| Catalog numbers | **LVS08819** | **LVS08820** |
| Characteristics | 6 to 18 modules<br>PVC frame | 21 to 27 modules<br>PVC frame |

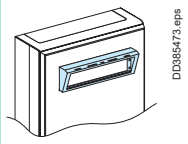
## Plinth raiser

| 100 mm for floor-standing enclosure | | | |
|---|---|---|---|
| |  | | |
| Catalog numbers | **LVS08805** | **LVS08806** | **LVS08807** |
| Characteristics | For basic floor-standing enclosure or extension.<br>W = 600 mm | For basic floor-standing enclosure or extension.<br>W = 850 mm | For a duct.<br>W = 300 mm |

## Trunking spreader

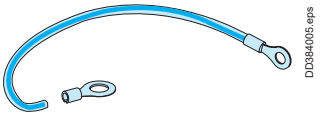
| Trunking spreader | |
|---|---|
| |  |
| Catalog number | **LVS08824** |
| Characteristics | For a professional-looking connection between the trunking and the enclosure.<br>Can be installed at the top or bottom.<br>The spreader is marked for cut-outs for standard trunking sizes.<br>The maximum capacity is two 250 x 80 mm trunking sections. |

## Mounting of devices on doors

| Type | Plain door with cut-out W600, W850 |
|---|---|
| |  |
| Catalog numbers | Plain door + **LVS03928** |
| Characteristics | Inclined visor by 30 °.<br>Allows mounting of measurement, inspection, indication 72 x 72, 96 x 96, Ø 16 or Ø 22 mm, 45 x 45 devices. *See page C-38*. |

## Earthing braid

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

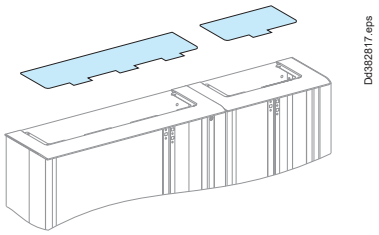
| | Earthing braid, 6 mm² | Earthing wire, 6 mm² |
|---|---|---|
| |  |  |
| Catalog numbers | **LVS08910** | **LVS08911** |
| Characteristics | Equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other.<br>L = 200 mm | Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other.<br>L = 200 mm |

E

# Wall-mounted and floor-standing enclosures

## Gland plates

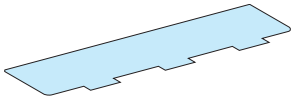
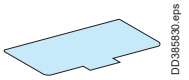
Up to 630 A

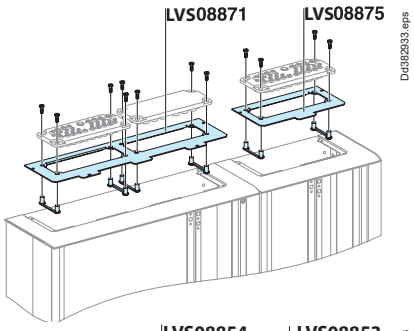



### Plain metal gland plates

Enclosures (wall-mounted, floor-standing, ducts) are supplied with a plastic gland plate installed on the top or bottom for wall-mounted enclosures and the top for floor-standing enclosures. For some connections needs, the existing plastic gland plate can be replaced by this metal gland plate.

**Plain metal gland plates**

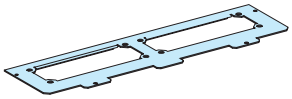
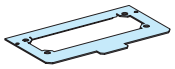
| |   |   |
|---|---|---|
| **Used with** | **Wall-mounted or floor-standing enclos. W600 / 850 mm** | **Duct W300** |
| Catalog numbers | **LVS08870** | **LVS08874** |

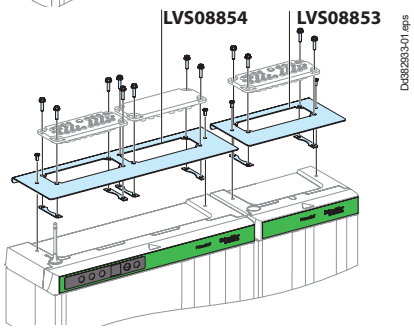



### Interface metal plates with cut-outs

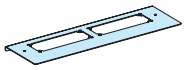
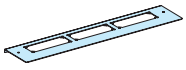
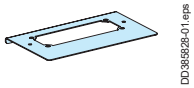
The enclosures (wall mounted and floor standing enclosures and ducts) are supplied with a plastic gland plate fitted on the top or bottom plate. This plastic gland plate can be replaced by an interface plate with cut-outs for special cable entry systems made of an insulating material (plain, with knockouts or membrane-type).

**Metal interface plates with cut-outs**

| |   |   |
|---|---|---|
| **Used with** | **Wall-mounted or floor-standing enclos. W600 / 850 mm** | **Duct W300** |
| Catalog numbers | **LVS08871** | **LVS08875** |



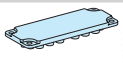
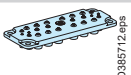
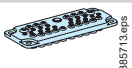
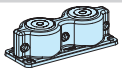

**Metal interface plates with cut-outs**

| |   |   |   |
|---|---|---|---|
| **Used with** | **W600** | **W850** | **W300** |
| Catalog numbers | **LVS08854** | **LVS08855** | **LVS08853** |

### Gland plates : plain, with knockouts or membrane-type

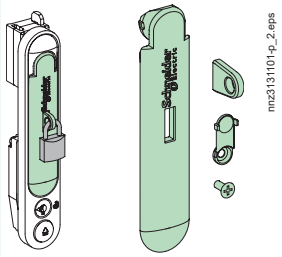
Mounting on the interface plates ref LVS08871, LVS08875, LVS08853, LVS08854 or LVS08855.

**Gland plates**

| | plain | membrane-type | | |
|---|---|---|---|---|
| |   |   |   |   |
| Catalog numbers | **LVS08881** | **LVS08872** | **LVS08896** | **LVS08897** |
| Ø 3 mm | - | - | 8 | - |
| Ø 3 to 7 mm | - | 4 | 4 | - |
| Ø 5 mm | - | - | 4 | - |
| Ø 7 to 12 mm | - | - | 20 | - |
| Ø 7 to 14 mm | - | 8 | 4 | - |
| Ø 7 to 18 mm | - | - | 2 | - |
| Ø 10 to 14 mm | - | 12 | - | - |
| Ø 14 to 20 mm | - | 4 | - | - |
| Ø 20 to 26 mm | - | 1 | - | - |
| Ø 17 to 30 mm | - | - | 1 | - |
| Ø 8 to 67 mm | - | - | - | 2 |
| **Total number of entries** | - | **29** | **43** | **2** |

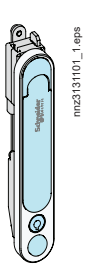
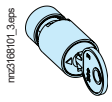
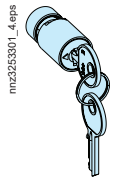
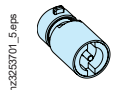
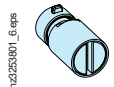
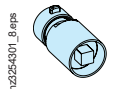
Up to 630 A

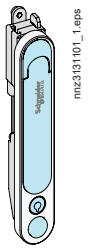
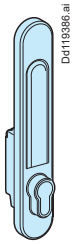
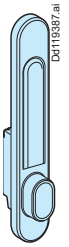
## Door handles and padlocking

| | Padlocking |
|---|---|
| |  |
| Catalog numbers | **LVS07938** |
| Characteristics | For new rotary handle |

## Barrel locks, inserts

**Rotary handle barrel locks and inserts**

| | Characteristics | | Catalog numbers |
|---|---|---|---|
|   | 1 key no. 405 | | **LVS07940** |
|  | 2 keys no. 455 | | **LVS07941** |
| | 2 keys no. 1242E | | **LVS07942** |
| | 2 keys no. 3113A | | **LVS07943** |
| | 2 keys no. 2433A | | **LVS07944** |
| | 2 keys no.2432E | | **LVS07956** |
|  | DIN double bar insert | | **LVS07945** |
|  | Screwdriver slot insert | | **LVS07946** |
|  | Male triangle insert | 8 mm | **LVS07949** |
|  | Male square insert | 6 mm | **LVS07951** |
| | | 8 mm | **LVS07953** |

| Rotary Handle | Handle | |
|---|---|---|
| **RAL 7016 handle** | **EURO handle - RAL 9003** | **ASSA/ABLOY handle - RAL 9003** |
|  |  |  |
| Supplied with barrel lock (key no. 405) RAL 7016 | Supplied without barrel | |
| **LVS07931** | **LVS07932** | **LVS07933** |

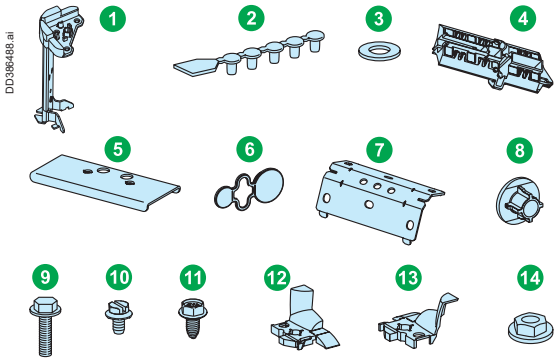
(1) Can be adapted to the new rotary handle on PrismaSeT G Active IP30 enclosures.

# Wall-mounted and floor-standing enclosures

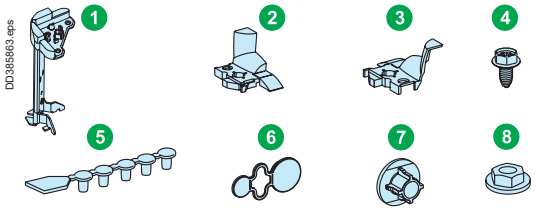
## Spare parts

Up to 630 A

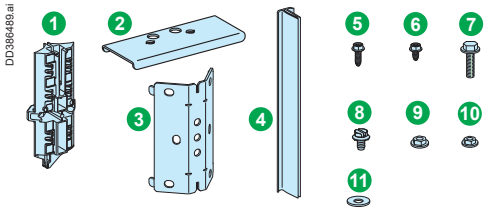
## Accessories




| Duct accessories | LVS01036 |
|---|---|
| 1 | 4 pillars |
| 2 | 1 earthing braid plug |
| 3 | 4 washers |
| 4 | 2 combination uprights |
| 5 | 2 short combination crossbars |
| 6 | 2 base blanking plugs |
| 7 | 2 association fasteners |
| 8 | 4 spacers |
| 9 | 2 screws with flange |
| 10 | 2 screws |
| 11 | 1 self-threading screw |
| 12 | 2 A-angle parts |
| 13 | 2 B-angle parts |
| 14 | 6 nuts HX grooved |

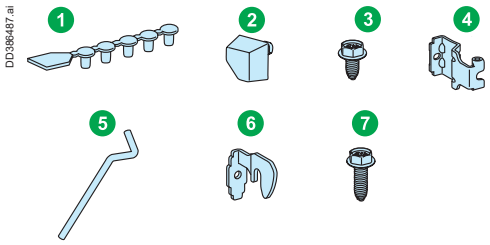



| Wall mounted and floor standing enclosures accessories | LVS01018 |
|---|---|
| 1 | 4 pillars |
| 2 | 2 A-angle parts |
| 3 | 2 B-angle parts |
| 4 | 8 self threading screws |
| 5 | 1 earthing braid plug |
| 6 | 4 base blanking plugs |
| 7 | 4 spacers |
| 8 | 4 nuts HX grooved |




| G IP30 floor standing enclosure combination kit | LVS08815 |
|---|---|
| 1 | 1 combination upright |
| 2 | 1 short combination crossbar + 2 screws + 2 nuts |
| 3 | 2 association fasteners |
| 4 | 7 plastic protectors |
| 5 | 2 self-threading screws |
| 6 | 3 self-threading screws |
| 7 | 1 screw with flange |
| 8 | 1 screw |
| 9 | 3 nuts |
| 10 | 3 nuts |
| 11 | 2 washers |

## Door accessories




| Wall mounted and floor standing enclosures closing accessories | LVS01032 |
|---|---|
| 1 | 1 earthing braid plug |
| 2 | 2 door stops |
| 3 | 3 self threading screws |
| 4 | 3 fixed hinges |
| 5 | 3 hinge pins |
| 6 | 3 stop bolts |
| 7 | 4 self threading screws |

## Connectivity accessories

| Connectivity accessories | |
|---|---|
| Cable Extender for LoRa Antenna | SMT10015 |
| Cables for Wireless Panel Server 2m 3P + N | SMT10016 |
| PrismaSeT Wireless Panel Server electronic part (without cables) | SMT10019 |

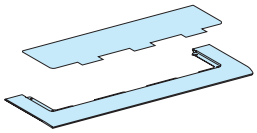
# Wall-mounted and floor-standing enclosures

## Spare parts

Up to 630 A

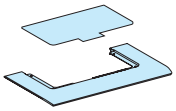
### Metal plates with cut-outs + plastic gland plates

Dd385832.eps



| | |
|---|---|
| W600 | LVS08880 |

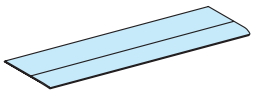
Dd385834.eps



| | |
|---|---|
| W300 | LVS08884 |

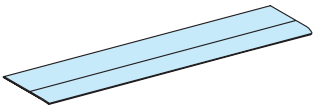
### Metal top/bottom plate (IP30)

DD384488.EPS



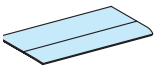
| | |
|---|---|
| W600 | LVS01017 |

DD385831.EPS



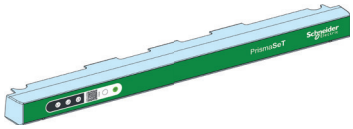
| | |
|---|---|
| W850 | LVS01070 |

DD384490.EPS

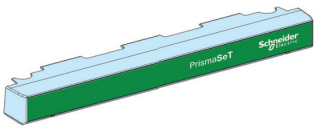


| | |
|---|---|
| W300 | LVS01039 |

### Green Bar



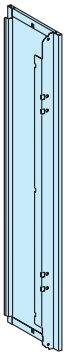

| | |
|---|---|
| W850 | LVS01129 |




| | |
|---|---|
| W850 | LVS01125 |

### Side (IP30)

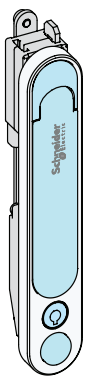
DD384491.EPS



| | |
|---|---|
| 6 modules | LVS01040 |
| 9 modules | LVS01041 |
| 12 modules | LVS01042 |
| 15 modules | LVS01043 |
| 18 modules | LVS01044 |
| 21 modules | LVS01045 |
| 24 modules | LVS01046 |
| 27 modules | LVS01035 |
| 30 modules | LVS01034 |
| 33 modules | LVS01033 |
| 36 modules | LVS01047 |

### PrismaSeT G Rotary Handle Spare Parts — LVS01218

mm23131101_1.eps




1. Handle housing block
2. G adapter link part
3. Screw, pan head, M5x8
4. The key of 405
5. 1 crosshead screw
6. Omega fix part
7. Driver block
8. Hex locking screw, M6x10
9. Self tapping screw, pan head, ST3.5x15

E

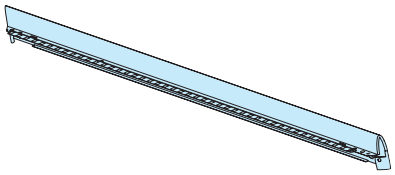
# Wall-mounted and floor-standing enclosures

## Spare parts

Up to 630 A

### Central uprights (IP30)

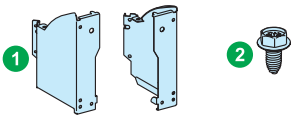
DD384492.EPS



| | |
|---|---|
| Association profile 9 modules | **LVS01063** |
| Association profile 12 modules | **LVS01064** |
| Association profile 15 modules | **LVS01065** |
| Association profile 18 modules | **LVS01066** |
| Association profile 21 modules | **LVS01067** |
| Association profile 27 modules | **LVS01030** |
| Association profile 30 modules | **LVS01029** |
| Association profile 33 modules | **LVS01028** |
| Association profile 36 modules | **LVS01069** |

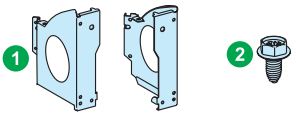
### Plinth

DD384494.EPS



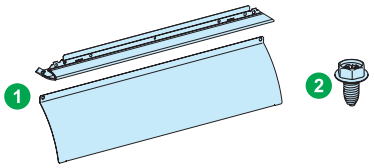
| | |
|---|---|
| **Accessories for plinth** | **LVS01051** |
| 1 Left drilled base bracket + right drilled base bracket | |
| 2 4 self-threading screws | |

DD384493.EPS



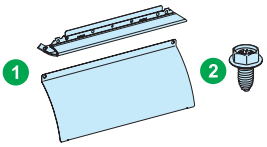
| | |
|---|---|
| **Floor standing enclosures** | **LVS01050** |
| 1 Left base bracket + right base bracket | |
| 2 4 self-threading screws | |

DD384495.EPS



| | |
|---|---|
| **Plinth front, 600 mm** | **LVS01052** |
| 1 Base cover + plinth | |
| 2 2 self-threading screws | |

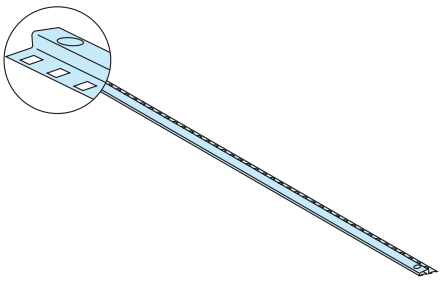
DD384496.EPS



| | |
|---|---|
| **Plinth front, 300 mm** | **LVS01053** |
| 1 Base cover + plinth | |
| 2 2 self-threading screws | |

### Front cover support uprights (IP30)

DD384500.EPS



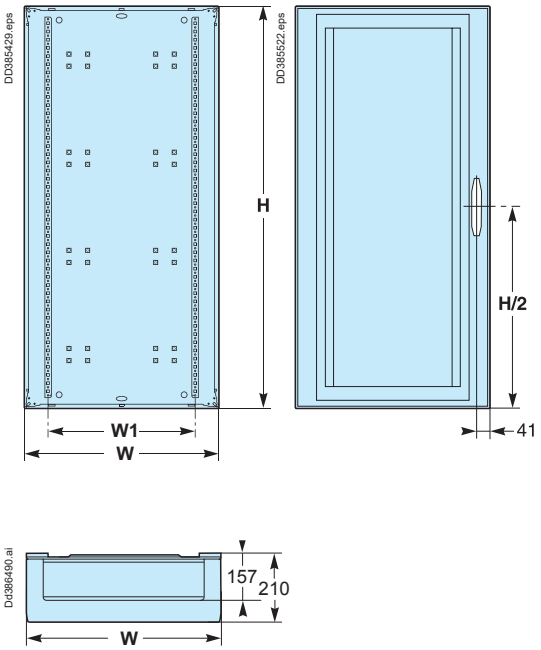
| | |
|---|---|
| 18 modules | **LVS01254** |
| 27 modules | **LVS01257** |
| 30 modules | **LVS01258** |
| 33 modules | **LVS01259** |
| 36 modules | **LVS01261** |

# Wall-mounted and floor-standing enclosures

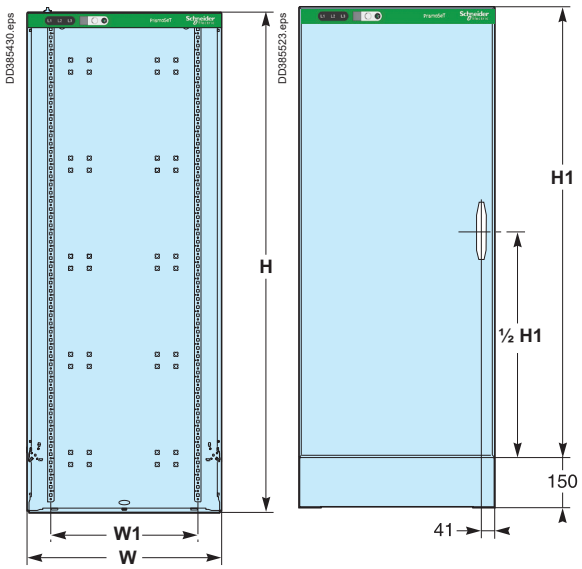
## Dimensions

Up to 630 A

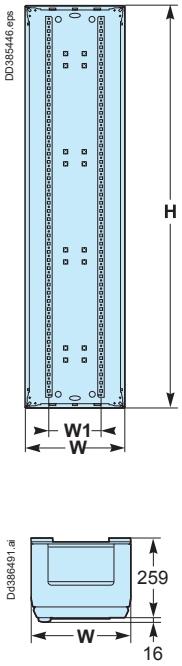
### Enclosures W600 – 6 to 27 mod.




### Enclosures W600 – 27 to 36 mod.



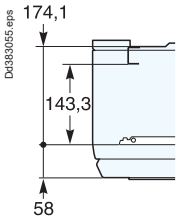

### Ducts W300



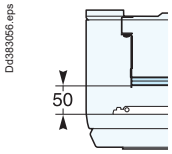

| | Nb. of vertical modules | Height | | Width | | | | | | | Depth | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | H | H1 | W600 | | W850 | | | W300 | | W/O door | with door |
| | | | | W | W1 | W | W1 | W2 | W | W1 | | |
| Wall-mounted enclosures / duct | 6 | 330 | - | 595 | 450 | - | - | - | 305 | 200 | 210 | 259 |
| | 9 | 480 | - | 595 | 450 | - | - | - | 305 | 200 | 210 | 259 |
| | 12 | 630 | - | 595 | 450 | - | - | - | 305 | 200 | 210 | 259 |
| | 15 | 780 | - | 595 | 450 | - | - | - | 305 | 200 | 210 | 259 |
| | 18 | 930 | - | 595 | 450 | - | - | - | 305 | 200 | 210 | 259 |
| | 21 | 1080 | - | 595 | 450 | - | - | - | 305 | 200 | 210 | 259 |
| | 24 | 1230 | - | 595 | 450 | - | - | - | 305 | 200 | 210 | 259 |
| | 27 | 1380 | - | 595 | 450 | - | - | - | 305 | 200 | 210 | 259 |
| Floor-standing enclosures / duct | 27 | 1580 | 1430 | 595 | 450 | 845 | 450 | 200 | 305 | 200 | 210 | 259 |
| | 30 | 1730 | 1580 | 595 | 450 | 845 | 450 | 200 | 305 | 200 | 210 | 259 |
| | 33 | 1880 | 1730 | 595 | 450 | 845 | 450 | 200 | 305 | 200 | 210 | 259 |
| | 36 | 2030 | 1880 | 595 | 450 | 845 | 450 | 200 | 305 | 200 | 210 | 259 |

## Depth behind front plate

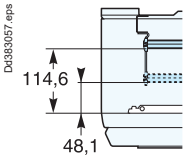
### Functional uprights



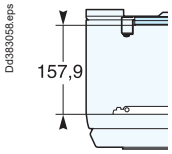

### Modular rails



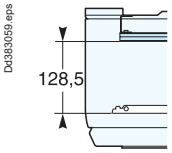

Fixed rail
Cat. no. LVS**03001** or LVS**03010**




Adjustable rail
Cat. no. LVS**03002** or LVS**03011**

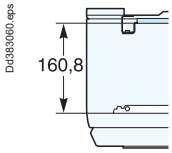



Recessed rail
Cat. no. LVS**03003**

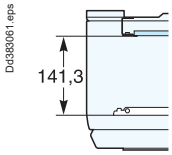



Rear rail
Cat. no. LVS**03004**

### Slotted mounting plate

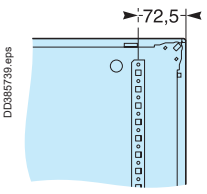



Recessed mounting plate
Cat. no. LVS**03171**, LVS**03172**, LVS**03173**, LVS**03176**, LVS**03177** or LVS**03178**

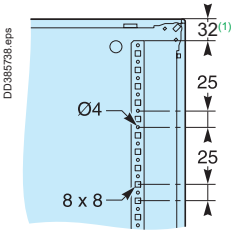



Flat plate
Cat. no. LVS**03170** or LVS**03175**

### Cable running




### Rear upright




(1) 57 mm for height 36 modules

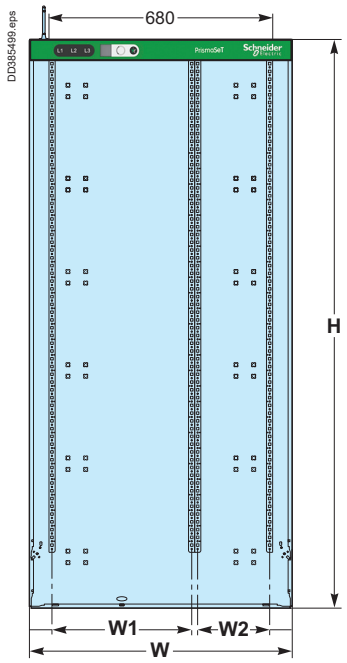
# PrismaSeT G Active IP30/IP4X enclosures - W600, W850, W300

## Wall-mounted and floor-standing enclosures

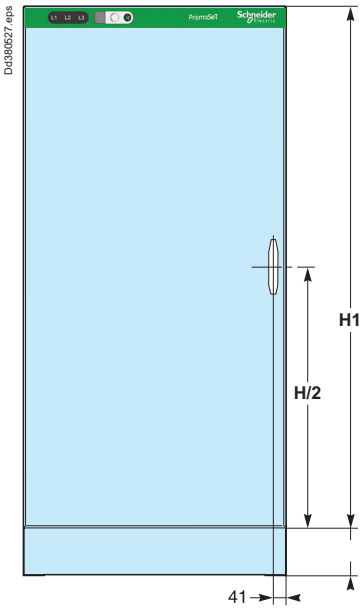
### Dimensions

Up to 630 A

### Enclosures W850

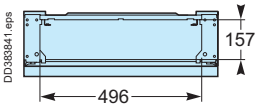



### Door

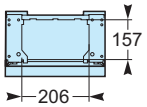



### Cable entry

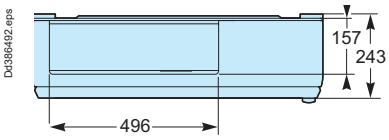
#### W600



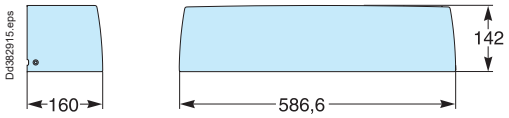

#### W300




#### W850

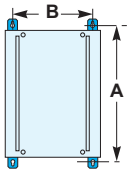


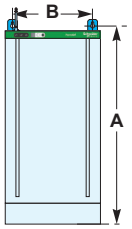

### Trunking spreader




## Wall-mounted installation

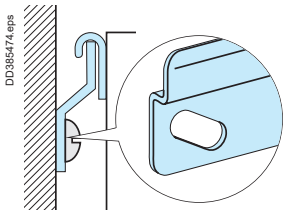
### External brackets



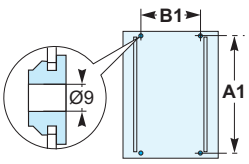



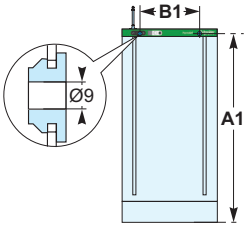

| | Nb. of vertical modules | A | B | | |
|---|---|---|---|---|---|
| | | | W600 | W850 | W300 |
| Wall-mounted enclosures | 6 | 430 | 545 | 795 | 255 |
| | 9 | 580 | 545 | 795 | 255 |
| | 12 | 730 | 545 | 795 | 255 |
| | 15 | 880 | 545 | 795 | 255 |
| | 18 | 1030 | 545 | 795 | 255 |
| | 21 | 1180 | 545 | 795 | 255 |
| | 24 | 1330 | 545 | 795 | 255 |
| | 27 | 1480 | 545 | 795 | 255 |
| Floor-standing enclosures | 27 | 1580 | 545 | 795 | 255 |
| | 30 | 1730 | 545 | 795 | 255 |
| | 33 | 1880 | 545 | 795 | 255 |
| | 36 | 2030 | 545 | 795 | 255 |

### Cyma system




### Screws

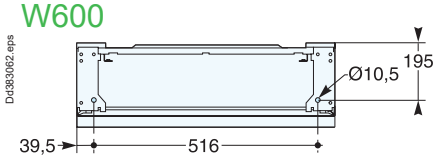


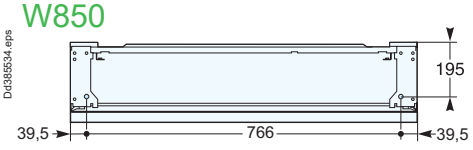

| | Nb. of vertical modules | A1 | B1 | | |
|---|---|---|---|---|---|
| | | | W600 | W850 | W300 |
| Wall-mounted enclosures | 6 | 270 | 381 | 631 | 91 |
| | 9 | 420 | 381 | 631 | 91 |
| | 12 | 570 | 381 | 631 | 91 |
| | 15 | 720 | 381 | 631 | 91 |
| | 18 | 870 | 381 | 631 | 91 |
| | 21 | 1020 | 381 | 631 | 91 |
| | 24 | 1170 | 381 | 631 | 91 |
| | 27 | 1320 | 381 | 631 | 91 |
| Floor-standing enclosures | 27 | 1500 | 381 | 631 | 91 |
| | 30 | 1650 | 381 | 631 | 91 |
| | 33 | 1800 | 381 | 631 | 91 |
| | 36 | 1950 | 381 | 631 | 91 |

### Enclosure plinth fixation

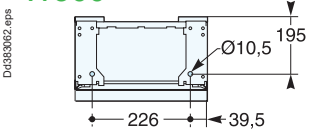
#### W600




#### W850




#### W300




MIREFLET

Up to 630 A

# Great capability for meeting the requirements of your installation



**> 100 % reliable and in compliance with existing standards**
All the components (switchgear, splitter blocks, prefabricated connections, etc.) have been designed to work together. All switchboard configurations have been tested. Even the most demanding.

**> Optimised, upgradeable installation**
PrismaSeT G IP55 is the only switchboard in this category designed as a “kit”. All configurations and combinations are possible, with full access. Thanks to the organisation around functional units, the installation evolves simply while preserving its original performance.

**> Ease of setup**
The complete accessibility of all mounting and connection points facilitates assembly and cabling in the workshop. The functional units are clearly identified: operations are intuitive and reliable, and connection and checking are performed naturally.

**> Safety of people and property**
**> Continuity of service**
**> Robustness**
**> Ergonomics and complete accessibility**
**> Optimisation and upgradeability**

E

Up to 630 A

Metallic indoor enclosures to compose Severe environments: industrial and agricultural buildings, basements, kitchens, etc.

**Enclosure delivered flat: total accessibility**
**Designed for electrical continuity**

- **630 A**
- **IP55**
- **IK10**
- **Seismic characteristics: 2,5G**

PB119167.eps

PE60331.eps

## Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:

- width: 575 mm, with duct: 325 mm
- height: 450 to 1750 mm
- depth: 260 mm with door
- properties of metal enclosures *> page G-16*

## Main characteristics

| IP55 enclosure | |
|---|---|
| Rated operational current | $I_n$ = 630 A - Isc = 50 kA, Icw = 25 kA rms / 1 s, Ipk = 53 kA |
| Colour | White colour RAL 9003 |
| Standards conformity | EN 62208, IEC 61439-2 |
| Degree of protection | IP55 with door |
| Degree of protection against mechanical impacts | IK10 |
| Seismic characteristics | 2,5G without accessories (IEC 60068-2-57) |
| Isolation | Class 1 |
| Doors | ■ Plain or transparent, opening to right or left 180°<br>■ Supplied with a handle and keylock (key 405)<br>Distance behind plain door = 78 mm,<br>Distance behind transparent door = 73 mm. |
| Earthing | Earthing braid delivered with enclosure |
| Combination | *> page E-25* |

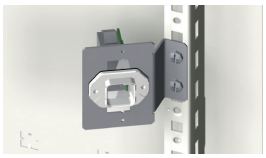
Easy design with
Rapsody software
> page B-34

Up to 630 A

**Fingers safe for cabling**
- Painted sheet metal inside, protection for wiring installers' hands

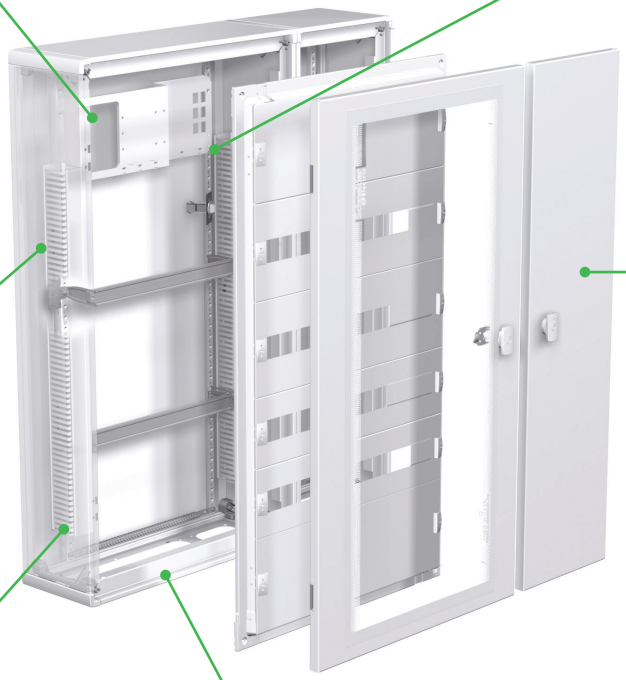
**Accessories shared with PrismaSeT G Active, IP30**

**Plates for connecting control circuits**

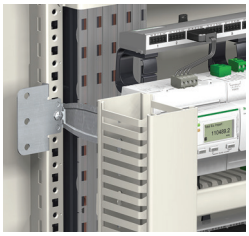


**Pre-hooked plates for quick positionning**

**Full accessibility**
- Removable side panels: easy wiring



**Trunking support plate, fixed at the same time as the modular rail**



**Plain or transparent door**

**Ergonomics and safety**
- Easy panel handling thanks to the ergonomic gripper
- Legible "Open/ closed" positions of front plate,
- Integrated front plate sealing function

**Practical**
- Functionalized installation of push buttons, power sockets, etc.
- Installation of power sockets on the side

**Weatherproofing**
- Large choice of IP55 gland plates

**Multiple combinations**

PE60330.eps

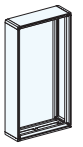
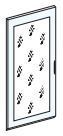
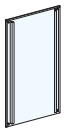
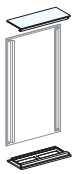
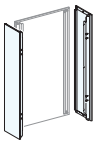
PB115681.eps

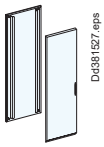
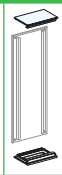
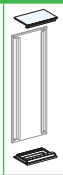
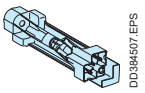
E

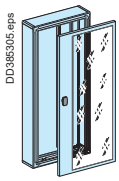
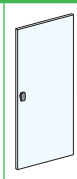
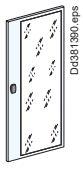
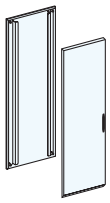
Up to 630 A

## Wall mounted and floor standing enclosures

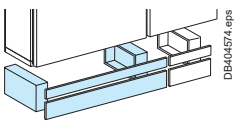
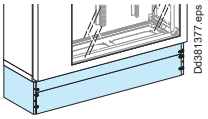
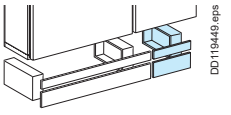
Enclosures are supplied with plain metal gland plates and external mounting brackets.
The doors are reversible, opening 180° to right or left, supplied equipped with a handle with 405 key lock.
The wall mounted and floor standing enclosure extensions and ducts are supplied without combination kits, see table opposite.

| Type | | Basic enclosure W600 | | | Extension enclosures W600 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | |  |  |  |  |  |  |  |  |
| Nb. of vertical modules of 50 mm | Height in mm | Basic enclosure | Frame + plain door | Frame + transparent door | Rear | Top and bottom plates for side-by-side combination | Side panels for vertical combination | Frame + plain door | Frame + transparent door |
| 7 | 450 | LVS08302 | LVS08322 | LVS08332 | LVS08312 | LVS08371 | LVS08352 | LVS08322 | LVS08332 |
| 11 | 650 | LVS08303 | LVS08323 | LVS08333 | LVS08313 | LVS08371 | LVS08353 | LVS08323 | LVS08333 |
| 15 | 850 | LVS08304 | LVS08324 | LVS08334 | LVS08314 | LVS08371 | LVS08354 | LVS08324 | LVS08334 |
| 19 | 1050 | LVS08305 | LVS08325 | LVS08335 | LVS08315 | LVS08371 | LVS08355 | LVS08325 | LVS08335 |
| 23 | 1250 | LVS08306 | LVS08326 | LVS08336 | LVS08316 | LVS08371 | LVS08356 | LVS08326 | LVS08336 |
| 27 | 1450 | LVS08307 | LVS08327 | LVS08337 | LVS08317 | LVS08371 | LVS08357 | LVS08327 | LVS08337 |
| 33 | 1750 | LVS08309 | LVS08329 | LVS08339 | LVS08319 | LVS08371 | LVS08359 | LVS08329 | LVS08339 |

| Type | | Ducts W300 | | Wall-mounted enclosures W300 | | | |
|---|---|---|---|---|---|---|---|
| | |  |  |  |  |  |  |
| Nb. of vertical modules of 50 mm | Height in mm | Rear + plain door | Top and bottom plates | Rear + plain door | Top and bottom plates | Side panels | Struts (set of 2) |
| 7 | 450 | LVS08342 | LVS08372 | LVS08342 | LVS08372 | LVS08352 | 2 x LVS01025 |
| 11 | 650 | LVS08343 | LVS08372 | LVS08343 | LVS08372 | LVS08353 | 2 x LVS01025 |
| 15 | 850 | LVS08344 | LVS08372 | LVS08344 | LVS08372 | LVS08354 | 2 x LVS01025 |
| 19 | 1050 | LVS08345 | LVS08372 | LVS08345 | LVS08372 | LVS08355 | 2 x LVS01025 |
| 23 | 1250 | LVS08346 | LVS08372 | LVS08346 | LVS08372 | LVS08356 | 2 x LVS01025 |
| 27 | 1450 | LVS08347 | LVS08372 | LVS08347 | LVS08372 | LVS08357 | 2 x LVS01025 |
| 33 | 1750 | LVS08349 | LVS08372 | LVS08349 | LVS08372 | LVS08359 | 2 x LVS01025 |

| W850 floor standing enclosure (plinth sold separately) | | | | | Duct W300 | |
|---|---|---|---|---|---|---|
|  | |  |  |  |  |  |
| Nb. of vertical modules of 50 mm | Height in mm | Floor standing enclosure | Plain door | Transparent door | Rear + plain door | Top and bottom plates |
| 33 | 1750 | LVS08311 | LVS08330 | LVS08340 (1) | LVS08349 | LVS08372 |

Spare parts > page E-30 ; Dimensions > page E-31

| Plinth H = 150 mm | W600 | W850 floor standing enclosure | Duct W300 |
|---|---|---|---|
| |  |  |  |
| Catalog numbers | 2 x LVS08392 + LVS08393 | LVS08802 | LVS08392 + LVS08394 |

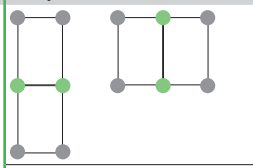
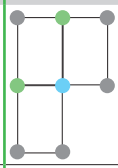
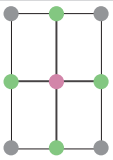
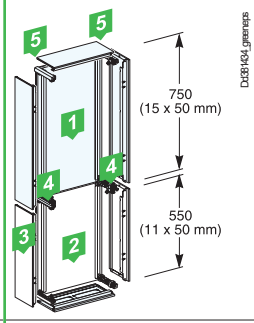
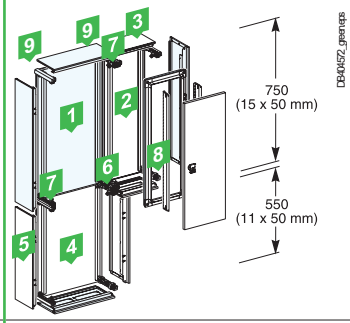
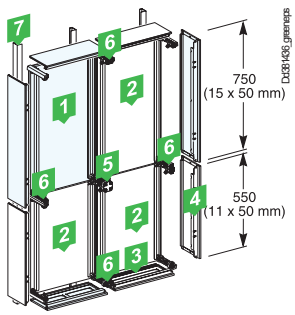
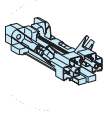
(1) New ref, commercialised mid 2018.
Spare parts > page E-30
Dimensions > page E-31
Partitioning > page C-45

# Weatherproof enclosures
## Combination kits

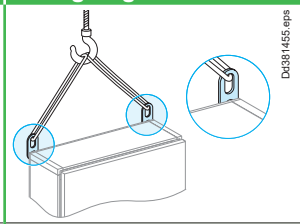
Up to 630 A

## Combination kits

| | Components catalog numbers | | | | |
|---|---|---|---|---|---|
| | Single pillar | Horizontal/vertical combination kit | "L" combination kit | Square combination kit | Mounting upright |
| Catalog numbers | **LVS01025** (set of 2) | **LVS08381** x 2 | **LVS08382** + **LVS08381** | **LVS08383** | **LVS08391** |
| Characteristics | Supplied with basic enclosures | 2 double pillars | 2 L pillars<br>+ 2 double pillar<br>+ 1 single pillar | 1 square pillar<br>+ 4 double pillar | L = 1950 mm |

| | Mounting example | | |
|---|---|---|---|
| | **Simple** | **In L** | **In square** |
| |  |  |  |
| |  |  |  |
| Wall-mounted enclosures | **1** Basic enclosure<br>Rear plate for enclosure extension<br>**3** 1 set of two side panels | **1** 1 basic enclosure<br>**2** 1 rear + door for duct<br>**3** 1 set of two top and bottom plates for duct W300 or W600<br>**4** 1 rear plate for enclosure extension<br>**5** 1 set of two side panels | **1** 1 basic enclosure<br>**2** 3 rear plates for enclosure extensions<br>**3** 1 set of two top and bottom plates for enclosure extensions W300 or W600<br>**4** 1 set of two side panels |
| Combination kits  | **4** 2 x 1 double pillar<br>**LVS08381** | **6** 1 L pillar<br>**LVS08382**<br>**7** 2 x 1 double pillar<br>**LVS08381**<br>**8** 1 standard pillar<br>**LVS01025** | **5** 1 square pillar<br>**LVS08383**<br>**6** 4 x 1 double pillar<br>**LVS08381** |
| Mounting uprights | **5** 2 x 1 mounting upright<br>**LVS08391** | **9** 2 x 1 mounting upright<br>**LVS08391** | **7** 3 mounting uprights<br>W = 1950 mm (to reinforce the switchboard) 3 x LVS**08391** |

## Lifting

| | Lifting rings |
|---|---|
| |  |
| Catalog number | **LVS08396** |
| Characteristics | Set of two. supplied with mounting hardware.<br>The lifting rings are secured directly to the switchboard or to the mounting uprights. |

**Note:** for combinations of more than two enclosures, the switchboard must be reinforced using mounting uprights (LVS**08391**).

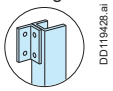
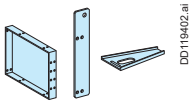
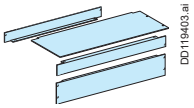
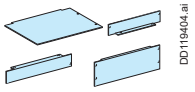
E

# Weatherproof enclosures

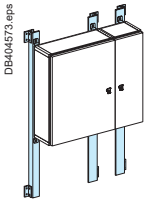
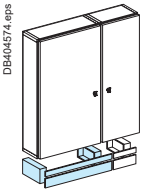
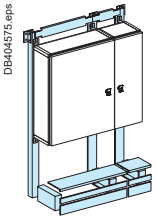
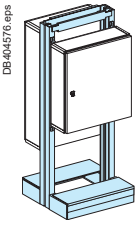
## Mounting accessories

Up to 630 A

## Mounting accessories

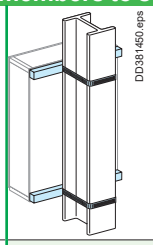
| Upright | | Plinth | | |
|---|---|---|---|---|
| | **Mounting uprights** | **Plinth gusset** | **Plinth cover panel (for enclosure)** | **Plinth cover panel (for duct)** |
| Catalog numbers | **LVS08391** | **LVS08392** | **LVS08393** | **LVS08394** |
| Characteristics | ■ W = 1950 mm<br>■ Colour: RAL 7016<br>■ Supplied with:<br>□ two adjustable fixing brackets,<br>□ one joint for combination with a plinth or another upright.<br>Leave space behind the switchboard for cable running and to improve ventilation.<br>  | ■ H = 150 mm<br>■ Colour: RAL 7016<br>  | ■ W = 600 mm<br>■ Colour: RAL 7016<br>  | ■ W = 300 mm<br>■ Colour: RAL 7016<br>  |
| Quantity to order | For one enclosure, order two uprights.<br>For each enclosure extension or duct, order one additional upright. | For the basic enclosure, order two gussets and one 600 mm wide plinth cover panel. For each enclosure extension or duct, order one additional gusset and the corresponding cover panel. | | |

## Mounting example

| | On uprights | On plinth | On wall structure | Free-standing structure |
|---|---|---|---|---|
| |  |  |  |  |
| Catalog numbers | 3 x **LVS08391** | 3 x **LVS08392 + LVS08393 + LVS08394** | 3 x **LVS08391** + 3 x **LVS08392 + LVS08393 + LVS08394** | 4 x **LVS08391** + 4 x **LVS08392** + 2 x **LVS08393** |
| Designation | 3 mounting uprights | 3 gussets<br>+ 1 plinth cover panel for enclosure<br>+ 1 plinth cover panel for duct | 3 uprights + 3 gussets<br>+ 1 plinth cover panel for enclosure<br>+ 1 plinth cover panel for duct | 4 uprights<br>+ 4 gussets<br>+ 2 plinth cover panels for enclosure |
| Remarks | The uprights are used to mount on a wall one or more enclosures combined horizontally or vertically. | The plinth, installed in the factory or on-site, raises the switchboard to protect it and facilitate spreading of cables arriving from a trough. The wall-fixing brackets supplied with the plinth ensure that the switchboard cannot topple over. | The supplied external brackets prevent the switchboard from tilting. | Assembly of 2 wall structures connected back-to-back. The switchboard is free-standing. Fixed to the ground and can be moved very easily with lifting rings ref. LVS08396. It can house one or more enclosures. |

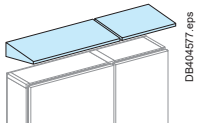
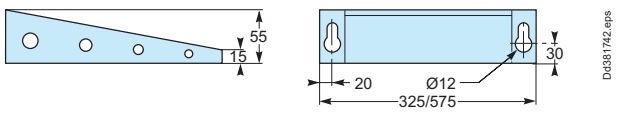
## Mounting on a pole

### 2 reinforcement cross-members to support the enclosure



| | |
|---|---|
| Catalog number | **LVS08395** |
| Characteristics | The kit is used to mount an enclosure or an enclosure + duct combination, without drilling, to an I-beam or concrete pole that can be rectangular or cylindrical. The maximum circumference of the pole is 580 mm. Supplied with mounting hardware. |

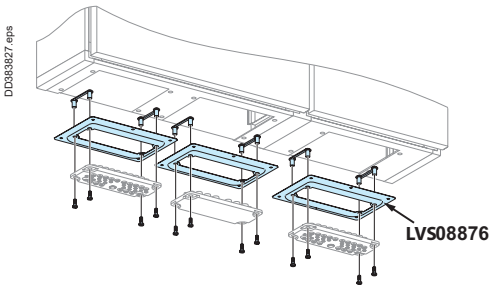
## Canopy

| Using | For wall-mounted enclosures W600 | For duct W300 |
|---|---|---|
|  |  | |
| Catalog numbers | **LVS08386** | **LVS08387** |
| Characteristics | ■ Installed on the mounting uprights or directly on the wall, canopies improve switchboard protection against vertically falling water and objects.<br>■ Colour: RAL 7016.<br>■ Supplied with: the hardware required for mounting on the uprights, the components required for combination with another canopy. | |

Dimensions > *page* E-31 ; Partitioning > *page C-45*

# Weatherproof enclosures
## Grand plates

Up to 630 A

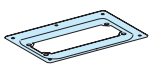



## Metal interface plate with cut-outs

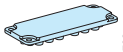
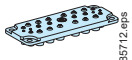
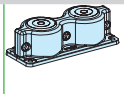
Enclosures are supplied with plain metal gland plates installed on the top or bottom panel of the enclosures (2 plates) or 300 mm wide ducts (1 plate).
These plates can be replaced by metal plates with cut-outs LVS08876 for special cable entry systems made of an insulating material (plain, with knockouts or membrane-type).
They are designed for entry of cables of different cross-sectional areas via the bottom of a switchboard while maintaining the IP55 degree of protection.
The gland plates are easy to install using the mounting kit (supplied with each gland plate) that positions and holds the nuts during installation.
This makes it possible to mount the gland plates using a single tool.

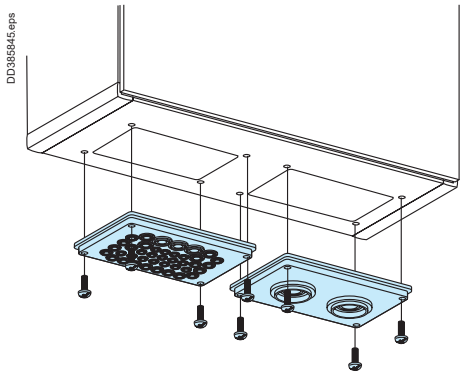
## Plain gland plates, plates with knockouts and membrane-type plates

**Metal interface plate with cut-outs**

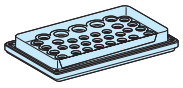
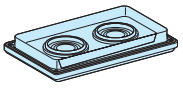
| |  DD385844.EPS |
|---|---|
| Catalog numbers | **LVS08876** |
| Characteristics | Fitting gland plates: plain and membrane-type. |

**Gland plates for metal interface**

| | plain | membrane-type | | |
|---|---|---|---|---|
| |  DD385708.eps |  DD385712.eps |  DD385713.eps |  DD385714.eps |
| Catalog numbers | **LVS08881** | **LVS08872** | **LVS08896** | **LVS08897** |
| Ø 3 mm | - | - | 8 | - |
| Ø 3 to 7 mm | - | 4 | 4 | - |
| Ø 5 mm | - | - | 4 | - |
| Ø 7 to 12 mm | - | - | 20 | - |
| Ø 7 to 14 mm | - | 8 | 4 | - |
| Ø 7 to 18 mm | - | - | 2 | - |
| Ø 10 to 14 mm | - | 12 | - | - |
| Ø 14 to 20 mm | - | 4 | - | - |
| Ø 20 to 26 mm | - | 1 | - | - |
| Ø 17 to 30 mm | - | - | 1 | - |
| Ø 8 to 67 mm | - | - | - | 2 |
| **Total number of entries** | - | **29** | **43** | **2** |




**Gland plates, direct mounting**

| |  DB124229.eps |  DB124230.eps |
|---|---|---|
| Catalog numbers | **LVS08898** | **LVS08899** |
| Ø 7 to 26 mm | 39 | - |
| Ø 33 to 72 mm | - | 2 |
| **Total number of entries** | **39** | **2** |

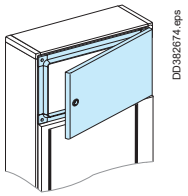
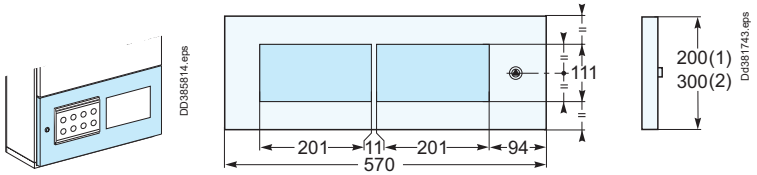
E

# Weatherproof enclosures

## Partial doors and functional units for partial door

Up to 630 A

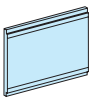
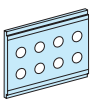
### Partial doors

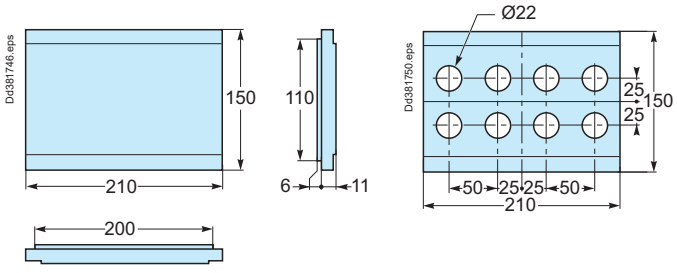
| Type | Plain | With cut-outs |
|---|---|---|
| |  |  |
| 4 modules (H = 200 mm) for enclosure from 11 to 27 modules | **LVS08374** | **LVS08376** |
| Installation | ■ On a wall-mounted enclosure at least 11 modules high (H = 650 mm).<br>■ The front must be completed with another door (plain or transparent).<br>■ Each enclosure or extension can be equipped with only one partial door. | |
| Caractéristiques | - | ■ Designed for two mounting plates with 22 mm diameter devices or Schneider Electric industrial sockets.<br>■ They are supplied with an insulating plain mounting plate that can be used to:<br>□ blank off a reserve hole,<br>□ install all types of devices (sockets, EPO devices, measurement devices).<br>■ The dimensions of the two holes are 201 mm x 111 mm. |
| | ■ Hinges that open 170°<br>■ Equipped with a 8 mm male triangle insert (key not supplied). | |

### Plastic plates for equipping openings on partial doors

They can be installed:

- horizontally on the partial doors with cut-outs
- horizontally or vertically at any point on a door or side panel.

| Type | Plain | For 22 mm diameter devices |
|---|---|---|
| |  |  |
| Catalog numbers | **LVS08861** | **LVS08862** |
| Characteristics | ■ Can be used to:<br>□ blank off partial doors with cut-outs<br>□ mount any type of device (EPO devices, measurement devices, sockets) | ■ For installation of eight 22 mm diameter devices (lights, switches, pushbuttons, etc.)<br>■ Supplied with 4 blanking plug |

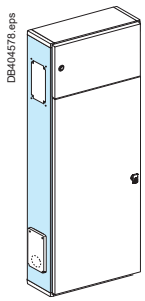


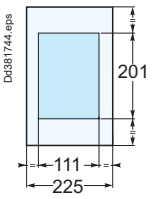
Up to 630 A

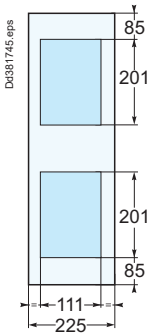
## Side panels with cut-outs

These panels are designed to replace the standard side panel.
They can be mounted on the left or right-hand side.

**Side panels with cut-out**



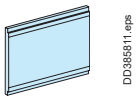




| Nb. of vertical modules of 50 mm | Height in mm | Nb. of 111 x 201 mm holes | Catalog numbers |
|---|---|---|---|
| 15 | 850 | 2 | **LVS08364** |
| 33 | 1750 | 2 | **LVS08369** |

The cut-outs are designed for the installation of Pratika PK industrial sockets up to 63 A either directly or on 111 x 201 mm adaptation plates of the Kaedra enclosure range.
Installation is direct for:

- 16/32 A interlocked LV sockets, IP44/IP65, IK08
- 16 A VLV sockets with 160 VA safety transformers, IP44/IP65, IK08.

## Plastic plate for equipping openings on partial door

| Type | Plain |
|---|---|
| |   |
| Catalog numbers | **LVS08861** |
| Characteristics | ■ Can be used to:<br>□ blank off<br>□ mount any type of device (EPO devices, measurement devices, sockets) |

E

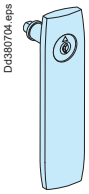
Up to 630 A

## Locks

- The small plain and transparent doors (7 to 23 modules) are supplied with a small handle comprising a barrel lock no. 405.
- The large plain and transparent doors (27 to 33 modules) are supplied with a large handle comprising a barrel lock no. 405.
- The partial doors are supplied with an 8 mm male triangle insert.
- All doors can receive as optional equipment:
  - a large or small handle with a barrel lock no. 405. The latter can be replaced by other barrel locks or special inserts
  - a large EURO handle, supplied without a barrel lock
  - door inserts (squares, triangles, double bars, screwdriver slots).

## Handles for replacement

**Handles**

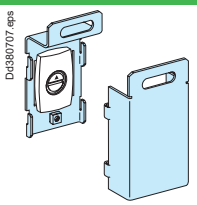




| Catalog numbers | LVS08936 | LVS08935 | LVS08934 |
|---|---|---|---|
| Designation | Door latch with lock and 2 no. 405 keys | Handle (W = 155 mm) with lock and 2 no. 405 keys | EURO handle without a barrel lock (1) |

(1) Do not suit to barrels with an automatic return stroke of the key.

## Padlocking

**Padlocking**

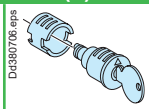



| Catalog number | LVS08939 |
|---|---|
| Designation | The kit can be installed on all IP55 doors, except those equipped with an EURO lock.<br>Kit designed for three padlocks. |

## Handle barrel locks and inserts

These components may equip handles after removing the standard barrel lock no. 405.

**Handle barrel locks (1)**







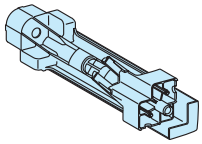
| Supplied with | 2 keys no. 2433A | 2 keys no. 455 | 2 keys no. 1242E | 2 keys no. 3113A | Double bar insert 3 mm | Male triangle insert | | | Male square insert | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 7 mm | 8 mm (CNOMO) | 9 mm | 7 mm | 8 mm |
| Catalog numbers | LVS09933 | LVS09945 | LVS09942 | LVS09943 | LVS09932 | LVS09937 | - | - | LVS09947 | LVS09948 |

(1) Others A and E combinations are available from Ronis, please contact us.

Up to 630 A

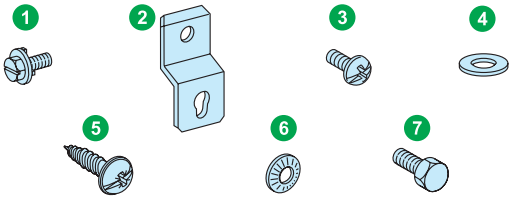
## Accessories (IP55)

DD384507_1.EPS



**2 pillars** — **LVS01025**

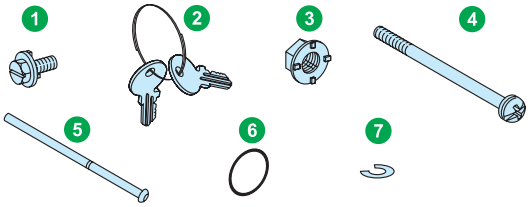
DD384508.EPS




**Set of spare parts for wall-mounted enclosure** — **LVS01247**

1. 24 screws + stubs contact
2. 4 simple fixing brackets
3. 4 screws pillar/seating
4. 12 nylon washers
5. 12 self threading screws
6. 4 conical washers
7. 4 screws

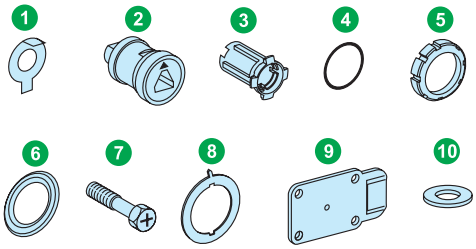
DD384509.EPS




**Set of spare parts for door** — **LVS01248**

1. 1 screw + stub washers
2. 2 keys no.405
3. 1 spring nut
4. 4 screws frame/pillar
5. 3 hinge pins
6. 8 o-ring joints
7. 3 stop rings

DD384510.EPS




**Spare parts for closing system** — **LVS01249**

1. 1 stop washer
2. 1 screw body
3. 1 screw cap
4. 1 o-ring
5. 1 screw nut
6. 1 composite seal
7. 1 captive screw
8. 1 special washer
9. 1 cam
10. 1 washer

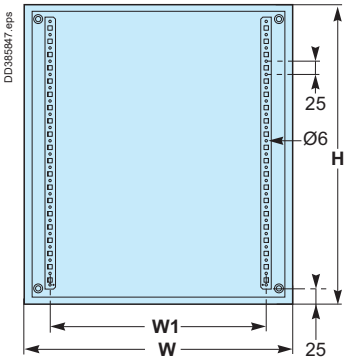
E

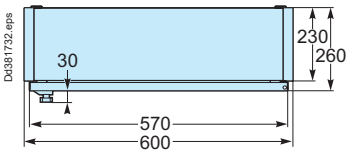
# Weatherproof enclosures

## Dimensions

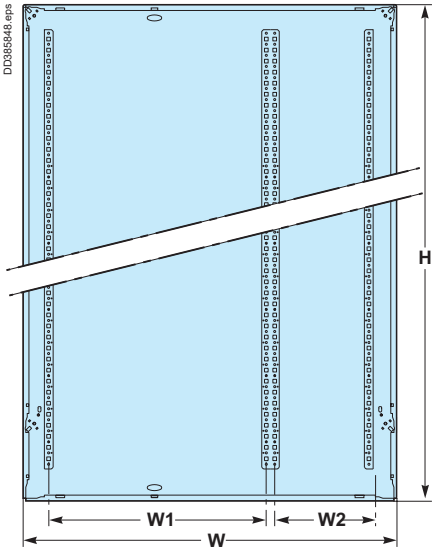
Up to 630 A

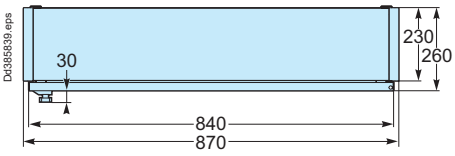
### W600 enclosures



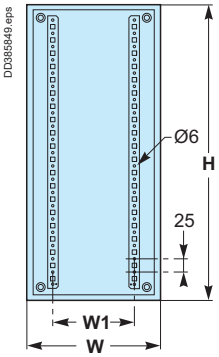



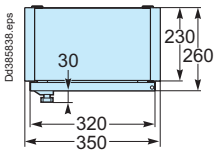

### W850 enclosure, 33 mod.



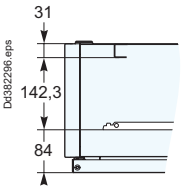

### W300 ducts



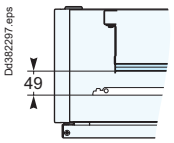




| | Nb. of vertical modules | | W600 | | W850 | | | W300 | |
|---|---|---|---|---|---|---|---|---|---|
| | | H | W | W1 | W | W1 | W2 | W | W1 |
| Enclosures<br>Ducts | 7 | 425 | 575 | 450 | - | - | - | 325 | 200 |
| | 11 | 625 | 575 | 450 | - | - | - | 325 | 200 |
| | 15 | 825 | 575 | 450 | - | - | - | 325 | 200 |
| | 19 | 1025 | 575 | 450 | - | - | - | 325 | 200 |
| | 23 | 1225 | 575 | 450 | - | - | - | 325 | 200 |
| | 27 | 1425 | 575 | 450 | - | - | - | 325 | 200 |
| | 33 | 1725 | 575 | 450 | 845 | 450 | 200 | 325 | 200 |

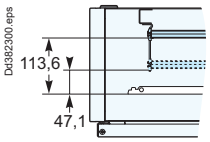
### Functional uprights



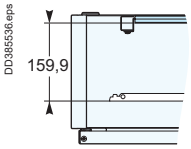

### Modular rails



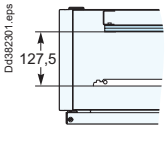

**LVS03001.**




**LVS03002.**

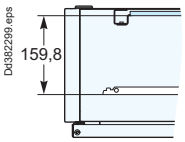



**LVS03003.**

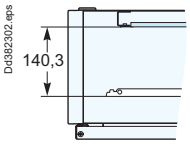



**LVS03004.**

### Slotted mounting plate

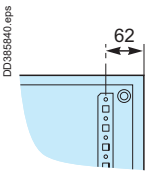



**LVS03171/LVS03172/LVS03173/ LVS03176/LVS03177/LVS03178.**

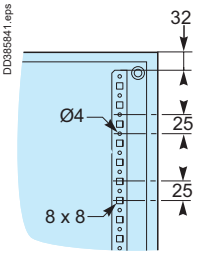


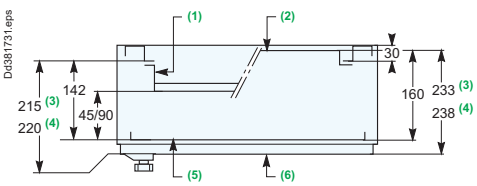

**LVS03170/LVS03175.**

### Cable running




### Rear upright



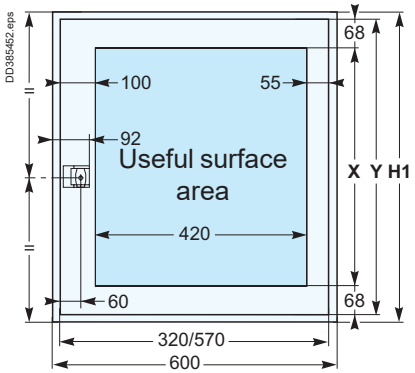

(1) Double profile modular rail.
(2) Recessed slotted mounting plate.
(3) Transparent door.
(4) Plain door.
(5) Front plate.
(6) Door.

# Weatherproof enclosures

## Dimensions

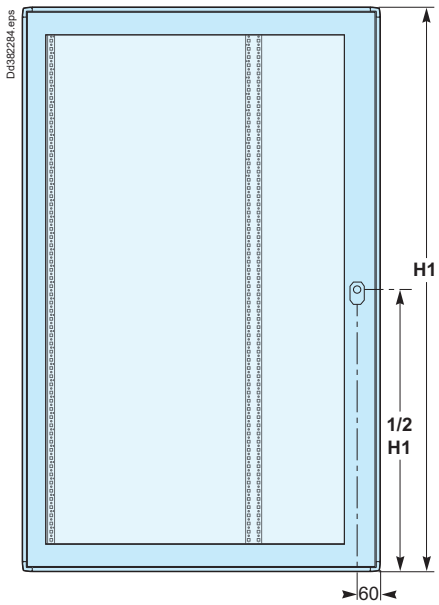
Up to 630 A

### Doors W600



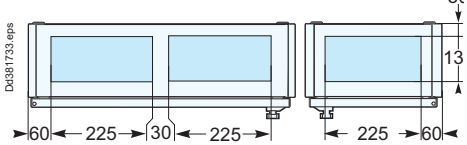

| Doors | | |
|---|---|---|
| H1 | X | Y |
| 450 | 284 | 420 |
| 650 | 484 | 620 |
| 850 | 684 | 820 |
| 1050 | 884 | 1020 |
| 1250 | 1084 | 1220 |
| 1450 | 1284 | 1420 |
| 1750 | 1584 | 1720 |

### Doors W850 of 33 mod.

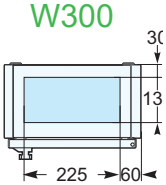



### Cable entry

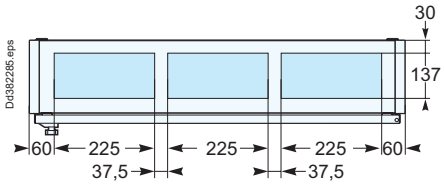
#### W600




#### W300

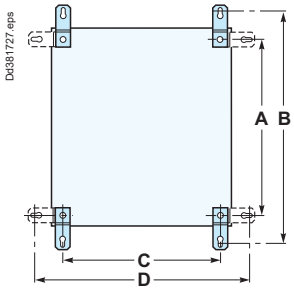



#### W850

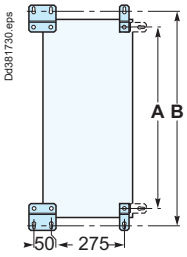


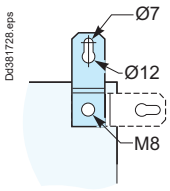

### Wall-mounted installation

#### External brackets W600/850

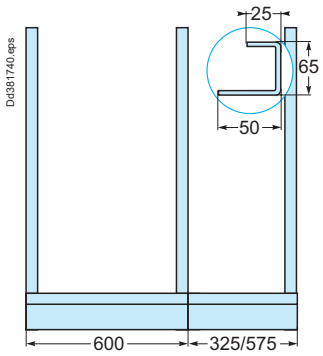


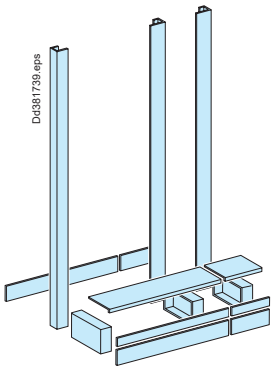

#### External brackets W300



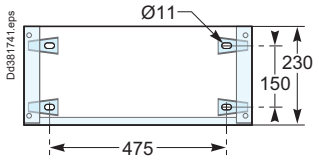

### Wall structure



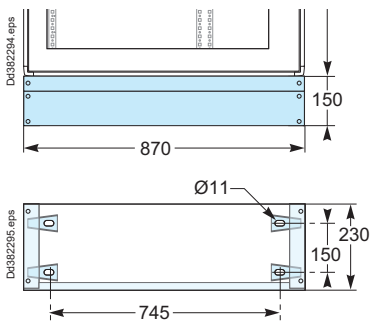




| Nb. of vertical modules | A | B | C | | D | |
|---|---|---|---|---|---|---|
| | | | W600 | W850 | W600 | W850 |
| 7 | 375 | 525 | 525 | - | 650 | - |
| 11 | 575 | 725 | 525 | - | 650 | - |
| 15 | 775 | 925 | 525 | - | 650 | - |
| 19 | 975 | 1125 | 525 | - | 650 | - |
| 23 | 1175 | 1325 | 525 | - | 650 | - |
| 27 | 1375 | 1525 | 525 | - | 650 | - |
| 33 | 1675 | 1825 | 525 | - | 650 | - |

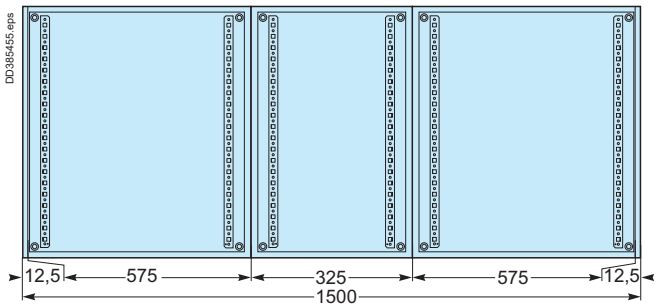
### Plinth fixation W600




### Plinth fixation W850




### Enclosure combinations




E

# Pack 160 , Pack 250 enclosures

# Contents

## Pack 160, IP30/IP43



## Pack 250, IP30/IP4X



F

# PrismaSeT G Active - Pack 160 enclosures, IP30/IP43
## Presentation

Up to 160 A

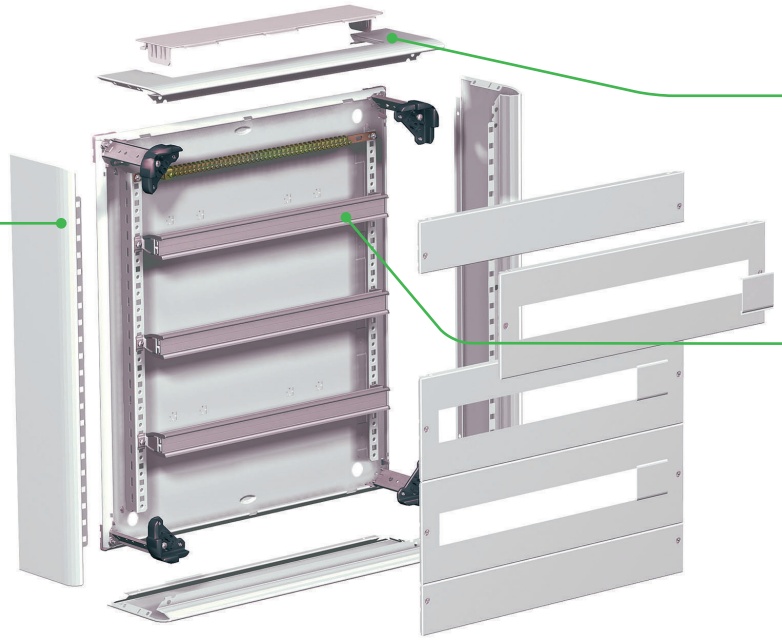
Premounted metallic indoor enclosures can be ordered with a single catalog number.

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

**One product reference = a complete modular enclosure ready to be equipped**

- **160 A**
- **IP30**
- **IK07/08**

PB119168.eps



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

**Accessibility**
- Side panels dismountable for full access

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

**Installation**
- Door easy to install without tools
- Plain or transparent reversible door

## Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:
- width: 555 mm
- height: 480 to 1080 mm
- depth: 157 mm without door / 186 mm with door
- properties of metal enclosures *> page G-16*.

PD390892_1.eps

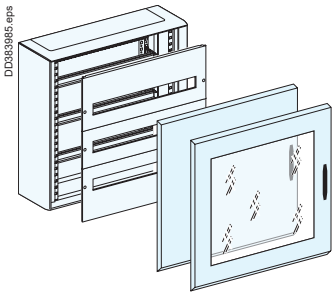
## Main characteristics

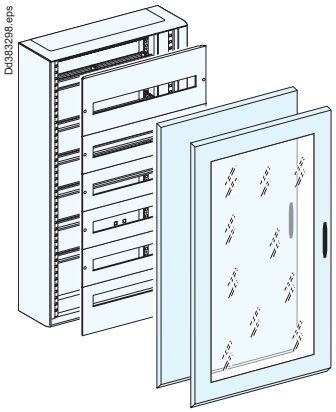
| Pack enclosures | |
|---|---|
| Rated operational current | **160 A** |
| Colour | White RAL 9003 |
| Compliance with standards | EN 62208, IEC 61439-1-2-3, NFC 61-910 |
| Degree of protection | IP30 without door, IP40 with door, IP41 with canopy + door, IP43 with canopy + door + door gasket |
| Degree of protection against mechanical impact | IK07 without door<br>IK08 with door |
| Insulation | Class 1 |
| Doors | ■ Plain or transparent, opening to right or left, 130°<br>■ By design, electrical continuity of moving parts (hinges…)<br>■ Supplied with a handle and keylock (key 405)<br>■ No possibility to install push buttons (distance behind door = 42 mm) |
| Mounting | Pack 160 enclosures easily integrated in using flush-mounting kit |

The design of Pack 160 enclosures ensures easy device access and mounting. Optimised depth and an extra-thin door ensure perfect integration in all environments.
Models with 4, 5 and 6 rows are particularly well-suited for the incomer function:
- more space available for wiring of the incoming device
- optimised number of front plates.

F

Up to 160 A



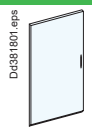

## Wall-mounted enclosures for modular devices

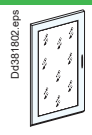
**Enclosures include:**
- 1 modular rail per row (L= 24 modules of 18mm).

The recessed rail at the top of 4, 5, 6-row enclosures is adapted for NSXm installation or INS/INV160 (for NG160, you can order LVS**03008**) and supplied with another rail + raisers to complete the row with modular devices.
- 1 front plate with cut-out per row (height depending on model)
- 1 plastic gland plate
- divisible blanking plates: 3 for 2 and 3 rows enclosures, 6 for 4 to 6 rows enclosures
- earth bar with 40 straples

**Doors are:**
- reversible, opening to left or right,
- supplied with a handle and barrel with keylock (key 405)
- barrel locks and inserts

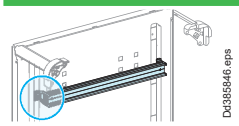
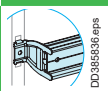
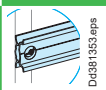
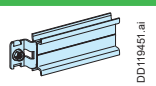
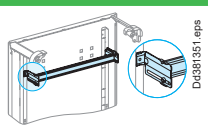
### Enclosure W555

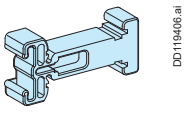
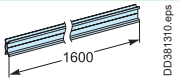
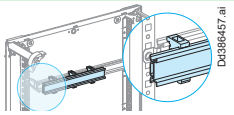

| Nb. of rows | Nb. of vertical modules of 50 mm | Height in mm | Enclosure | Plain door | Transparent door |
|---|---|---|---|---|---|
| **2** | 9 | 480 | **LVS08002** | **LVS08082** | **LVS08092** |
| **3** | 12 | 630 | **LVS08003** | **LVS08083** | **LVS08093** |
| **4** | 15 | 780 | **LVS08004** | **LVS08084** | **LVS08094** |
| **5** | 18 | 930 | **LVS08005** | **LVS08085** | **LVS08095** |
| **6** | 21 | 1080 | **LVS08006** | **LVS08086** | **LVS08096** |

Flush-mounting kit > *see page F-7*

| | Other modular ≤ 63 A rails W555 | Other devices | | | |
|---|---|---|---|---|---|
|   |   |   |   |   |   |
| | **Fixed** | **Rear** | **Recessed** | **NSXm/NSXm Vigi** | **For NG160** |
| Catalog numbers | **LVS01260** | **LVS03004** | **LVS03003** | **LVS03018** | **LVS03008** |
| Useful length | 432 mm | 432 mm | 432 mm | 432 mm | 432 mm |
| 9 mm modules number | 48 | 48 | 48 | 48 | 48 |
| Depth behind front plate | 50 mm | 80 mm | 110 mm | 76 mm | 83 mm |

## Accessories

Allows adding modular devices to the row, if the LVS**03008** or LVS**03018** rail is used.

| | Raiser for NSXm | Rail to be cut L1600 | Rail + raiser for NG160 |
|---|---|---|---|
| |   |   |   |
| Catalog numbers | **LVS04225** | **LVS04226** | **LVS04227** (2) |
| Characteristics | Set of 12 raisers (NSXm/NSXm Vigi) height 11 mm to be completed with **LVS04226** | Set of 2 rails, useful length: 1600 mm with 4 holes, dia. 6.4 mm, 450 mm between centres | Rail, 8 modular raisers (NG 160 and NSXm 4 each)<br>Useful length: 342 mm<br>Raiser height: NG160-31 mm, NSXm-24 mm |

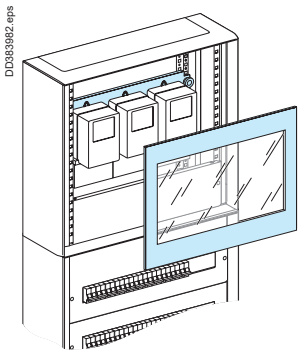
### Other front plates W600

> *page C-50* and *page F-8*.

# Enclosure extension and metering

## Functional units for extension enclosure

Up to 160 A




## Enclosure extension for metering

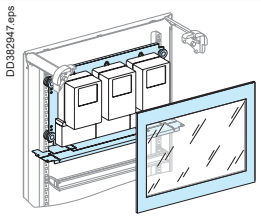
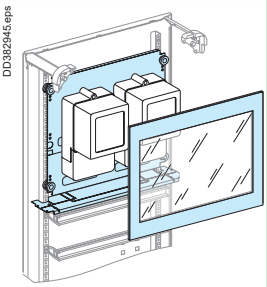
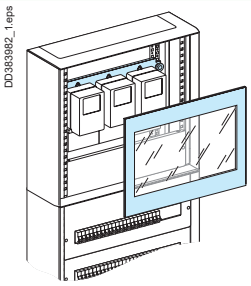
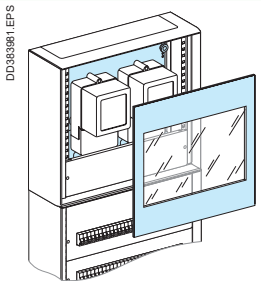
Meters can be installed at different levels on the functional uprights of enclosures.
Class 1: Depending on preferences and needs, meters can be installed directly on mounting plates equipped with earthing braids and combined with partitioning or front plates.
The mounting plates can be raised using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

**Enclosure extension W555**

| | |  |  |  |
|---|---|---|---|---|
| **Nb. of vertical modules of 50 mm** | **Height in mm** | **Enclosure** | **Plain door** | **Transparent door** |
| 9 | 480 | **LVS08012** | **LVS08082** | **LVS08092** |

## Kilowatt-hour meters, Class 2

Class 1: Depending on preferences and needs, meters can be installed directly on mounting plates (without insulating plate) equipped with earthing braids of 6 mm² (LVS08910) and combined with partitioning or front plates. The mounting plates can be raised using **M5 spacers** *> see page C-51.*

| **Installation** | **In Pack wall-mounted enclosures** | | **In an enclosure extension** | |
|---|---|---|---|---|
| |  |  |  |  |
| **Device** | **Single-phase meters** | **3-phase meters** | **Single-phase meters** | **3-phase meters** |
| Nb. of devices per row | 3 | 2 | 3 | 2 |
| Nb. of vertical modules | 6 | 9 | 6 | 9 |
| Mounting plate | - | **LVS03152** | - | **LVS03152** |
| Insulating plate | - | - | - | - |
| Horizontal partitioning (1) | **LVS04333** | **LVS04333** | - | - |
| Front plate transparent | **LVS03343** or **LVS03806** | **LVS03344** | **LVS03343** or **LVS03806** | **LVS03344** |
| Front plate plain | | | | |
| Enclosure | Pack enclosure | Pack enclosure | **LVS08012** | - |
| Door | Depending on enclosure | Depending on enclosure | **LVS08092** (transparent) or **LVS08082** (plain) | **LVS08093** (transparent) or **LVS08083** (plain) |
| Earthing wire 6 mm² | **LVS08911** | **LVS08911** | **LVS08911** | **LVS08911** |
| Combination uprights (set of 2) | - | - | **LVS08817** (2) | **LVS08817** (2) |

(1) If not installed at the top of a Pack enclosure, order an addition horizontal partition (LVS**04333**).
(2) To make the combination more rigid, particularly during transport, it is mandatory to use a set of combination uprights secured to the rear of the switchboard.

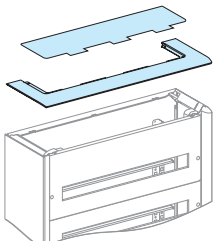
F

Up to 160 A

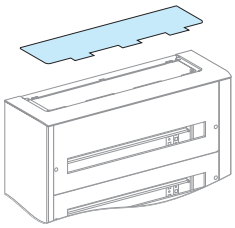
## Gland plates

**Gland plates**

DD383989.eps



DD383990.eps

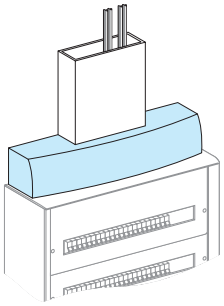


| | Top or bottom plate with plastic gland plate | Metal gland plate |
|---|---|---|
| Catalog numbers | **LVS08878** | **LVS08879** |
| Characteristics | - | Plain metal gland plate |

## Trunking spreader

**Trunking spreader**

DD383991.eps

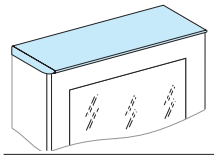


| | |
|---|---|
| Catalog numbers | **LVS08821** |

## Canopy

**Canopy to increase the IP value from IP30 to IP31 (1)**

DD383933.eps



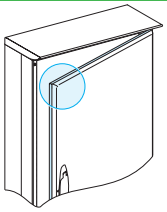
| | |
|---|---|
| Catalog numbers | **LVS08823** |
| Characteristics | The canopy cannot be mounted on the existing top plate.<br>It therefore comes with a special top plate that must be mounted in place of the existing top plate.<br>The existing top plate is remounted at the bottom of the enclosure to allow cable entry and exit via the bottom.<br>The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP41. |

(1) With a door, the IP30 become IP40
With a door + canopy, the IP40 become IP41.

## Gasket

**Gasket for IP43**

Dd381268.eps



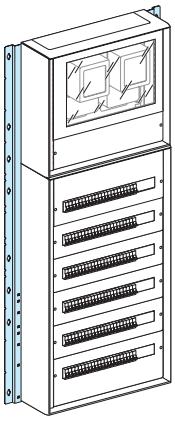
| | |
|---|---|
| Catalog numbers | **LVS08841** |
| Characteristics | When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43.<br>L = 5.3 m |

Up to 630 A

## Combination uprights

### Combination uprights

DD383984.EPS

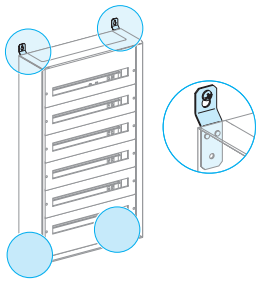


| | |
|---|---|
| Catalog numbers | **LVS08817** |
| Characteristics | Set of 2 uprights.<br>Particularly during transport, it is mandatory to use a set of combination uprights secured to the rear of the switchboard, to make the combination more rigid. |

## Wall mounting installation

### Wall mounting

DD385482.eps

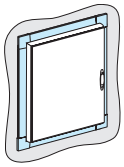


| | |
|---|---|
| Catalog numbers | **LVS08803** |
| Characteristics | 4 external wall-mounted brackets |

## Flush-mounting kit

### Flush-mount kit

Dd381256.eps

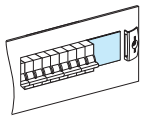


| | |
|---|---|
| Catalog numbers | **LVS08822** |

## Blanking plates

### Blanking plates

DD384029.eps



| | | |
|---|---|---|
| Catalog numbers | **LVS03220** | **LVS03221** |
| Characteristics | ■ Blanking strip<br>■ H = 46 mm, L = 1 m | ■ Divisible<br>■ Set of 4<br>■ H = 46 mm, L = 90 mm |

Finishing parts > *see page C-44*

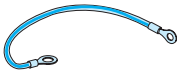
F

Up to 160 A

## Cable-tie supports
> page C-46.

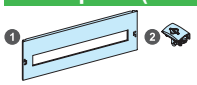
## Cable running
> page C-48.

## Earthing braid
The earthing braid is used to earth a door with devices.

| | Earthing braid, 6 mm² | Earthing wire, 6 mm² |
|---|---|---|
| |  DD384005.eps |  DD384005.eps |
| Catalog numbers | **LVS08910** | **LVS08911** |
| Characteristics | The braid is equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other.<br>L = 200 mm | Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other.<br>L = 200 mm |

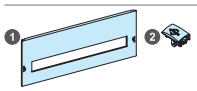
## Spare-parts

### Front plate (IP30)

DD384498hb.eps 

**4 modules decentered plate** **LVS01264**

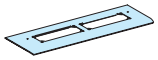
1. 1 front plate
2. 2 front plates locking mechanisms

DD384499hb.eps 

**4.5 modules decentered plate** **LVS01265**

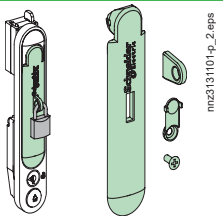
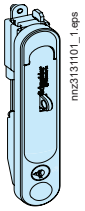
1. 1 front plate
2. 2 front plates locking mechanisms

### Gland plate (IP30)

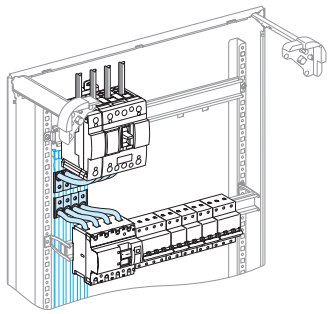
DD384489.EPS 

**Cut-out gland plate for Pack 160 enclosure** **LVS01020**

## Handle and padlocking

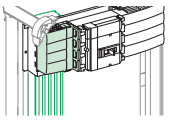
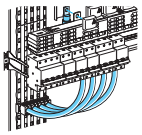
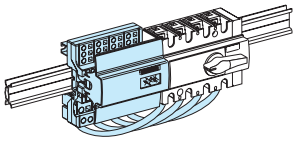
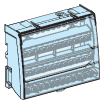
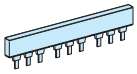
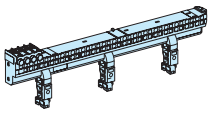
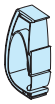
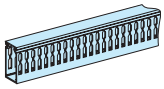
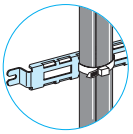
| | Padlocking | RAL 7016 handle |
|---|---|---|
| |  nnz31311101-p_2.eps |  nnz31311101_1.eps |
| Catalog numbers | **LVS07938** | **LVS07931** |
| Characteristics | For existing handle | Supplied with barrel lock (key no. 405) RAL 7016 |

Up to 160 A


Dd388294.eps

## Presentation

At the head of a switchboard, the incoming device can supply by one of the following:
- busbars mounted in rear of the enclosure
- centralised distribution blocks
- row distribution blocks.

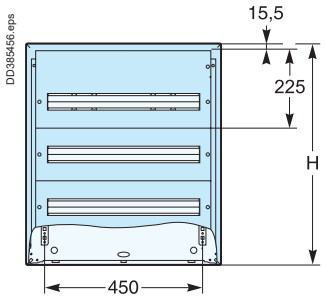
| Linergy distribution | | Catalog numbers | Pages |
|---|---|---|---|
| **Linergy BW busbars 125 A** | | | |
|  DD380522-LIN.eps | 125 A | **LVS04103, LVS04107, LVS04104, LVS04108, LVS01210, LVS01201** | D-4 |
| **Prefabricated connections 125 to 160 A** | | | |
|  Dd383472.eps | 125 A<br>160 A | **LVS04145**<br>**LVS04146, LVS04147, LVS04148, LVS04151** | D-4, D-5 |
| **Linergy DX distribution block** | | | |
|  PB502370-55.eps | 63 A<br>125 A<br>160 A | **LVS04040, LVS04041 (4P)**<br>**LVS04045, LVS04047 (4P)**<br>**LVS04031, LVS04149, LVS04046** | D-10, D-11 |
| **Linergy DS distribution block** | | | |
|  DD385267.eps | 100 A<br>125 A<br>160 A | **LGY410028, LGYN1007 LGYN12512**<br>**LGY112510, LGY412548, LGY412560, LGYN12515**<br>**LGY116013, LGY416048** | D-14, D-15 |
| **Linergy FH comb busbars** | | | |
|  DD382484.eps | | | D-18 to D-22 |
| **Linergy FM distribution block** | | | |
|  DD384088-LIN.eps | 63 A<br>80 A | **LVS04008 (4P)**<br>**LVS04004 (4P)** | D-16, D-17 |
| **Cable straps** | | | |
|  Dd381618.eps | | **LVS04239, LVS04243** | C-47 |
| **Trunking** | | | |
|  Dd381639.eps | **80 x 60 mm support external brackets** | **LVS04257, LVS04255, LVS04206** | C-47, C-46 |
| **Cable-tie supports** | | | |
|  Dd386902.eps | | **LVS08867** | C-47 |

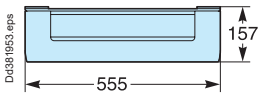
F

# PrismaSeT G Active - Pack 160 enclosures, IP30/IP43
## Dimensions

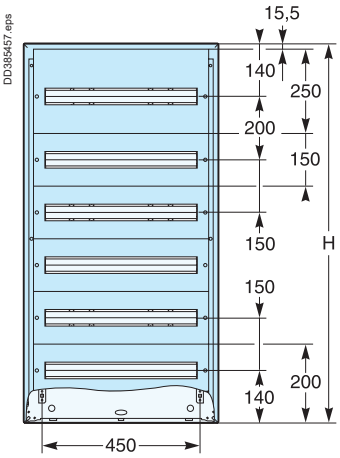
Up to 160 A

### Wall-mounted enclosures of 2 and 3 rows

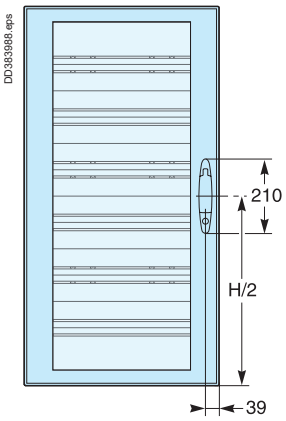


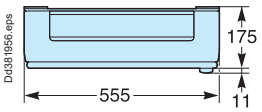




### Wall-mounted enclosures of 4, 5 and 6 rows



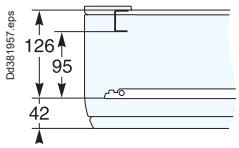

### Door

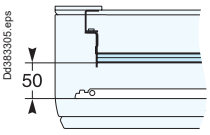


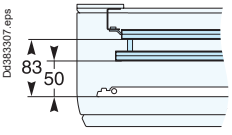

| Nb. of rows | Nb. of vertical modules of 50 mm | Height in mm |
|---|---|---|
| **2** | 9 | 480 |
| **3** | 12 | 630 |
| **4** | 15 | 780 |
| **5** | 18 | 930 |
| **6** | 21 | 1080 |

### Useful depth behind front plate



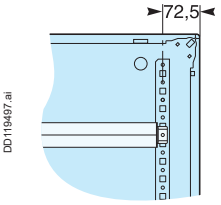




Supplied modular rail.

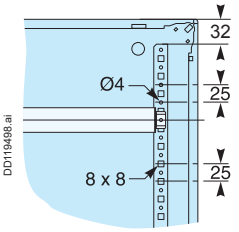


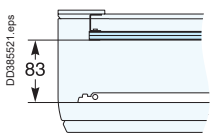

Upper rail in wall-mounted enclosures of 4, 5 and 6 rows.

### Cable running

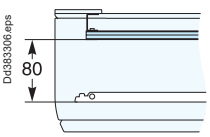



### Rear upright

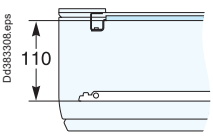



Rail cat. no. LVS**03008**.



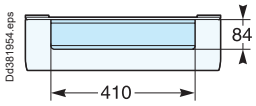

Rail cat. no. LVS**03004**.



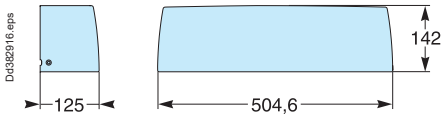

Rail cat. no. LVS**03003**.

Up to 160 A

## Cable entry



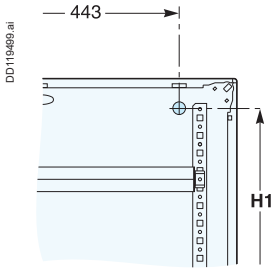

## Trunking spreader



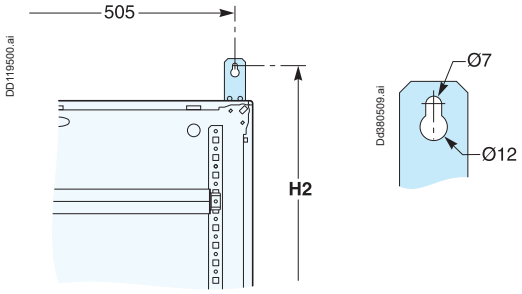

## Wall-mounted installation

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

## Screws




## External brackets




F

# Presentation

## Wall-mounted and floor-standing enclosures

Up to 250 A

Metallic indoor wall-mounted and floor-standing enclosures delivered in a kit with a limited number of references. Commercial buildings: hotels, offices,shops, etc.

**Wall-mounted and floor-standing enclosures delivered flat: total accessibility**
**Designed for electrical continuity**

- **250 A**
- **IP30/IP4X**
- **IK07/08**
- **Seismic characteristics 2,5G**

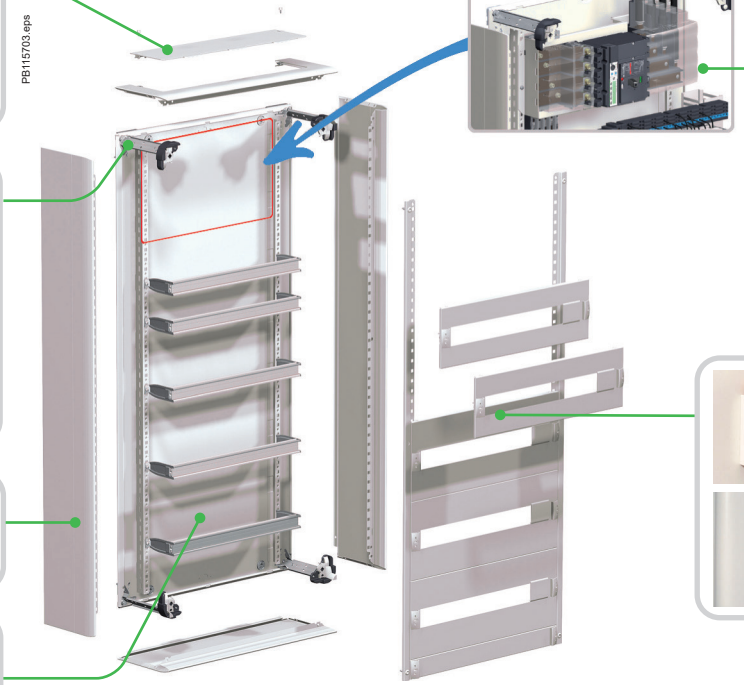
**Gland plate**
- Dismountable and cuttable

**Quick fastening on hook-on rail**
- Easy wall mounting

**Total accessibility**
- Dismountable side panels: flat wiring

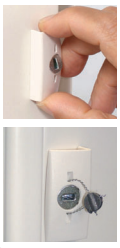
**Confortable wiring**
- Steel sheet metal with inside painting, not aggressive for the hands of the wiring staffs

**Common accessories with PrismaSeT G Active**




**Free space**
- H = 300 mm for incomer device installation at your choice

**Ergonomics and safety**
- Easy panel handling thanks to the ergonomic gripper
- Legible "Open/closed" positions of front plate
- Integrated front plate sealing function




## Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:
- width: 595 mm
- height: 630 to 1830 mm
- depth: 205 mm without door / 261 mm with door (including the handle : 16.6 mm)
- properties of metal enclosures > page G-16

## Main characteristics

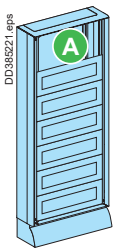
| **PrismaSeT** G Active - **Pack 250 enclosures, IP30/IP4X** | |
|---|---|
| Rated operational current | In = 250 A, Isc = 50 kA, Icw = 25 kA rms/1 s, Ipk = 52.5 kA |
| Colour | White colour RAL 9003 |
| Standards conformity | EN 62208, IEC 61439-1-2-3 |
| Degree of protection | IP30 without door<br>IP40 with door<br>IP41 with canopy + door<br>IP43 with canopy + door + gasket |
| Degree of protection against mechanical impacts | IK07 withour door<br>IK08 with door (transparent)<br>Ik10 with plain door |
| Seismic characteristics | 2.5G without accessory (IEC 60068-2-57) |
| Isolation | Class 1 |
| Doors | ■ Plain or transparent, opening to right or left, 130°<br>■ By design, electrical continuity of moving parts<br>■ Supplied with a handle and keylock (key 405)<br>■ Distance behind door = 58 mm |
| Mounting | Surface mounting, floor-standing, flush-mounting via a kit |

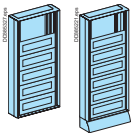
# Wall-mounted and floor standing enclosures
## W600

Up to 250 A

Each enclosure is delivered with H = 150 mm front plates and rails for modular devices (quantity according the number of rows) and a plastic gland plate.

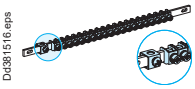
### Wall-mounted and floor standing enclosures W600

Optional





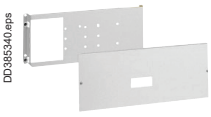

| Capacity | | Nb of row + Zone Ⓐ to complete height 300 mm (6 modules) | H x W x D (in mm) | Wall-mounted and floor-standing | Plain door (1) | Transparent door (1) | Earth bar with 40 staples (16 mm²) and 1 incoming terminal (35 mm²) |
|---|---|---|---|---|---|---|---|
| 9-mm pitches | 18-mm modules | | | | | | |
| **Wall-mounted** | | | | | | | |
| 96 + 96 | 48 + 48 | **2R +** Ⓐ | 630 x 600 x 205 | **LVS08064** | **LVS08124** | **LVS08134** | 1 |
| 144 + 96 | 72 + 48 | **3R +** Ⓐ | 780 x 600 x 205 | **LVS08065** | **LVS08125** | **LVS08135** | 1 |
| 192 + 96 | 96 + 48 | **4R +** Ⓐ | 930 x 600 x 205 | **LVS08066** | **LVS08126** | **LVS08136** | 1 |
| 240 + 96 | 120 + 48 | **5R +** Ⓐ | 1080 x 600 x 205 | **LVS08067** | **LVS08127** | **LVS08137** | 2 |
| 288 + 96 | 144 + 48 | **6R +** Ⓐ | 1230 x 600 x 205 | **LVS08068** | **LVS08128** | **LVS08138** | 2 |
| 336 + 96 | 168 + 48 | **7R +** Ⓐ | 1380 x 600 x 205 | **LVS08069** | **LVS08222** | **LVS08232** | 2 |
| **Floor-standing** | | | | | | | |
| 336 + 96 | 168 + 48 | **7R +** Ⓐ | 1580 x 600 x 205 | **LVS08072** | **LVS08222** | **LVS08232** | 2 |
| 384 + 96 | 192 + 48 | **8R +** Ⓐ | 1730 x 600 x 205 | **LVS08073** | **LVS08223** | **LVS08233** | 2 |
| 432 + 96 | 216 + 48 | **9R +** Ⓐ | 1880 x 600 x 205 | **LVS08074** | **LVS08224** | **LVS08234** | 2 |

(1) Reversible doors, opening to left or right, equipped with a handle and keylock (key 405).

## Zone Ⓐ to complete depending on the incoming device

### Zone Ⓐ (H = 300 mm) to complete


LVS03260




LVS03264

| Zone Ⓐ incoming device | Cat. no. | Composition |
|---|---|---|
| Modular devices ≤ 40 A (2 rows) | **LVS03001** x 2 + **LVS03203** x 2 | 2 modular rails<br>2 modular front plates (H = 2 x 150 mm) |
| Modular devices ≤ 63 A (1 row) | **LVS03001**<br>+ **LVS03204**<br>+ **LVS03802** | 1 modular rail<br>1 modular front plate H = 200 mm<br>1 plain front plate H = 100 mm |
| ComPacT INS-INV40-160, NG125, Vigi NG125, C120, Vigi C120 + Modular devices Acti 9 | **LVS03260** | 1 modular rail<br>+ 1 modular front plate H = 250 mm<br>+ 1 plain front plate H = 50 mm |
| NSXm or NSXm Vigi + modular devices | **LVS03261** | 1 adjustable modular rail<br>+ 1 modular rail<br>+ 2 raisers (1)<br>+ 1 modular front plate H = 250 mm<br>+ 1 plain front plate H = 50 mm |
| ComPacT INS/INV250 horizontal fixed, toggle | **LVS03264** | 1 mounting plate<br>+ 1 front plate INS/INV250 H = 200 mm<br>+ 2 plain front plates H = 50 mm |
| ComPacT NSX100/250 horizontal fixed, toggle | **LVS03030**<br>+ **LVS03232**<br>+ **LVS03802** | 1 mounting plate<br>+ 1 front plate with cut-out H = 200 mm<br>+ 1 plain front plate H = 100 mm |
| VigicomPacT NSX100/250 horizontal fixed, toggle | **LVS03033**<br>+ **LVS03292**<br>+ **LVS03802** | 1 mounting plate<br>+ 1 front plate with cut-out H = 200 mm<br>+ 1 plain front plate H = 100 mm |
| FuPacT ISFT160, horizontal fixed | **LVS03121**<br>+ **LVS03326**<br>+ **LVS03801**<br>+ **LVS03802** | 1 mounting plate<br>+ 1 front plate with cut-out H = 150 mm<br>+ 1 plain front plate H = 50 mm<br>+ 1 plain front plate H = 100 mm |
| FuPacT ISFT250, horizontal fixed | **LVS03124**<br>+ **LVS03328**<br>+ **LVS03801** | 1 mounting plate<br>+ 1 front plate with cut-out H = 250 mm<br>+ 1 plain front plate H = 50 mm |

(1) To add modular devices to the row.

F

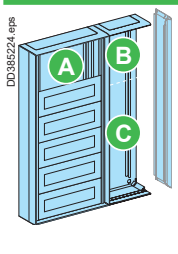
# PrismaSeT G Active - Pack 250, IP30/IP4X enclosures

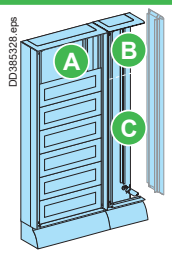
## Wall-mounted and floor standing enclosures + duct

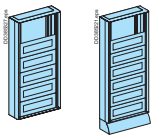
W600 + W300

Up to 250 A

### Wall-mounted and floor standing enclosures W600 + Ducts W300



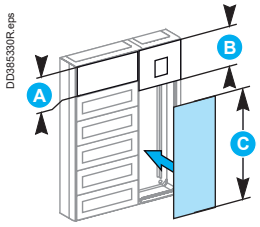



| Nb of row + Zone A to complete height 300 mm (6 modules) | Height in mm | Wall-mounted and floor-standing | Optional: Plain door (2) | Optional: Transparent door (2) | Ducts (1) | Optional: Plain door | Optional: Transparent door | Earth bar with 40 staples |
|---|---|---|---|---|---|---|---|---|
| **Wall-mounted** | | | | | | | | |
| 2R + A | 630 | LVS08064 | LVS08124 | LVS08134 | LVS08174 | LVS08184 | - | 1 |
| 3R + A | 780 | LVS08065 | LVS08125 | LVS08135 | LVS08175 | LVS08185 | - | 1 |
| 4R + A | 930 | LVS08066 | LVS08126 | LVS08136 | LVS08176 | LVS08186 | - | 1 |
| 5R + A | 1080 | LVS08067 | LVS08127 | LVS08137 | LVS08177 | LVS08187 | LVS08197 | 2 |
| 6R + A | 1230 | LVS08068 | LVS08128 | LVS08138 | LVS08178 | LVS08188 | LVS08198 | 2 |
| 7R + A | 1380 | LVS08069 | LVS08222 | LVS08232 | LVS08179 | LVS08282 | LVS08292 | 2 |
| **Floor-standing** | | | | | | | | |
| 7R + A | 1580 | LVS08072 | LVS08222 | LVS08232 | LVS08272 | LVS08282 | LVS08292 | 2 |
| 8R + A | 1730 | LVS08073 | LVS08223 | LVS08233 | LVS08273 | LVS08283 | LVS08293 | 2 |
| 9R + A | 1880 | LVS08074 | LVS08224 | LVS08234 | LVS08274 | LVS08284 | LVS08294 | 2 |

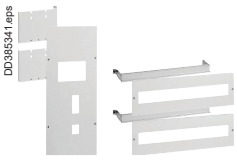
(1) Supplied with a combination kit for enclosure + duct association.
(2) Reversible doors, opening to left or right, equipped with a handle and keylock (key 405).

### Zone A to complete with 2 rails (Ref. LVS03001) + 2 front plates (Ref. LVS03203)

### Zone B to complete (H = 450 mm) with the incoming device




Location of zones to complete




LVS03267

| Incoming device Zone B | Cat. no. | Composition |
|---|---|---|
| ComPacT INV250 | LVS03267 | 1 mounting plate INV<br>1 front plate INV<br>2 modular rails L = 600 mm<br>2 front plates L = 600 mm |
| ComPacT NSX100/250<br>Vertical fixed, toggle | LVS03050<br>+ LVS03253 | 1 mounting plate<br>1 front plate |
| FuPacT ISFT160<br>Vertical fixed, toggle | LVS03123<br>+ LVS03327<br>+ LVS03813 | 1 mounting plate<br>1 front plate H = 300 mm<br>1 front plate H = 150 mm |
| FuPacT ISFT250<br>Vertical fixed, toggle | LVS03125<br>+ LVS03329 | 1 mounting plate<br>1 front plate |

### Zone C to complete

The table below gives the cat. no of plain front plates to be installed to complete the duct.

| Cat. no. of the duct | Dimensions of zone C (mm) to complete | Cat. no. |
|---|---|---|
| LVS08174 | 150 | LVS03813 x 1 |
| LVS08175 | 300 | LVS03816 x 1 |
| LVS08176 | 450 | LVS03817 x 1 |
| LVS08177 | 600 | LVS03816 x 2 |
| LVS08178 | 750 | LVS03815 x 3 |
| LVS08179 | 900 | LVS03816 x 3 |
| LVS08272 | 900 | LVS03817 x 2 |
| LVS08273 | 1050 | LVS03817 x 2 + LVS03813 x 1 |
| LVS08274 | 1200 | LVS03816 x 4 |

Other combinations are possible to complete the zone C, including 7 heights of 300 mm width front-plates:

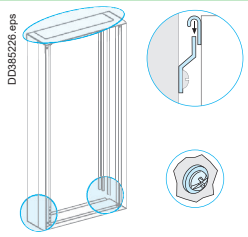
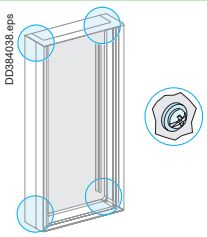
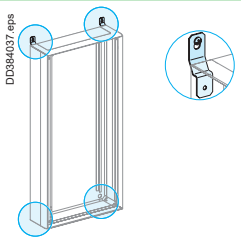
| Height (mm) | Cat. no. |
|---|---|
| 50 | LVS03811 (3) |
| 100 | LVS03812 |
| 150 | LVS03813 |
| 200 | LVS03814 |
| 250 | LVS03815 |
| 300 | LVS03816 |
| 450 | LVS03817 |

(3) Mounting 1 module front plate (LVS03811) on the extreme top or bottom is not allowed.

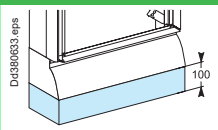
Up to 250 A

## Installation possibilities

Switchboards can be mounted on a wall in three manners: with the hook-on rail system, via the inside of the enclosure or using external wall-mounted brackets. Combined enclosures can be mounted using the lifting/reinforcement crossmembers set of two lifting/reinforcement cross-members.

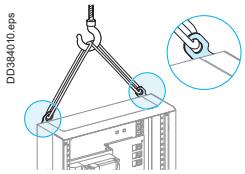
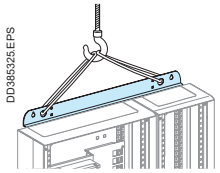
| | Hook-on rail system | Mounting via the inside | Mounting using the external wall-mounted brackets |
|---|---|---|---|
| |  |  |  |
| Catalog numbers | Delivered with the enclosure | - | **LVS08804** |
| Characteristics | The enclosure comes with 2 cross-members secured to the back of the enclosure (top and bottom) and a support rail (with levelling adjustment) for screw-mounting on the wall. The enclosure is easily mounted on the hook-on rail system. End the fixation with 2x 8mm diameter screws, at the bottom of enclosure | The enclosure can be mounted through the spacers in the 4 holes provided on the enclosure using 8 mm diameter screws (2 knockouts can be removed if necessary to provide 2 other holes). | 4 external wall-mounted brackets. |

## Plinth raiser

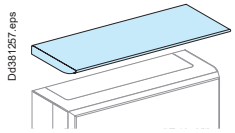
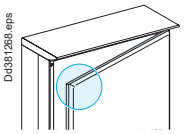
| Plinth raiser | | |
|---|---|---|
| |  | |
| Catalog numbers | **LVS08805** | **LVS08807** |
| Characteristics | For basic floor-standing enclosure or extension W = 600 mm | For a duct W = 300 mm |

## Lifting accessories

The lifting rings are used to move a single wall-mounted or floor-standing enclosure. For combined enclosures, use the lifting/reinforcement cross-members (see below).

| | 2 lifting rings for single wall-mounted or floor-standing enclosures | Lifting/reinforcement cross-members for combined enclosures |
|---|---|---|
| |  |  |
| Catalog numbers | **LVS08801** | **LVS08812** |
| Characteristics |  Set of two lifting rings |  Have 2 types of holes: for lifting and for mounting on a wall |

## Accessories to increase the degree of protection IP

| | Canopy to increase the IP value from IP30 to IP31 (1) | | Gasket for the door to increase the IP value from IP31 to IP43 |
|---|---|---|---|
| |  | |  |
| **Used with** | **1 wall-mounted enclosure** | **1 wall-mounted enclosure + 1 duct (2)** | **Enclosures or a duct from 6 to 36 modules** |
| |  |  | |
| Catalog numbers | **LVS08830** | **LVS08832** | **LVS08841** |
| Designation | The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP41. | | When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5.3 m |

(1) With a door, the IP30 become IP40
With a door + canopy, the IP40 become IP41.
(2) Whatever the duct position.

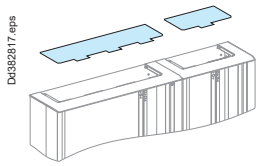
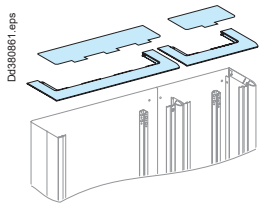
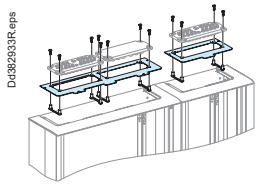
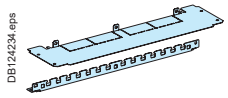
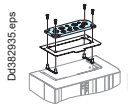
F

# Gland plates, cable running

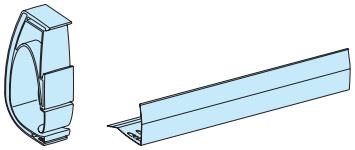
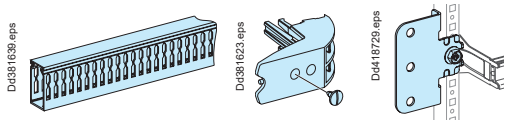
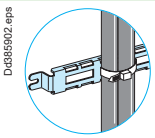
Up to 250 A

## Gland plates

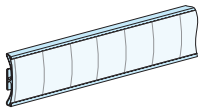
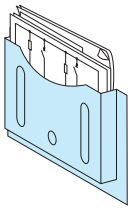
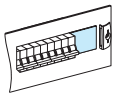
Enclosures (wall-mounted, floor-standing, ducts) are supplied with a plastic gland plate installed on the top or bottom for wall-mounted enclosures and the top for floor-standing enclosures.
The existing plastic gland plate can be replaced by this metal gland plate or by an interface plate with cut-out.

| Wall-mounted and floor-standing W600 and duct W300 | Pages |
|---|---|
| **Plain metal gland plates** | |
|  | E-12 |
| **Metal plates with cut-outs + plastic gland plates** | |
|  | E-12 |
| **Metal plate with cut-outs** | |
|  | E-12 |
| **Metal gland plates for plinth** | |
|  | E-7 |
| **Gland plates, plain with knockouts or membrane-type** | |
|  | E-12 |

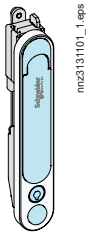
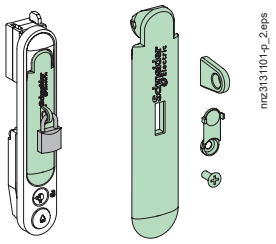
## Cable running

| Cable running | Pages |
|---|---|
| **Horizontal/vertical cable straps + covers** | |
|  | C-47 |
| **Horizontal/vertical trunkings + supports** | |
|  | C-47, C-50 |
| **Cable-tie supports** | |
|  | C-47 |

Up to 250 A

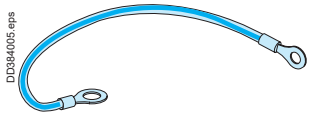
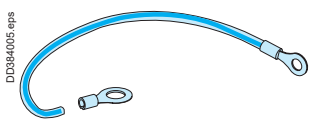
| Labels | Pages |
|---|---|
| **Adhesive labels** | |
|  | C-45 |
| **Adhesive drawing holder** | |
|  | C-45 |
| **Blanking plates modular device (blanking strip or divisible)** | |
|  | F-7 |

## Door handles and padlocking *See page E-13*

| | Rotary handle | Padlocking |
|---|---|---|
| |   |   |
| Catalog numbers | **LVS01218** | **LVS07938** |
| Characteristics | New rotary handle - RAL 9003 | For new rotary handle |

## Earthing braid

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

| | Earthing braid, 6 mm² | Earthing wire, 6 mm² |
|---|---|---|
| |   |   |
| Catalog numbers | **LVS08910** | **LVS08911** |
| Characteristics | Equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other<br>L = 200 mm | Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other.<br>L = 200 mm |

## Spare parts

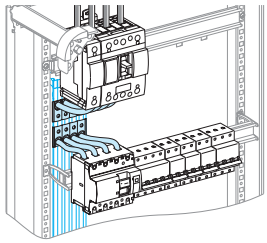
*> see pages E-14 to E-16.*

## Dimensions

*> see page E-17.*

F

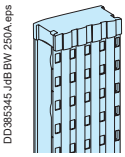
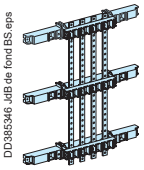
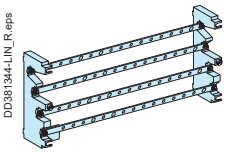
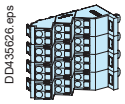
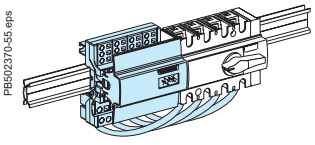
## Up to 250 A




## Presentation

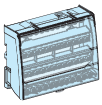
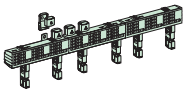
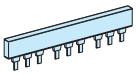
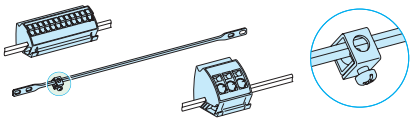
At the head of a switchboard, the incoming device can be supplied by one of the following:

- busbars mounted in rear of the enclosure
- centralised distribution blocks
- row distribution blocks.

| Linergy distribution | | Catalog numbers | Pages |
|---|---|---|---|
| **Linergy BW insulated busbars up to 250 A** | | | |
|   | 125 A | **LVS04103, LVS04104, LVS04107, LVS04108** | D-4 |
| | 160 A | **LVS04111, LVS04121, LVS04116, LVS04126** | |
| | 250 A | **LVS04112, LVS04122, LVS04117, LVS04127** | |
| **Linergy BS rear busbars** | | | |
|   | 160 A | **LVS04161, LVS04171** | D-6 |
| | 250 A | **LVS04162, LVS04172** | |
| | Support | **LVS04191** | |
| **Linergy BS multi-stage distribution block up to 250 A / Linergy BS multi-stage busbars up to 250 A** | | | |
|   | **Complete** | | D-7, D-8 |
| | 160 A | **LVS04052** | |
| | 250 A | **LVS04053** | |
| | **To be assembled** | | |
| | 160 A | **LVS04161, LVS04171** | |
| | 250 A | **LVS04162, LVS04172** | |
| **Linergy DP quick distribution blocks 160 A / Linergy DP quick distribution blocks 250 A** | | | |
|   | NSXm up to 160 A | **LVS04038 (3P)** | D-13 |
| | NSXm up to 160 A | **LVS04039 (4P)** | |
|   | NSX100 to 250 A | **LVS04033, LVS04155 (3P)** | D-12 |
| | NSX100 to 250 A | **LVS04034, LVS04156 (4P)** | |
| **Linergy DX distribution block** | | | |
|   | 63 A | **LVS04040, LVS04041 (4P)** | D-10, D-11 |
| | 125 A | **LVS04045 (4P)** | |
| | 160 A | **LVS04031 (1P), LVS04046 (4P)** | |

**Note:** see pages C-53, C-50 for prefabricated connections.

## Up to 250 A

| Linergy distribution | | Catalog numbers | Pages |
|---|---|---|---|
| **Linergy DS screw distribution blocks** | | | |
|  DD385267.eps | 100 A<br>125 A<br>160 A<br>250 A | **LGY410028**<br>**LGY112510, LGY416048, LGY412560**<br>**LGY116013, LGY412548**<br>**LGY125014** | D-14, D-15 |
| **Linergy FM quick device feeders** | | | |
|  DD381674-LIN.eps | 63 A<br>80 A<br>160 A<br>200 A | **LVS04008 (4P)**<br>**LVS04004 (4P)**<br>**LVS04018 (4P)**<br>**LVS04012 (1P+N), LVS04013 (3P), LVS04014 (4P)** | D-16, D-17 |
| **Horizontal comb busbars Linergy FH** | | | |
|  DD382484.eps | | | D-18 to D-22 |
| **Linergy TB earth bar, neutral bar** | | | |
|  DD381560-LIN.eps | | **LVS04201, LVS04214, LVS04215, LVS04200, LVS04202, LVS04210** | D-23 |

**Note:** see pages C-53, C-50 for prefabricated connections.

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# Additional information

# Contents



G

# Designing PrismaSeT power circuits
## Presentation and approach

The PrismaSeT G Active system takes into account the installation and connection conditions of Schneider Electric devices.
The entire installation complies with standard IEC 61439-1 and 2 of tested switchboard.

PB115625_65.eps

## Electrical characteristics

In the following pages you will find a number of examples, validated for PrismaSeT switchboards, intended to assist in determining the busbars as well as the upstream and downstream connections for the installation.
The examples assume that the devices have already been selected.
A complete process involves a number of steps before making final choices (transformer, conductors, protection, etc.).
Schneider Electric offers a number of tools to assist in designing a complete installation (technical guides, software).

## Busbar sizing

The factors that must be taken into account in determining the size of busbars include:

- the diversity factor.

Not all the loads supplied by a set of busbars are used at full rated load or at the same time. The diversity factor is the means to determine the maximum load current used to size the busbars.

**Standard IEC 61439-1 and 2 §4.7 specifies the table below:**

| Number of circuits | Rated diversity factor (RDF) |
|---|---|
| 2 and 3 | 0.9 |
| 4 and 5 | 0.8 |
| 6 and 9 | 0.7 |
| 10 and more | 0.6 |

- the degree of protection IP.
- the ambient temperature around the switchboard.

## Supply of devices for outgoers ⩽ 630 A

**Flexible copper bars with an insulating cover.**
To determine the required sizes for flexible bars, see the tables starting on *> see page G-3* which indicate the correct size for each type of connected device.

- an insulated flexible bar (not connected) must meet standards IEC 60243-1, (dielectric, *> see page G-3*), NFC 32201 (insulation) and IEC 60332-1 (fire)
- a flexible bar connected to a device in an enclosure must comply with standard IEC 61439-1 and 2.

**Cables**
To determine the cables required, see the tables. on *> see page G-5*.
They can be used to determine:

- the size of cables as a function of:
  - the circuit breaker rating
  - the current
  - the ambient temperature around the switchboard
- the permissible current for individually tied cables or touching cables as a function of:
  - the size of the cables
  - the degree of protection for the switchboard.

Rapsody software
Easy design with
> see page B-20

Electrical characteristics

## Flexible copper bars with an insulating sheath

### Switchboards that comply with standard IEC 61439-1 and 2

It is imperative to use the values indicated below that have been validated for the installation of devices in PrismaSeT switchboards.
The parameters determining the size of flexible bars are:
- the environment in which the devices are installed:
  - position in the enclosure
  - dimensions of other conductors in the circuit
  - ambient temperature around the switchboard
- the characteristics of the connected devices:
  - device heat losses
  - the type of installation (horizontal or vertical)
  - the type of device (fixed or withdrawable).

Only the equipment manufacturer with in-depth knowledge on:
- the characteristics of the installed devices
- the configuration of the installation in the enclosure can provide the correct sizes of flexible bars for a given permissible current.

Insulated flexible bars brings flexibility, easy ans quick installation.

### Insulated flexible bars are better solution than cables:

- better insulation temperature withstand (125 °C for bars, 105 °C for cables) and a larger exchange surface for an equivalent size, i.e. a smaller size for a given current
- greater rigidity offering better electrodynamic characteristics for short-circuit currents
- no intermediate parts (lugs) for a direct connection between the device and the busbars therefore less temperature rise and less risk of error
- fast implementation of prefabricated connections already cut to length, formed and drilled.

**Technical characteristics**
- thickness of the insulation: variable depending on the bar size, 2 mm on average
- rated insulation level Ui = 1000 V
- impulse withstand voltage Uimp = 12 kV
- maximum withstand temperature of insulating material = 125 °C.

## Connection

In all enclosures with IP ⩽ 55
- the switchboard internal temperature is 60 °C
- the withstand temperature of the insulating material is 125 °C.

If the withstand temperature of the insulation is only 105 °C, use the next largest flexible bar.
The bar sizes (S) indicated below take into account the derating curves of devices.

### Connection of devices and distribution blocks to busbars

| Device | INS-INV125 | INS-INV160 | INS-INV250 | INS-INV320 INS-INV400 | INS-INV500 INS-INV630 | GS250 ISFT250 | GS400 ISFT400 | GS630 ISFT630 |
|---|---|---|---|---|---|---|---|---|
| S (mm) | 20 x 2 | 20 x 2 | 20 x 3 | 32 x 5 | 32 x 6 | 24 x 5 | 32 x 5 | 32 x 8 |

To connect a ComPacT NSX250 to Linergy BW busbars, use a 24 x 5 mm flexible bar (LVS04746).

| Device | Linergy FM distribution block (200 A) |
|---|---|
| S (mm) | 20 x 3 |

### Disconnectors, terminal blocks, connections, busbars to busbars

| I max. (60 °C) | 200 A | 250 A | 400 A | 400 A | 480 A | 520 A | 580 A | 660 A |
|---|---|---|---|---|---|---|---|---|
| S (mm) | 20 x 2 | 20 x 3 | 24 x 5 | 24 x 5 | 24 x 6 | 32 x 5 | 32 x 6 | 32 x 8 |

**Note:** The values indicated above have been validated for PrismaSeT switchboards.

G

# Designing connections ⩽ 630 A
## ComPacT circuit breakers NSX100 to 630

### Electrical characteristics

## ComPacT NSX100 to NSX250

### Insulated flexible copper bars

| Devices | | Rated current of a circuit $I_{nc}$ (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | |
| | | 25 °C | 30 °C | 35 °C | 40 °C | 45 °C | 50 °C |
| **IP ⩽ 55** | | | | | | | |
| NSX100 TMD-TMG | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 100 | 97.5 | 95 | 92.5 | 90 | 85 |
| NSX125 TMD-TMG | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 125 | 122 | 119 | 116 | 113 | 100 |
| NSX160 (1) TMD-TMG | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 160 | 156 | 152 | 147 | 144 | 140 |
| NSX250 (1) TMD-TMG | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 250 | 244 | 238 | 231 | 225 | 198 |
| NSX100 STR | Size per phase | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 | 20 x 2 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 100 | 100 |
| NSX160 STR | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 160 | 160 | 160 |
| NSX250 (2) STR | Size per phase | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 | 20 x 3 |
| | $I_{nc}$ (A) | 250 | 250 | 237.5 | 237.5 | 225 | 225 |

## ComPacT NSX400 to NSX630

### Insulated flexible copper bars

| Devices | | Rated current of a circuit $I_{nc}$ (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | |
| | | 25 °C | 30 °C | 35 °C | 40 °C | 45 °C | 50 °C |
| **IP ⩽ 55** | | | | | | | |
| NSX400B/F/N/H/S/L fixed | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 400 | 400 | 390 | 380 | 370 |
| NSX400B/F/N/H/S/L with Vigi or NSX Vigi (ELCB) 400 B/F/N/H/S/L | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 390 | 380 | 370 | 360 | 350 |
| NSX400B/F/N/H/S/L withdrawable | Size per phase | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 | 32 x 5 |
| | $I_{nc}$ (A) | 400 | 390 | 380 | 370 | 360 | 350 |
| NSX630B/F/N/H/S/L fixed | Size per phase | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 | 32 x 6 |
| | $I_{nc}$ (A) | 630 | 615 | 600 | 585 | 570 | 550 |
| NSX630B/F/N/H/S/L with Vigi or withdrawable or NSX Vigi (ELCB) 630 B/F/N/H/S/L | Size per phase | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 | 32 x 8 |
| | $I_{nc}$ (A) | 570 | 550 | 535 | 520 | 505 | 490 |

**Note:** the values indicated above have been validated for PrismaSeT switchboards.
(1) For a withdrawable NSX160 or NSX250 equipped with a Vigi or NSX Vigi (ELCB) or an insulation-monitoring module, multiply the In values by 0.9.
(2) For a withdrawable NSX250 equipped with a Vigi or NSX Vigi (ELCB) or an insulation-monitoring module, multiply the In values by 0.86.

# Designing connections ⩽ 630 A
## ComPacT circuit breakers NSX100 to 630
## ComPacT circuit breakers NSXm up to 160

Electrical characteristics

## Cables

Schneider Electric provides cabling recommendations according to the rating of the circuit breaker.
The size of cables must be selected according to:
- the level of current
- the ambient temperature around the conductors
- the degree of protection for the switchboard.

When mounting Schneider Electric prefabricated connections, short terminal shields can be used or not if the function is already integrated in prefabricated connections.
**Note:** For some devices, it is recommended to use Schneider Electric prefabricated connections. If not, switchgears must be equipped with long terminal shields for personnel safety.

## ComPacT NSX100 to NSX250

### Copper cable, withstand temperature = 105 °C

| Devices | | Rated current of a circuit $I_{nc}$ (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | |
| | | 25 °C | 30 °C | 35 °C | 40 °C | 45 °C | 50 °C |
| **IP ⩽ 55** | | | | | | | |
| NSX100 TMD-TMG | Size per phase (mm²) | 50 | 50 | 50 | 50 | 50 | 50 |
| | $I_{nc}$ (A) | 100 | 97.5 | 95 | 92.5 | 90 | 85 |
| NSX125 TMD-TMG | Size per phase (mm²) | 70 | 70 | 70 | 70 | 70 | 70 |
| | $I_{nc}$ (A) | 125 | 122 | 119 | 116 | 113 | 100 |
| NSX160 (1) TMD-TMG | Size per phase (mm²) | 95 | 95 | 95 | 95 | 95 | 95 |
| | $I_{nc}$ (A) | 160 | 156 | 152 | 147 | 144 | 140 |
| NSX250 (1) TMD-TMG | Size per phase (mm²) | 120 | 120 | 120 | 120 | 120 | 120 |
| | $I_{nc}$ (A) | 250 | 244 | 238 | 231 | 225 | 198 |
| NSX250 (1) Withdrawable TMD-TMG | Size per phase (mm²) | 120 | 120 | 120 | 120 | 120 | 120 |
| | $I_{nc}$ (A) | 238 | 231 | 223 | 215 | 204 | 195 |
| NSX100 STR | Size per phase (mm²) | 50 | 50 | 50 | 50 | 50 | 50 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 100 | 100 |
| NSX160 STR | Size per phase (mm²) | 95 | 95 | 95 | 95 | 95 | 95 |
| | $I_{nc}$ (A) | 160 | 160 | 160 | 160 | 160 | 160 |
| NSX250 (2) STR | Size per phase (mm²) | 120 | 120 | 120 | 120 | 120 | 120 |
| | $I_{nc}$ (A) | 250 | 250 | 237.5 | 237.5 | 225 | 225 |

## ComPacT NSX400 to NSX630

### In case of cable connection

Cable connection is not recommended if the cable sizes are too large. Choose insulated flexible bar (see table opposite and list of insulated flexible bars).

(1) For a withdrawable NSX160 or NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the In values by 0.9.
(2) For a withdrawable NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the In values by 0.86.
**Note:** the values indicated above have been validated for PrismaSeT switchboards.

## ComPacT NSXm up to 160

### Copper cable, withstand temperature = 105°C

| Devices | | Rated current of a circuit $I_{nc}$ (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | |
| | | 25 °C | 30 °C | 35 °C | 40 °C | 45 °C | 50 °C |
| **IP ⩽ 55** | | | | | | | |
| NSXm100 TMD | Size per phase (mm²) | 50 | 50 | 50 | 50 | 50 | 50 |
| | $I_{nc}$ (A) | 96 | 94 | 90 | 87 | 83 | 80 |
| NSXm125 TMD | Size per phase (mm²) | 70 | 70 | 70 | 70 | 70 | 70 |
| | $I_{nc}$ (A) | 120 | 117 | 113 | 109 | 104 | 100 |
| NSXm160 TMD | Size per phase (mm²) | 95 | 95 | 95 | 95 | 95 | 95 |
| | $I_{nc}$ (A) | 156 | 152 | 148 | 144 | 139 | 133 |
| NSXm Vigi (ELCB) 100 | Size per phase (mm²) | 50 | 50 | 50 | 50 | 50 | 50 |
| | $I_{nc}$ (A) | 100 | 100 | 100 | 100 | 96 | 93 |
| NSXm Vigi (ELCB) 160 | Size per phase (mm²) | 95 | 95 | 95 | 95 | 95 | 95 |
| | $I_{nc}$ (A) | 160 | 155 | 150 | 145 | 140 | 135 |

**Note:** For use of NSXm in PrismaSeT Pack multiply the Inc values by 0.98.

# Designing connections ⩽ 630 A

## Incoming connection block and power supply block on Linergy BW busbars
## Tubular lugs, Bimetal lugs

Electrical characteristics

## ComPacT NSX100 to NSX630

### Horizontal mounting

Determining the permissible current of NSX100 to NSX630 connection and power supply blocks as a function of the ambient temperature around the switchboard and their IP degree of protection.

| Device | | | | Rated current of a circuit $I_{nc}$ (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 |
| NSX100 TMD-TMG | Incoming connection block | via the top | LVS04066 | 100 | 95 | 100 | 92 | 100 | 90 | 97 | 87 | 95 | 85 | 92 | ■ |
| | | via the bottom | LVS04067 | | | | | | | | | | | | |
| | Power supply block | | LVS04060 | | | | | | | | | | | | |
| NSX100STR | Incoming connection block | via the top | LVS04066 | 100 | 100 | 100 | 97 | 100 | 95 | 100 | 92 | 100 | 90 | 97 | ■ |
| | | via the bottom | LVS04067 | | | | | | | | | | | | |
| | Power supply block | | LVS04060 | | | | | | | | | | | | |
| NSX160 TMD-TMG | Incoming connection block | via the top | LVS04066 | 160 | 152 | 160 | 147 | 160 | 144 | 156 | 140 | 152 | 136 | 147 | ■ |
| | | via the bottom | LVS04067 | | | | | | | | | | | | |
| | Power supply block | | LVS04060 | | | | | | | | | | | | |
| NSX160STR | Incoming connection block | via the top | LVS04066 | 160 | 160 | 160 | 156 | 160 | 152 | 160 | 147 | 160 | 144 | 156 | ■ |
| | | via the bottom | LVS04067 | | | | | | | | | | | | |
| | Power supply block | | LVS04060 | | | | | | | | | | | | |
| NSX250 TMD-TMG | Incoming connection block | via the top | LVS04066 | 238 | 213 | 231 | 207 | 225 | 200 | 219 | 193 | 213 | 185 | 207 | ■ |
| | | via the bottom | LVS04067 | | | | | | | | | | | | |
| | Power supply block | | LVS04060 | | | | | | | | | | | | |
| NSX250STR | Incoming connection block | via the top | LVS04066 | 250 | 219 | 245 | 213 | 238 | 207 | 225 | 200 | 219 | 193 | 213 | ■ |
| | | via the bottom | LVS04067 | | | | | | | | | | | | |
| | Power supply block | | LVS04060 | | | | | | | | | | | | |
| NSX400B/F/ N/H/S/L fixed | Incoming connection block | | LVS04076 | 400 | 360 | 390 | 350 | 380 | 340 | 370 | 330 | 360 | 320 | 350 | ■ |
| | Power supply block | | LVS04070 | | | | | | | | | | | | |
| NSX630B/F/ N/H/S/L fixed | Incoming connection block | | LVS04076 | 570 | 520 | 555 | 505 | 540 | 490 | 525 | 470 | 510 | 450 | 495 | ■ |
| | Power supply block | | LVS04071 | | | | | | | | | | | | |

**Note:** the values indicated above have been validated for PrismaSeT switchboards.
■ connection not possible.

The indicated performance characteristics are valid for:
- ComPacT NSX100/160/250/400 circuit breakers used as incoming or outgoing devices
- ComPacT NSX630 circuit breakers used as incoming device.

## Designing connections with cables

### Tubular lugs

**Tubular lugs for incoming connection blocks**

Maximum size of lugs for connection to the different incoming connection blocks.

| | *Standard Cu lugs* | *Narrow Cu lugs* | *Narrow bimetal lugs* |
|---|---|---|---|
| Incoming connection block for NSX-INS-INV250 supplied via the top or bottom, cat. no. LVS04066 and LVS04067 | 150 mm² | 240 mm² | 185 mm² |
| In-duct incoming connection block for NSX630, cat. no. LVS04076 | 240 mm² | 300 mm² | 300 mm² |

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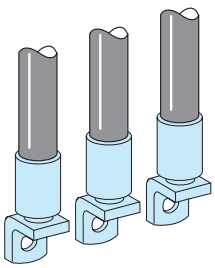


## Narrow bimetal lugs

**Catalog numbers selection**

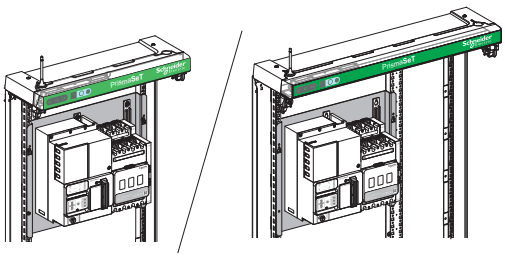
| *Catalog numbers* | *Cable size (mm²)* | *Quantity* |
|---|---|---|
| **Lugs for aluminium cable(1)** | | |
| **LV429504** | 150 | 3 |
| **LV429505** | 150 | 4 |
| **LV429506** | 185 | 3 |
| **LV429507** | 185 | 4 |
| **LV432504** | 240 | 3 |
| **LV432505** | 240 | 4 |
| **LV432506** | 300 | 3 |
| **LV432507** | 300 | 4 |

**(1)** Supplied with 2 or 3 interphase barriers.

# Designing connections ⩽ Frame 250

## TransferPacT Active Automatic/Automatic/Remote Frame 250





## Cables

Schneider Electric provides cabling recommendations according to the rating of the TransferPacT switch.
The size of cables must be selected according to:

- the level of current
- the ambient temperature around the conductors
- the degree of protection for the switchboard.

**Note:** When mounting, TransferPacT devices must be equipped with long terminal shield for personnel safety.

## TransferPacT Frame 250

### Copper cable, withstand temperature = 105 °C

### Vertical Mounting

### Front Connection

### Incoming Top Connection - Cable

### Outgoing Bottom Connection - Cable

## Incoming and Outgoing Connections - Cable

Cable Used 120mm²

| Devices | | Permissible Current (A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ambient temperature around the switchboard | | | | | | | | | | | |
| | | 25 °C | | 30 °C | | 35 °C | | 40 °C | | 45 °C | | 50 °C | |
| IP ⩽ 55 | Cable Size | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 | IP ⩽ 31 | IP > 31 |
| TransferPacT 250 | Size per phase (mm²) | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| | I (A) | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 240 | 250 | 235 | 240 | 225 |

## Designing Connection with Cable

### Tubular Lugs

**Note:** The values indicated above have been validated for PrismaSeT G Active switchboards.
Select Copper or Aluminium lugs using TransferPacT device catalog along with the respective cable size.

Electrical characteristics

## Size of PEN protective conductor

### Practical guidelines

The size of the PEN is determined in the same manner as a neutral conductor, i.e.:
- for copper single-phase circuits or sized y 16mm², it must be the same size as the phase conductors
- for copper three-phase circuits sized > 16 mm², it can be:
  - the same size as the phase conductors
  - smaller on the condition that:
    - the current likely to flow in the neutral during normal operation is less than the permissible current for the conductor
    - the power rating of single-phase loads does not exceed 10 % of the total rating.

The conductor must be accessible to enable connections both in the factory and on site, as well as checks on the tightness of connections.

## Implementing the PEN protective conductor

### Practical guidelines

According to standard IEC 61439-1 and 2, the practical guidelines for implementing the PEN are the following:
- at the entry to the assembly, the PEN connection must be next to the phase connections
- within the assembly, the PEN does not need to be insulated from the exposed conductive parts (except on sites where there is a risk of fire or explosion)
- the size of the conductor must be at least equal to that of the neutral
- the size must remain constant throughout the main busbars
- the change from a TNC to a TNS system must take place at a single point in the switchboard, via a marked neutral-disconnection bar that is accessible and can be dismantled to facilitate the impedance measurement of the fault loop
- after the TNS creation point, it is forbidden to recreate a TNC system.

The PE and the neutral must meet their specific requirements.

## Electrical characteristics

- To ensure protection of persons, first connect the switchboard protective conductor to the earth electrode.
- Tie the cables as close as possible to the connections to avoid any mechanical stresses on the device terminals. When not using cable glands, also attach the cables near to the electrical switchboard.
- Cables must never be in contact with or passed between live conductors.
- Sharp edges of the framework must be protected where cables pass to avoid damaging the conductors.
- Comply with a minimum radius of curvature of 6 to 8 times the cable outside diameter.
- All power connections must be made with class 8.8 mounting hardware and elastic contact washers, tightened to the torque indicated in the table below.
- When connecting aluminium cables to copper terminals, use bimetal lugs or interfaces.
- Separate the different types of circuits into separate cable bundles (power, control, 48 V, 24 V, DC, AC, etc).

### Cable bundles

| Cable cross-sectional area ($mm^2$) | Max. number of cables per bundle |
|---|---|
| CSA ≤ 10 | 8 |
| 16 < CSA ≤ 50 | 4 |
| CSA ≥ 50 | Tie individually |

### Tying the cable bundles

| Type of tie | Maximum Icw (kA/rms 1s) | Distance between ties (mm) |
|---|---|---|
| Width: 4.5 mm<br>Load: 22 kg | 10<br>15<br>20 | 200<br>100<br>50 |
| Width: 9 mm<br>Load: 80 kg | 20<br>25<br>35<br>45 | 350<br>200<br>100<br>70 |

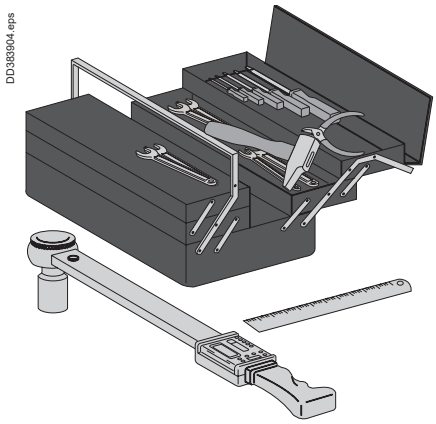
For cable sizes of 50 $mm^2$ or more, use 9 mm wide fixing ties.

**Recommended tightening torque** for mechanical and electrical connections with 8.8 class screws.

| Diameter of screw | Tightening torque (Nm) (with nut + contact washer) |
|---|---|
| M3 | 1.5 |
| M4 | 3.5 |
| M5 | 7 |
| M6 | 13 |
| M8 | 28 |
| M10 | 50 |
| M12 | 75 |

# Tools required for mounting and connection

## Practical information

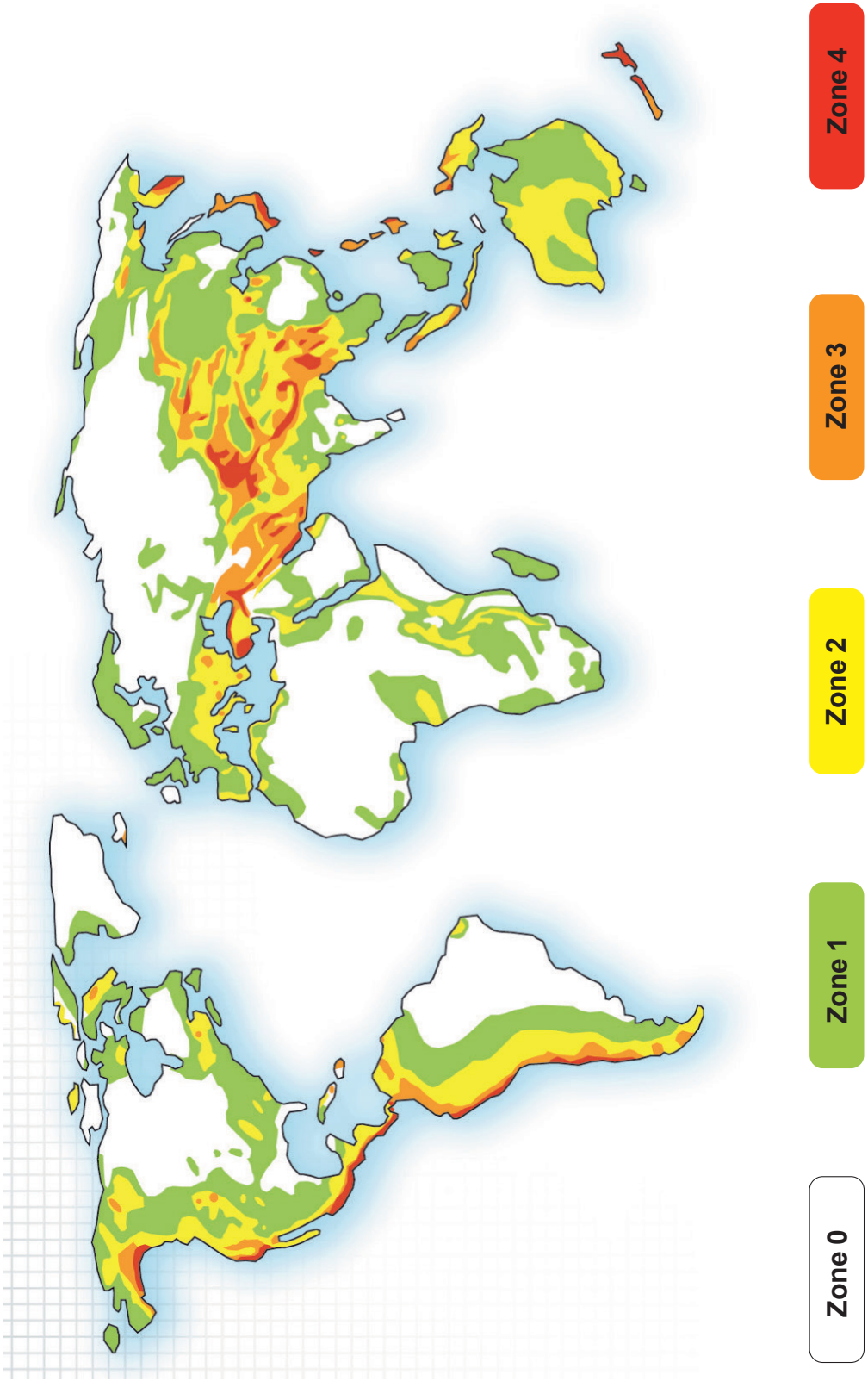



- Vacuum cleaner to clean the switchboards
- Ratchet wrench with sockets
- Torque wrench with sockets and ring bits to tighten the electrical connections to the correct torque (max. torque 50 Nm)
- Open-ended spanners (15 to 27 mm)
- Electrician's knife
- 7, 8, 10, 13, 16, 17 and 19 mm sockets
- Bit holder socket
- 4, 5, 6, 8 and 10 mm hexagonal-head bits
- Pozidriv no. 1, 2 and 3 bits
- Rubber mallet
- Level
- Measurement and inspection tools and instruments
- Drill
- Semi-circuit nosed pliers
- Cable-tie pliers
- Wire stripper
- Crimping tool
- Diagonal cutter
- Wire cutters
- Flat-nosed pliers
- Bit holder for screwdriver
- Extension
- Electric saw
- Jig saw
- Clamp for cubicle alignment
- Buzzer or tester
- 3, 4, 5, 5.5 and 8 mm flat screwdrivers
- Posidriv no. 2 crosshead screwdriver (to mount handle)
- Hydraulic jacks that can be operated in horizontal position to lift cubicles and move them sideways if necessary
- Coloured, indelible and temperature resistant acrylic varnish
- Electric screwdriver
- LoRA tester
- Smartphone or Tablet

# PrismaSeT G Active seismic

## Seismic zone

Around the world can be found different zones with a specific seismic risk.
These zones have been classified according to the Uniform Building Code (UBC).



# PrismaSeT G Active seismic

## Switchboard qualification

Tests are carried out on switchboards to ensure that they operate correctly (structural and functional integrity) under severe earthquake conditions and meet specific safety requirements.
The tests carried out to qualify these switchboards are described in the international standard IEC 60068-3-3.

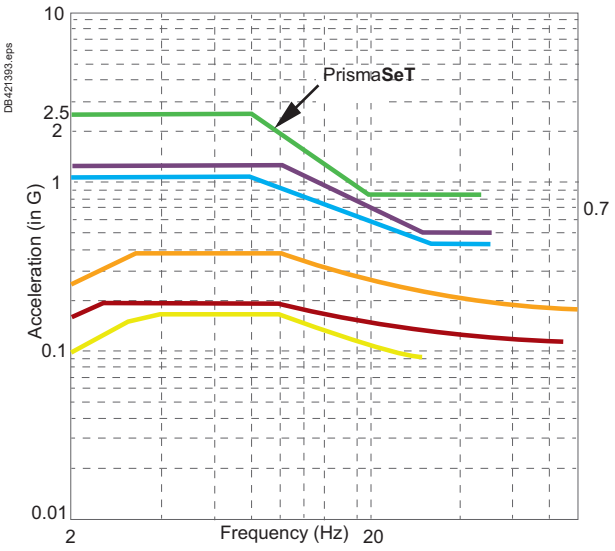
## Classification

From weak to strong earthquakes, PrismaSeT G Active has been tested in the following ground accelerations to guarantee the right performance on seismic risk.

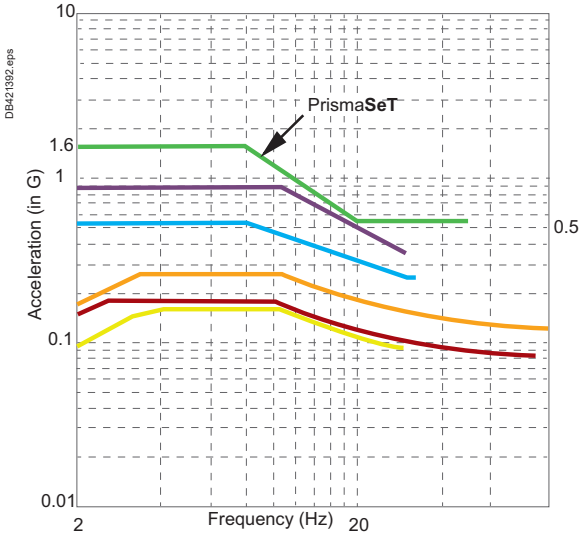
| IEC 60068 -3-3 Ground acceleration | Seismic characteristics | | | |
|---|---|---|---|---|
| References | General description | Richter scale magnitude | MSK Intensity | UBC Zone |
| AG2 | Intensity from weak to average | < 5 .5 | < VIII | 0<br>1 |
| AG3 | Intensity from average to strong | 5.5 to 7.0 | VIII to IX | 2 3 |
| AG5 | Intensity from strong to very strong | > 7.0 | > IX | 4 |

PrismaSeT G Active is compliant up to level AG5 from IEC 60068-3-3 (2,5G) :

Compare PrismaSeT G Switchboards Performances with seismic Standard Damping % - **horizontal**




Compare PrismaSeT G Switchboards Performances with seismic Standard Damping % - **vertical**




| | Country | Standard | Parameters |
|---|---|---|---|
| | PrismaSeT G Active | IEC60068-3-3 | Up to level AG5 |
| | Russia | GOST 17516.1-90 | Civil Market (Seismic intensity 8, all installation levels) or (Up to Seismic Intensity 9, Level 1 only) |
| | Chile | ENDESA 1986 | All seismic categories |
| | Turkey | Seismic Turkish Code 2009 | All seismic zones, all site class |
| | Greece | EAK 2000 | All soil types, Worst case |
| | Australia | AS1170 | All soil types, Worst case |

**Warning:** use the seismic kit **LVS04130** when using linergy BW *> see page D-4*




## What is a standard?

### A common reference

*"A standard helps to define a common language between economic stakeholders (producers, users and consumers), to clarify and harmonize practices and to define the levels of quality, safety, compatibility, and least environmental impact of products, services and practices.*
*Standards facilitate trade, both national and international, and help to better structure the economy and facilitate the everyday life of everyone."*

***Afnor definition***

## IEC international standards

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.

## National standards

**In Europe**

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

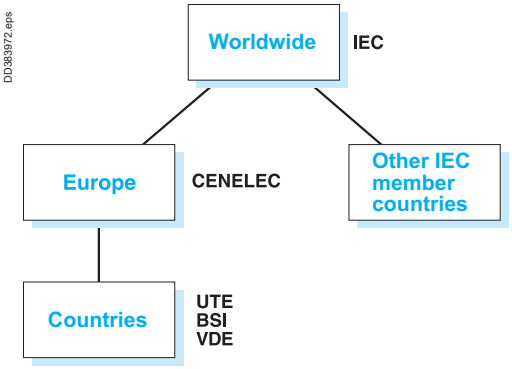
- either a European standard (EN), often identical to the IEC standard, which then becomes the applicable national standard in all the member countries
- or, in the event of differences, a harmonisation document (HD).

**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.

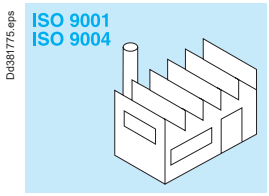



***CEI / IEC***
*Commission Electrotechnique Internationale*
***CENELEC***
*Comité Européen de Normalisation ELECtrotechnique*
***UTE***
*Union Technique de l'Électricité*
***VDE***
*Verband der Elektrotechnik, Elektronik und Informationstechnik e.v. (German electrotechnical, electronics and computer technology standardisation organisation)*
***BSI***
*British Standards Institution*

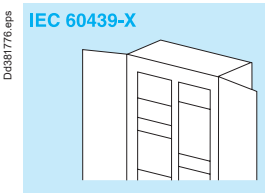
G


## The different types of standards

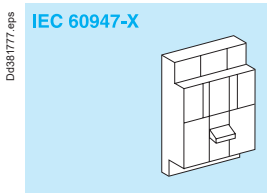
There are different types of standards, including:
- management standards
- installation standards
- product standards.



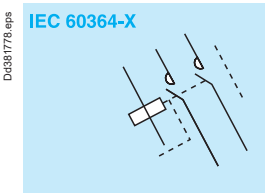

Design and manufacture.




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.

### Low voltage installation standards

The set of IEC 60364 standards defines the main principles and rules for the design and the mounting of the electrical installation:
- determining general characteristics of installations
- protection
- selection and installation of equipment
- verification and maintenance of installations.

### Switchgears 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 60947-7-1: terminal blocks for copper conductors
  - IEC 62208: empty enclosures.

- The IEC 61439 switchboard standard:
  - characterizes the electrical switchboard and specifies the design, construction and verification rules
  - describes in detail all low voltage switchgear and controlgear: definitions, technical characteristics, conditions of use, and construction and verification requirements
  - applies to power switchgear and controlgear assemblies (PSC assemblies) whose rated voltage does not exceed 1000 V in alternating current or 1500 V in direct current.

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

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.

> More informations in *pages B-22* to *B-25*.




## Enclosure standards

Standard IEC 62208 lay down definitions, classifications, characteristics and test requirements for enclosures used for switchgear and controlgear assemblies.
They apply to empty enclosures before installation of the devices by the panelbuilder, as supplied by the manufacturer.
They apply to one-piece enclosures and to enclosures supplied in kit form.

### Type tests of standard IEC 62208

**1** - Static load
**2** - Hoisting
**3** - Axial loads of metal inserts
**4** - IK code
**5** - IP code
**6** - Thermal stability
**7** - Resistance to heat
**8** - Resistance to abnormal heat and to fire
**9** - Dielectric strength
**10** - Protective-circuit continuity
**11** - Weather resistance
**12** - Corrosion resistance
**13** - Marking

## CE marking

CE marking is a regulatory symbol attributed under the sole responsibility of the manufacturer and intended for the verification authorities of the European countries that enforce the European regulations.
It allows free circulation of a product in the European Union and certifies that it complies with the basic requirements in all the applicable European directives.
CE marking is not a quality symbol and does not indicate conformity with a standard

The CE declaration is intended exclusively for the authorities in charge of verifying compliance with the applicable regulations and it is drafted, signed and held for presentation to the authorities by the manufacturer.
For the PrismaSeT range, the declaration is the responsibility of the Schneider Electric unit that has designed and developed the product.
For LV switchboards, the declaration is the responsibility of the panelbuilder.

The following products receive CE marking:
- all products that are liable to endanger the safety of persons, animals and property (LV directive)
- all products likely to emit electromagnetic disturbances above a standardised threshold or to be disturbed during operation (EMC directive).

Consequences:
- the PrismaSeT range falls under the LV directive only
- LV switchboards are covered by the LV directive and may also fall under the EMC directive, depending on the type of devices incorporated.

CE

For the PrismaSeT range, CE marking is applied:
- on the packing of "mechanical" components
- on the product itself for "electrical" components.

For the LV assemblies created by the panelbuilder, CE marking is applied:
- on the packing
- on the rating plate (if applicable)
- on one of the documents accompanying the switchboard when it is shipped.


## Standards

Schneider Electric enclosures comply with standard IEC 62208 for empty enclosures. The sheet metal used for Schneider Electric enclosures receives an anti-corrosion epoxy electrophoresis treatment and a coating of a thermosetting, polyester-resinmodified epoxy powder for colour and appearance.
This two-coat system provides excellent finish and corrosion protection.
The characteristics of this coating are much better than those of traditional epoxy powders:

- improved colour stability
- wider operating temperature range.

## Mechanical properties of enclosures

| **Static load on doors, wall-mounted and floor-standing enclosures and cubicles** | |
|---|---|
| Floor-standing enclosure | 64 kg |
| Wall-mounted enclosure | 48 kg |
| Floor-standing enclosure door | 4 kg |
| Wall-mounted enclosure door | 4 kg |

## Mechanical properties of powder coated surfaces

**Test conditions**
**Test piece made of 1 mm thick steel sheet, degreased, iron phosphated, final rinsing with 100000 Ω cm DI water, 15 microns of anti-corrosion electrophoresis treatment and 35 microns of powder paint.**

| | | |
|---|---|---|
| Adhesion (cross-hatch and pull-off) | class 0 required | (ISO 2409) |
| Impact strength (1) | > 1 kg/50 cm | (ISO 6272) |
| Mandrel bending test (2) | < 10 mm | (ISO 6860) |
| Persoz hardness | 300 s | (ISO 1522) |

## Artificial ageing test on powder coating

**Test conditions: two tests carried out on the same 1 mm thick steel sheet test piece.**

- cyclical damp-heat test:
  - as per standard IEC 68-2-30
  - six 24-hour cycles at temperatures higher than 40 °C
- continuous resistance to neutral salt mist:
  - the tests were carried out over a period of 400 hours, far more than the 48 hours required by the standard for indoor installations
  - as per standard IEC 68-2-11 and ISO 7253
  - 400 hours without blistering for normal surface on test piece
  - 250 hours for a scratched surface.

**Evaluation of corrosion as per ISO 4628:**

- adhesion: class ≤ 1
- blistering: degree 1 dim.1
- rusting: Ri 1
- cracking: class 1
- flaking imp. 1 dim. 1
- propagation of corrosion under scratch with respect to the scratch axis: 3 mm max.

## Chemical properties of powder coating

**Tests carried out at ambient temperature on phosphated test pieces coated with a 150 to 200 micron film.**

| **Test duration (months)** | | | **2** | **4** | **6** | **8** | **10** | **12** |
|---|---|---|---|---|---|---|---|---|
| Acids | | Concentration | | | | | | |
| | Acetic | 20 % | | | | | | |
| | Sulphuric | 30 % | | | | | | |
| | Nitric | 30 % | | | | | | |
| | Phosphoric | 30 % | | | | | | |
| | Hydrochloric | 30 % | | | | | | |
| | Lactic | 10 % | | | | | | |
| | Citric | 10 % | | | | | | |
| Bases | Soda | 10 % | | | | | | |
| | Ammonia | 10 % | | | | | | |
| Water | Distilled water | | | | | | | |
| | Seawater | | | | | | | |
| | Tap water | | | | | | | |
| | Diluted bleach | | | | | | | |
| Solvents | Petrol | | | | | | | |
| | High alcohols | | | | | | | |
| | Aliphatics | | | | | | | |
| | Aromatics | | | | | | | |
| | Ketones, esters | | | | | | | |
| | Tri-perchlorethylene | | | | | | | |

*Film intact.*

*Film damaged (blisters, yellowing, loss of shine).*

(1) No cracking of the paint film after dropping a weight of one kilogram on the test piece from a height of 50 centimetres.
(2) Film cracks over a length of 10 millimetres maximum.

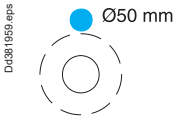
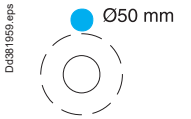
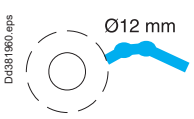
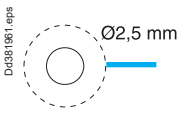
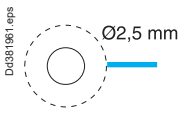
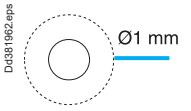
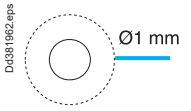
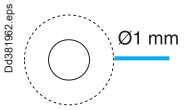
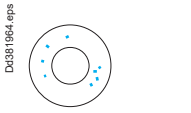
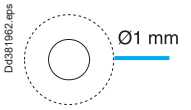
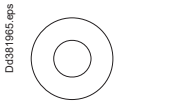


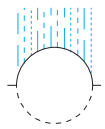
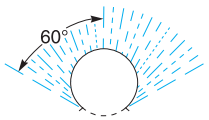
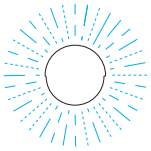
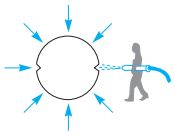
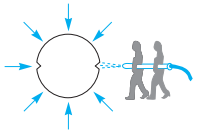
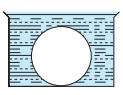
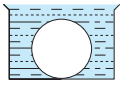

## Degree of protection

Standard IEC 60364-5-51 lists and codifies a large number of external influences to which electrical installations can be subjected, including the presence of water, solid objects, shocks, vibrations, corrosive substances, etc.

## IP code

Standard IEC 60529 (IP code, February 2001) indicates the degrees of protection provided by an enclosure for electrical devices against access to hazardous parts, against penetration of solid foreign objects and against penetration of water.
These standards do not apply for the protection against the risks of explosion or conditions such a humidity, corrosive vapour, fungus or vermin.
The IP code is made up of two characteristic numerals and can include an additional letter when the actual protection for persons against access to the hazardous parts is better than that indicated by the first numeral.
The first numeral characterises the protection provided against the ingress of solid foreign objects and the protection of persons. The second numeral characterises the protection provided against the ingress of water with harmful effects.

| 1st numeral<br>Protection of persons | | Protection against ingress of solid objects | |
|---|---|---|---|
| 1 | Protected against access with back of hand<br>Dd381959.eps   | Protection against solid foreign objects larger than 50 mm<br>Dd381959.eps   |
| 2 | 2 Protected against access with a finger<br>Dd381960.eps   | Protection against solid foreign objects larger than 12.5 mm<br>Dd381963.eps   |
| 3 | Protected against access with a tool<br>Dd381961.eps   | Protection against solid foreign objects larger than 2.5 mm<br>Dd381961.eps   |
| 4 | 4 Protected against access with a wire<br>Dd381962.eps   | Protection against solid foreign objects larger than 1 mm<br>Dd381962.eps   |
| 5 | Protected against access with a wire<br>Dd381962.eps   | Protected against dust (dust protected)<br>Dd381964.eps  |
| 6 | Protected against access with a wire<br>Dd381962.eps   | Dust tight<br>Dd381965.eps  |

| 2nd numeral<br>Protection against ingress of water | |
|---|---|
| 1 | Protected against vertically dripping water (condensation)<br>Dd381966.eps  |
| 2 | Protected against dripping water up to 15° from vertical<br>Dd381967.eps   |
| 3 | Protected against spraying water up to 60° from vertical<br>Dd381968.eps   |
| 4 | Protected against splashing water from all directions<br>Dd381969.eps  |
| 5 | Protected against water jets from all directions<br>Dd381970.eps  |
| 6 | Protected against powerful water jets from all directions<br>Dd381971.eps  |
| 7 | Protected against the effects of temporary immersion in water<br>Dd381972.eps  |
| 8 | Protected against the effects of continuous immersion in water<br>Dd381973.eps  |
| 9 | Protected against close-range high pressure, high temperature spray downs |



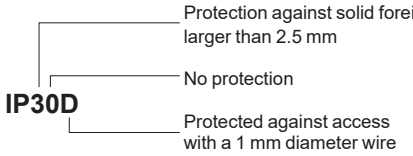

## Additional letter

The additional letter is used only if the actual protection of persons is higher than that indicated by the first characteristic numeral of the IP code.

| Additional letter | Protection |
|---|---|
| A | A Protected against access with back of hand |
| B | B Protected against access with a 12 mm diameter finger |
| C | C Protected against access with a 2.5 mm diameter tool |
| D | D Protected against access with a 1 mm diameter wire |

If only the protection of persons is of interest, the two characteristic numerals are replaced by the letter "X", e.g. IPXXB.

## Illustration of the above explanations:




**Remarks**

- The degree of protection IP must always be read and understood numeral by numeral and not as a whole.

For example, an IP31 wall-mount enclosure is suitable for an environment that requires a minimum degree of protection IP21. However an IP30 wall-mount enclosure is not suitable.

- the degrees of protection indicated in this Catalog are valid for the enclosures as presented. However, the indicated degree of protection is guaranteed only when installation and device mounting are carried out in accordance with professional standards that conserve the initial degree of protection.

## IK code

Standard IEC 62262 defines an IK code characterising the capacity of products to resist mechanical impacts from all sides.

| IK code | Impact energy (joules) |
|---|---|
| 01 | 0.14 |
| 02 | 0.2 |
| 03 | 0.35 |
| 04 | 0.5 |
| 05 | 0.7 |
| 06 | 1 |
| 07 | 2 |
| 08 | 5 |
| 09 | 10 |
| 10 | 20 |

IK codes can be selected according to the risks of impacts on a given site.

| | Site | Recommended IK |
|---|---|---|
| No risk of major impact | Technical premises | 07 |
| Significant risk of impact that can damage devices | Hallways | 08 (switchboard with door) |
| Maximum risk of impact that can damage the switchboard | Workshops | 10 |

# Selection of enclosures according to the premises

## Enclosure characteristics

The IP and IK degrees of protection provided by an enclosure must be specified as a function of the various external influences defined by standard IEC 30364-5-51, in particular:

- presence of foreign solid bodies (code AE)
- presence of water (code AD)
- mechanical stress (code not specified)
- capability of persons (code BA)
- ...

**PrismaSeT switchboards are designed for indoor installation.**
Unless the rules, standards and regulations of a specific country stipulate otherwise, Schneider Electric recommends the following IP and IK values based on French guide UTE C 15-103 (March 2004).

## Using the table

1. Opposite the relevant premises, read the recommended IP and IK values.
2. The ■ symbol indicates the enclosure or cubicle satisfying the criteria of the UTE guide.
   Any enclosure or cubicle with a higher degree of protection can also be used.
3. If several degrees of protection are possible (refer to the standard for more details) and the □ and ■ symbols are indicated (e.g. 24□/25■), enclosures that correspond to the higher degree of protection (■) are suitable for the lower degree of protection (□).

**Example:**
Selection of an enclosure for a laundry room.
Minimum degree of protection: IP21/IK02
A wall-mounted enclosure with a door (plain or transparent), a canopy and a gasket offer IP43/IK08 degrees of protection and are therefore suitable for this application.

| Type of premises | Enclosures | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Wall-mounted enclosure** | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | IP55 |
| | **Floor-standing enclosure** | | without door | with door (1) | with door + canopy (1) | with door + canopy+ gasket (1) | |
| | **Min. IP/IK required** | | IP30/IK07 | IP40/IK08 - IK10 | IP41/IK08 - IK10 | IP43/IK08 - IK10 | IP55/IK10 |
| | **IP** | **IK** | | | | | |
| **Domestic or comparable premises or locations** | | | | | | | |
| Porch | 24 | 07 | | | | | ■ |
| Bathrooms (see washrooms) | | | | | | | |
| Bicycles, motorcycles, tricycles, etc. (premises for) | 20 | 07 | ■ | | | | |
| Water, sewer and heating connections | 23 | 02 | | | | ■ | |
| Laundries | 21 | 02 | | | ■ | | |
| Cellars, garages, furnace rooms | 20 | 02/07 | ■ | | | | |
| Bedrooms | 20 | 02 | ■ | | | | |
| Trash rooms | 25 | 07 | | | | | ■ |
| Halls in cellars | 20 | 07 | ■ | | | | |
| Courtyards | 24/25 | 02/07 | | | | | ■ |
| Kitchens | 20 | 02 | ■ | | | | |
| Shower rooms (see washrooms) | | | | | | | |
| Indoor stairways and alleys | 20 | 02/07 | ■ | | | | |
| Outdoor stairways and outdoor alleys without roofs | 24 | 07 | | | | | |
| Outdoor alleys with roofs | 21 | 02 | | | ■ | | |
| Attics (roof space) | 20 | 02 | ■ | | | | |
| Garden shelters | 24/25 | 02/07 | | | | | ■ |
| Latrines | 20 | 02 | ■ | | | | |
| Dustbin rooms | 25 | 02/07 | | | | | ■ |
| Ironing room | 20 | 02 | ■ | | | | |
| Access ramps to garages | 25 | 07 | | | | | ■ |

*N/A*

(1) IK08 with transparent door, IK10 with plain door.

G

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | | Enclosures | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Wall-mounted enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | IP55 |
| | | Floor-standing enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | |
| | | Min. IP/IK required | | IP30/IK07 | IP40/IK08 - IK10 | IP41/IK08 - IK10 | IP43/IK08 - IK10 | IP55/IK10 |
| | | IP | IK | | | | | |
| Washrooms, rooms containing a bathtub or shower | volume 0 | 27 | 02 | | | | | |
| | volume 1 | 24 | 02 | | | | | ■ |
| | volume 2 | 23 | 02 | | | | ■ | |
| | volume 3 | 21 | 02 | | | ■ | | |
| Lounges, living rooms, etc | | 20 | 02 | ■ | | | | |
| Drying rooms | | 21 | 02 | | | ■ | | |
| Covered terraces | | 21 | 02 | | | ■ | | |
| WCs | | 20 | 02 | ■ | | | | |
| Verandas | | 20 | 02 | ■ | | | | |
| Crawl spaces | | 23 | 07 | | | | ■ | |
| **Commercial premises and adjoining areas** | | | | | | | | |
| Gunsmiths (storage area, workshop) | | 30 | 08 | | ■ | | | |
| Laundries (wash room) | | 24 | 07 | | | | | ■ |
| Butchers | shop | 24 | 07 | | | | | ■ |
| | cold room: ≤ -10 °C | 23 | 07 | | | | ■ | |
| Bakers, cake shops (kitchens) | | 50 | 07 | | | | | ■ |
| Coffee roasters | | 21 | 02 | | | ■ | | |
| Coal, wood, oil | | 20 | 08 | | ■ | | | |
| Delicatessen (production) | | 24 | 07 | | | | | ■ |
| Sweets (production) | | 20 | 02 | ■ | | | | |
| Shoe repair shops | | 20 | 02 | ■ | | | | |
| Dairies | | 24 | 02 | | | | | ■ |
| Hardware stores (storage areas for chemicals and paint) | | 33 | 07 | | | | ■ | |
| Wood workers | | 50 | 07 | | | | | ■ |
| Art galleries | | 20 | 02/07 | ■ | | | | |
| Florists | | 24 | 07 | | | | | ■ |
| Furriers | | 20 | 07 | ■ | | | | |
| Fruit and vegetable merchants | | 24 | 07 | | | | | ■ |
| Grain shops | | 50 | 07 | | | | | ■ |
| Bookshops, stationers | | 20 | 02 | ■ | | | | |
| Motorcycle and bicycle repairs and accessories | | 20 | 08 | | ■ | | | |
| Messenger services | | 20 | 08 | | ■ | | | |
| Furniture shops (antiques, secondhand) | | 20 | 07 | ■ | | | | |
| Glass and mirror merchants (workshop) | | 20 | 07 | ■ | | | | |
| Wallpaper shop (storage area) | | 20 | 07 | ■ | | | | |
| Cosmetics shop (storage area) | | 20 | 02 | ■ | | | | |
| Chemists (storage area) | | 20 | 02 | ■ | | | | |
| Photographers (dark room) | | 23 | 02 | | | | ■ | |
| Plumbers (storage area) | | 20 | 08 | | ■ | | | |
| Fishmongers | | 25 | 07 | | | | | ■ |
| Dry cleaners | | 23 | 02 | | | | ■ | |
| Hardware stores (without paint, chemicals, etc.) | | 20 | 07 | ■ | | | | |
| Locksmiths | | 20 | 07▫/08▪ | | ■ | | | |
| Vintners, spirits | | 20 | 07 | ■ | | | | |
| Interior decorator (carding) | | 50 | 07 | | | | | ■ |
| Tailors, clothing retailers (storage area) | | 20 | 02 | ■ | | | | |
| Pet care | | 35 | 07 | | | | | ■ |

*N/A*

(1) IK08 with transparent door, IK10 with plain door.

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | | | Enclosures | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Wall-mounted enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | IP55 |
| | | | Floor-standing enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | |
| | | | Min. IP/IK required | | IP30/IK07 | IP40/IK08 - IK10 | IP41/IK08 - IK10 | IP43/IK08 - IK10 | IP55/IK10 |
| | | | IP | IK | | | | | |
| **Buildings open to the general public** | | | | | | | | | |
| Shared premises of buildings open to the general public | | storage rooms | 20 | 08 | | ■ | | | |
| | | packing rooms | 20 | 08 | | ■ | | | |
| | | archive rooms | 20 | 02 | ■ | | | | |
| | | film and magnetic media storage | 20 | 02 | ■ | | | | |
| | | linen rooms | 20 | 02 | ■ | | | | |
| | | laundry rooms | 24 | 07 | | | | | ■ |
| | | misc. shops | 21 | 07/08 | | | ■ | | |
| | | kitchens (large) | | | | | | | |
| J | Reception old and handicapped people | | 20 | 02 | ■ | | | | |
| L | Lecture halls, meeting rooms, auditoriums, halls used for several purposes | halls | 20 | 02/07 | ■ | | | | |
| | | stage areas | 20 | 08 | | ■ | | | |
| | | scenery storage rooms | 20 | 08 | | ■ | | | |
| | | costume rooms | 20 | 07 | ■ | | | | |
| M | Retail premises, shopping malls | sales premises | 20 | 08 | | ■ | | | |
| | | areas for storage and handling of packing | 20 | 08 | | ■ | | | |
| N | Restaurants and cafes | | 20 | 08 | | ■ | | | |
| O | Hotels and boarding houses | | 20 | 02 | ■ | | | | |
| P | Dance halls and gaming parlours | | 20 | 07 | ■ | | | | |
| R | Teaching establishments, holiday camps | classrooms | 20 | 02 | ■ | | | | |
| | | dormitories | 20 | 08 | | ■ | | | |
| S | Libraries and documentation centres | | 20 | 02 | ■ | | | | |
| T | Exhibitions | halls and rooms | 20 | 02 | ■ | | | | |
| | | areas for reception of equipment and merchandise | 20 | 07 | ■ | | | | |
| U | Healthcare establishments | bedrooms | 20 | 02 | ■ | | | | |
| | | incineration | 21 | 07/08 | | | ■ | | |
| | | operating rooms | 20 | 07 | ■ | | | | |
| | | centralised sterilisation | 24 | 02/07 | | | | | ■ |
| | | pharmacies and labs with more than 10 l of inflammable liquids | 21▫/23▪ | 02▫/07▪ | | | | ■ | |
| V | Places of worship | | 20 | 02 | ■ | | | | |
| W | Administrative premises, banks | | 20 | 02 | ■ | | | | |
| X | Indoor sports facilities | halls | 20 | 07▫/08▪ | | ■ | | | |
| | | premises containing refrigeration facilities | 21 | 08 | □ | | ■ | | |
| Y | Museums | | 20 | 02 | ■ | | | | |
| PA | Covered open air facilities | | 23▫/25▪ | 08▫/10▪ | | | | | ■ |
| CTS | Marquees and tents | | 44 | 08 | | | | □ | ■ |
| SG | Inflatable structures | | 44 | 08 | | | | | ■ |
| PS | Covered parking lots | | 21 | 08▫/10▪ | | | | | ■ |

(1) IK08 with transparent door, IK10 with plain door.

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | | Enclosures | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Wall-mounted enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | IP55 |
| | | Floor-standing enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | |
| | | Min. IP/IK required | | IP30/IK07 | IP40/IK08 - IK10 | IP41/IK08 - IK10 | IP43/IK08 - IK10 | IP55/IK10 |
| | | IP | IK | | | | | |
| **Technical premises** | | | | | | | | |
| Battery rooms | | 23 | 02/07 | | | | ■ | |
| Lifts (machine rooms and pulley rooms) | | 20 | 07□/08■ | □ | ■ | | | |
| Electrical rooms | | 20 | 07 | ■ | | | | |
| Control rooms | | 20 | 02 | ■ | | | | |
| Workshops | | 21□/23■ | 07□/08■ | | | □ | ■ | |
| Laboratories | | 21□/23■ | 02□/07■ | | | □ | ■ | |
| Air conditioning washers | | 24 | 07 | | | | | ■ |
| Garages (used exclusively for parking vehicles) of an area not exceeding 100 m² | | 21 | 07 | | | ■ | | |
| Machine rooms | | 31 | 07/08 | | | ■ | | |
| Water pressurisers | | 23 | 07/08 | | | | ■ | |
| **Boiler houses and adjoining premises (power in excess of 70 kW)** | | | | | | | | |
| Boiler rooms | coal fuel | 51□/61■ | 07□/08■ | | | | | □ |
| | other fuel | 21 | 07/08 | | | ■ | | |
| | electrical | 21 | 07/08 | | | ■ | | |
| Fuel storage areas | coal | 50□/60■ | 08 | | | | | □ |
| | oil | 20 | 07□/08■ | □ | ■ | | | |
| | liquefied gas | 20 | 07□/08■ | □ | ■ | | | |
| Cinder tips | | 50 | 08 | | | | | ■ |
| Pump rooms | | 21□/23■ | 07□/08■ | | | □ | ■ | |
| Pressure reduction rooms (gas) | | 20 | 07□/08■ | □ | ■ | | | |
| Steam or hot water facilities | | 21□/23■ | 07□/08■ | | | □ | ■ | |
| Expansion vessel rooms | | 21 | 02 | | | ■ | | |
| **Garages and car parks of an area exceeding 100 m²** | | | | | | | | |
| Parking lots | | 21 | 07□/10■ | | | □ | | ■ |
| Carwash areas (inside premises) | | 25 | 07 | | | | | ■ |
| Petrol stations | inside | 21 | 07 | | | ■ | | |
| | outside | | | | | | | |
| Lubrication areas | | 23 | 08 | | | | ■ | |
| Battery recharging areas | | 23 | 07 | | | | ■ | |
| Workshops | | 21 | 08 | | | ■ | | |
| **Public building (other than for the general public)** | | | | | | | | |
| Offices | | 20 | 02 | ■ | | | | |
| Libraries | | 20 | 02 | ■ | | | | |
| Archives | | 20 | 02 | ■ | | | | |
| Computer rooms | | 20 | 02 | ■ | | | | |
| Design offices | | 20 | 02 | ■ | | | | |
| Rooms containing reprographic machines | | 20 | 02 | ■ | | | | |
| Sorting rooms | | 20 | 07 | ■ | | | | |
| Refectories in restaurants or canteens | | 21 | 07 | | | ■ | | |
| Large kitchens | | | | | | | | |
| Sports rooms | | 20 | 07□/08■ | □ | ■ | | | |
| Barracks | | 20 | 07 | ■ | | | | |
| Meeting rooms | | 20 | 02 | ■ | | | | |
| Waiting rooms, lounges, halls | | 20 | 02 | ■ | | | | |
| Medical consulting rooms, not fitted with specific equipment | | 20 | 02 | ■ | | | | |
| Demonstration and exhibition rooms | | 20 | 02/07 | ■ | | | | |

*N/A*

(1) IK08 with transparent door, IK10 with plain door.

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | Enclosures | | | | | | |
|---|---|---|---|---|---|---|---|
| | Wall-mounted enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | IP55 |
| | Floor-standing enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | |
| | Min. IP/IK required | | IP30/IK07 | IP40/IK08 - IK10 | IP41/IK08 - IK10 | IP43/IK08 - IK10 | IP55/IK10 |
| | IP | IK | | | | | |
| **Industrial facilities** | | | | | | | |
| Slaughter houses | 55 | 08 | | | | | ■ |
| Batteries (manufacture) | 33 | 07 | | | | ■ | |
| Acid (manufacture and storage) | 33 | 07 | | | | ■ | |
| Alcohol (manufacture and storage) | 33 | 07 | | | | ■ | |
| Aluminium (manufacture and storage) | 51 | 08 | | | | | ■ |
| Livestock (raising, fattening and sale) | 45 | 07 | | | | | ■ |
| Asphalt and bitumen storage | 53 | 07 | | | | | ■ |
| Wool beating and carding | 50 | 08 | | | | | ■ |
| Industrial laundry | 24/25 | 07 | | | | | ■ |
| Wood (processing) | 50 | 08 | | | | | ■ |
| Meat packers | 24/25 | 07 | | | | | ■ |
| Bakeries | 50 | 07 | | | | | ■ |
| Breweries | 24 | 07 | | | | | ■ |
| Brickworks | 53 | 08 | | | | | ■ |
| Rubber (production and processing) | 54 | 07 | | | | | ■ |
| Carbide (manufacture and storage) | 51 | 07 | | | | | ■ |
| Ammunition factories | 53 | 08 | | | | | ■ |
| Carton board (production) | 33 | 07 | | | | ■ | |
| Quarries | 55 | 08 | | | | | ■ |
| Celluloid (manufacture of objects) | 30 | 08 | | ■ | | | |
| Cellulose (manufacture) | 34 | 08 | | | | | ■ |
| Coal (depots) | 53 | 08 | | | | | ■ |
| Pork products | 24/25 | 07 | | | | | ■ |
| Boiler-making works | 30 | 08 | | ■ | | | |
| Lime kilns | 50 | 08 | | | | | ■ |
| Rag (storage) | 30 | 07 | ■ | | | | |
| Chlorine (manufacture and storage) | 33 | 07 | | | | ■ | |
| Chrome-plating | 33 | 07 | | | | ■ | |
| Cement works | 50 | 08 | | | | | ■ |
| Coking plant | 53 | 08 | | | | | ■ |
| Adhesives (production) | 33 | 07 | | | | ■ | |
| Bottling lines | 35 | 08 | | | | | ■ |
| Liquid fuels (storage) | 31▫/33▪ | 08 | | | □ | ■ | |
| Fats (processing) | 51 | 07 | | | | | ■ |
| Leather (tanning and storage) | 31 | 08 | | | ■ | | |
| Copper (ore processing) | 31 | 08 | | | ■ | | |
| Paint stripping | 54 | 08 | | | | | ■ |
| Detergents (manufacture) | 53 | 07 | | | | | ■ |
| Distilleries | 33 | 07 | | | | ■ | |
| Electrolysis | 33 | 08 | | | | ■ | |
| Ink manufacturing | 31 | 07 | | | ■ | | |
| Fertilisers (manufacture and storage) | 53 | 07 | | | | | ■ |
| Explosives (manufacture and storage) | 55 | 08 | | | | | ■ |
| Iron (production and processing) | 51 | 08 | | | | | ■ |
| Spinning mills | 50 | 07 | | | | | ■ |
| Furriers (beating process) | 50 | 07 | | | | | ■ |
| Cheese factories | 25 | 07 | | | | | ■ |
| Gas (production and storage) | 31 | 08 | | | ■ | | |
| Tar (processing) | 33 | 05 | | | | ■ | |
| Seed production | 50 | 07 | | | | | ■ |
| Metal engraving | 33 | 07 | | | | ■ | |
| Oils (extraction) | 31 | 07 | | | ■ | | |
| Petroleum products (manufacture) | 33▫/34▪ | 08 | | | | □ | ■ |
| Printworks | 20 | 08 | | ■ | | | |

(1) IK08 with transparent door, IK10 with plain door.

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | Enclosures | | | | | | |
|---|---|---|---|---|---|---|---|
| | Wall-mounted enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | IP55 |
| | Floor-standing enclosure | | without door | with with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | |
| | Min. IP/IK required | | IP30/IK07 | IP30/IK07 | IP41/IK08 - IK10 | IP43/IK08 - IK10 | IP55/IK10 |
| | IP | IK | | | | | |
| **Industrial establishments (continued)** | | | | | | | |
| Dairies | 25 | 07 | | | | | ■ |
| Public wash-houses | 25 | 07 | | | | | ■ |
| Liqueurs (production) | 21 | 07 | | | ■ | | |
| Halogenated liquids (use) | 21 | 08 | | | ■ | | |
| Inflammable products (storage and workshops where they are used) | 21 | 08 | | | ■ | | |
| Magnesium (production, storage and use) | 31 | 08 | | | ■ | | |
| Machine rooms | 20 | 08 | | ■ | | | |
| Plastics (production) | 51 | 08 | | | | | ■ |
| Cabinet makers | 50 | 08 | | | | | ■ |
| Metals (processing) | 31▫/33▪ | 08 | | | □ | ■ | |
| Combustion engines (testing of) | 30 | 08 | | ■ | | | |
| Ammunition storage | 33 | 08 | | | | ■ | |
| Nickel (ore processing) | 33 | 08 | | | | ■ | |
| Household waste (processing) | 54 | 07 | | | | | ■ |
| Paper (production) | 33▫/34▪ | 07 | | | | □ | ■ |
| Paper (storage) | 31 | 07 | | | ■ | | |
| Perfume (production and storage) | 31 | 07 | | | ■ | | |
| Pulp mill | 34/35 | 07 | | | | | ■ |
| Paint (production and storage) | 33 | 08 | | | | ■ | |
| Plaster (processing and storage) | 50 | 07 | | | | | ■ |
| Gunpowder factory | 55 | 08 | | | | | ■ |
| Chemicals (production) | 30▫/50▪ | 08 | | □ | | | ■ |
| Oil refineries | 34/35 | 07 | | | | | ■ |
| Salt preserve factories | 33 | 07 | | | | ■ | |
| Soap (production) | 31 | 07 | | | ■ | | |
| Saw mills | 50 | 08 | | | | | ■ |
| Metalwork shops | 30 | 08 | | ■ | | | |
| Grain or sugar silos | 50 | 07 | | | | | ■ |
| Silk and artificial hair factories | 50 | 08 | | | | | ■ |
| Sodium carbonate (processing and storage) | 33 | 07 | | | | ■ | |
| Sulphur (processing) | 51 | 07 | | | | | ■ |
| Spirits (storage) | 33 | 07 | | | | ■ | |
| Sugar mills | 55 | 07 | | | | | ■ |
| Tanners | 35 | 07 | | | | | ■ |
| Dye works | 35 | 07 | | | | | ■ |
| Textile and fabric (production) | 51 | 08 | | | | | ■ |
| Varnish (production and application) | 33 | 08 | | | | ■ | |
| Glass works | 33 | 08 | | | | ■ | |
| Zinc works | 31 | 08 | | | ■ | | |

(1) IK08 with transparent door, IK10 with plain door.

# Selection of enclosures according to the premises

## Enclosure characteristics

| Type of premises | | Enclosures | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Wall-mounted enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | IP55 |
| | | Floor-standing enclosure | | without door | with door (1) | with door + canopy (1) | with door + canopy + gasket (1) | |
| | | Min. IP/IK required | | IP30/IK07 | IP40/IK08 - IK10 | IP41/IK08 - IK10 | IP43/IK08 - IK10 | IP55/IK10 |
| | | IP | IK | | | | | |
| **Farm premises or locations** | | | | | | | | |
| Alcohol (storage) | | 23 | 07 | | | | ■ | |
| Closed cattle sheds | | 35 | 07 | | | | | ■ |
| Laundries | | 24 | 07 | | | | | ■ |
| Wood storage rooms | | 30 | 10 | | | | | ■ |
| Threshing floors | | 50 | 07 | | | | | ■ |
| Distilling cellars | | 23 | 07 | | | | ■ | |
| Vat rooms (wine) | | 23 | 07 | | | | ■ | |
| Courtyards | | 35 | 07 | | | | | ■ |
| Poultry barns | | 35 | 07 | | | | | ■ |
| Stables | | 35 | 07 | | | | | ■ |
| Fertiliser (storage) | | 50 | 07 | | | | | ■ |
| Stables | | 35 | 07 | | | | | ■ |
| Manure heaps | | 24 | 07 | | | | | ■ |
| Haylofts | | 50 | 07 | | | | | ■ |
| Haystacks, forage (storage) | | 50 | 07 | | | | | ■ |
| Granaries, barns | | 50 | 07 | | | | | ■ |
| Straw (storage) | | 50 | 07 | | | | | ■ |
| Greenhouses | | 23 | 07 | | | | ■ | |
| Grain silos | | 50 | 07 | | | | | ■ |
| Milking rooms | | 35 | 07 | | | | | ■ |
| Pig sties | | 35 | 07 | | | | | ■ |
| Chicken houses | | 35 | 07 | | | | | ■ |
| **Miscellaneous installations** | | | | | | | | |
| Fair facilities | | 33 | 08 | | | | ■ | |
| Water treatment facilities | | 24/25 | 07/08 | | | | | ■ |
| **Thermodynamic installations, air-conditioned rooms and cold rooms** | | | | | | | | |
| Height above ground | from 0 to 1.10 m | 25 | 07 | | | | | ■ |
| | from 1.10 to 2 m | 24 | 07 | | | | | ■ |
| | above 2 m under evaporator or water drain pipe | 21 | 07 | | | ■ | | |
| | ceiling and up to 10 cm underneath | 23 | 07 | | | | ■ | |
| Temperature ≤ -10 °C | | 23 | 07 | | | | ■ | |
| Compressor | room | 21 | 08 | | | ■ | | |
| | integral unit located outside or on a terrace | 34 | 08 | | | | | |

*N/A*

(1) IK08 with transparent door, IK10 with plain door.

## Thermal characteristics

A switchboard is designed for operation under normal ambient conditions.
Most devices do not operation correctly outside a temperature range of -10 and +70 °C.
It is therefore important to maintain the switchboard internal temperature within this temperature range by:

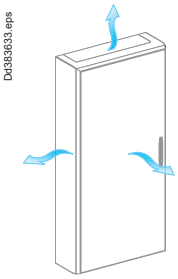
- correctly sizing the switchboard during design
- correcting the temperature using suitable means.

## Management of the internal temperature

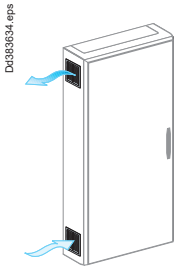
**Cooling**

There are a number of way to dissipate heat from the switchboard.
The drawings below present the various means.

**Convection**

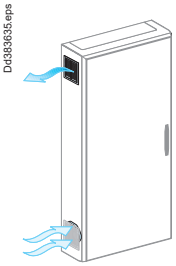



IP > 31
Ensured naturally in PrismaSeT enclosures.



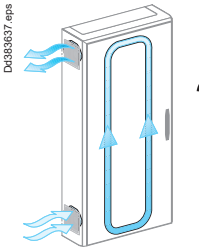

IP ⩽ 31

**Forced-air ventilation**



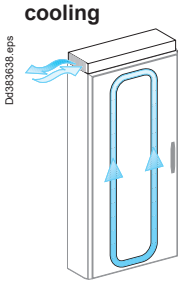

IP ⩽ 54
Using fans, it significantly increases the thermal capacity of an enclosure.

**Forced-air ventilation with air-air exchanger**




IP > 31
On special request.

**Forced convection and cooling**



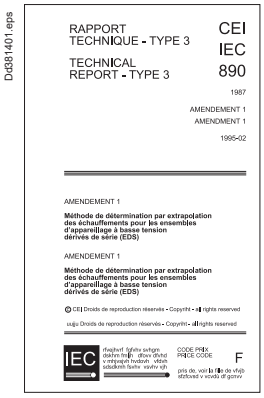

IP > 31

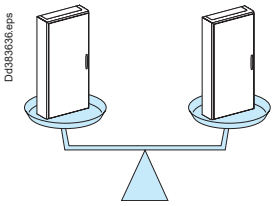
For these extreme cases, many installers prefer to set up the switchboards with other electrotechnical and electronic devices in air-conditioned electrical rooms.

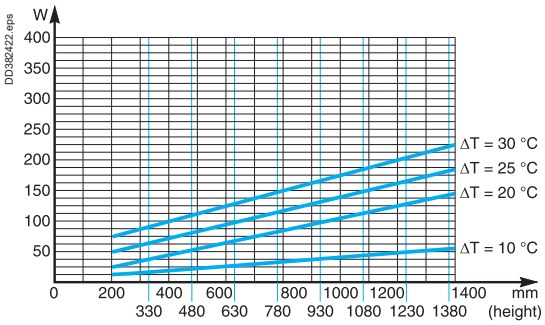
**Heating**

The means employed to raise the internal temperature in a switchboard is a resistorbased heater, used to:

- avoid condensation by limiting variations in temperature
- ensure that the switchboard does not freeze.




## Calculation of the internal temperature

Calculation of the temperature is the means to check that the enclosure can evacuate the dissipated power of the installed devices.

**Important note**

**Correct thermal management of the switchboard depends on compliance with the installation requirements for the distribution system (power circuits).**

Incorrect installation will have major consequences on the connected device, but almost none on the internal temperature of the enclosure.

Once the circuit has been correctly sized, it is necessary to check whether the assembly (devices + distribution system + cables) have a level of dissipated power P(W) ⩽ the P(W) that the enclosure can handle.

**Method defined by IEC 890 technical report**

This IEC guide for switchboards proposes a calculation method to determine three levels of internal temperature, depending on the dissipated power of the devices and distribution blocks installed in the switchboard.

Users can consult this document when it is necessary to determine precisely the internal temperature in view of optimising the switchboard.

On request, Schneider Electric can carry out a thermal study to check that the installed assembly and the thermal capacity of the enclosure are compatible.

**Comparative method**

A number of qualified and tested configurations serve as the basis for indicating the thermal capacity of PrismaSeT enclosures.

This is en empirical means to check whether the dissipated power of the desired configuration is close to that of a tested configuration.

**Method using charts taking into account enclosure characteristics**

To speed up calculations, Schneider Electric produces charts based on the company's experience and a number of assumptions on the installation.

They can be used sufficiently precisely to determine the variations in temperature and the dissipated-power levels for the different types of wall-mount enclosures, floor-standing enclosures and cubicles.

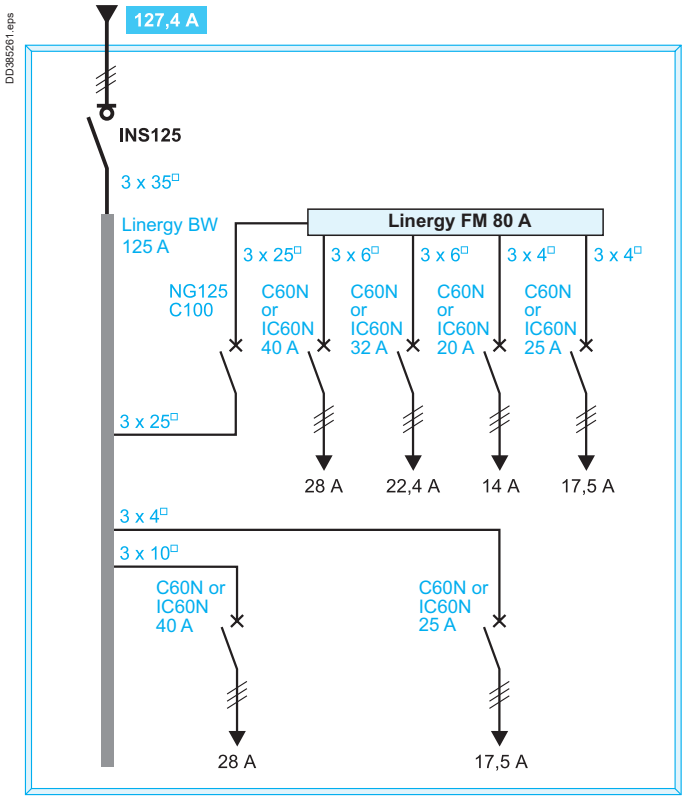
# Thermal management of switchboards
## Comparative method



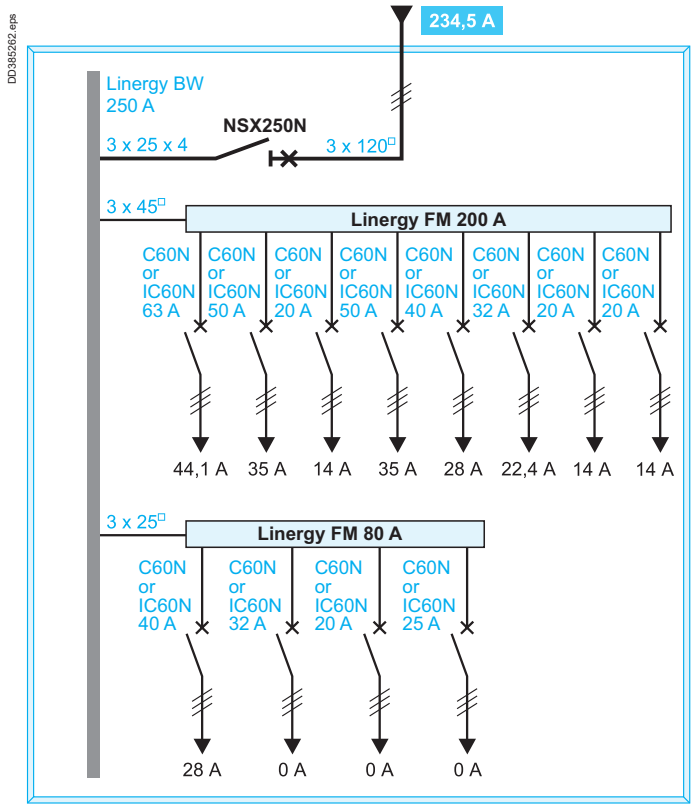
### Comparative method

You will have no problems with your switchboard if:
- the volume of the enclosure is greater than that of the tested enclosure with a similar assembly
- the P(W) of the installed assembly is less than the P(W) of the tested configuration in the same size enclosure.

**Pack enclosure, 3 rows, IP30**
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
P(W) = 95 W




**Wall-mounted enclosure, 23 modules, IP30/IP4X**
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
P(W) = 170 W



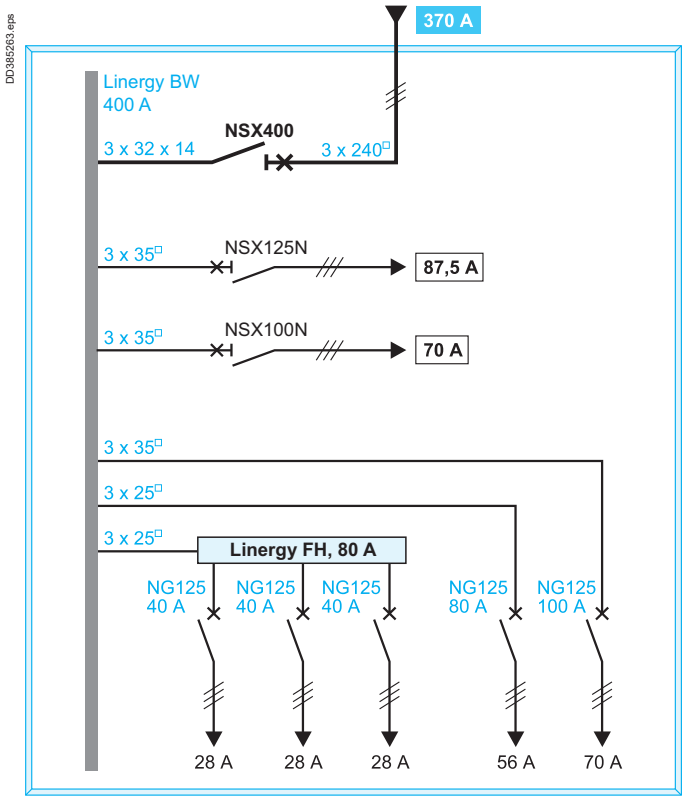
# Thermal management of switchboards
## Comparative method



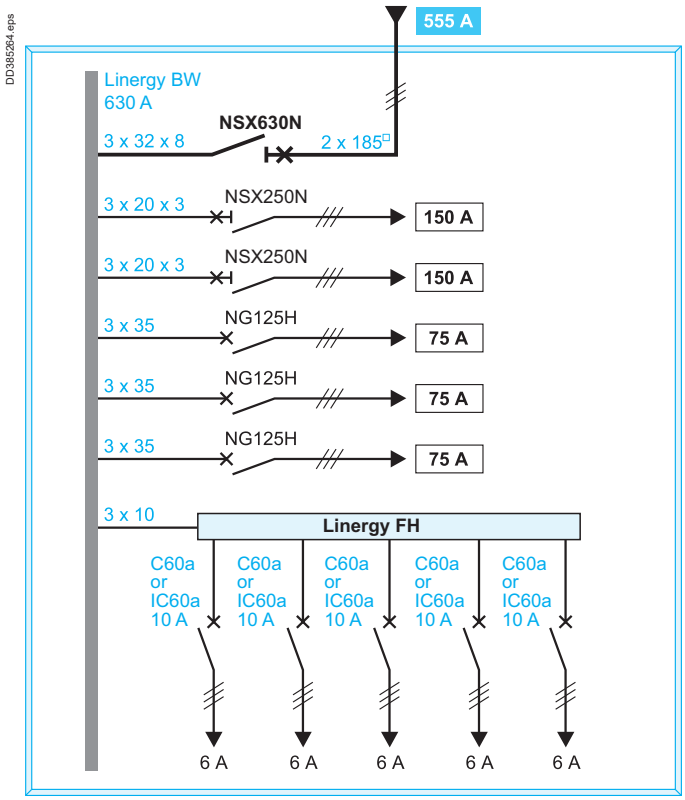
### Comparative method

You will have no problems with your switchboard if:
- the volume of the enclosure is greater than that of the tested enclosure with a similar assembly
- the P(W) of the installed assembly is less than the P(W) of the tested configuration in the same size enclosure.

**Wall-mounted enclosure, 23 modules, plain door, IP30/IP4X**
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
P(W) = 200 W




**Floor-standing enclosure, 33 modules, IP30/IP4X**
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
P(W) = 270 W

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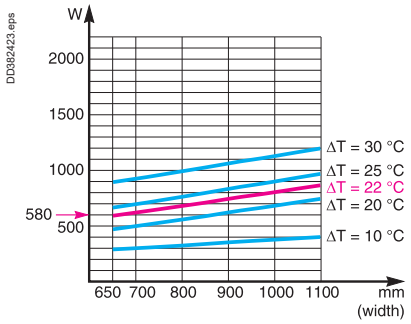
# Thermal management of switchboards
## Example

### Thermal characteristics

Once the dissipated power of the devices has been determined and the enclosure with its IP selected, transfer the results (sum of the dissipated power and width of the device zone) to the chart corresponding to the enclosure IP.



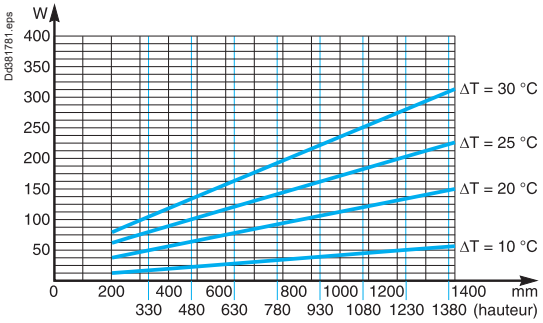

Draw a line parallel to the others on the chart and read the corresponding difference in temperature.
For the given example, the heat rise is 22 °C at mid-height in the enclosure.
The internal temperature = external temperature + heat rise
= 35 °C + 22 °C = 57 °C
57 °C < 60 °C stipulated by the standard, i.e. the result is acceptable for an IP30/IP4X all-mounted and floor-standing enclosures.
This gives roughly:
Internal temperature = 60 °C at mid-height in the enclosure for a low IP value.
= 70 °C at mid-height in the enclosure for a high IP value.

## Thermal characteristics

### Quick calculation charts for internal temperatures

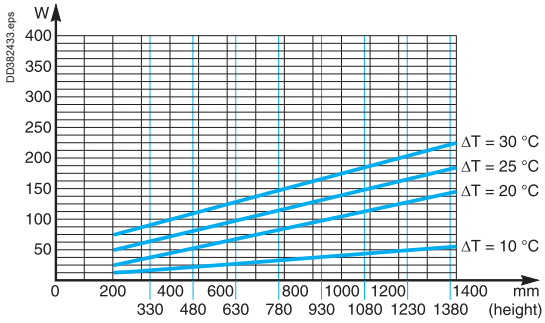
The indicated internal heat rise is that measured at mid-height in the enclosure.

**IP3X wall-mounted enclosure**



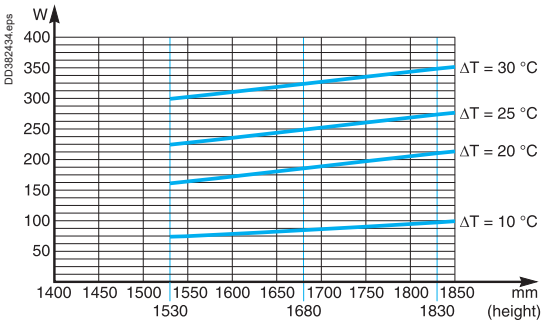

**Test conditions:**
600 mm wide enclosure mounted directly on wall without fixing lugs.

**IP43 wall-mounted enclosure**



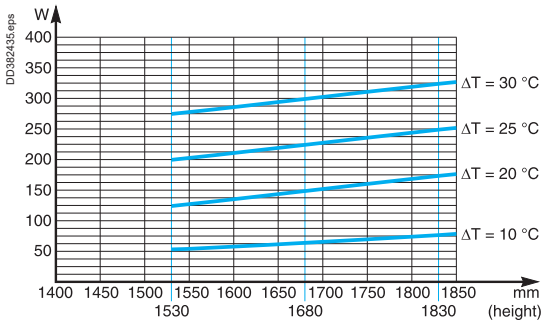

**Test conditions:**
600 mm wide enclosure mounted directly on wall without fixing lugs.

**IP3X floor-standing enclosure**



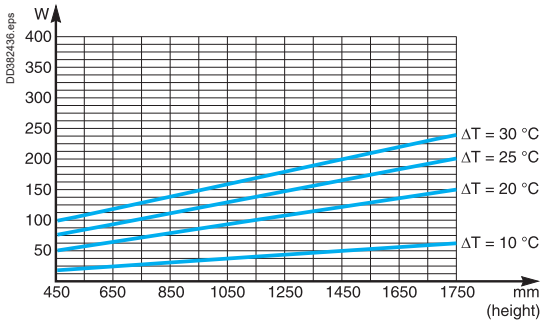

**Test conditions:**
600 mm wide enclosure on floor against a wall.

**IP43 floor-standing enclosure**




**Test conditions:**
Mounted on wall with fixing lugs or on mounting uprights.

**IP55 wall-mounted and floor-standing enclosures**




**Test conditions:**
600 mm wide enclosure mounted directly on wall without fixing lugs or mounting uprights.

Thermal characteristics

## Switchboard ventilation

The air enters the lower section via the fans and exits the upper section:
- through a ventilated roof
- or through a ventilation opening.

The air throughput of the fans is determined by the equation:

$$D = 3{,}1 \times \left(\frac{P}{\Delta T} - KS\right)$$

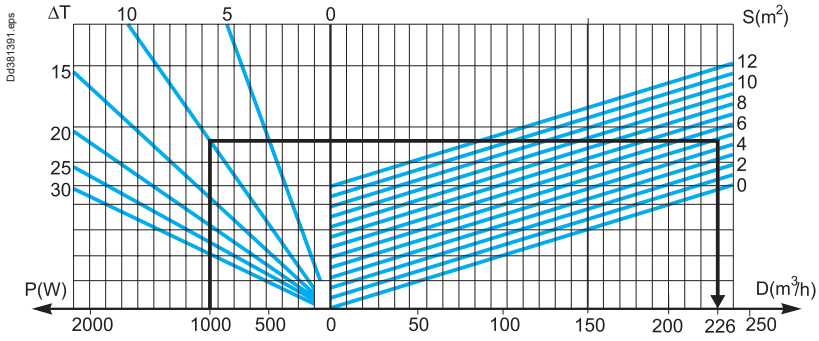
The chart below can be used to determine the necessary throughput, based on the dissipated power, the difference in temperature (internal - external) and the exposed surface area of the enclosure.

**Example**

Consider an IP3X cubicle, 650 mm wide and 400 mm deep, containing components (devices, connections, busbars, etc.) dissipating 1000 W.
The ambient temperature around the cubicle is 50 °C.
Given that the average temperature at mid-height should not exceed 60 °C, the difference in temperature $\Delta T$ is equal to 60 - 50 = 10 °C.
The exposed surface of the cubicle (non adjacent to a wall or other cubicle) is 4.46 m².
(back = 1.3 m², front = 1.3 m², roof = 0.26 m², side panels = 1.6 m²).
What is the necessary throughput of the ventilation system?
The throughput can be calculated as:

$$D = 3{,}1 \times \left(\frac{1000}{10} - 5{,}5 \times 4{,}46\right)$$

D = 234 m³/h.
In the range of PrismaSeT accessories, select a system with a throughput of 300 m³/h.




**Calculation data**

**P** : power dissipated by the devices, connections and busbars (in Watts)
**$P_r$** : power of the heating resistor (in Watts)
**$T_m$** : maximum internal temperature in the device zone (in °C)
**$T_i$** : average internal temperature (in °C)
**$T_e$** : average external temperature (in °C)
$\Delta T_m = T_m - T_e$
$\Delta T = T_i - T_e$
**S** : total free surface area of the enclosure (expressed in m²)
**K** : thermal-conduction coefficient of the material (W/m² °C)
K = 5.5 W/m² °C for painted sheet metal
**D** : ventilation throughput (in m³/h)

**Note:** the dissipated power of each device is provided by the manufacturer. Add approximately 30 % to account for the connections and the busbars.

Thermal characteristics

## Switchboard heating

The heating resistor, placed in the bottom of the switchboard, maintains the internal temperature 10 °C higher than the external temperature.
When the switchboard is not in operation, the heater compensates the dissipated power normally emitted by the switchboard.
The power of the heating resistor is calculated:

- using the equation: Pr = (ΔT x S x K) - P
- or using the charts below, based on the exposed surface area of the enclosure and the desired difference in temperature.

**Chart to determine the heating resistor for small wall-mounted enclosures (exposed surfaces ≤ 1 m²)**

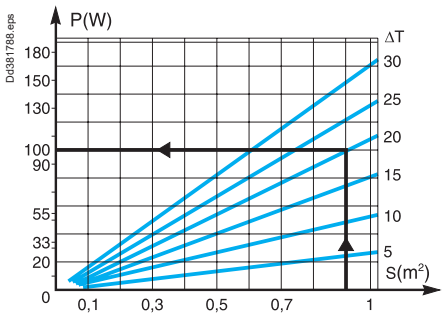
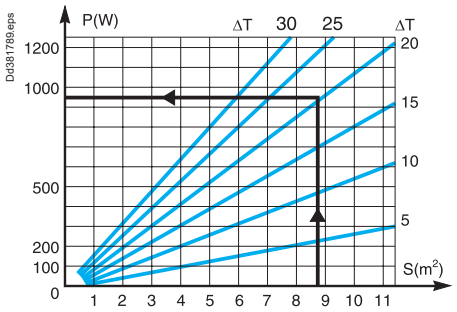



**Chart to determine the heating resistor for all types of enclosures**




**Calculation data**

**P** : power dissipated by the devices, connections and busbars (in Watts)
**$P_r$** : power of the heating resistor (in Watts)
**$T_m$** : maximum internal temperature in the device zone (in °C)
**$T_i$** : average internal temperature (in °C)
**$T_e$** : average external temperature (in °C)
$\Delta T_m = T_m - T_e$
$\Delta T = T_i - T_e$
**S** : total free surface area of the enclosure (expressed in m²)
**K** : thermal-conduction coefficient of the material (W/m² °C)
K = 5.5 W/m² °C for painted sheet metal
**D** : ventilation throughput (in m³/h)

**Note:** the dissipated power of each device is provided by the manufacturer. Add approximately 30 % to account for the connections and the busbars.

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