

PacT series
ComPacT

Catalogue 2025
Switch-Disconnectors
INS/INV40 to 2500 A



se.com

Life Is On

Schneider
Electric

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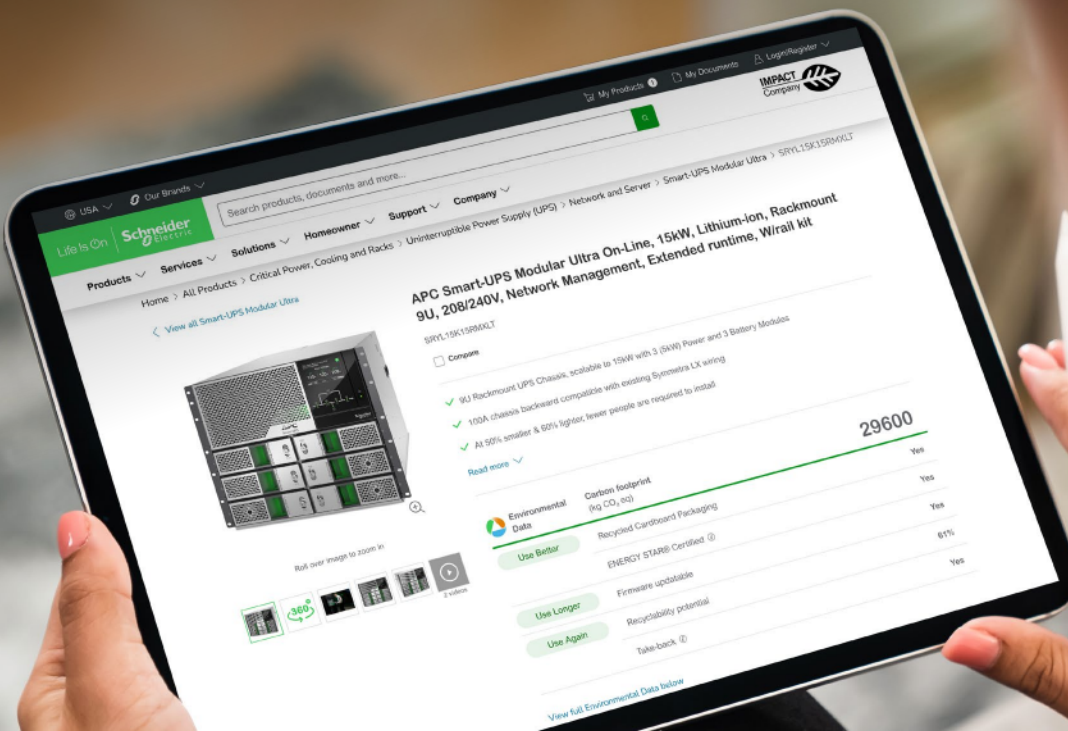
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Environmental Data Program

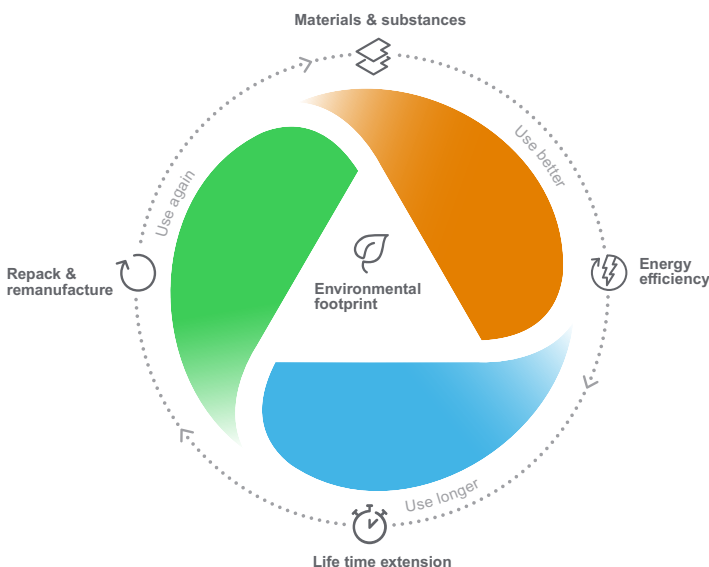


Next-level transparency for better-informed product choices

The Environmental Data Program is a framework for how we measure, categorize, and compare the environmental attributes and footprint of our products.

Using a rigorous, fact-based methodology, the program provides environmental data from across the product lifecycle.

Five data categories across the product lifecycle



Use Better: How sustainable a product is, including environmental footprint, materials and substances, packaging, and energy efficiency.

Use Longer: How a product's life time can be effectively extended in terms of repairability and updatability.

Use Again: How a product can be reused, from dismantling and remanufacturing to recyclability and manufacturer take back.

With this transparent, verified data, customers and partners are empowered to make conscious environmental choices and accurately evaluate and report on sustainability performance.

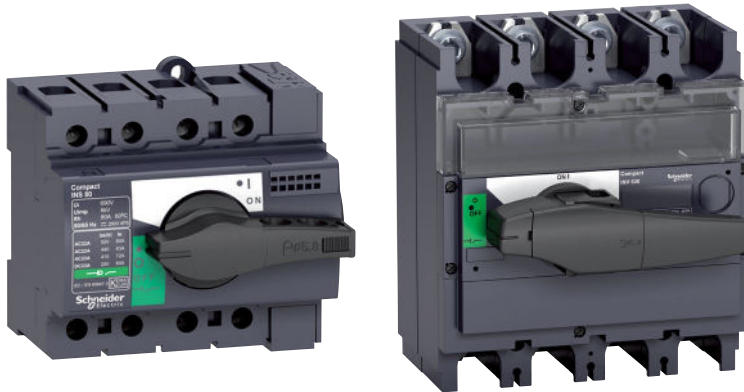
All our hardware offers have an associated environmental data available on se.com product pages.



Learn more about the **Environmental Data Program**

ComPacT INS/INV

Optimize your solution with field-proven & high-performance switch-disconnectors



Standards

ComPacT INS/INV Switch Disconnectors comply with

- International Standards:
 - IEC/EN 60947-1: General rules
 - IEC/EN 60947-3: Switch-disconnectors
- Marine certifications:
 - American Bureau of Shipping
 - Bureau Veritas
 - Det Norske Veritas - Germanischer Lloyd
 - Lloyd's Register of Shipping
 - Nippon Kaiji Kyokai
 - China Classification Societies
 - Registro Italiano Navale
 - Korean Register of shipping
 - Russian Maritime Registers of Shipping
- UL489 and CSA C22.2 N°5-02 & N°5-13 standards. INSE and INSJ versions only.

High performances

- No derating for all performances in accordance with IEC60947-3 criteria:
 - $I_{th} = I_{the} = I_e$ up to 60°

Functions and Characteristics

www.schneider-electric.com

Switch-disconnector selection ComPacT INS40 to 160



ComPacT INS40 to 80 switch-disconnector.

ComPacT INS Switch-Disconnectors

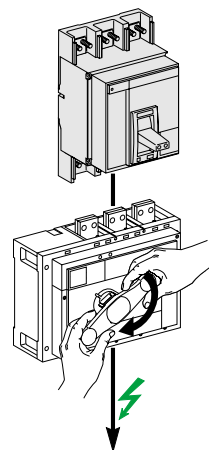
Number of poles

Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3

Conventional thermal current (A)	I_{th}	at 60 °C
Conventional thermal current in enclosure	I_{the}	at 60 °C
Rated insulation level (V)	U_i	AC 50/60 Hz
Impulse-withstand voltage (kV)	U_{imp}	
Rated operational voltage (V)	U_e	AC 50/60 Hz
		DC
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz
Rated operational current (A)	I_e	Electrical AC 50/60 Hz

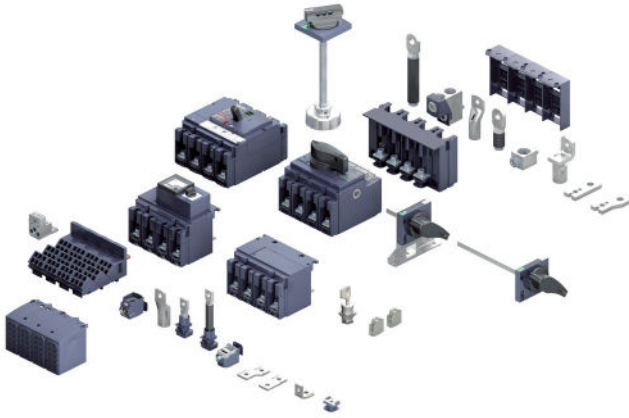
Total coordination with MasterPacT MTZ, NT, NW, ComPacT NS, ComPacT NSX and ComPacT NSXm

- The switch must be chosen according to:
 - the characteristics of the network on which it is installed,
 - the location and the application,
 - coordination with the upstream protection devices (in particular overload and short-circuit).



Design easy-to-install solutions

Large range of accessories

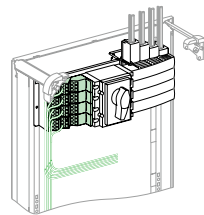


- Positive contact indication or Visible break
- Rotary, front and lateral, direct and extended handles
- locking and interlocking functions
- Installation accessories on symmetrical rails and backplate
- Connection accessories to cables or bars
- Enclosures
- Complete source-changeover assembly

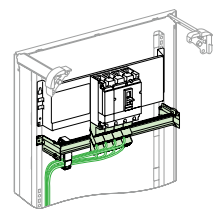
Easy to connect to Linergy devices



Quick distribution blocks for direct installation on the mounting plates

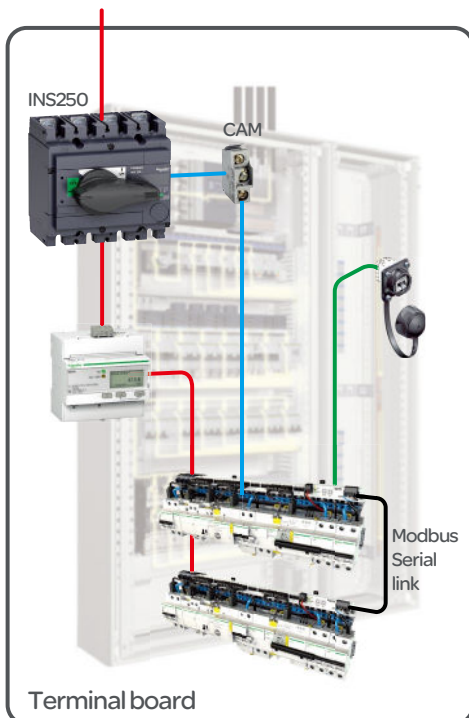


Horizontally



Vertically

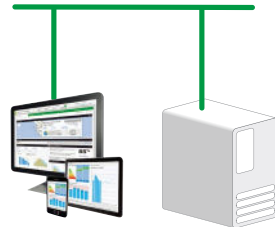
Upgrade easily to smarter functions



Indications & measurements auxiliaries and connection to Smart Panels:

- ComPacT is an internal part of EcoStruxure™ Power - Schneider's open, interoperable, lot-enabled system architecture.
- You can add Powertag NSX to your switch disconnecter in order to get energy measurement and alarming. As ComPacT INS/INV is part of the Smart Panels system, all measurement provided by ComPacT INS/INV + Powertag NSX can be digitized for transmission to local and remote management software and solutions. When incorporated into Smart Panels, these data can be computed by energy management software, enabling through analysis of energy consumptions across the building and identification of potential savings

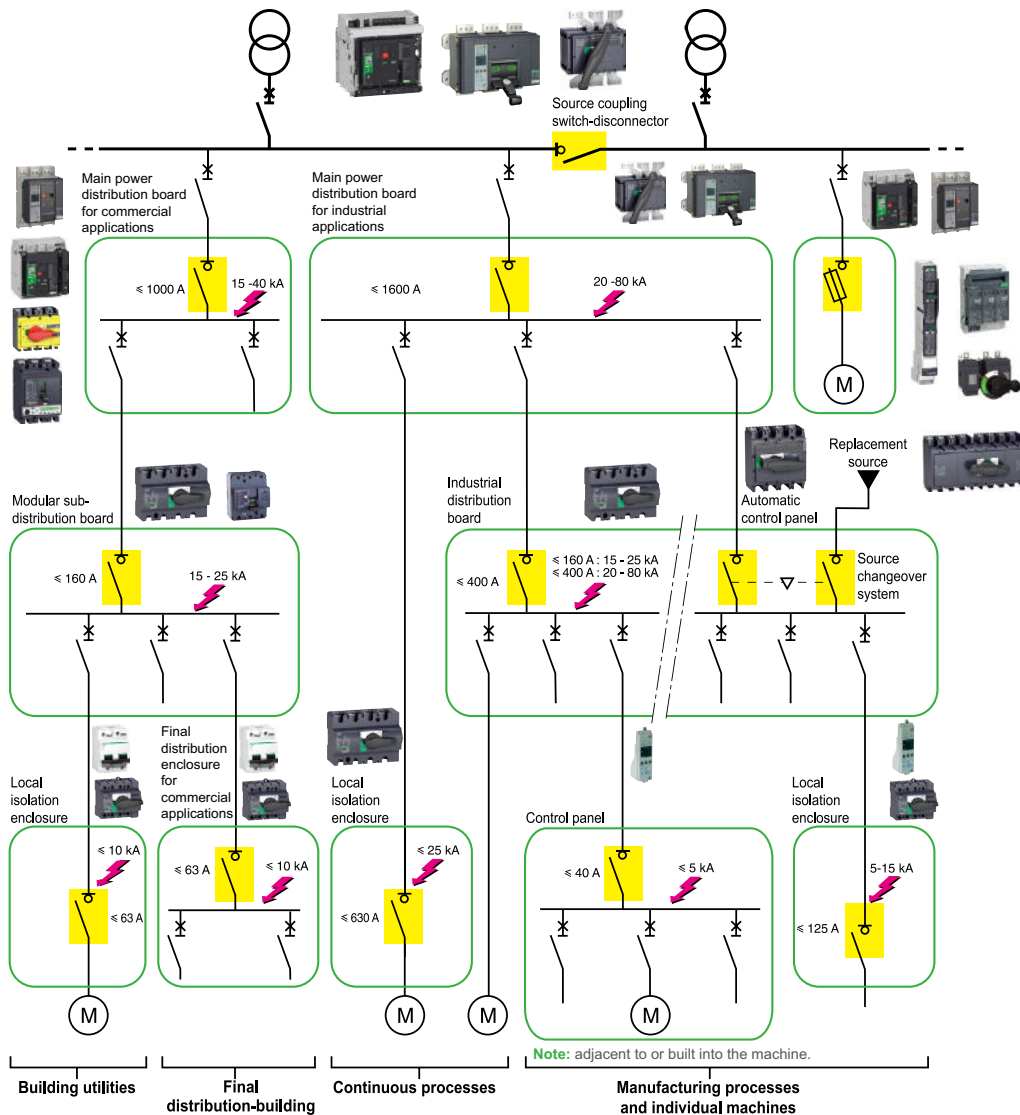
Ethernet network



- Ethernet
- Modbus
- Supply
- Communication

Grow your business with better solutions

Choose the installation that best suits your needs



Less stock space needed

- Common accessories for ComPacT INS/INV and ComPacT NSX
- Less product references









Energy availability thanks to the power-system protection

- Isolation of components under fault



Overview

The complete range	40 A	63 A	80 A	100 A	125 A	160 A	200 A	250 A
Modular profile	INS40	INS63	INS80PV	INS100	INS125	INS160		
				INS250-100	INS250-160	INS250-200	INS250	
	INSE 40-80							

ComPacT INS

Switch-disconnectors with positive contact indication				
	Emergency-off switch-disconnectors with positive contact indication			
				

ComPacT INV

	Mounting on backplate		INV100	INV160	INV250
Switch-disconnectors with visible break					
	Emergency-off switch-disconnectors with visible break				

320 A	400 A	500 A	630 A	630b A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A
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INS320	INS400	INS500	INS630	INS630b	INS800	INS1000	INS1250	INS1600	INS2000	INS2500
INSJ400										



INV400	INV630	INV630b	INV800	INV1000	INV1250	INV1600	INV2000	INV2500
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Who else covers ...



Local isolation enclosures

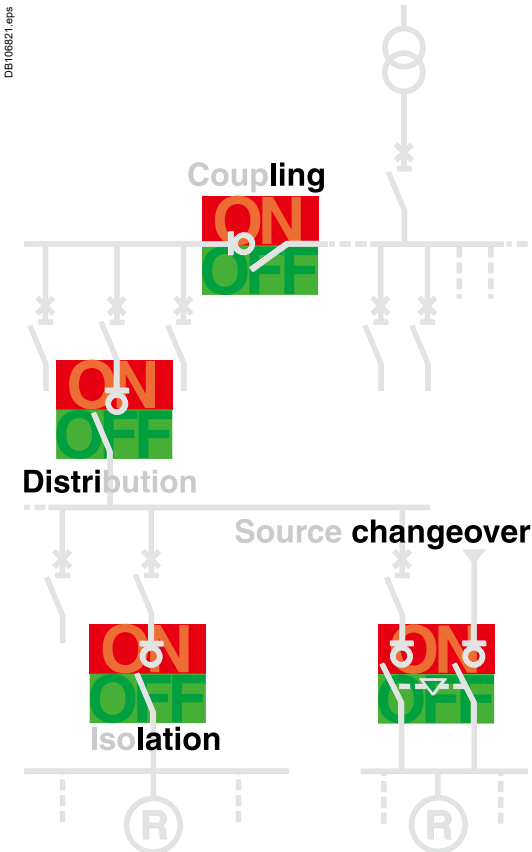
- Current ratings: up to 63 A for commercial and 630 A for industrial applications
 - Schneider Electric switch-disconnectors
 - ComPacT INS40 to 160 and I modular switches
 - ComPacT INS/INV
 - Schneider Electric switch-disconnectors
- Vario 12 to 175 A

Control panels

- Current ratings: up to 63/80 A
- Schneider Electric switch-disconnectors:
 - ComPacT INS
- Schneider Electric switch-disconnectors
 - Vario

Sub-distribution boards

- Current ratings: up to 160 A
- Schneider Electric switch-disconnectors:
 - ComPacT INS/INV
 - ComPacT NSXm



Local isolation
Industrial or commercial

Final distribution

Sub-distribution

Power distribution

...so many applications?

PD096007_L70_SE.eps



Industrial switchboards and automatic control panels

- Current ratings: up to 400 A
- Schneider Electric switch-disconnectors:
 - ComPacT INS/INV

PB111807_104.eps



Main power distribution boards for commercial and industrial applications

- Current ratings:
 - 400 to 1000 A for commercial applications
 - 400 to 1600 A for industrial applications
- Schneider Electric switch-disconnectors:
 - ComPacT INS/INV
 - ComPacT NSX NA
 - ComPacT NS NA
 - MasterPacT MTZ1 HA, MTZ2 NA/HA/HA10, MTZ3 HA

A Complete Offering ...

Power Distribution Incomers for Critical Applications



MasterPacT MTZ2



Micrologic 5.0 X

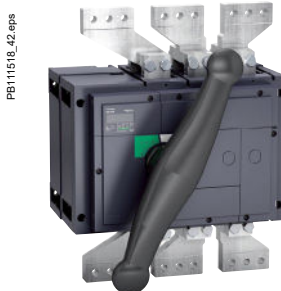


MasterPacT
MTZ1

Power Distribution Incomers for Large Buildings



ComPacT
NS1600NA



ComPacT
INS2000



ComPacT
NS2000

...For All Your Needs

Sub Distribution Incomers for Mid Size Buildings



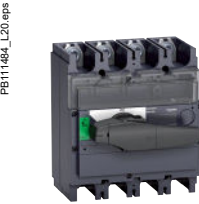
C253263S.eps

ComPacT
NSX400NA



PB111489_43.eps

TransferPacT FMX (complete
source-changeover assembly)



PB111484_L20.eps

ComPacT INV400



ComPacT INS400



FuPacT ISFL



FuPacT ISFT



FuPacT INF

Final Distribution Outgoers and Local Isolation and Control Devices for Small Buildings



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ComPacT
NSX250NA



C12437M160L.eps

NSXmNA



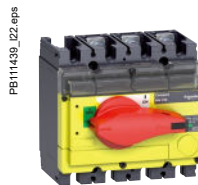
9262_SE_20.eps

Vario



PB107917_17.eps

Acti 9



PB111439_L22.eps

ComPacT
INV250



PB111402_15.eps

ComPacT
INS80



20Q1
GENERAL

20QF1
DEPART 1

Life Is on
www.schneider-electric.com

Select and Order Your ComPacT INS/INV

1 | Design

Ecodial Software

Optimize the choice of equipment-sizing installations with several and different types of power supplies

3 | Build

Easy Installation

Simple and flexible installation with field-installable accessories and auxiliaries

2 | Configure

Ecoreal Software (supports switchboards up to 630 A)

Configure your switchboard with the devices that match your criteria

Generate a quote with a bill of materials, price and 3D views of the configured switchboard

Eplan Software

ComPacT INS/INV are available in Unity Software with Eplan.

4 | Operate and Maintain

More security

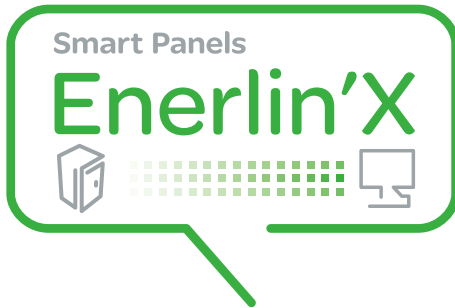
Isolation ensured when locked by up to three padlocks or lead-sealed in the OFF position

More Continuity of Service

Total coordination ensured with ComPacT, Acti9 and MasterPacT products.



Ethernet-Ready Smart Panels



Ethernet-ready Smart Panels enable electrical distribution control and expertise. 'Protect' - 'Measure' - 'Connect' are the 3 pillars of their technology.

PB 115758.psd



4- Act

3- Connect

Give a Voice to the Panel

Secured Ethernet network data transmission is now part of the intrinsic design of protection and metering devices.

2- Measure

Keeping a Close eye on Energy Flows

The switchboard plays a key role in capturing building-related data, by gathering the critical protection and metering components.

1- Protect

Electrical Protection is at the Core of Smart Panel

Reliable and high-performance technology is present in every breaker and every residual current device.

Future Savings, Peace-of-Mind

Access to Smart Panel status, values, is essential for taking advantages of monitoring and management services, locally or remotely.

Act in Small/Medium Buildings

with FDM 128, Com'X 510, Power View, EcoStruxure™ Facility Expert

PB11801-80.eps



Electrical device monitoring and control with FDM 128, locally



Optimizing Energy-Efficiency

- Visualize, record energy consumption and WAGES.
- Comply with regulation.

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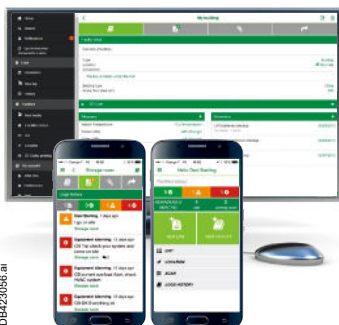
Com'X 510 web pages direct display, or Cloud based pages from other devices with Power View.



Improving Continuity of Service

- Get instant notifications.
- Manage with assets-maintenance platform.
- Get and analyze data for quick crisis-recovery.

DD385919.ai



Distance management with EcoStruxure™ Facility Expert on Smartphone, tablet, PC



Increasing Maintenance Efficiency

- Operate preventive maintenance tools.
- Follow maintenance & planning.
- Provide business owner instant access to maintenance reports.

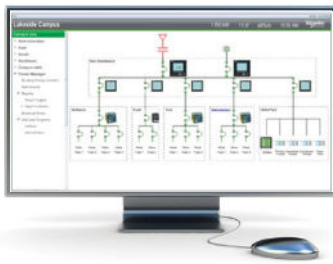
Day-to-Day Energy Management

For simply dealing with building user's needs and energy constraints.
EcoStruxure™ Building Management provides electrical management, monitoring and energy accounting.

Act in Large Non-Critical Buildings

with EcoStruxure™ Energy Expert

DB425660.ai



Managing Equipment & Key Assets

- Check operating status, faults on custom on-line diagrams.

DB425661.ai



Monitoring Electrical Network

- Observe voltage disturbances, harmonics on graphics.
- Read power factor.

DB425334.ai



Accounting Energy

- Record power meter data on dashboards.
- Allocate energy consumption with costs.
- Follow conservation goals.

Power Availability & Quality, Energy Performance

Energy decisions are often crucial in large critical buildings, they must be informed. EcoStruxure™ Power Monitoring Expert (software for PC) collects Smart Panels values to provide expert analysis.

Act in large Critical Buildings

with EcoStruxure™ Power Monitoring Expert

DB425657.ai



Analysing Power Events

- Speed up downtime crisis recovery.
- Determine incident root cause, events sequence.
- Troubleshoot power quality issues.

DB425658.ai



Monitoring Power Quality

- Be alerted of equipment affected by power quality issue.
- Compare power quality against industry standards.
- Collect facts for future discussion with Utility.

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Analysing Energy Performance

- Evaluate building energy saving performance.
- Identify underperforming loads.
- Analyze Energy Conservation Measures (ECMs) according to ISO 50001 program.

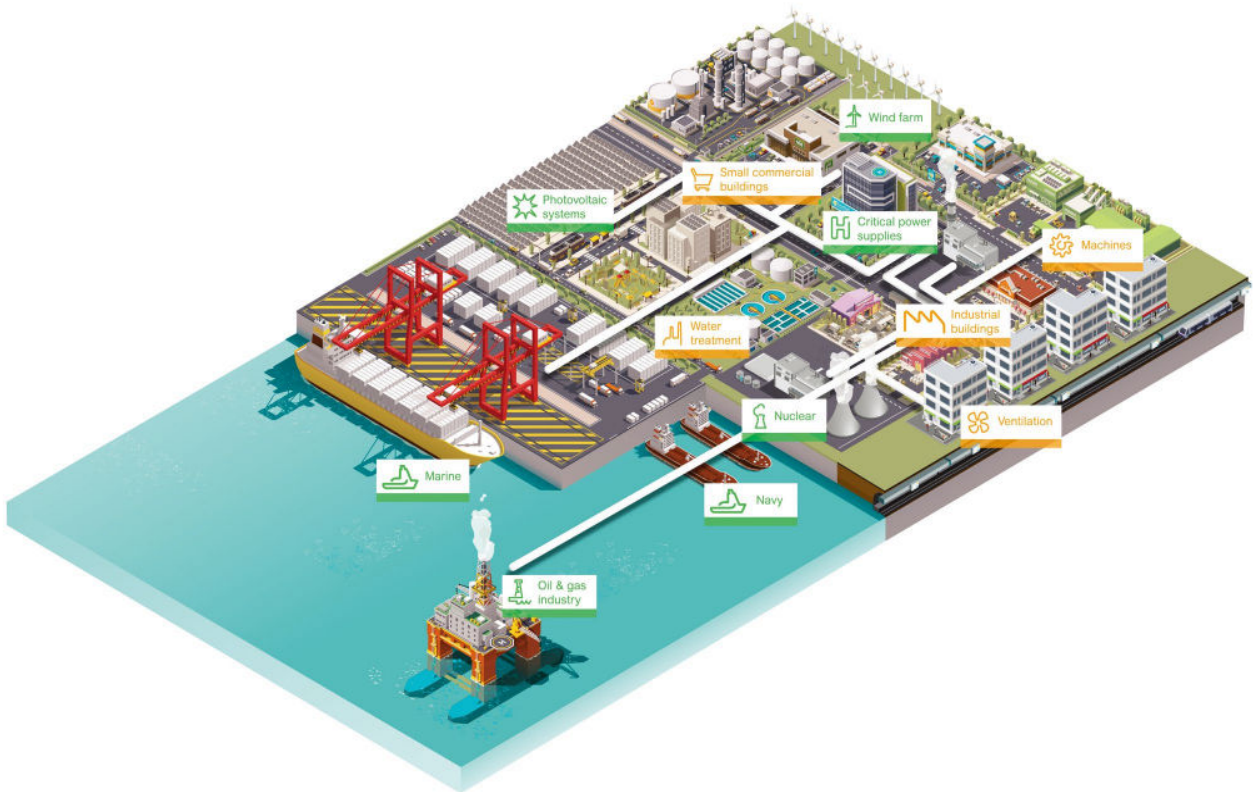


[1] EcoStruxure™ Power Monitoring Expert, <http://pmedemo.biz/web/>
ID: demo & Password: demo

ComPacT INS/INV, NS, NSX and NSXm

Overview of Applications

The ComPacT range circuit breakers, switch-disconnectors and source-changeovers are the best choice for all standards and specific applications.



> ComPacT NS



LVPED211021EN

> ComPacT NSXm & NSX



LVPED217032EN

> TransferPacT (Source-changeover systems)



LVPED216028EN

> ComPacT NSX, ComPacT INS/ INV, MasterPacT NW DC - DC PV



LVPED208006EN

> FuPacT



LVPED216031EN

> Complementary technical information



LVPED308005EN

General contents

ComPacT INS/INV

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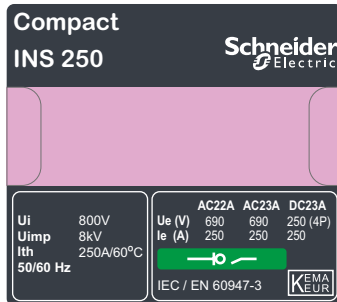
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Catalogue numbers	E-1


The ComPacT INS and INV switches are non-automatic switches with rotary handles.

Note: non-automatic switches do not provide overcurrent or short circuit protection and therefore must be protected by a suitable circuit breaker or fuse.

A

DB11488.eps



Ith: conventional thermal current.
 Ui: rated insulation voltage.
 Uimp: rated impulse-withstand voltage.
 Ue: rated operational voltage.
 Ie: rated operational current.
 suitable for isolation.

Conformity with standards

ComPacT INS/INV switch-disconnectors and auxiliaries comply with the following standards and international recommendations:

- IEC 60947-1: general rules
- IEC 60947-3: switches, disconnectors, switch-disconnectors, etc.
- IEC 60947-5.1 and following: control-circuit devices and switching elements; automatic-control components.

In that these standards and recommendations are applied in most countries, ComPacT INS/INV switch-disconnectors and auxiliaries comply with European (EN 60947-1, EN 60947-3, EN 60947-5-1)

- CCC (China)
- EAC (Customs Union)

■ the specifications of the Marine Classification companies (American Bureau of Shipping, Bureau Veritas, Det Norske Veritas –Germanischer Lloyd, Lloyd Register of Shipping, Nippon Kaiji Kyokai, China Classification Societies, Registro Italiano Navale, Korean Register of shipping, Russian Maritime registers of Shipping) .

■ ComPacT INS/INV switch-disconnectors and auxiliaries are suitable for the control of machine-tools in that they comply with the recommendations issues by the CNOMO organization.

Easy Rotary Handle Operation

Rotary handles are designed to offer easy operation, yet high performance in interruption of currents. The handle is front-mounted with optional handle extensions.

Installation in class II switchboards

All ComPacT INS/INV switch-disconnectors are class II front-face devices. They may be installed through the door of class II switchboards (as per standard IEC 60664) without downgrading switchboard insulation. Installation requires no special operations even when the switch-disconnector is equipped with rotary handles.

Environmental withstand capacity (tropicalisation)

ComPacT INS/INV switch-disconnectors meet the environmental requirements of the following standards:

- IEC 60068-2-1 - dry cold (-55 °C)
- IEC 60068-2-1 - dry heat (+85 °C)
- IEC 60068-2-30 - damp heat (95 % relative humidity at +55 °C)
- IEC 68-2-52 (level 2) - salt mist.

Degree of pollution

The ComPacT INS/INV range is certified for operation in pollution-degree 3 environments as defined by IEC standard 60947 for industrial environments.

Ambient temperature

Operating-temperature range

- ComPacT INS/INV switch-disconnectors may be used between -25 °C and +70 °C.
- Switch-disconnectors should be put into service under the normal, ambient operating temperatures indicated above. Exceptionally, they may be put into service when the ambient temperature is between -35 °C and -25 °C.

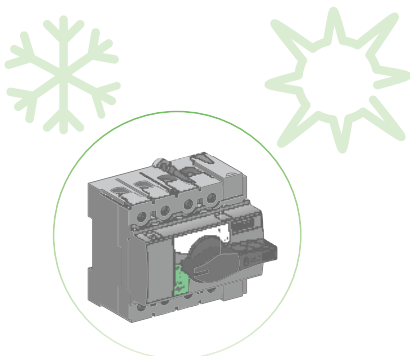
Storage-temperature range

ComPacT INS/INV switch-disconnectors may be stored in their original packing between -50 °C and +85 °C.

Environmental protection

ComPacT INS/INV switch-disconnectors take into account important concerns for environmental protection. Most components are recyclable. Insulating parts making up the ComPacT INS/INV switch-disconnectors are marked as specified in applicable environmental standards.

DB32447.eps



Altitude

ComPacT INS/INV switch-disconnectors are designed to operate at their rated values at altitudes under 2000 metres.

Above 2000 metres, the changes in the characteristics of the ambient air (electrical resistance, cooling capacity) result in a reduction of the characteristics below.

Altitude (m)	2000	3000	4000	5000
Dielectric resistance voltage (V)	3500	3150	2500	2100
Rated insulation voltage (V)	750	700	600	500
Maximum utilisation voltage (V)	690	550	480	420
Rated current (A) at 60 °C	1 x I _n	0.96 I _n	0.93 I _n	0.9 I _n

Vibrations

ComPacT INS/INV switch-disconnectors are guaranteed against electromagnetic or mechanical vibrations.

Tests are carried out in compliance with standard IEC 68-2-6 for the levels required by merchant-marine inspection organisations (Veritas, Lloyd's, etc.):

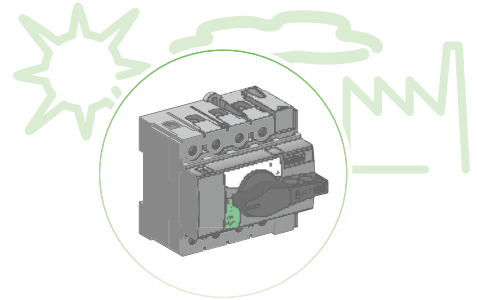
- 2 to 13.2 Hz: amplitude ±1 mm
- 13.2 to 100 Hz: constant acceleration 0.7 g.

Excessive vibration may cause tripping, breaks in connections or damage to mechanical parts.

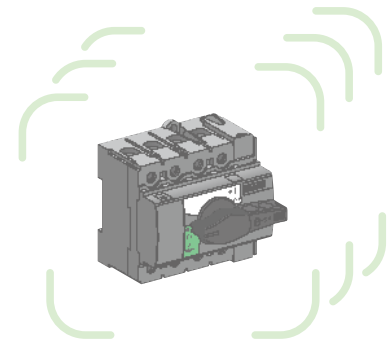
Electromagnetic compatibility

ComPacT INS/INV switch-disconnectors are protected against:

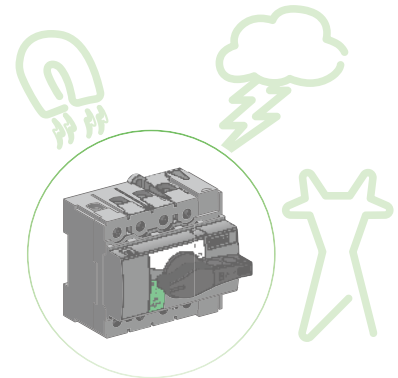
- overvoltages caused by devices that generate electromagnetic disturbances
- overvoltages caused by atmospheric disturbances or by a distribution-system outage (e.g. failure of a lighting system) and devices emitting radio waves (radios, walkie-talkies, radar, etc.).



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A



Switch-disconnector in dedicated enclosure IP66 with specific extended handle

Degree of protection

ComPacT INS/INV switch-disconnectors offer the following protection characteristics depending on the installation conditions:

- IP: degree of protection (standard IEC 60529)
- IK: protection against external mechanical impacts (standard EN 50102).

<p>IP40 IK07</p>	<p>IP40 IK07</p>	<p>IP55 IK08</p>
<p>Bare switch-disconnector with terminal shields.</p>	<p>Switch-disconnector in cabinet or enclosure (direct handle).</p>	<p>Switch-disconnector in cabinet or enclosure (extended handle).</p>
<p>IP66 IK10</p>		
<p>Switch-disconnector in dedicated enclosure with specific handle.</p>		

Suitable for isolation with positive contact indication



All ComPacT INS/INV switch-disconnectors are suitable for isolation as defined in IEC standards 60947-1 and 3. The mechanical design of ComPacT switches ensures the position of the handle always reflects the position of the main contacts:

- the isolation position corresponds to the O (OFF) position
- the operating handle cannot indicate the OFF position unless the contacts are actually open
- padlocking in the OFF position is not possible unless the contacts are actually open.

Installation of an extended handle does not alter the suitability for isolation. The isolation function is certified by tests guaranteeing:

- the mechanical reliability of the position-indication system
 - the absence of leakage currents
 - overvoltage withstand capacity between upstream and downstream connections.
- The ComPacT switch-disconnector range can be used as disconnecting mean.

Suitable for isolation with visible break

The physical separation of the main contacts is directly visible through a transparent cover.

The ComPacT INV range offers both positive contact indication and visible break.

Emergency-off switch-disconnector

This switch-disconnector can be used as an emergency-off device. For this application, it must be easily visible, accessible and identifiable (see standards and rules concerning the safety of machines VDE 0660, VDE 0113, CNOMO, etc.). For easy identification, the emergency-off switch-disconnector uses special colours stipulated by the standards and different from those of the standard version:

- yellow for the front face of the device
- red for the handle.

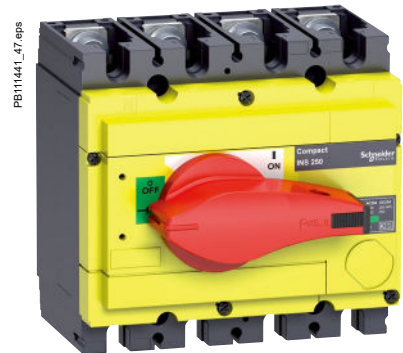
The electrical and mechanical performance characteristics of ComPacT INS/INV emergency-off switch-disconnector are the same as those of the standard version. The emergency-off switch-disconnectors are available in positive contact indication and visible-break versions.



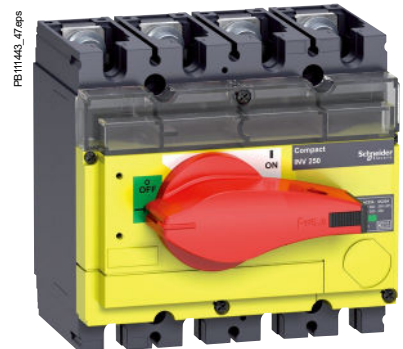
Suitable for isolation with positive contact indication.



Suitable for isolation with visible break.



INS250 emergency-off switch-disconnector.



INV250 emergency-off switch-disconnector.



ComPacT NSX Accessories and Auxiliaries

Additional measurement module: PowerTag NSX

PowerTag NSX is a ComPacT NSX wireless-communication modules for 3P and 3P+N electrical networks, mounted directly on the bottom side of the circuit breaker or the Vigi add-on. PowerTag NSX provides capability to measure energy, monitor voltage loss, and trigger alarms. It then delivers useful data for monitoring and diagnosis of the associated circuit breaker through Smartlink concentrator.

In combination with PowerTag Acti9, you can take advantage of a full wireless class 1 solution to monitor energy and to be aware in case of voltage loss or alarming at any level of a distribution panel, being able to take immediately the right actions in case of electrical issue. In addition to monitoring and alarming, PowerTag solution provides a complete knowledge of real time electrical values with a rich and accurate data transfer every 5 seconds.

PowerTag energy sensors can be quickly and easily installed in new or existing panels at any time. Compared to traditional metering solutions, installation time and commissioning are much shorter with no wiring, hence an error proof high density solution and a built-in class 1 accuracy.

A



PowerTag NSX.

Functions

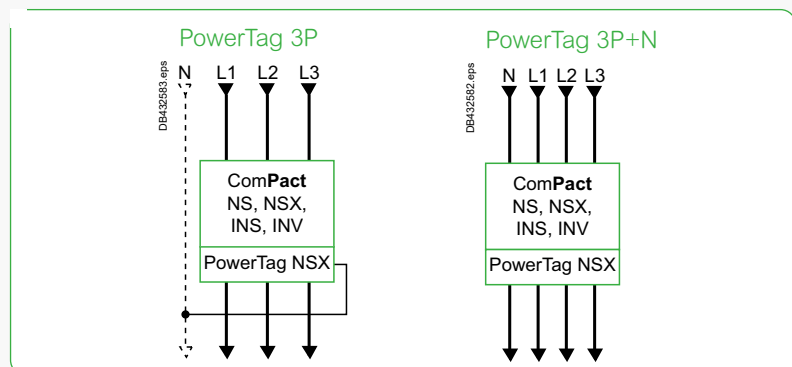
PowerTag NSX energy sensor measures the following values in accordance with the IEC 61557-12 standard:

- Energy (4 quadrants):
 - Active energy (kWh): total and partial, delivered and received.
 - Active energy per phase (kWh): total.
 - Reactive energy (VARh): partial, delivered and received.
- Power:
 - Active power (W): total and per phase
 - Reactive power (VAR): total
 - Apparent power (VA): total.
- Voltages (V): phase-to-phase (U12, U23, U31) and phase-to-neutral (V1N, V2N, V3N)
- Currents (A): per phase (I1, I2, I3)
- Frequency
- Power factor
- Voltage loss alarm:
 - PowerTag energy sensor sends a "voltage loss" alarm and the current-per-phase value before being de-energized,
 - At "voltage loss", PowerTag adds an overload alarm if the current is higher than the rated current of the associated protective device.

Installation

The module is self-powered and is installed directly on the bottom side of the circuit breaker or Vigi add-on terminals. It communicates wirelessly to SmartLink which can concentrate data for up to 20 PowerTag in the same panel.

PowerTag NSX 3P has to be used with 3P devices, and an external neutral voltage tap is provided in case of the installation has a neutral to provide phase-to-neutral voltages, active energy per phase and power per phase. PowerTag 3P+N has to be used with 4P devices.



PowerTag NSX modules are compatible with ComPacT NSX100/160/250, ComPacT NSX400/630, ComPacT INS250-100A to 250A, ComPacT INS320/400/500/630, ComPacT INV100/160/200/250, ComPacT INV400/630, ComPacT NS100/160/250 and ComPacT NS400/630.

In case of retrofit, following points have to be checked:

- Clearance to be able to add PowerTag module (see dimensions in chapter E) and to respect bending radius of cables
- Condition of power connectors: to be replaced if damaged
- Tightening torques depending of the connector used

ComPacT NSX Accessories and Auxiliaries

Additional measurement module: PowerTag NSX



Integration in Smartlink

Smartlink concentrate wirelessly data from PowerTag and make them available over Ethernet:

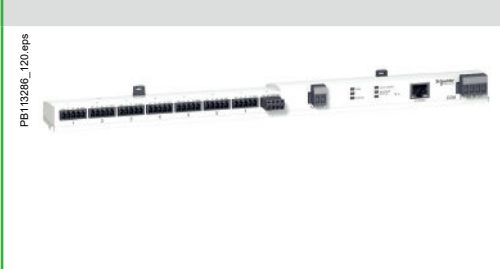
For Commercial & Building applications

Acti9 Smartlink SI D (Monitoring)



A9XMWA20

Acti9 Smartlink SI B (Monitoring & Control)



A9XMZA08

For Small Business applications

Acti9 Smartlink EL D (Monitoring)



A9XELC10

Smartlink embedded web pages allow:

- to do commissioning
- to display measured values
- to set and display alarms and pre-alarms.

Refer to the concentrator catalogue for more information.

Commissioning

Commissioning can be done very easily:

- for Smartlink EL: with a smartphone
- for Smartlink SI: with embedded webpages or with Ecoreach which provides a test report for system integration with all the Modbus registers, including bits and descriptions associated

ComPacT NSX Accessories and Auxiliaries

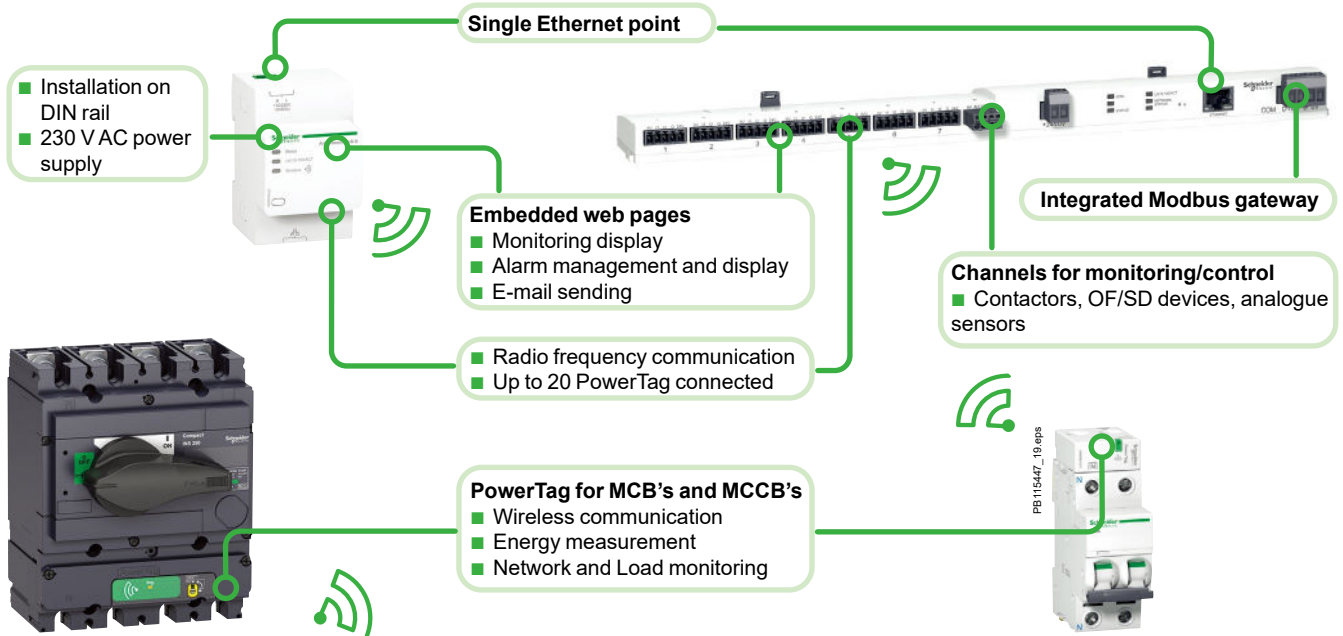
Additional measurement module: PowerTag NSX

Metering and monitoring

Acti 9 Smartlink SI D (Ethernet)

Metering, monitoring and control

Acti 9 Smartlink SI B (Ethernet)



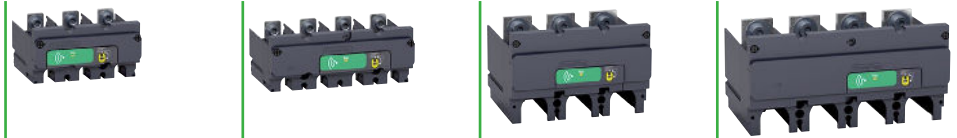
Technical characteristics

Main characteristics				
Rated voltage	Un	Phase-to-neutral	230 VAC ± 20 %	
		Phase-to-phase	400 VAC ± 20 %	
Frequency			50/60 Hz	
Operating current	In		250 A / 630 A	
Maximum operating current			1.2 x In	
Saturation current			2 x In	
Maximum consumption			3.7 VA	
Starting current	Ist		160 mA / 400 mA	
Base current	Ib		40 A / 100 A	
Additional characteristics				
Operating temperature			-25 °C to +70 °C	
Storage temperature			-50 °C to +85 °C	
Overtoltage category		As per IEC 61010-1	Cat. IV	
Measuring category		As per IEC 61010-2-30	Cat. III	
Pollution degree			3	
Altitude			Up to 2000m without derating ^[1]	
Degree of protection device			IP20 IK07	
Radio-frequency communication				
ISM band 2.4 GHz			2.4 GHz to 2.4835 GHz	
Channels		As per IEEE 802.15.4	11 to 26	
Isotropic Radiated Power		Equivalent (EIRP)	0 dBm	
Maximum transmission time			< 5 ms	
Channel occupancy		For 1 device	messages sent every 5 seconds	
Characteristics of measuring functions				
Function	Symbol	Performance as per IEC 61557-12		Measuring range (250 A / 630 A)
		Class	Measuring range (250 A / 630 A)	
Active power (per phase, total)	P	1	4 to 250 A / 10 to 630 A	88 W to 416 kW / 221 W to 1048 kW
Total reactive power	Q _A	2		88 VAR to 416 kVAR / 221 VAR to 1048 kVAR
Total apparent power	S _A	2		88 VA to 416 kVA / 221 VA to 1048 kVA
Active Energy (per phase, total, partial)	E _a	1		0 to 281.10 ⁹ kWh
Total reactive Energy	E _{rA}	2		0 to 281.10 ⁹ kVARh
Frequency	f	1	45 to 55 Hz	45 to 65 Hz
Phase current	I	1	8 to 250 A / 20 to 630 A	160 mA to 500 A / 400 mA to 1260 A
Voltages (Line to Line)	U	0.5	Un ± 20 %	320 to 480 VAC
Power factor (arithmetic)	PF _A	1	From 0.5 inductive to 0.8 capacitive	-1 to 1

[1] Above 2000m, please consult us.

ComPacT NSX Accessories and Auxiliaries

Additional measurement module: PowerTag NSX



Products (AC network)		Mounting position	250 3P	250 3P+N	630 3P	630 3P+N
ComPacT						
Circuit breakers						
NSX100/160/250 B/F/N/H/S/L/R Fixed	3P	Bottom	☑	-	-	-
	4P	Bottom	-	☑	-	-
NSX400/630 F/N/H/S/L/R Fixed	3P	Bottom	-	-	☑	-
	4P	Bottom	-	-	-	☑
NSX100/160/250 B/F/N/H/S/L/R Plug-In (mounted on the base)	3P	Top / Bottom	☑	-	-	-
	4P	Top / Bottom	-	☑ [1]	-	-
NSX400/630 F/N/H/S/L/R Plug-In (mounted on the base)	3P	Top / Bottom	-	-	☑ [2]	-
	4P	Top / Bottom	-	-	-	☑ [1] [2]
NS100/160/250 N/SX/H/L Fixed	3P	Bottom	☑	-	-	-
	4P	Bottom	-	☑	-	-
NS400/630 N/H/L Fixed	3P	Bottom	-	-	☑	-
	4P	Bottom	-	-	-	☑
NS100/160/250 N/SX/H/L Plug-in	3P	Top / Bottom	☑	-	-	-
	4P	Top / Bottom	-	☑ [1]	-	-
NS400/630 N/H/L Plug-in	3P	Top / Bottom	-	-	☑ [2]	-
	4P	Top / Bottom	-	-	-	☑ [1] [2]
Circuit breakers equipped with Vigi block						
NSX100/160/250 B/F/N/H/S/L/R Fixed	3P	Bottom	☑	-	-	-
	4P	Bottom	-	☑	-	-
NSX400/630 F/N/H/S/L/R Fixed	3P	Bottom	-	-	☑	-
	4P	Bottom	-	-	-	☑
NSX100/160/250 B/F/N/H/S/L/R Plug-In (mounted on the base)	3P	Top	☑	-	-	-
NSX400/630 F/N/H/S/L/R Plug-In (mounted on the base)	3P	Top	-	-	☑ [2]	-
Switches						
INS250/INV - 100/160/200/250	3P	Bottom	-	☑	-	-
	4P	Top / Bottom	-	☑ [1]	-	-
INS/INV - 320/400/500/630	3P	Bottom	-	-	-	☑
	4P	Top / Bottom	-	-	-	☑ [1]

[1] neutral on the right when mounted on top side

[2] when plate mounted, need to add an intercalary under the PowerTag module with following dimensions:

A

Functions and Characteristics

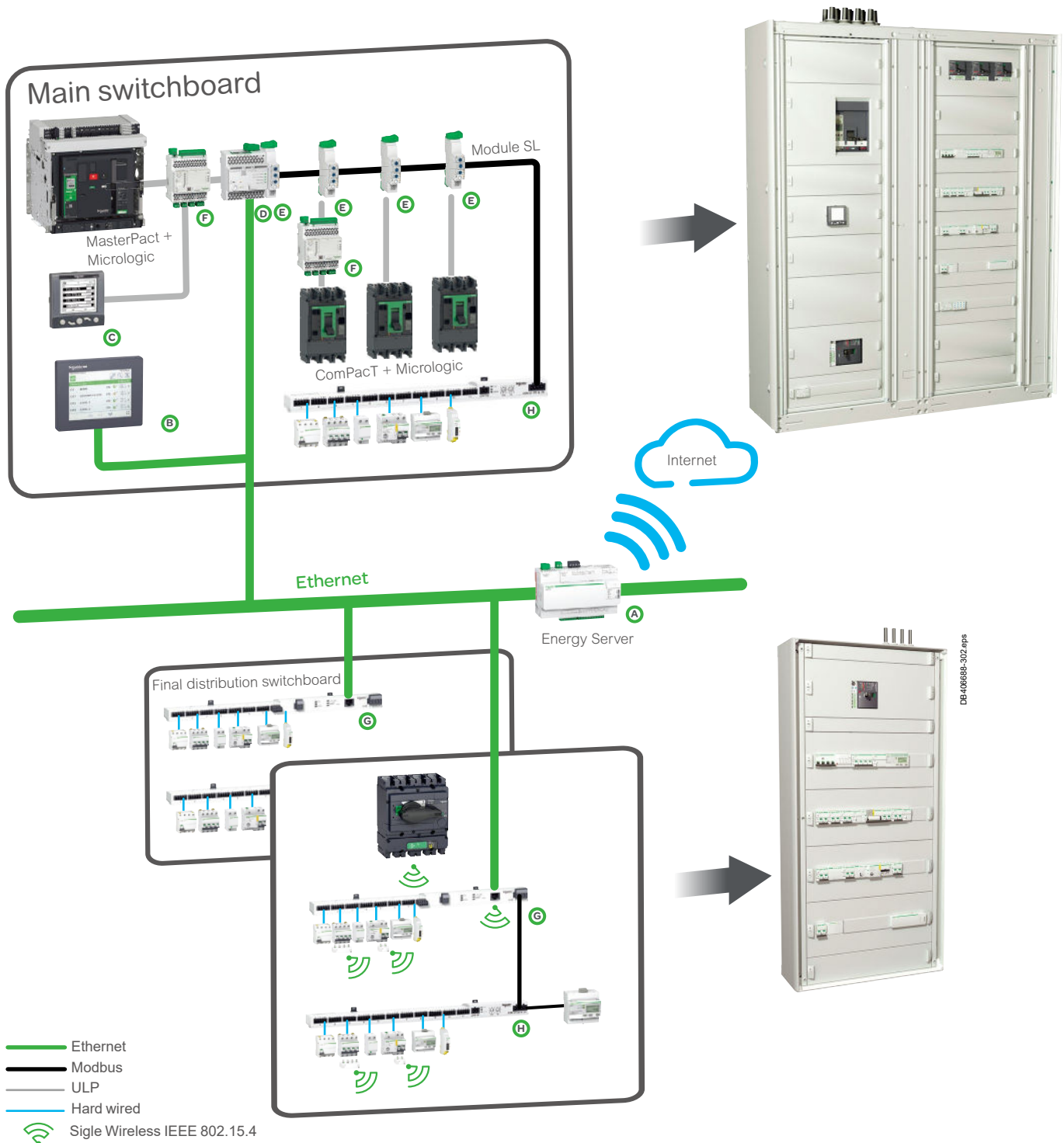
Enerlin'X Digital System Overview

Enerlin'X communication system provides access to status, electrical values and devices control using Ethernet and Modbus SL communication protocols.

Ethernet has become the universal link between switchboards, computers and communication devices inside the building. The large amount of information which can be transferred makes the connection of Enerlin'X digital system to hosted web services of Schneider Electric a reality. More advantages are offered to integrators thanks to configuration web pages available remotely or on the local Ethernet network.

Modbus SL is the most widely used communication protocol in industrial networks. It operates in master-slave mode. The devices (slaves) communicate one after the other with a gateway (master).

A











- Ethernet
- Modbus
- ULP
- Hard wired
- 📶 Sigle Wireless IEEE 802.15.4

Functions and Characteristics

Enerlin'X Digital System

Overview

Enerlin'X digital devices and displays							
	Name	Function	Port (to device) (to server)		Inputs	Outputs	Cial. Ref.
A	 Com'X 210	Energy data logger + Ethernet Gateway	Ethernet Modbus Master, Zigbee (to wireless meters)	Ethernet cable + WiFi	64 devices: 6 binary 2 analog 32 Modbus devices + other Ethernet devices (Modbus TCP)	-	EBX210
	Com'X 510 24 V DC + PoE	Energy server + Ethernet Gateway				-	EBX510
B	 FDM128	Ethernet LCD colour touch screen	-	Ethernet		-	LV434128
C	 FDM121	LCD display for circuit breaker	ULP	-	1 circuit breaker	-	TRV00121
D	 IFE Switchboard server	Switchboard server	Modbus Master & ULP	Ethernet	20 circuit breakers	-	LV434002
	IFE interface	Ethernet interface for circuit breakers	ULP	Ethernet	1 circuit breaker	-	LV434001
E	 IFM	Modbus interface for circuit breaker	ULP	Modbus Slave	1 circuit breaker	-	LV434000
F	 I/O	Input/Output application module for circuit breaker	ULP	ULP	6 binary 1 analog (PT100 sensor)	3	LV434063
G	 Acti 9 Smartlink SIB Ethernet wireless	Ethernet server for I/O and Modbus slave devices	Modbus Master & Wireless to PowerTag	Ethernet	14 binary 2 analog	7	A9XMZA08
H	 Acti 9 Smartlink Modbus slave	Modbus interface with Input/Output functions	-	Modbus Slave	22 binary	11	A9XMSB11

Ethernet Gateway or Interface: routes an internal traffic (ULP or other protocole) to the Internet, the outgoing messages are coded with Modbus TCP/IP protocol.

Server (Switchboard, Energy): routes the internal traffic to the Internet. Other complementary functions such as data logging and storage. Provides devices status and energy trends on internal web pages...



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ComPacT INSE80.

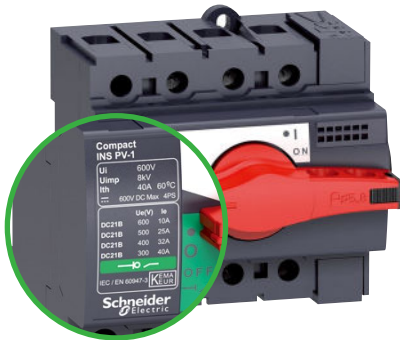
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PB111487_L38.eps



ComPacT INSJ400.

PB111403_L42.eps



ComPacT INS PV-1.

PB104853.eps



OEM application

The INSE/INSJ circuit breakers are ideal for industrial and OEM applications. They are UL489 and CSA C22.2 N°5-02 for INSE and C22.2 N°5-13 for INSJ certified.

Photovoltaic application

No matter the size or scale of the project, Schneider Electric, has a photovoltaic solution to fit your needs. Fast ROI, high efficiency – it's all a part of our offer as the world leader in energy management.

The INS PV-1 is a direct current switch-disconnector dedicated to array isolation and control with Voc until 600 V DC.

Product used

Description	Current	Reference	Weight (kg)
INS PV-1 switch-disconnector	40 A	28907	0.657

ComPacT

INS80 PV

Number of poles	4 serial poles		
Electrical characteristics			
Conventional thermal current (A)	Ith		
Conventional thermal current in enclosure (A) Ithe			
Rated insulation level (DC V)	Ui		
Impulse-withstand voltage (kV)	Uimp		
Rated operational voltage (DC V)	Ue		
Rated operational voltage DC21B (V)			
Rated operational current (A)	Ie	Electrical DC	
	DC21B	600	
	DC21B	500	
	DC21B	400	
	DC21B	300	
Rated duties	Uninterrupted duty		-
	Intermittent duty		Class 120 - 60 %
Short-circuit making capacity (kA peak)	Icm		
Short-time withstand current (A rms)	Icw		
Suitability for isolation			Yes
Durability (O-C cycles)	Mechanical	20000	
	Electrical DC	600 V	1500
Positive contact indication			Yes
Visible break			-
Emergency-off switch-disconnector			Yes
Degree of pollution			3

High performances applications (tunnel...)

- Well suited to harsh environment
- The enclosed switch-disconnector ComPacT INS250-200A 3P offers IP66 and IK10 degrees of protection in both versions steel and stainless steel.
- The switch-disconnector has been successfully tested by third party F200 (during more than 2 hours at 200 °C) according with European Fire Regulation EN12101-3:20002. After the heating test, the current carrying path is still operating ensuring power supply even in case of fire.
- The individual enclosure is equipped with:
 - cover, screwed
 - 2 cable-gland M50 up and down for power supply
 - provides location for 2 cable-gland M20 for electrical auxiliaries early break and make outputs (provided within the enclosure)
 - 4 adjustable fixing brackets
 - IP66 extended rotary handle.



Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INS40 to 160

PB11402_30.eps



ComPacT INS40 to 80 switch-disconnector.

PB11403_30.eps



ComPacT INS40 to 80 emergency-off switch-disconnector.

PB11406_42.eps



ComPacT INS100 to 160 switch-disconnector.

PB11407_42.eps



ComPacT INS100 to 160 emergency-off switch-disconnector.

ComPacT INS switch-disconnectors

Number of poles

Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3

Conventional thermal current (A)	I_{th}	at 60 °C
Conventional thermal current in enclosure	I_{the}	at 60 °C
Rated insulation level (V)	U_i	AC 50/60 Hz
Impulse-withstand voltage (kV)	U_{imp}	
Rated operational voltage (V)	U_e	AC 50/60 Hz DC

Rated operational voltage AC20 and DC20 (V)

Rated operational current (A)	I_e	Electrical AC 50/60 Hz	220-240 V
			380-415 V
			440-480 V
			500 V
			660-690 V

Electrical DC

125 V (2P in series)

250 V (4P in series)

Rated operational power AC23 (kW)

Electrical AC 50/60 Hz

220-240 V

380-415 V

440 V

500-525 V

660-690 V

Rated duties

Uninterrupted duty

Intermittent duty

Short-circuit making capacity (kA peak)

I_{cm}

Min. (switch-disconnector alone)

Max. (with upstream protection circuit breaker)

Short-time withstand current (A rms)

I_{cw}

1 s

3 s

20 s

30 s

Suitability for isolation

Durability (O-C cycles)

Mechanical

Electrical AC 50/60 Hz

220-240 V

380-415 V

440 V

500 V

690 V

Electrical DC

250 V

Positive contact indication

Visible break

Emergency-off switch-disconnector

Degree of pollution

Upstream protection

See the "Complementary technical information" page <?>.

Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INS40 to 160

INS40		INS63		INS80		INS100		INS125		INS160	
3-4		3-4		3-4		3-4		3-4		3-4	
47-3											
40		63		80		100		125		160	
40		63		80		100		125		160	
690		690		690		800		800		800	
8		8		8		8		8		8	
500		500		500		690		690		690	
250		250		250		250		250		250	
690		690		690		750		750		750	
AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A
40	40	63	63	80	80	100	100	125	125	160	160
40	40	63	63	80	72	100	100	125	125	160	160
40	40	63	63	80	63	100	100	125	125	160	160
40	32	63	40	80	40	100	100	125	125	160	160
-	-	-	-	-	-	100	63	125	80	160	100
DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A
40	40	63	63	80	80	100	100	125	125	160	160
40	40	63	63	80	80	100	100	125	125	160	160
11		15		22		22		37		45	
20		30		37		45		55		75	
22		30		37		55		55		90	
18,5		22		22		55		75		110	
-		-		-		55		75		90	
⊙		⊙		⊙		⊙		⊙		⊙	
Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %	
15		15		15		20		20		20	
75		75		75		154		154		154	
3000		3000		3000		5500		5500		5500	
1730		1730		1730		3175		3175		3175	
670		670		670		1230		1230		1230	
550		550		550		1000		1000		1000	
⊙		⊙		⊙		⊙		⊙		⊙	
20000		20000		20000		15000		15000		15000	
AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
-	-	-	-	-	-	1500	1500	1500	1500	1500	1500
DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
⊙		⊙		⊙		⊙		⊙		⊙	
-		-		-		-		-		-	
⊙		⊙		⊙		⊙		⊙		⊙	
3		3		3		3		3		3	
-		-		-		-		-		-	



Switch-Disconnecter Selection

ComPacT INS40 to 160

A

ComPacT INS switch-disconnectors

Installation

Fixed, front connection

Fixed, rear connection

On symmetrical rails

On a backplate

Connection

By cables To bare cable connectors

By cables with lugs Directly to terminals

To spreaders

To vertical-connection adapters via cable-lug adapters

Flat-facing bars Directly to terminals

To spreaders

Edgewise bars To vertical-connection adapters

Indication and measurement auxiliaries

Auxiliary contacts

Control, locking and interlocking

Control Direct front rotary handle

Extended front rotary handle

Direct lateral rotary handle

Extended lateral rotary handle

Locking By keylock
By padlocks

Interlocking By keylock
Mechanical

Complete source-changeover assembly

Operating torque (Nm) (typical value for 3-4 poles with front handle)

Installation and connection accessories

Bare cable connectors

Rear connectors

Terminal extensions

Spreaders

One-piece spreader

Terminal shrouds

Terminal shields

Interphase-barrier

Front panel escutcheons

Coupling accessories

Tightening torque for electrical connections (Nm)

Dimensions and weights

Overall dimensions H x W x D (mm)

3 poles

4 poles

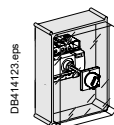
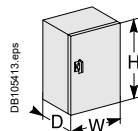
Approximate weight (kg)

3 poles

4 poles

Enclosure dimensions for lthe

H x W x D (mm)



H x W x D (mm)

Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INS40 to 160

A

INS40	INS63	INS80	INS100	INS125	INS160
○	○	○	○	○	○
-	-	-	○	○	○
○	○	○	-	-	-
○	○	○	○	○	○
○	○	○	○	○	○
-	-	-	○	○	○
-	-	-	-	-	-
-	-	-	-	-	-
○	○	○	○	○	○
-	-	-	-	-	-
-	-	-	-	-	-
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
-	-	-	-	-	-
○	○	○	○	○	○
-	-	-	-	-	-
-	-	-	-	-	-
0.7 < Nm < 1.3	0.7 < Nm < 1.3	0.7 < Nm < 1.3	1.4 < Nm < 2	1.4 < Nm < 2	1.4 < Nm < 2
○	○	○	○	○	○
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
○	○	○	○	○	○
○	○	○	○	○	○
-	-	-	○	○	○
-	-	-	-	-	-
-	-	-	-	-	-
5	5	5	8	8	8
85 x 90 x 67.5	85 x 90 x 67.5	85 x 90 x 67.5	100 x 135 x 67.5	100 x 135 x 67.5	100 x 135 x 67.5
85 x 90 x 67.5	85 x 90 x 67.5	85 x 90 x 67.5	100 x 135 x 67.5	100 x 135 x 67.5	100 x 135 x 67.5
0.5	0.5	0.5	0.8	0.8	0.8
0.6	0.6	0.6	0.9	0.9	0.9
350 X 350 X 260	350 X 350 X 260	350 X 350 X 260	350 X 350 X 260	350 X 350 X 260	350 X 350 X 260
270 x 180 x 185	270 x 180 x 185	270 x 180 x 185	270 x 180 x 185	270 x 180 x 185	270 x 180 x 185

Switch-disconnector selection

ComPacT INS250-100 to 630

A

PB111440_52_1_eps



ComPacT INS250 switch-disconnector.

PB111441_47_1_eps



ComPacT INS250 emergency-off switch-disconnector.

PB111442_149_eps



ComPacT INS630 switch-disconnector.

ComPacT INS switch-disconnectors

Number of poles

Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3

Conventional thermal current (A)	I_{th}	at 60 °C
Conventional thermal current in enclosure	I_{the}	at 60 °C
Rated insulation level (V)	U_i	AC 50/60 Hz
Impulse-withstand voltage (kV)	U_{imp}	
Rated operational voltage (V)	U_e	AC 50/60 Hz DC
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz
Rated operational current (A)	I_e	Electrical AC 50/60 Hz
		220-240 V
		380-415 V
		440-480 V
		500-525 V
		660-690 V
		Electrical DC
		125 V (2P in series)
		250 V (4P in series)
Rated operational power AC23 (kW)	Electrical AC 50/60 Hz	
		220-240 V
		380-415 V
		440 V
		500-525 V
		660-690 V

Rated duties		Uninterrupted duty
		Intermittent duty
Short-circuit making capacity (kA peak)	I_{cm}	Min. (switch-disconnector alone)
		Max. (with upstream protection circuit breaker)
Short-time withstand current (A rms)	I_{cw}	1 s
		3 s
		20 s
		30 s

Suitability for isolation		
Durability (O-C cycles)		Mechanical
		Electrical AC 50/60 Hz
		440 V
		500 V
		690 V
		Electrical DC
		250 V

- Positive contact indication
- Visible break
- Emergency-off switch-disconnector
- Degree of pollution

Upstream protection

See the "Complementary technical information" page <?>.

[1] 550 A (DC).

Functions and Characteristics

Switch-disconnector selection

ComPacT INS250-100 to 630



INS250-100		INS250-160		INS250-200		INS250		INS320		INS400		INS500		INS630		
3-4		3-4		3-4		3-4		3-4		3-4		3-4		3-4		
100		160		200		250		320		400		500		630		
100		160		200		250		320		400		500		630 ^[1]		
800		800		800		800		800		800		800		800		
8		8		8		8		8		8		8		8		
690		690		690		690		690		690		690		690		
250		250		250		250		250		250		250		250		
750		750		750		750		750		750		750		750		
AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC23B
100	100	160	160	200	200	250	250	320	320	400	400	500	500	550	550	630
100	100	160	160	200	200	250	250	320	320	400	400	500	500	550	550	630
22	45	55	75	90	110	132	160	210	250	330	400	500	630	800	1000	1500
45	75	90	110	132	160	210	250	330	400	500	630	800	1000	1500	2000	3000
55	90	110	132	160	210	250	330	400	500	630	800	1000	1500	2000	3000	4000
55	110	132	160	210	250	330	400	500	630	800	1000	1500	2000	3000	4000	5000
55	90	110	132	160	210	250	330	400	500	630	800	1000	1500	2000	3000	4000
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Class 120 - 60 % 30	Class 120 - 60 % 30	Class 120 - 60 % 30	Class 120 - 60 % 30	Class 120 - 60 % 30	Class 120 - 60 % 30	Class 120 - 60 % 30	Class 120 - 60 % 30	Class 120 - 60 % 50	Class 120 - 60 % 50	Class 120 - 60 % 50	Class 120 - 60 % 50	Class 120 - 60 % 50	Class 120 - 60 % 50	Class 120 - 60 % 50	Class 120 - 60 % 50	Class 120 - 60 % 50
330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330	330
8500	8500	8500	8500	8500	8500	8500	8500	20000	20000	20000	20000	20000	20000	20000	20000	20000
4900	4900	4900	4900	4900	4900	4900	4900	11500	11500	11500	11500	11500	11500	11500	11500	11500
2200	2200	2200	2200	2200	2200	2200	2200	4900	4900	4900	4900	4900	4900	4900	4900	4900
1800	1800	1800	1800	1800	1800	1800	1800	4000	4000	4000	4000	4000	4000	4000	4000	4000
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000	10000	10000	10000	10000	10000	10000
AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	AC22A	AC23A	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	
DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC22A	DC23A	DC23A	DC23B	DC23A	DC23B	DC23A	DC23B	DC23A	DC23B	
1500	1500	1500	1500	1500	1500	1500	1500	1000	-	1000	-	1000	-	1000	200	
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Switch-Disconnecter Selection

ComPacT INS250-100 to 630



ComPacT INS switch-disconnectors

Installation

Fixed, front connection

Fixed, rear connection

On symmetrical rails

On a backplate

Connection

By cables To bare cable connectors

By cables with lugs Directly to terminals

To spreaders

To vertical-connection adapters via cable-lug adapters

Flat-facing bars Directly to terminals

To spreaders

Edgewise bars To vertical-connection adapters

Indication and measurement auxiliaries

Auxiliary contacts

PowerTag NSX

Voltage-presence indicator

Current-transformer module

Ammeter module

Control, locking and interlocking

Control Direct front rotary handle

Extended front rotary handle

Direct lateral rotary handle

Extended lateral rotary handle

Locking By keylock

By padlocks

Interlocking By keylock

Mechanical

Complete source-changeover assembly

Operating torque (Nm) (typical value for 3-4 poles with front handle)

Installation and connection accessories

Bare cable connectors

Rear connectors

Terminal extensions

Spreaders

One-piece spreader

Terminal shrouds

Terminal shields

Interphase-barrier

Front panel escutcheons

Coupling accessories

Tightening torque for electrical connections (Nm)

Dimensions and weights

Overall dimensions H x W x D (mm) 3 poles

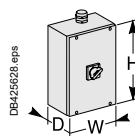
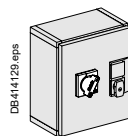
4 poles

Approximate weight (kg) 3 poles

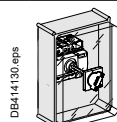
4 poles

Enclosure dimensions for Ithe

H x W x D (mm)



H x W x D (mm) (IP66)
Enclosed switch-disconnectors
ComPacT INS 250-200 3P IP66
for tight performances application ^[1]
H x W x D (mm)



[1] Available in August 2017 for Nordic countries.

Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INS630b to 2500

A

PB11510_45_1eps



ComPacT INS1600 switch-disconnector.

PB11511_45_6eps



ComPacT INS1600 emergency-off switch-disconnector.

PB11510_72_6eps



ComPacT INS2500 switch-disconnector.

ComPacT INS switch-disconnectors

Number of poles

Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3

Conventional thermal current (A)	I_{th}	at 60 °C
Conventional thermal current in enclosure	I_{the}	at 60 °C
Rated insulation level (V)	U_i	AC 50/60 Hz
Impulse-withstand voltage (kV)	U_{imp}	
Rated operational voltage (V)	U_e	AC 50/60 Hz DC
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz
Rated operational current (A)	I_e	Electrical AC 50/60 Hz

220-240 V

380-415 V

440-480 V

500-525 V

660-690 V

Electrical DC

125 V (2P in series)

250 V (4P in series)

Rated operational power AC23 (kW)

Electrical AC 50/60 Hz

220-240 V

380-400 V

415 V

500-525 V

660-690 V

Rated duties

Uninterrupted duty

Intermittent duty

Short-circuit making capacity (kA peak)

I_{cm}

Min. (switch-disconnector alone)

Max. (with upstream protection circuit breaker)

Short-time withstand current (kA rms)

I_{cw}

0.5 s

0.8 s

1 s

3 s

20 s

30 s

Suitability for isolation

Durability (O-C cycles)

Mechanical

Electrical AC 50/60 Hz

220-240 V

380-415 V

440-480 V

500-525 V

660-690 V

Electrical DC

125 V (2P)

250 V (4P)

Positive contact indication

Visible break

Emergency-off switch-disconnector

Degree of pollution

Upstream protection

See the "Complementary technical information" page <?>.

[1] For vertical connection busbars only. For horizontal connection busbars, see derating charts in "Installation recommendations" see page <?>.

Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INS630b to 2500

A

INS630b			INS800			INS1000			INS1250			INS1600			INS2000			INS2500		
3-4			3-4			3-4			3-4			3-4			3-4			3-4		
630			800			1000			1250			1600 ^[1]			2000			2500		
630			800			1000			1250			1600 ^[1]			2000			2500		
1000			1000			1000			1000			1000			1000			1000		
12			12			12			12			12			12			12		
690			690			690			690			690			690			690		
250			250			250			250			250			250			250		
800			800			800			800			800			800			800		
AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21B	AC22B	AC23A	AC21B	AC22B	AC23B	AC21B	AC22B	AC23B
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1250	2000	2000	-	2500	2500	-
												1450	1450							
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1250	2000	2000	-	2500	2500	-
												1450	1450							
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1250	2000	2000	-	2500	2500	-
												1250	1250							
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1250	2000	2000	-	2500	2500	-
												1250	1250							
DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21B	DC22B	DC23B	DC21B	DC22B	DC23B
630/2	630/2	630/2	800/2	800/2	800/2	1000/2	1000/2	1000/2	1250/2	1250/2	1250/2	1600/2	1600/2	1600/2	2000/2	2000/2	-	2500/2	2500/2	-
630/4	630/4	630/4	800/4	800/4	800/4	1000/4	1000/4	1000/4	1250/4	1250/4	1250/4	1600/4	1600/4	1600/4	2000/4	2000/4	-	2500/4	2500/4	-
250			250			315			400			400			-			-		
400			400			560			710			710			-			-		
500			500			630			800			800			-			-		
560			560			710			900			900			-			-		
710			710			900			-			-			-			-		
☉			☉			☉			☉			☉			☉			☉		
Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %		
75			75			75			75			75			105			105		
330			330			330			330			330			330			330		
50			50			50			50			50			50			50		
42			42			42			42			42			50			50		
35			35			35			35			35			50			50		
20			20			20			20			20			30			30		
10			10			10			10			10			13			13		
8			8			8			8			8			11			11		
☉			☉			☉			☉			☉			☉			☉		
5000			3000			3000			3000			3000			3000			3000		
AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21B	AC22B	AC23A	AC21B	AC22B	AC23B	AC21B	AC22B	AC23B
1000	1000	1000	500	500	500	500	500	500	500	500	500	100	100	500	100	100	-	100	100	-
												500	500							
1000	1000	1000	500	500	500	500	500	500	500	500	500	100	100	500	100	100	-	100	100	-
												500	500							
1000	1000	1000	500	500	500	500	500	500	500	500	500	100	100	500	100	100	-	100	100	-
												500	500							
1000	1000	1000	500	500	500	500	500	500	500	500	500	100	100	500	100	100	-	100	100	-
												500	500							
DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23B	DC21B	DC22B	DC23B	DC21B	DC22B	DC23B
1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
☉			☉			☉			☉			☉			☉			☉		
-			-			-			-			-			-			-		
-			☉			☉			☉			☉			-			-		
3			3			3			3			3			3			3		
-			-			-			-			-			-			-		

Switch-Disconnecter Selection

ComPacT INS630b to 2500

A

ComPacT INS switch-disconnectors

Installation

Fixed, front connection

Fixed, rear connection

On symmetrical rails

On a backplate

Connection

By cables To bare cable connectors

By cables with lugs Directly to terminals

To spreaders

To vertical-connection adapters via cable-lug adapters

Flat-facing bars Directly to terminals

To spreaders

Edgewise bars To vertical-connection adapters

Indication and measurement auxiliaries

Auxiliary contacts

Control, locking and interlocking

Control Direct front rotary handle

Extended front rotary handle

Direct lateral rotary handle

Extended lateral rotary handle

Locking By keylock

By padlocks

Interlocking By keylock

Mechanical

Complete source-changeover assembly

Operating torque (Nm) (typical value for 3-4 poles with front handle)

Installation and connection accessories

Bare cable connectors

Rear connectors

Terminal extensions

Spreaders

One-piece spreader

Terminal shrouds

Terminal shields

Interphase-barrier

Front panel escutcheons

Coupling accessories

Tightening torque for electrical connections (Nm)

Dimensions and weights

Overall dimensions H x W x D (mm) 3 poles

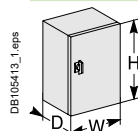
4 poles

Approximate weight (kg) 3 poles

4 poles

Enclosure dimensions for Ithe

H x W x D (mm)



Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INS630b to 2500

A

	INS630b	INS800	INS1000	INS1250	INS1600	INS2000	INS2500
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	-	-	-	-	-	-	-
	○	○	○	○	○	○	○
	-	-	-	-	-	-	-
	-	-	-	-	-	○	○
	-	-	-	-	-	-	-
	○	○	○	○	○	-	-
	○	○	○	○	○	○	○
	○	○	○	○	○	-	-
	○	○	○	○	○	-	-
	○	○	○	○	○	-	-
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	30	30	30	30	30	60	60
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	-	-	-	-	-	-	-
	50	50	50	50	50	50	50
	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	440 x 347.5 x 227.5	440 x 347.5 x 227.5
	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	440 x 462.5 x 227.5	440 x 462.5 x 227.5
	14	14	14	14	14	35	35
	18	18	18	18	18	45	45
	-	-	-	-	-	-	-

Switch-Disconnecter Selection

ComPacT INSE80 and INSJ400

A



ComPacT INSE80.



ComPacT INSJ400.

INSE/INSJ switch specifications

Reverse Connection

ComPacT INSE/INSJ switches may be wired with the supply power coming from either side with no reduction in performance.

Neutral Pole Position

In ComPacT switches, the neutral pole is located on the left-hand side. On the INSE/INSJ switch, the four poles are identical and the neutral pole can therefore be located on the right-hand side by masking the existing label and adding an appropriate label on the right.

Electrical characteristics

ComPacT INSE/INSJ

Number of poles

UL489 - Electrical characteristic

Rated operational voltage

Impulse-withstand voltage

Short circuit rating when protected by any protective device 600 V AC

Short circuit rating when protected by circuit breaker 240 V AC

480 V AC

600 V AC

Short circuit rating when protected by fuses 600 V AC

Current rating at 60 °C

Positive contact indication

Endurance (operation O-CO)	Total
	Electrical
	Mechanical

Connection

Front connection

Busbar or compression lug

Bare wire connector

1 cable

1-2 cables

Rear connection

Busbar or compression lug

Cable range temperature

Cable range for base wire

1 cable

1-2 cables

Torques

Terminal shrouds

Terminal shields

Phase barriers

Mounting

Mounting on 35 mm symmetrical rail

Mounting on backplate

Accessories

Auxiliary contacts ^[1]

Rotary handle

Direct front

Extended front

Direct lateral

Extended lateral

Locking

By padlocks

By keylock

Escutcheons

Dimensions and Weight

Overall dimensions H x W x D (mm) 3 poles/4 poles

Approximate weight (kg)

3 poles

4 poles

[1] Common points changeover contact.

[2] CAM (early break or early make) common point changeover contact.

Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INSE80 and INSJ400



INSE80-40 A		INSE80-60 A		INSE80-80 A		INSJ400-250 A		INSJ400-400 A	
3-4						3			
600 V AC						600 V AC			
8 kV						8 kV			
10 kA rms						20 kA rms			
100 kA rms						150 kA rms			
65 kA rms						100 kA rms			
18 kA rms						25 kA rms			
Schneider Electric circuit breaker PowerPact H 100 A						Schneider Electric circuit breaker PowerPact L 400 A			
50 kA rms. specific class T or RK 100 A						50 kA rms. specific class T or RK 400 A			
40 A		60 A		80 A		250 A		400 A	
<input checked="" type="radio"/>						<input checked="" type="radio"/>			
10000						6000			
6000 full load						1000 full load			
4000						5000			
<input checked="" type="radio"/>						<input checked="" type="radio"/>			
<input checked="" type="radio"/>						<input checked="" type="radio"/>			
-						<input checked="" type="radio"/>			
-						<input checked="" type="radio"/>			
Al/Cu 75 °C and 90 °C						Al/Cu 75 °C and 90 °C			
14 to 4 AWG Cu/Al						2 AWG to 600 kcmil Cu			
3 to 2 AWG Cu/Al						2 AWG to 500 kcmil Al			
-						4/0 AWG à / to 350 kcmil Cu			
-						4/0 AWG à / to 500 kcmil Al			
10 Nm/88 lb-in						32 Nm/275 lb-in			
Option						-			
Option						Option			
Option						Option			
<input checked="" type="radio"/>						-			
<input checked="" type="radio"/>						<input checked="" type="radio"/>			
<input checked="" type="radio"/> 2 OF ^[1]						<input checked="" type="radio"/> 3 OF ^[1] + 1 CAM ^[2]			
<input checked="" type="radio"/>						<input checked="" type="radio"/>			
Option						Option			
<input checked="" type="radio"/>						-			
Option						-			
Standard, up to 3 padlocks, position OFF only						Standard, up to 3 padlocks, position OFF only			
-						Option			
-						<input checked="" type="radio"/>			
100 x 135 x 62,5 (without direct handle)						205 x 185 x 130 (without direct handle)			
3.94 x 5.31 x 2.46 in.						8.07 x 7.28 x 5.12 in.			
0,8 (1.76 lbs)						4,6 (10.12 lbs)			
0,9 (1.98 lbs)						4,9 (10.78 lbs)			

Switch-Disconnecter Selection

ComPacT INV100 to 630

A



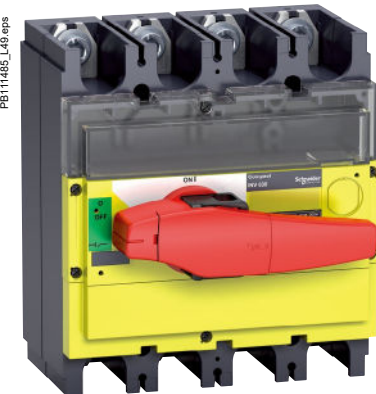
ComPacT INV250 switch-disconnector.



ComPacT INV250 emergency-off switch-disconnector.



ComPacT INV630 switch-disconnector.



ComPacT INV630 emergency-off switch-disconnector.

ComPacT INV switch-disconnectors

Number of poles

Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3

Conventional thermal current (A)	I_{th}	at 60 °C
Conventional thermal current in enclosure	I_{the}	at 60 °C
Rated insulation level (V)	U_i	AC 50/60 Hz
Impulse-withstand voltage (kV)	U_{imp}	
Rated operational voltage (V)	U_e	AC 50/60 Hz DC
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz
Rated operational current (A)	I_e	Electrical AC 50/60 Hz 220-240 V 380-415 V 440-480 V 500-525 V 660-690 V Electrical DC 125 V (2P in series) 250 V (4P in series)
Rated operational power AC23 (kW)		Electrical AC 50/60 Hz 220-240 V 380-415 V 440 V 500-525 V 660-690 V
Rated duties		Uninterrupted duty Intermittent duty
Short-circuit making capacity (kA peak)	I_{cm}	Min. (switch-disconnector alone) Max. (with upstream protection circuit breaker)
Short-time withstand current (A rms)	I_{cw}	1 s 3 s 20 s 30 s
Suitability for isolation		
Durability (O-C cycles)		Mechanical Electrical AC 50/60 Hz 440 V 500 V 690 V Electrical DC 250 V
Positive contact indication		
Visible break		
Emergency-off switch-disconnector		
Degree of pollution		

Upstream protection

See the "Complementary technical information" page <?>.

[1] 550 A (DC).

Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INV100 to 630



INV100			INV160			INV250			INV400			INV630		
3-4			3-4			3-4			3-4			3-4		
100			160			250			400			630		
100			160			250			400			630 ^[1]		
800			800			800			800			800		
8			8			8			8			8		
690			690			690			690			690		
250			250			250			250			250		
750			750			750			750			750		
AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A
100	100	100	160	160	160	250	250	250	400	400	400	630	630	630
100	100	100	160	160	160	250	250	250	400	400	400	630	630	630
100	100	100	160	160	160	250	250	250	400	400	400	630	630	630
100	100	100	160	160	160	250	250	250	400	400	400	630	630	630
DC21A	DC22A	DC23B	DC21A	DC22A	DC23B	DC21A	DC22A	DC23B	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A/ DC23B
100	100	100	160	160	160	250	250	250	400	400	400	550	550	550/630
100	100	100	160	160	160	250	250	250	400	400	400	550	550	550/630
22			45			75			110			200		
45			75			132			200			315		
55			90			150			220			400		
55			110			132			250			400		
55			90			160			400			560		
●			●			●			●			●		
Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %		
30			30			30			50			50		
330			330			330			330			330		
8500			8500			8500			20000			20000		
4900			4900			4900			11500			11500		
2200			2200			2200			4900			4900		
1800			1800			1800			4000			4000		
●			●			●			●			●		
15000			15000			15000			10000			10000		
AC22A	AC23A		AC22A	AC23A		AC22A	AC23A		AC21A	AC22A	AC23A	AC21A	AC22A	AC23A/ AC23B
1500	1500		1500	1500		1500	1500		1000	1000	1000	1000	1000	1000
1500	1500		1500	1500		1500	1500		1000	1000	1000	1000	1000	1000/200
1500	1500		1500	1500		1500	1500		1000	1000	1000	1000	1000	1000/200
DC22A	DC23A		DC22A	DC23A		DC22A	DC23A		DC21A	DC22A	DC23A	DC21A	DC22A	DC23A/ DC23B
1500	1500		1500	1500		1500	1500		1000	1000	1000	1000	1000	1000/200
●			●			●			●			●		
●			●			●			●			●		
●			●			●			●			●		
3			3			3			3			3		
-			-			-			-			-		

Switch-Disconnecter Selection

ComPacT INV100 to 630

A

ComPacT INV switch-disconnectors

Installation

Fixed, front connection

Fixed, rear connection

On symmetrical rails

On a backplate

Connection

By cables To bare cable connectors

By cables with lugs Directly to terminals

To spreaders

To vertical-connection adapters via cable-lug adapters

Flat-facing bars Directly to terminals

To spreaders

Edgewise bars To vertical-connection adapters

Indication and measurement auxiliaries

Auxiliary contacts

PowerTag NSX

Voltage-presence indicator

Current-transformer module

Ammeter module

Control, locking and interlocking

Control Direct front rotary handle

Extended front rotary handle

Direct lateral rotary handle

Extended lateral rotary handle

Locking By keylock

By padlocks

Interlocking By keylock

Mechanical

Complete source-changeover assembly

Operating torque (Nm) (typical value for 3-4 poles with front handle)

Installation and connection accessories

Bare cable connectors

Rear connectors

Terminal extensions

Spreaders

One-piece spreader

Terminal shrouds

Terminal shields

Interphase-barrier

Front panel escutcheons

Coupling accessories

Tightening torque for electrical connections (Nm)

Dimensions and weights

Overall dimensions H x W x D (mm) 3 poles

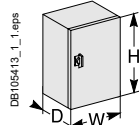
4 poles

Approximate weight (kg) 3 poles

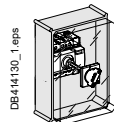
4 poles

Enclosure dimensions for lthe

H x W x D (mm)



H x W x D (mm)



Switch-Disconnecter Selection

ComPacT INV630b to 2500

PB11512_45.eps



ComPacT INV1600 switch-disconnector.

A

PB11519_L02.eps



ComPacT INV2500 switch-disconnector.

ComPacT INV switch-disconnectors

Number of poles

Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3

Conventional thermal current (A)	I_{th}	at 60 °C
Conventional thermal current in enclosure	I_{the}	at 60 °C
Rated insulation level (V)	U_i	AC 50/60 Hz
Impulse-withstand voltage (kV)	U_{imp}	
Rated operational voltage (V)	U_e	AC 50/60 Hz DC
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz
Rated operational current (A)	I_e	Electrical AC 50/60 Hz
		220-240 V
		380-415 V
		440-480 V
		500-525 V
		660-690 V
		Electrical DC
		125 V (2P in series)
		250 V (4P in series)
Rated operational power AC23 (kW)	Electrical AC 50/60 Hz	
		220-240 V
		380-400 V
		415 V
		500-525 V
		660-690 V
Rated duties		Uninterrupted duty
		Intermittent duty
Short-circuit making capacity (kA peak)	I_{cm}	Min. (switch-disconnector alone) Max. (with upstream protection circuit breaker)
Short-time withstand current (kA rms)	I_{cw}	0.5 s 0.8 s 1 s 3 s 20 s 30 s
Suitability for isolation		
Durability (O-C cycles)		Mechanical
		Electrical AC 50/60 Hz
		220-240 V
		380-415 V
		440-480 V ^[1]
		500-525 V
		660-690 V
		Electrical DC
		125 V (2P)
		250 V (4P)
Positive contact indication		
Visible break		
Emergency-off switch-disconnector		
Degree of pollution		

Upstream protection

See the "Complementary technical information" page <?>.

[1] For vertical connection busbars only. For horizontal connection busbars, see derating charts in "Installation recommendations" page <?>.

Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INV630b to 2500



INV630b			INV800			INV1000			INV1250			INV1600			INV2000			INV2500		
3-4			3-4			3-4			3-4			3-4			3-4			3-4		
630			800			1000			1250			1600 ⁽¹⁾			2000			2500		
630			800			1000			1250			1600 ⁽¹⁾			2000			2500		
1000			1000			1000			1000			1000			1000			1000		
12			12			12			12			12			12			12		
690			690			690			690			690			690			690		
250			250			250			250			250			250			250		
800			800			800			800			800			800			800		
AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21B	AC22B	AC23A	AC21B	AC22B	AC23B	AC21B	AC22B	AC23B
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1250	2000	2000	-	2500	2500	-
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1450	1450	1250	2000	2000	-	2500	2500	-
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1450	1450	1250	2000	2000	-	2500	2500	-
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1250	1250	1250	2000	2000	-	2500	2500	-
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1250	2000	2000	-	2500	2500	-
630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1250	1250	1250	2000	2000	-	2500	2500	-
DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21B	DC22B	DC23B	DC21B	DC22B	DC23B
630/2	630/2	630/2	800/2	800/2	800/2	1000/2	1000/2	1000/2	1250/2	1250/2	1250/2	1600/2	1600/2	1600/2	2000/2	2000/2	-	2500/2	2500/2	-
630/4	630/4	630/4	800/4	800/4	800/4	1000/4	1000/4	1000/4	1250/4	1250/4	1250/4	1600/4	1600/4	1600/4	2000/4	2000/4	-	2500/4	2500/4	-
250	250	250	400	400	400	560	560	560	710	710	710	900	900	900	-	-	-	-	-	-
400	400	400	560	560	560	710	710	710	900	900	900	-	-	-	-	-	-	-	-	-
500	500	500	630	630	630	800	800	800	900	900	900	-	-	-	-	-	-	-	-	-
560	560	560	710	710	710	900	900	900	-	-	-	-	-	-	-	-	-	-	-	-
710	710	710	900	900	900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %		
75			75			75			75			75			105			105		
330			330			330			330			330			330			330		
50			50			50			50			50			50			50		
42			42			42			42			42			50			50		
35			35			35			35			35			50			50		
20			20			20			20			20			30			30		
10			10			10			10			10			13			13		
8			8			8			8			8			11			11		
☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
5000			3000			3000			3000			3000			3000			3000		
AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21B	AC22B	AC23A	AC21B	AC22B	AC23B	AC21B	AC22B	AC23B
1000	1000	1000	500	500	500	500	500	500	500	500	500	100	100	500	100	100	-	100	100	-
1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23B	DC21B	DC22B	DC23B	DC21B	DC22B	DC23B
1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3			3			3			3			3			3			3		
-			-			-			-			-			-			-		

Switch-Disconnecter Selection

ComPacT INV630b to 2500

A

ComPacT INV switch-disconnectors

Installation

Fixed, front connection

Fixed, rear connection

On symmetrical rails

On a backplate

Connection

By cables	To bare cable connectors
By cables with lugs	Directly to terminals
	To spreaders
	To vertical-connection adapters via cable-lug adapters
Flat-facing bars	Directly to terminals
	To spreaders
Edgewise bars	To vertical-connection adapters

Indication and measurement auxiliaries

Auxiliary contacts

Voltage-presence indicator

Current-transformer module

Ammeter module

Control, locking and interlocking

Control	Direct front rotary handle
	Extended front rotary handle
	Direct lateral rotary handle
	Extended lateral rotary handle
Locking	By keylock
	By padlocks
Interlocking	By keylock
	Mechanical

Complete source-changeover assembly

Operating torque (Nm) (typical value for 3-4 poles with front handle)

Installation and connection accessories

Bare cable connectors

Rear connectors

Terminal extensions

Spreaders

One-piece spreader

Terminal shrouds

Terminal shields

Interphase-barrier

Front panel escutcheons

Coupling accessories

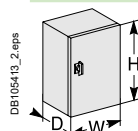
Tightening torque for electrical connections (Nm)

Dimensions and weights

Overall dimensions H x W x D (mm)	3 poles
	4 poles
Approximate weight (kg)	3 poles
	4 poles

Enclosure dimensions for lthe

H x W x D (mm)



Functions and Characteristics

Switch-Disconnecter Selection

ComPacT INV630b to 2500

A

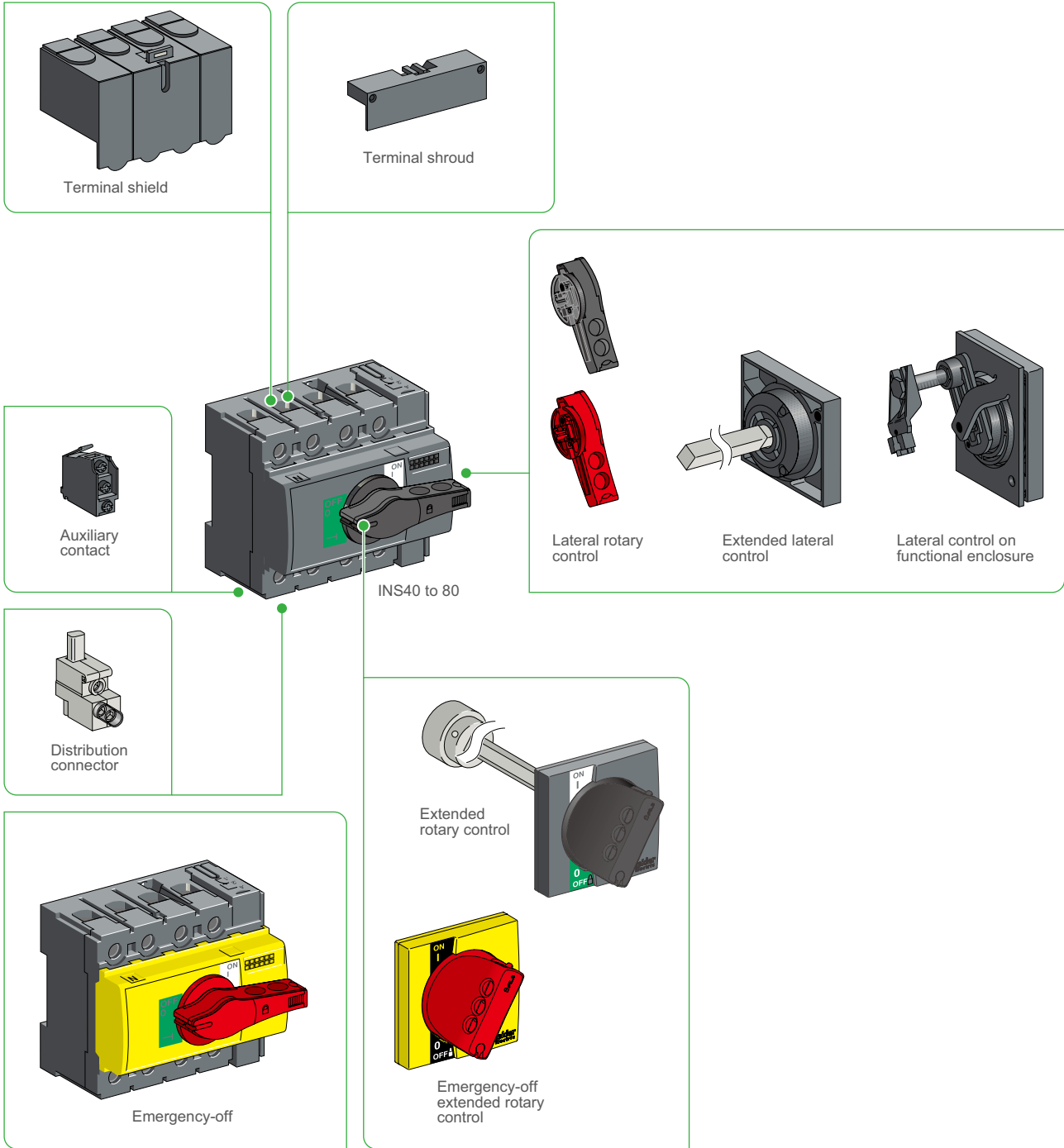
	INV630b	INV800	INV1000	INV1250	INV1600	INV2000	INV2500
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-
	-	-	-	-	-	⊙	⊙
	-	-	-	-	-	-	-
	⊙	⊙	⊙	⊙	⊙	-	-
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	-	-
	⊙	⊙	⊙	⊙	⊙	-	-
	⊙	⊙	⊙	⊙	⊙	-	-
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	30	30	30	30	30	60	60
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-
	50	50	50	50	50	50	50
	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	440 x 347.5 x 227.5	440 x 347.5 x 227.5
	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	440 x 462.5 x 227.5	440 x 462.5 x 227.5
	14	14	14	14	14	35	35
	18	18	18	18	18	45	45
	-	-	-	-	-	-	-

Functions and Characteristics

Electrical and Mechanical Accessories ComPacT INS40 to 80

DB432320 eps

A



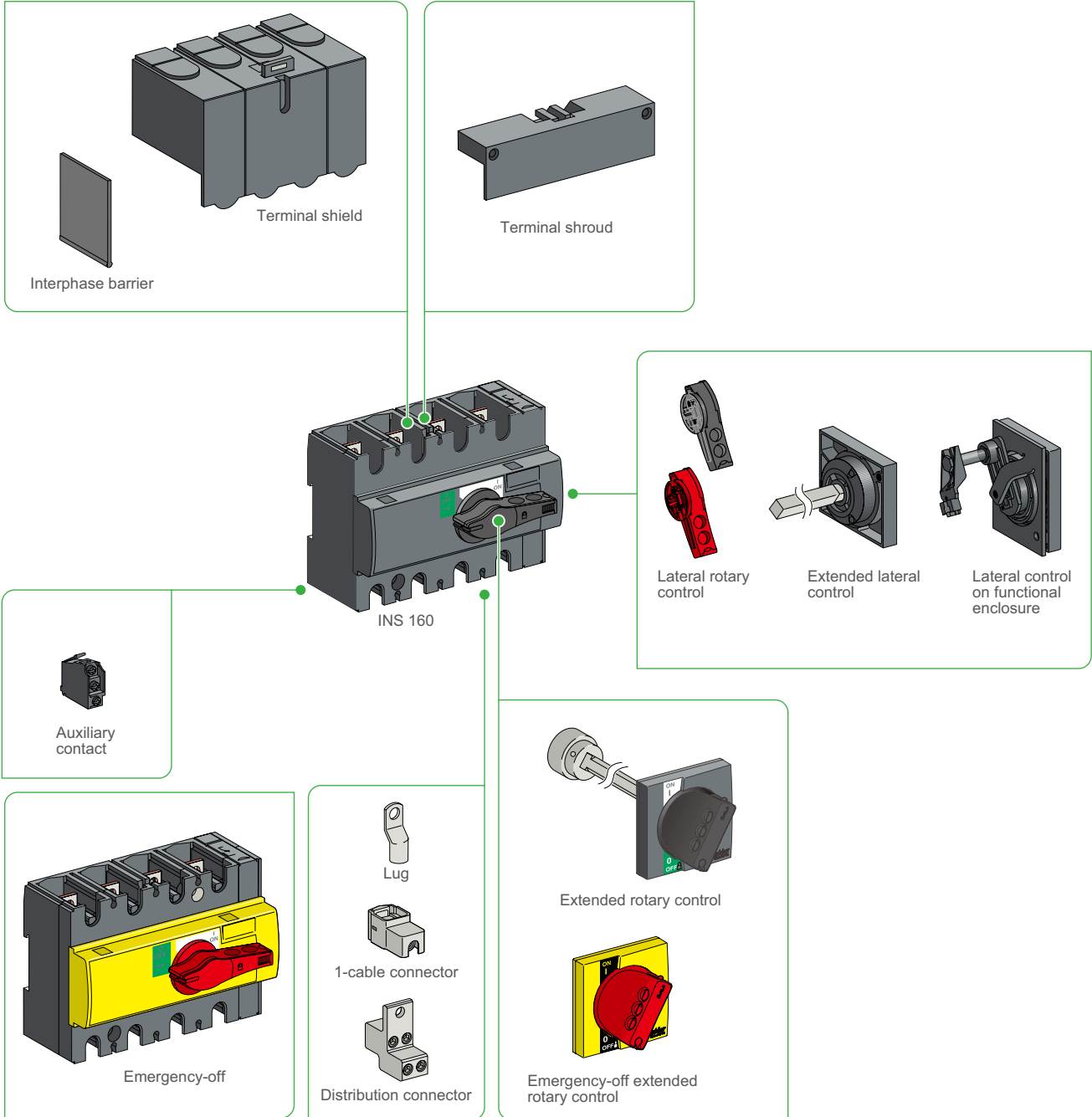
Functions and Characteristics

Electrical and Mechanical Accessories

ComPacT INS100 to 160



DB432321 eps



Electrical and Mechanical Accessories

ComPacT INS250-100 to 630

ComPacT INV100 to 630

DB432322-2023_eps

A

Connection accessories
compatibles with INS320 to 630

Voltage-presence indicator Interphase barrier Long terminal shield

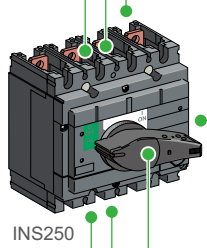
Interphase barrier Long terminal shield

Enclosure IP66^[2]

Rear connection Lug Spreader One-piece spreader
Right-angle terminal extension Cable connector DC connection

Rear connection Lug Spreader
Right-angle terminal extension Edgewise terminal Cable connector

Emergency-off
Emergency-off
INV250



Auxiliary contact

Locking by keylock

Emergency-off extended rotary control
Extended lateral rotary control
Direct lateral rotary control
Handle support

Power Tag

Coupling accessory
Short terminal shield

Lateral rotary control
Emergency-off extended rotary control

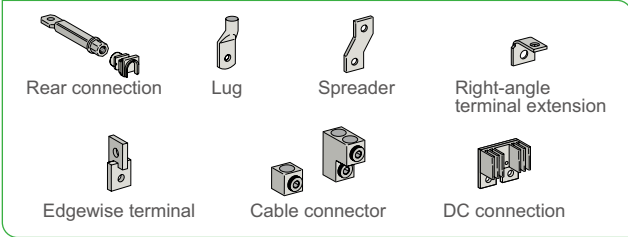
[1] Connectors 240 mm² INS (only for 250) /INV 100 to 250.
[2] IP66 enclosed switch 200A.

Electrical and Mechanical Accessories

ComPacT INS320 to 630

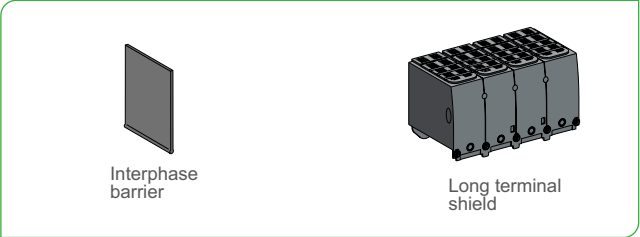
ComPacT INV400 to 630

DB43235-2024_eps

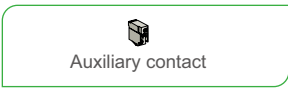


Rear connection Lug Spreader Right-angle terminal extension

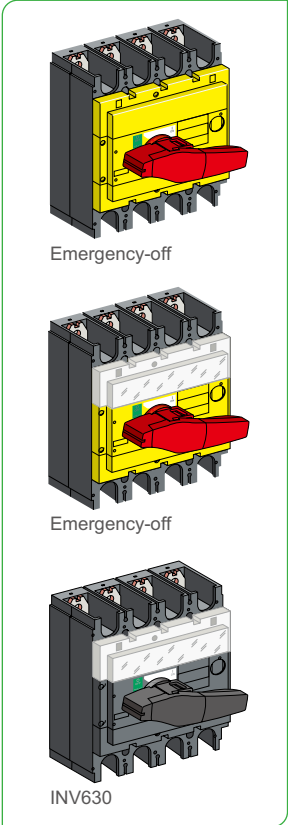
Edgewise terminal Cable connector DC connection



Interphase barrier Long terminal shield



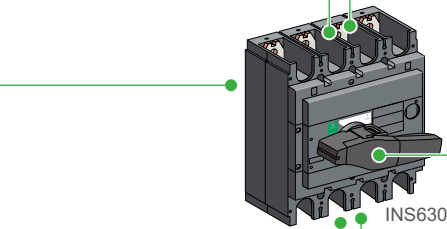
Auxiliary contact



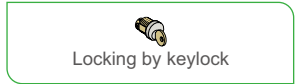
Emergency-off

Emergency-off

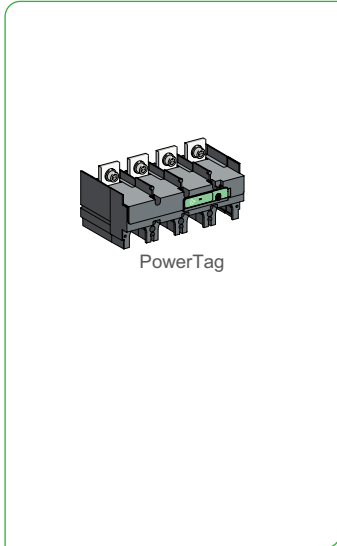
INV630



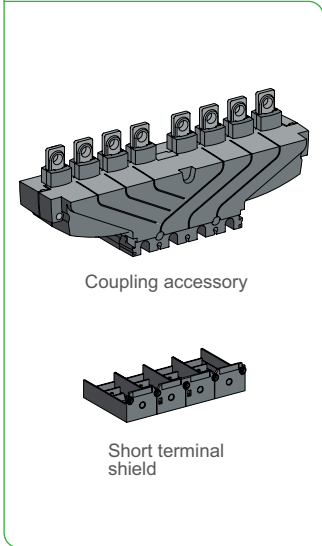
INS630



Locking by keylock

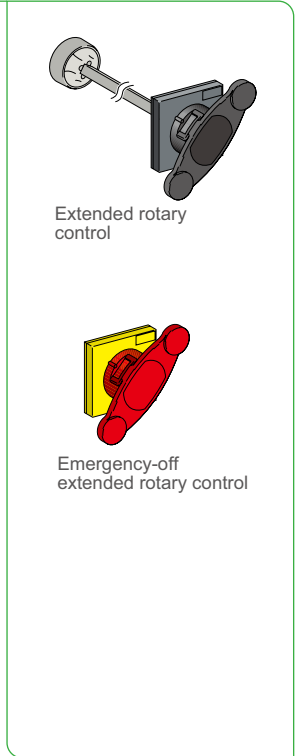


PowerTag



Coupling accessory

Short terminal shield



Extended rotary control

Emergency-off extended rotary control



Functions and Characteristics

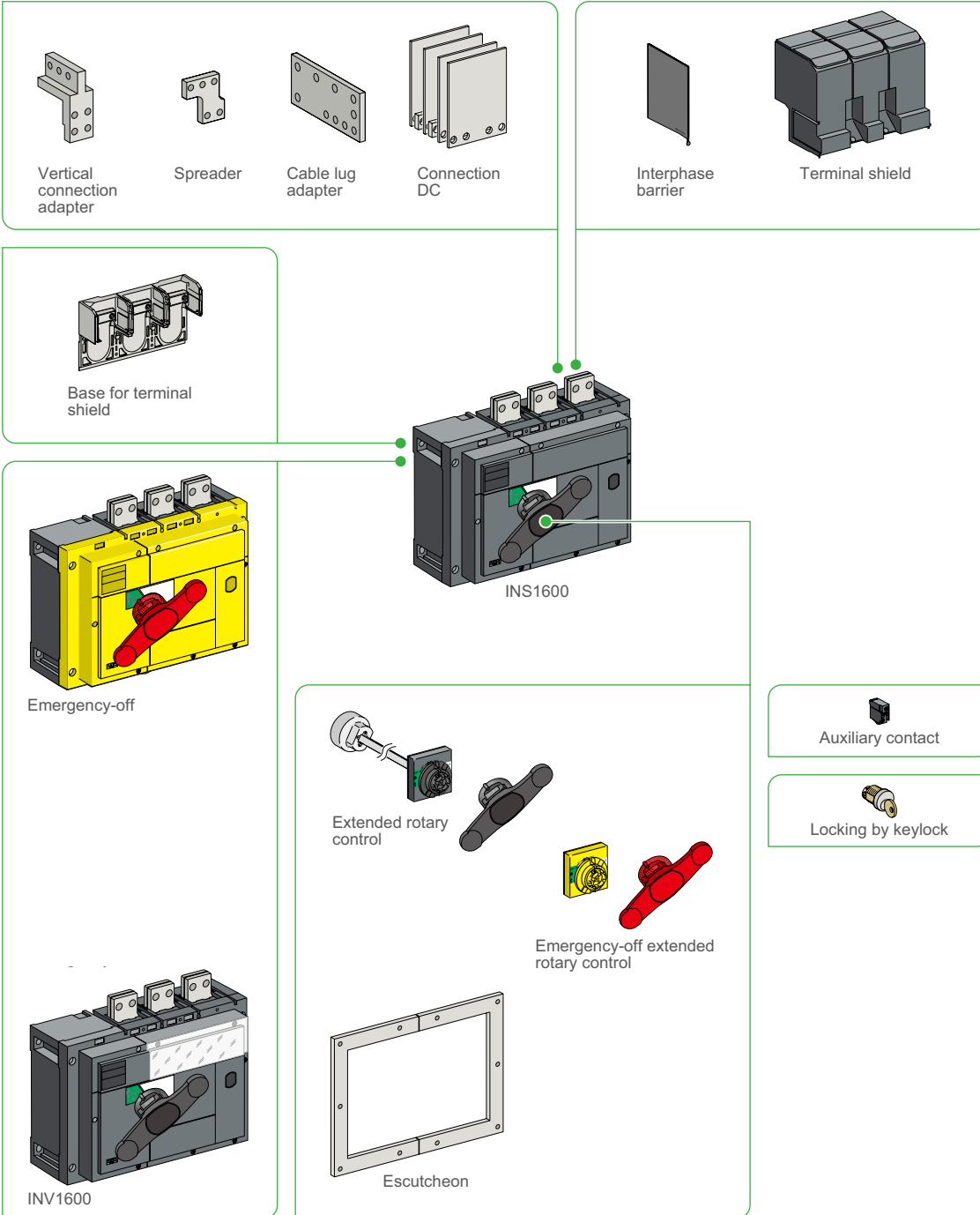
Electrical and Mechanical Accessories

ComPacT INS630b to 1600

ComPacT INV630b to 1600

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A

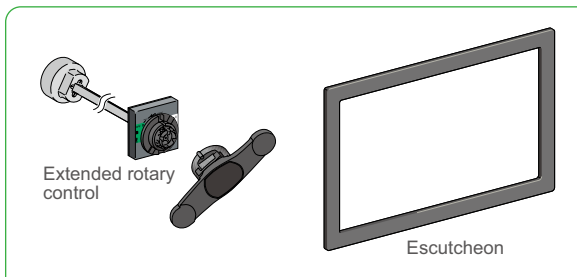
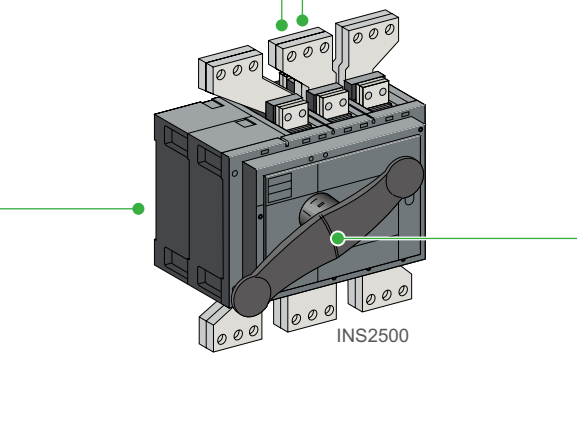
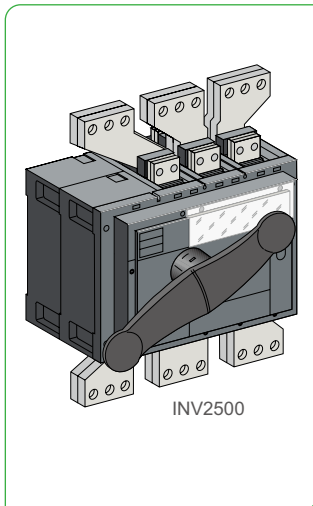
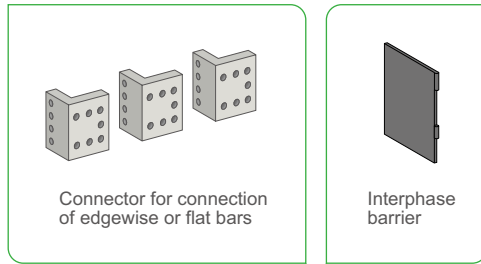


Electrical and Mechanical Accessories

Com**PacT** INS2000 to 2500

Com**PacT** INV2000 to 2500

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Electrical and Mechanical Accessories



ComPacT INV250 with PowerTag.

Indications and Measurement

PowerTag NSX Measurement Module

For ComPacT INS250 to 630 and INV100 to 630.

Function

Provides capability to measure energy, monitor voltage loss and trigger alarms. Refer to page A-6 for further details.

Installation

- The module is self-powered and mounted directly on the bottom side of the switch disconnector. On 4P, it can be mounted on top side with neutral on the right.
 - Degree of protection IP20 IK05
- Refer to page A-6 for further details regarding integration in Smartlink and configuration with Ecoreach.

Electrical Characteristics

Accuracy class 1.

A

Voltage Presence Indicator

The indicator detects and indicates that circuit breaker terminals are supplied with power.

Installation

- In the long or short terminal shields, via the knockouts.
- Upstream or downstream of the circuit breaker.
- Degree of protection: IP40, IK04.

Electrical Characteristics

Operates on all networks with voltages ranging from 220 et 550 V AC.

Auxiliary Contacts

ComPacT INS and INV

One or four common-point changeover contacts can be used to remote switch-disconnector status information for indications, electrical interlocking, relays, etc.

Functions

Each contact may be used for the following functions:

- OF (ON/OFF): indicates the position of the switch-disconnector poles
- CAM (early-make or early-break function): indicates the position of the handle.

Used in particular for:

- CAO early-break switch (auxiliary contacts open before the main contacts), used, for example, to automatically open a circuit breaker or a contactor before opening the ComPacT INS
- CAF early-make switch (auxiliary contacts close before the main contacts)
- switching of very small loads. A "low-level" version of the auxiliary contacts exists for switching very small loads (for example, to control a PLC or electronic circuits).

Standards

The auxiliary contacts comply with international standard IEC 60947-5-1.

Installation

They simply snap in under the auxiliaries cover (supplied as standard) of the switch-disconnector.

Insulation

Sealable auxiliary shield to protect against direct contact with power circuits.

Electrical Characteristics of Auxiliary Contacts for ComPacT INS and INV

Contact	Standard					Low Level				
	AC		DC			AC		DC		
Rated thermal current (A)	6					5				
Minimum load	100 mA at 24 V					1 mA at 4 V				
Utilisation category (IEC 60947-5-1)	AC12	AC15	DC12	DC13	DC14	AC12	AC15	DC12	DC14	
Operational current (A)	24 V	5	5	5	2.5	1	5	3	5	1
	48 V	5	5	2.5	1.2	0.2	5	3	2.5	0.2
	110 V	5	5	0.6	0.35	0.05	5	2.5	0.6	0.05
	200/240 V	5	4	-	-	-	5	2	-	-
	250 V	-	-	0.3	0.03	0.03	5	-	0.3	0.03
	380/440 V	5	2	-	-	-	5	1.5	-	-
	480 V	5	1.5	-	-	-	5	1	-	-
	660/690 V	5	0.1	-	-	-	-	-	-	-

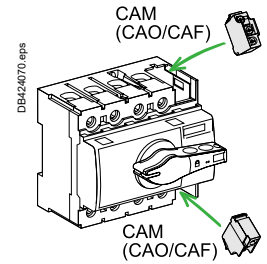
ComPacT INS40 to 2500, INV100 to 2500

Possible Combinations

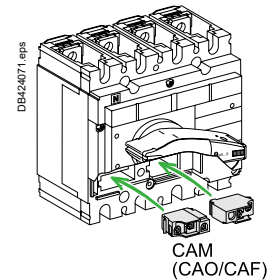
ComPacT	OF block	CAM block (CAO/CAF)
INS40 to 160	-	2
INS250	-	2
INS400 to 630	3	and 1
INS630b to 1600	3	and 1
INS2000 to 2500	3	and 1



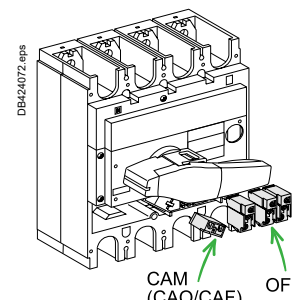
Auxiliary Contacts for ComPacT INS and INV



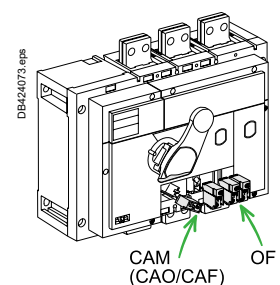
ComPacT INS40 to 160.



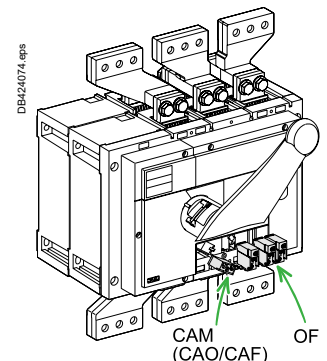
ComPacT INS250 and INV100 to 250.



ComPacT INS/INV320 to 630.



ComPacT INS/INV800 to 1600.



ComPacT INS/INV2000 to 2500.



Electrical and Mechanical Accessories

A



ComPacT INS160 with Lateral Direct Rotary Handle



ComPacT INS250 with Lateral Extended Rotary Handle



ComPacT INS250 with Front Extended Rotary Handle



ComPacT INS630 with Front Extended Rotary Handle



ComPacT INS250 Emergency-Off Version with Front Direct Rotary Handle.

Rotary Handle

ComPacT INS and INV

There are two types of rotary handle:

- direct rotary handle
- extended rotary handle.

There are two models:

- standard with a black handle
- with a red handle and yellow front for machine-tool control, in accordance with VDE standard.

	INS40-160	INS250 INV100-250	INS/INV 320-630	INS/INV 630b-1600	INS/INV 2000-2500
Standard rotary handle					
Front direct	Standard	Standard	Standard	Standard	Standard
Lateral direct	Standard	With conversion	No	No	No
Front extended	Optional	Optional	Optional	Optional	Optional
Lateral extended	Optional ^[1]	Optional	No	No	No
Red and yellow rotary handle for emergency-off switch-disconnectors					
Front direct	Standard	Standard	Standard	Standard	No ^[2]
Lateral direct	Standard	With conversion	No	No	No
Front extended	Optional	Optional	Optional	Optional	No ^[2]
Lateral extended	Optional ^[1] [3]	Optional ^[3]	No	No	No

[1] Two models for universal enclosures and for Prisma G enclosures.

[2] Emergency-off versions not available for INS/INV2000-2500.

[3] The basic switch-disconnector must be the emergency-off (red and yellow) version.

Direct Rotary Handle

- Degree of protection IP40.IK07.
- The switch-disconnector may be locked in the OFF position by one to three padlocks, hasp diameter 5 to 8 mm (not supplied).

Models

- Standard switch-disconnector: with black handle.
- Emergency-off version with red handle and yellow front for machine-tool control.

Extended Rotary Handle

- Makes it possible to operate the switch-disconnector, installed inside a switchboard, from the front or side of the switchboard. The extended rotary handle may be installed on the front or the side of the switch-disconnector. Degree of protection IP55.IK08.
- IP66, IK08 specific extended front rotary handle for INS250-200A.

Operation

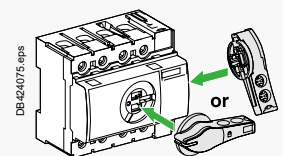
- Suitability for isolation is maintained.
- Door opening is prevented when the switch-disconnector is in ON position (for front handle only).
- The switch-disconnector may be locked in the OFF position by one to three padlocks, hasp diameter 5 to 8 mm (not supplied). Locking prevents opening of the switchboard door (for front handle only).

Models

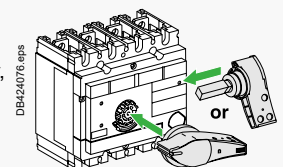
- Standard switch-disconnector: with black handle.
- Emergency-off: with red handle and yellow front for machine-tool control.
- PV switch-disconnector: with red handle.

Installation

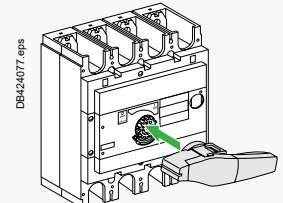
- The extended rotary handle is made up of:
- An assembly that replaces the direct rotary handle on the ComPacT INS/INV switch-disconnector (secured by screws).
 - An assembly (handle and front plate) to be mounted on the door or the side of the switchboard. This assembly is always secured in the same position, but rotating following the switch-disconnector installation situation either vertically or horizontally.
 - An adjustable extension shaft



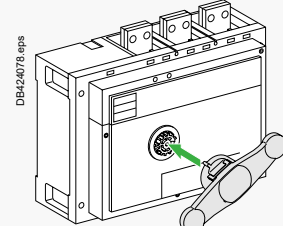
Direct rotary handle on INS40 to 160.



Direct rotary handle on INS250 and INV100 to 250.



Direct rotary handle on INS/INV320 to 630.



Direct rotary handle on INS/INV630 to 1600.

Electrical and Mechanical Accessories



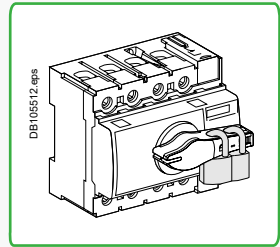
Disabling Device Closing

Padlocking

- INS40 to 2500 A.
- INV100 to 2500 A.

Switch-disconnectors may be locked in the OFF position

The handle is designed for locking by up to three padlocks (not supplied). Locking in the OFF position guarantees isolation as defined by the IEC 60947-3 standard. The handle may also be lead-sealed in the OFF position.



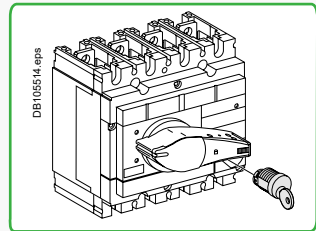
Padlocked ComPacT INS250 switch-disconnector.

Keylocking

- INS250-100 to 2500 A.
- INV100 to 2500 A.

INS250 to 630, INV100 to 630 or INV1000 to 2500 switch-disconnectors may be locked in the OFF position using a keylock (optional) that may be installed in the hole prepared for that purpose on the front of the devices.

The key may not be removed when the switch-disconnector is in the ON position. Keylocks can also be fitted on switch-disconnectors equipped with extended rotary handles.



INS/INV Switch-Disconnectors

	INS40 to 80		INS80 to 160		INS250-100 to 250 INV100 to 250		INS320 to 630 INV400 to 630		INS630b to 1600 INV630b to 1600		INV2000 to 2500 INS2000 to 2500	
	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
Locking by padlocks	●	○	●	○	●	○	●	○	●	○	●	○
Locking by keylock	-	-	-	-	●	○	●	○	●	○	●	○
Door locking ^[1]	-	●	-	●	-	●	-	●	-	●	-	●
Door lock defeat ^[1]	-	● [2]	-	● [2]	-	● [2]	-	● [2]	-	● [2]	-	● [2]
Door locking device padlocked ^[1]	●	-	●	-	●	-	●	-	●	-	●	-
Lead-sealable handle	●	○	●	○	●	○	●	○	●	○	●	○

● Standard. ○ By simple modification of the standard rotary handle.

[1] With extended rotary control. [2] Using a special tool.

Electrical and Mechanical Accessories

UL489/CSA22.2 standards

PB111410_L35_2.eps



ComPacT INSE80.

PB111407_L39_2.eps



ComPacT INSJ400.

Electrical and mechanical accessories

Auxiliary contacts

Two to four common-point changeover contacts can be used to remote switch-disconnector status information for indications, electrical interlocking, relays, etc.

Rotary handles (standard)

Suitability for isolation is maintained.

Direct rotary handle

The switch-disconnector may be locked in the OFF position by one to three padlocks, hasp diameter 5 to 8 mm (not supplied).
Standard models: black handle.

Extended rotary handle

Makes it possible to operate the switch-disconnector, installed inside a switchboard, from the front or side of the switchboard.

The extended rotary handle may be installed on the front or the side of the switch-disconnector.

Insulation accessories

ComPacT INSE/INSJ may be equipped with insulation accessories in option:

- terminal shrouds
- terminal shields
- interphase barriers.



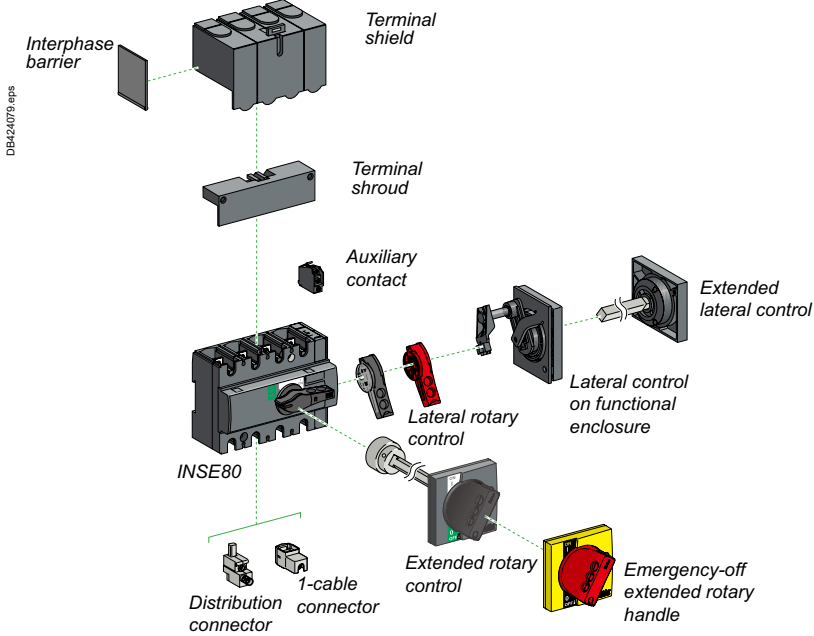
Functions and Characteristics

Electrical and Mechanical Accessories

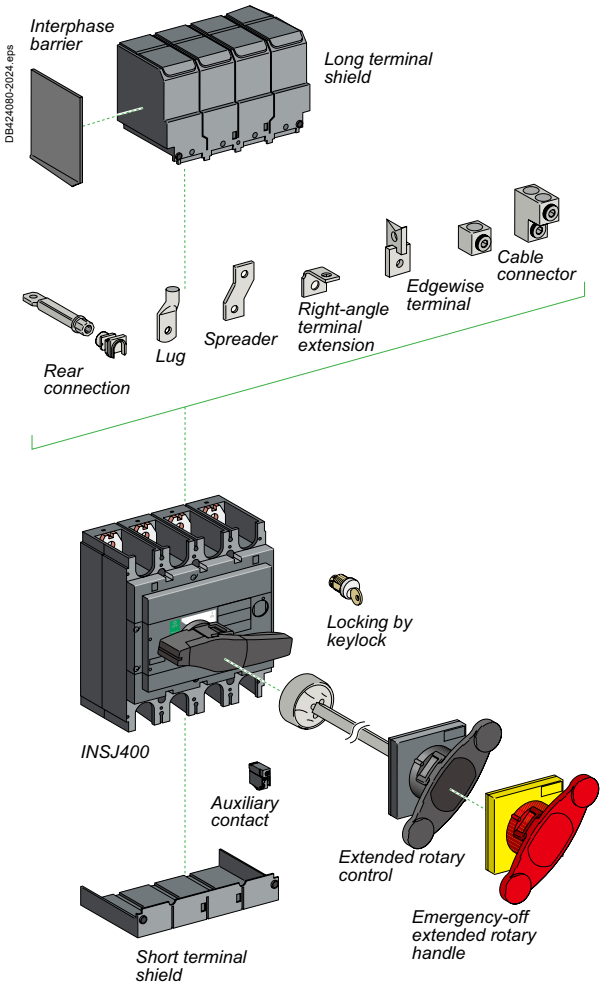
UL489/CSA22.2 standards



ComPacT INSE80



ComPacT INSJ400



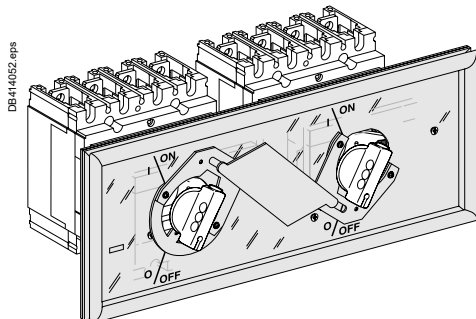
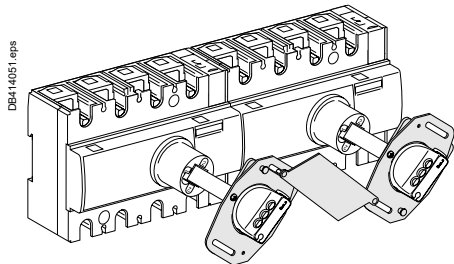
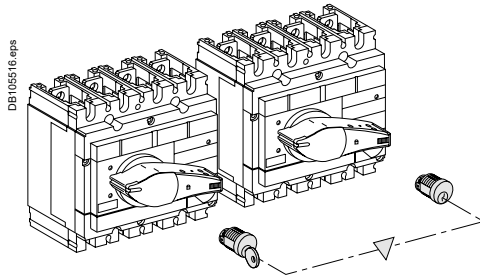
Manual Source-Changeover Systems

A source-changeover system is made up of two switch-disconnectors or circuit breakers that are mechanically interlocked.

The mechanism prevents the simultaneous connection (even transient) of both sources. Switching from one source to the other can be achieved by:

- a keylock-type interlocking system
- a mechanical interlocking system
- a complete source-changeover assembly.

A



Possible positions

Normal	1	0	0
Replacement	0	1	0

Source-changeover	INS40...160	INS250 INV100...250	INS320...630 INV400...630	INS630b...2500
By keylock	-	●	●	●
Mechanical	●	●	●	-
Complete assembly	-	●	●	-

Interlocking of two devices using keylocks and a captive key

Interlocking is based on two identical keylocks with a single key and a keylock adapter (different for each device). This solution enables interlocking between two devices that are physically distant or that have very different characteristics.

Interlocking of two devices with rotary handles

The direct or extended rotary handles are padlocked with the devices in the OFF position. The mechanism prevents simultaneous closing of the devices, but allows them to be opened.

Possible combinations of "Normal" and "Replacement" source INS40 to 160 switch-disconnectors

"Normal N"	"Replacement" R						
	ComPacT INS ^[1]	INS40	INS63	INS80	INS100	INS125	INS160
INS40							
Ratings 40 A	●	●	●	●	●	●	●
INS63							
Ratings 63 A	●	●	●	●	●	●	●
INS80							
Ratings 80 A	●	●	●	●	●	●	●
INS100							
Ratings 100 A	●	●	●	●	●	●	●
INS125							
Ratings 125 A	●	●	●	●	●	●	●
INS160							
Ratings 160 A	●	●	●	●	●	●	●

[1] With extended rotary handles only.

Possible combinations of "Normal" and "Replacement" source INS/INV100 to 250 switch-disconnectors

"Normal N"	"Replacement" R			
	ComPacT INS /INV ^[2]	INS250-100 INV100	INS250-160 INV160	INS250-200 INV250
INS250-100/INV100				
Ratings 100 A	●	●	●	●
INS250-160/INV160				
Ratings 160 A	●	●	●	●
INS250-200/INV200				
Ratings 200 A	●	●	●	●
INS250-250/INV250				
Ratings 250 A	●	●	●	●
INS320/INV320				
Ratings 320 A	○			○
INS400/INV400				
Ratings 400 A				
INS500/INV500				
Ratings 500 A				
INS630/INV630				
Ratings 630 A	○			○

○ 250 A and 630 A ratings can be mixed by using INS320/630 rotary handle interlocking system.

[2] Possible with INV, but visible-break function is significantly impaired.

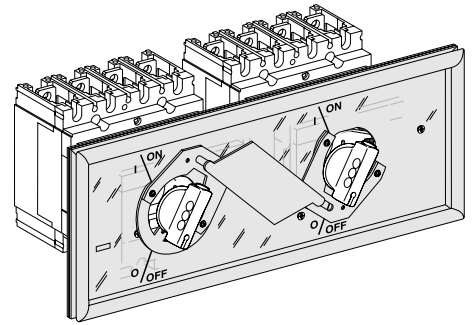
Interlocking of two devices with rotary handles

Possible combinations of "Normal" and "Replacement" source INS/INV320 to 630 switch-disconnectors

"Normal N"	"Replacement" R			
ComPacT INS /INV [1]	INS320	INS400 INV400	INS500	INS630 INV630
INS250-100/INV100				
Ratings 100 A	○	○	○	
INS250-160/INV160				
Ratings 160 A				
INS250-200/INV200				
Ratings 200 A				
INS250-250/INV250				
Ratings 250 A	○			○
INS320				
Ratings 320 A	●	●	●	●
INS400/INV400				
Ratings 400 A	●	●	●	●
INS500				
Ratings 500 A	●	●	●	●
INS630/INV630				
Ratings 630 A	●	●	●	●

○ 250 A and 630 A ratings can be mixed by using INS320/630 rotary handle interlocking system.

[1] Possible with INV, but visible-break function is significantly impaired.



DB414053.eps

Selection Guide For Dc Switch-Disconnectors

Solutions depending on the distribution system and the voltage

Type of distribution system

Type Source	Earthed	Mid-point connected to earth	Isolated
Protected polarities Diagrams, connection method	<p>One polarity (negative here) connected to earth (or exposed conductive parts) 1 (disconnection of 1P)</p>	<p>2 (disconnection of 2P)</p>	<p>2</p>
	<p>2 (disconnection of 2P)</p>		

Series connection of poles

Selection of switch-disconnectors and pole connection

ComPact INS/INV 24 V ≤ Un ≤ 125 V	<p>Two-pole [1].</p>	<p>Three-pole.</p>	<p>Two-pole [2].</p>	<p>Four-pole.</p>
125 V < Un ≤ 250 V	<p>Four-pole.</p>	<p>Four-pole.</p>	<p>Four-pole.</p>	<p>Not applicable</p>

[1] A 3P switch-disconnectors can be used if a 2P version does not exist. In this case, connect pole 1 and pole 2, or pole 2 and pole 3 with dedicated connection accessory.
 [2] A 3P switch-disconnectors can be used if a 2P version does not exist. In this case, connection accessory is not necessary and the central pole is not connected.

Parallel connection of poles

Selection of switch-disconnectors and pole connection

ComPact INS/INV Un ≤ 63 V	<p>Two, three-pole, 2, 3P in parallel, four-pole, 4P in parallel.</p>	<p>Four-pole, 2 x 2P in parallel.</p>	<p>Four-pole, 2 x 2P in parallel.</p>	<p>Four-pole, 2 x 2P in parallel.</p>
63 V < Un ≤ 125 V	<p>Four-pole, 2 x 2P in parallel, connected in series.</p>	<p>Not applicable</p>	<p>Four-pole, 2 x 2P in parallel.</p>	<p>Not applicable</p>



One-piece spreader

Connection of large cables may require an increase in the distance between the switch-disconnector terminals. The one-piece spreader is an accessory that can also be fitted on ComPacT circuit breakers. It offers the following features:

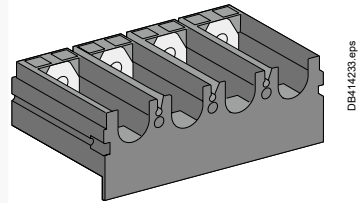
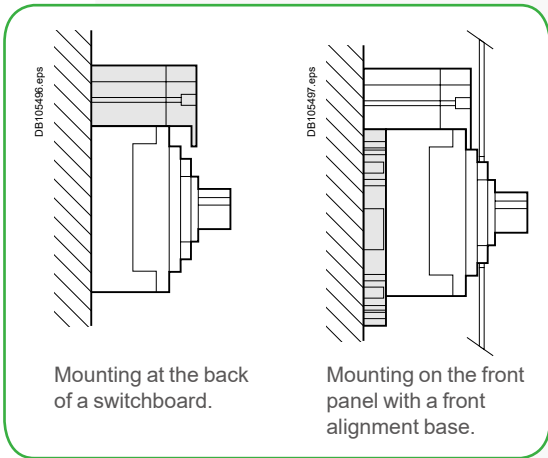
- increases the pitch of the switch-disconnector terminals to correspond to that of the upstream device
- compatible with all the connection and insulation accessories available for the upstream device (connectors, terminal extensions, etc.)
- enhances insulation between phases in comparison with standard spreaders.

	INS250 INV100 to 250	INS400 to 630 INV400 to 630
Pitch without spreaders (mm)	35	45
Pitch with standard spreaders (mm)	45	52.5 or 70
Pitch with one-piece spreader (mm)	45	-

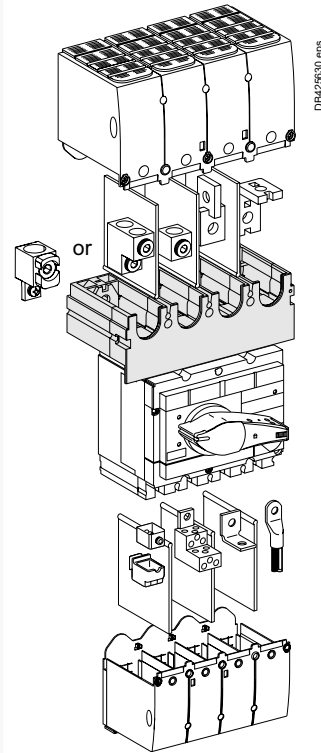
Mounting

When equipped with a one-piece spreader, INS and INV switch-disconnectors may be installed either at the back of a switchboard or on the front panel with a front alignment base.

- Devices with different frame sizes can thus be aligned in the switchboard.
- The same mounting plate can be used for all devices (including ComPacT circuit breakers).

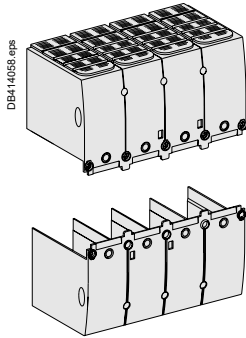


One-piece spreader.

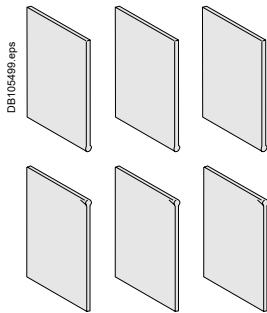


Connection and insulation accessories are identical to those for ComPacT.

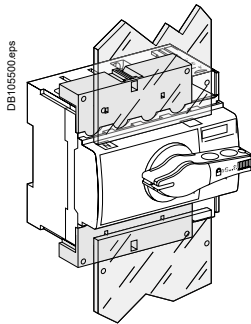
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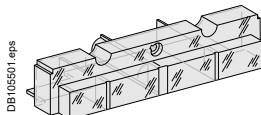
Terminal shields for ComPacT INS and INV.



Interphase-barrier for ComPacT INS and INV.



Terminal shrouds for ComPacT INS40 to 160 (with insulating plate to avoid contact with the conductors).



Spare viewport for ComPacT INV.

Insulation of live parts

Terminal shields for INS and INV switch-disconnectors

Lead-sealable insulation accessories used to protect against direct contact with power circuits.

- Degree of protection: IP40, IK07.
- Supplied with lead-sealing accessories.

Interphase-barrier for INS/INV

■ Safety accessories providing maximum insulation between the phases of the power connection.

- Easy installation by snapping into the case.
- May be combined with all other connection accessories, except the terminal shields and terminal shrouds.

Terminal shrouds for INS40 to INS160

These insulation accessories are used for protection against direct contact with live connection screws. It is also possible to attach an insulating plate (not supplied) to the shrouds to avoid any contact with the power conductors.

Spare viewport for ComPacT INV switch-disconnectors

Viewports are darkened by the electrical arc. A new viewport may be installed to maintain the visible-break function.



Note: If $500\text{ V} \leq U \leq 690\text{ V}$, interphase-barrier or long terminal shields are mandatory.



DE42596 eps

Coupling accessory for complete source-changeover assembly

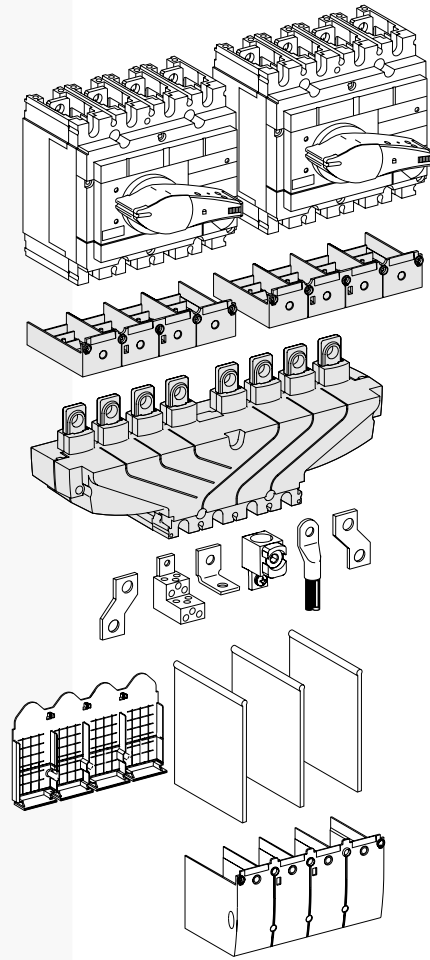
This accessory simplifies connection of bars or cables with lugs when coupling two ComPacT INS/INV100 to 630 switch-disconnectors of the same size.

Pitch between outgoing terminals:

- ComPacT INS250 and INV100 to 250: 35 mm
- ComPacT INS/INV320 to 630: 45 mm.

Connection and insulation accessories

The coupling accessory may be fitted with the same connection and insulation accessories as the coupled circuit breakers or switch-disconnectors.



Possible combinations	Downstream coupling	
	Possible	Pitch of outgoing terminals (mm)
Manual source-changeover		
INS250 (100 to 250 A) with rotary handle	●	35
INS400/630 (320 to 630 A) with rotary handle	●	45

Linergy DS

Screw distribution blocks



IEC/EN 60947-7-1, IEC/EN 61439-1 & 2 (inside Prisma System)





Description

- Single-pole or four-pole distribution block that can be installed on a standard DIN rail or on a mounting plate.
- Compatible with Prisma G 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.

Advantages

- 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
Total connection capacity	10	13	14	4 x 7
Terminal capacity				
Diameter	2 x Ø9.5 mm	2 x Ø12 mm	1 x Ø15.3 mm	2 x Ø7.5 mm
	2 x Ø7.5 mm	3 x Ø7.5 mm	1 x Ø10 mm	5 x Ø5.5 mm
	6 x Ø5.8 mm	8 x Ø5.8 mm	4 x Ø6 mm	-
	-	-	8 x Ø7.5 mm	-
Rated peak withstand current (I _{pk})	I _{pk} /60 ms	25 kA	36 kA	60 kA
	I _{pk} /6 ms	-	-	-
Rated short-time withstand current (I _{cc}) (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
Catalogue numbers	LGY112510	LGY116013	LGY125014	LGY410028



Technical data

Common characteristics	
To 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 (L/N) 440 V AC (L/L)
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

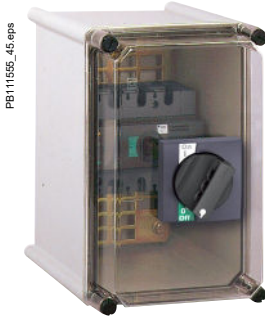


On LGY412560 and LGY416048 references.
Input cabling facilitated by side terminals.

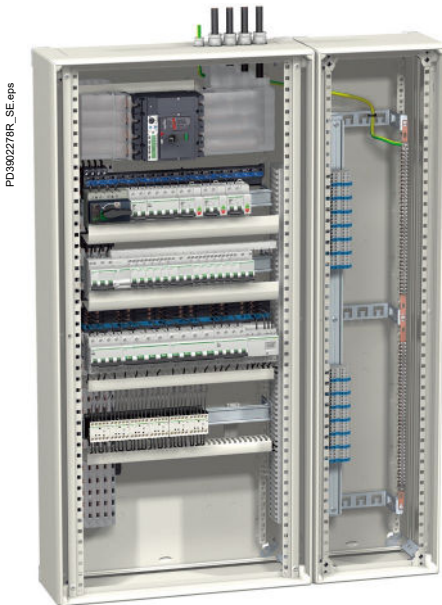
				Neutral terminal strip		
125 A	160 A	160 A	100 A	125 A		
4 x 12	4 x 15	4 x 12	7	12		15
1 x Ø9 mm	1 x Ø9.5 mm	1 x Ø12 mm	2 x Ø7.5 mm	1 x Ø9 mm		1 x Ø9.5 mm
7 x Ø7.5 mm	3 x Ø8.5 mm	3 x Ø9 mm	5 x Ø5.5 mm	7 x Ø7.5 mm		3 x Ø8.5 mm
4 x Ø6.5 mm	11 x Ø6.5 mm	8 x Ø7.5 mm	-	4 x Ø6.5 mm		11 x Ø6.5 mm
-	-	-	-	-		-
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	Ø5.5 mm	Ø5.8 mm	Ø6 mm	Ø6.5 mm	Ø7.5 mm	Ø8.5 mm	Ø9 mm	Ø9.5 mm
Section rigid cable	1.5 to 16 mm ²	1.5 to 16 mm ²	1.5 to 16 mm ²	1.5 to 16 mm ²	2.5 to 25 mm ²	6 to 35 mm ²	10 to 35 mm ²	10 to 35 mm ²
Section flexible cable or with ferrule	1.5 to 10 mm ²	1.5 to 10 mm ²	1.5 to 10 mm ²	1.5 to 10 mm ²	1.5 to 16 mm ²	4 to 25 mm ²	4 to 25 mm ²	6 to 35 mm ²
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	Ø9.5 mm	Ø10 mm	Ø12 mm		Ø15.3 mm			
Section rigid cable	10 to 35 mm ²	1.5 to 50 mm ²	25 to 70 mm ²		35 to 120 mm ²			
Section flexible cable or with ferrule	6 to 35 mm ²	1.5 to 35 mm ²	16 to 50 mm ²		25 to 95 mm ²			
Tightening torque	8 N.m	4 N.m	1P: 10 N.m 4P: 5 N.m		14 N.m			



Local isolation enclosure.



Power distribution incomer in a Prisma G enclosure.



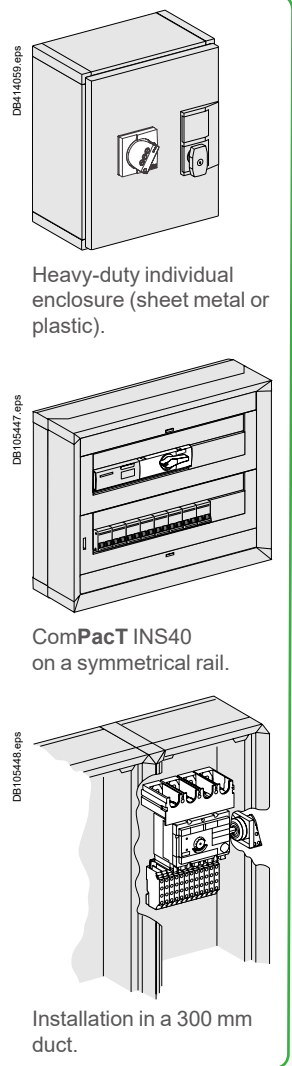
Power distribution incomer in a Prisma G IP30 enclosure.

ComPacT INS and INV switch-disconnectors offer a number of rational installation solutions to optimise available space inside enclosures. They may be installed in individual enclosures or as incomers in power distribution or control panels.

- ComPacT INS40 to 160 switch-disconnectors have a standard 45 mm high front and may be clipped onto a Multifix or symmetrical rail. They may be installed in all modular enclosures, including Pragma, Prisma, etc.
- ComPacT INS250 to 630 and INV100 to 630 switch-disconnectors may be installed on mounting plates or rails. Installation as incomers in Prisma power distribution cubicles is very flexible:
 - the mounting plates are the same as those used for ComPacT NSX circuit breakers and are identical for direct and extended handles
 - installation in 300 mm ducts is possible for ratings up to 630 A.

Individual enclosures

- Each individual enclosure includes:
 - a door with a cut-out
 - a mounting plate
 - accessories required for extended front or lateral rotary handle
 - removable plates (without holes) for cable entry.
 The ComPacT INS switch-disconnector must be order separately.



Pragma modular enclosures

- The enclosures in the Pragma range are:
 - made of self-extinguishing insulating material
 - supplied with all accessories (terminal blocks, blanking plates, etc.)
 - rated class 2.

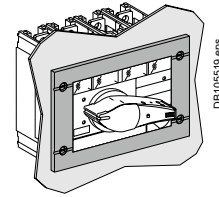
Prisma G metal enclosures

- The metal enclosures in the Prisma G range are highly adaptable to the type of installation:
 - basic enclosure
 - multifix rail
 - modular front plates
 - distribution accessories
 - ducts for running cables or installing terminals
 - plain or transparent doors.

Front-panel escutcheons

Escutcheons for switch-disconnectors

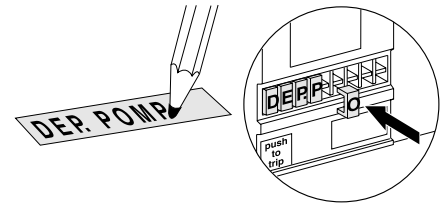
Mounted on switchboard panel from the front using four screws.



Escutcheon for switch-disconnectors.

Identification labels

ComPacT INS40 to 160 switch-disconnectors may receive Telemecanique prefabricated labels, catalogue number AB1- (eight characters). ComPacT INS250 to 630 and INV100 to 630 switch-disconnectors are supplied as standard with a clip-on label for handwritten indications. These devices also come with a nameplate into which a label can be inserted.



Individual enclosures

ComPacT INS and INV switch-disconnectors equipped with a front handle may be installed in individual enclosures.

All fixed, front connections are possible, except right-angle and edgewise terminal extensions. Spreaders may be installed in the enclosures intended for ComPacT INS250 to 630 and INV100 to 630 switch-disconnectors.

Heavy-duty steel (or stainless steel) individual enclosure for ComPacT INS250 (IP66, IK10)

- Steel (or stainless steel) cover,
- Screwed
- Extended front rotary handle IP66
- 2 CAM (early make or break function) wired with terminal bloc NSY. (see page 12).



Heavy-duty metal individual enclosure for ComPacT INS (IP55, IK08)

- Metal enclosure.
- Door with keylock and cut-out for switch-disconnector rotary handle.
- Extended rotary front handle.
- Device mounting plate.
- Removable plate (without holes) for cable entry through bottom.



Heavy-duty insulating individual enclosure for ComPacT INS and INV (IP55, IK08)

- Thermoplastic enclosure.
- Transparent cover, screwed, lead sealable, with cut-out for switch-disconnector rotary handle.
- Extended rotary front handle.
- Device mounting plate.
- Removable plates (without holes) for cable entry through bottom and/or top.



Dimensions

Steel - Stainless steel IP66	H x W x D
ComPacT INS250-200	553 x 300 x 221
Metal enclosures	H x W x D
ComPacT INS40 to 160	350 x 350 x 260
ComPacT INS250	450 x 350 x 260
ComPacT INV100 to 250	
ComPacT INS320 to 630	650 x 350 x 260
ComPacT INV400 to 630	
Insulating enclosures	H x W x D
ComPacT INS40 to 160	270 x 180 x 185
ComPacT INS250	360 x 270 x 235
ComPacT INV100 to 250	
ComPacT INS320 to 630	720 x 360 x 235
ComPacT INV400 to 630	

A

Installation Recommendations

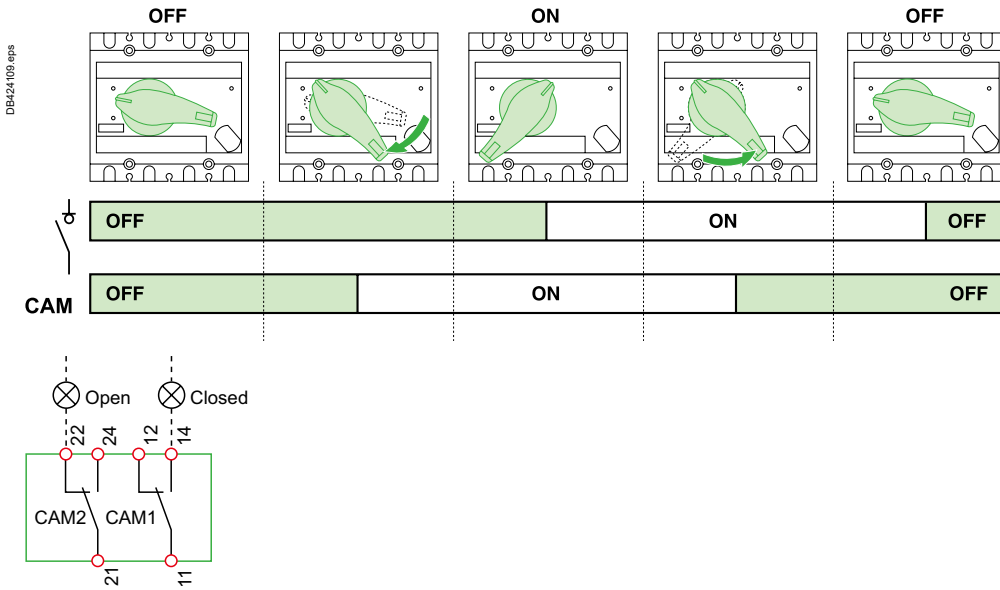
Operating Principle.....	B-2
Possible Installation Positions and Mounting Techniques.....	B-4
Implementation.....	B-5
ComPact INS40 to 80.....	B-6
ComPact INS100 to 160.....	B-7
ComPact INS250-100 to 250 ComPact INV100 to 250.....	B-8
ComPact INS320 to 630 ComPact INV400 to 630....	B-12
ComPact INS630b to 1600	B-16
Connection Accessories.....	B-18
ComPact INS2000 to 2500 ComPact INV2000 to 2500.....	B-22
Use at High Temperatures	B-24



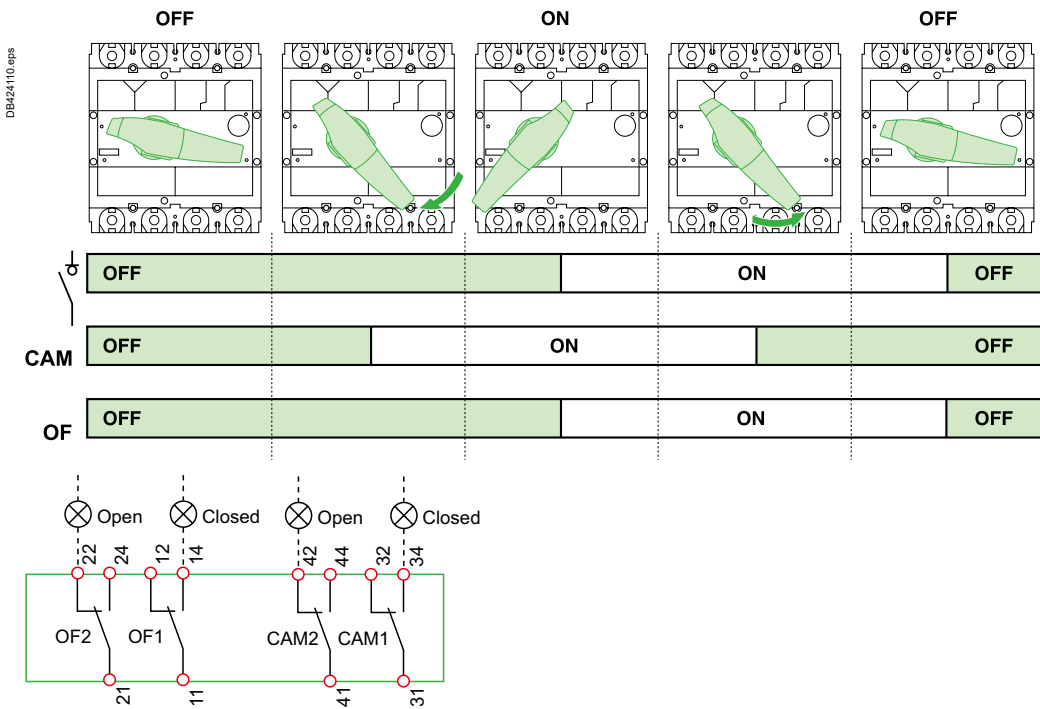
Other Chapters	
Functions and Characteristics	A-1
Dimensions and Connection.....	C-1
Complementary Technical Information.....	D-1
Catalogue Numbers.....	E-1

Operating Principle

INS40 to 250 - INV100 to 250

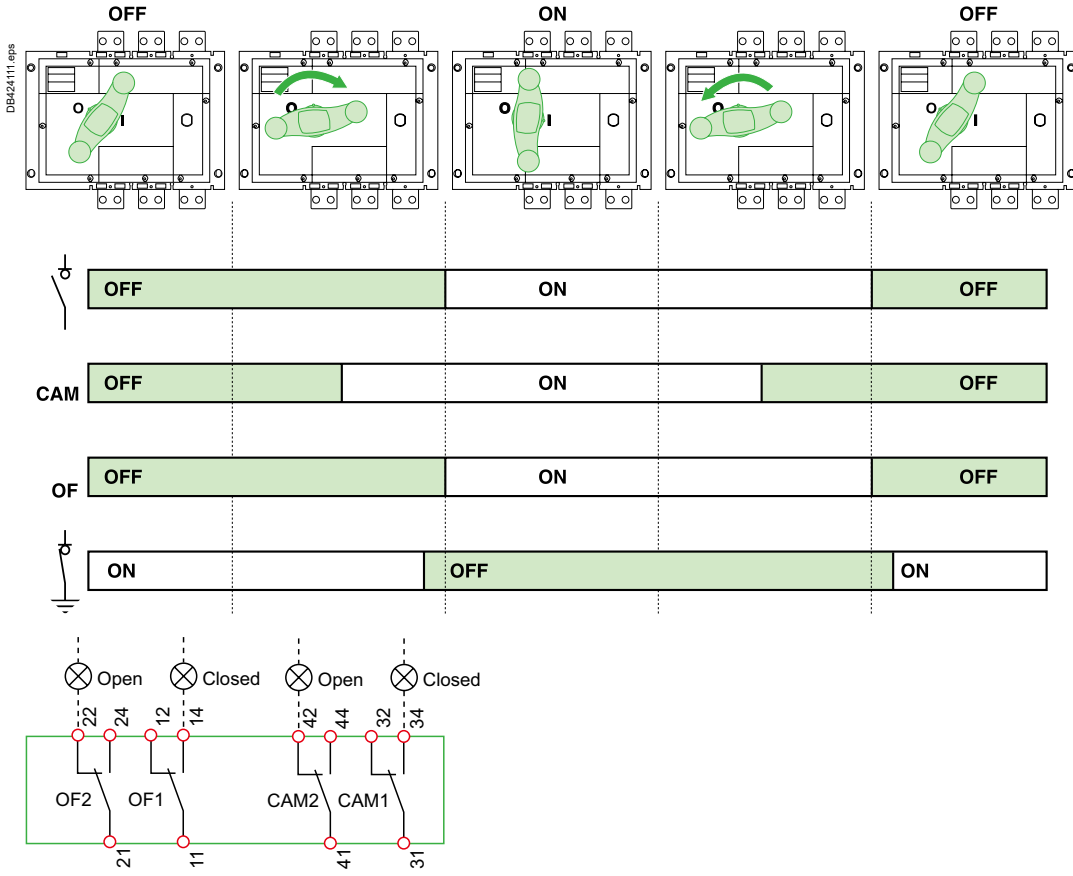


INS320 to 630 - INV400 to 630



B

INS630b to 2500 - INV630b to 2500

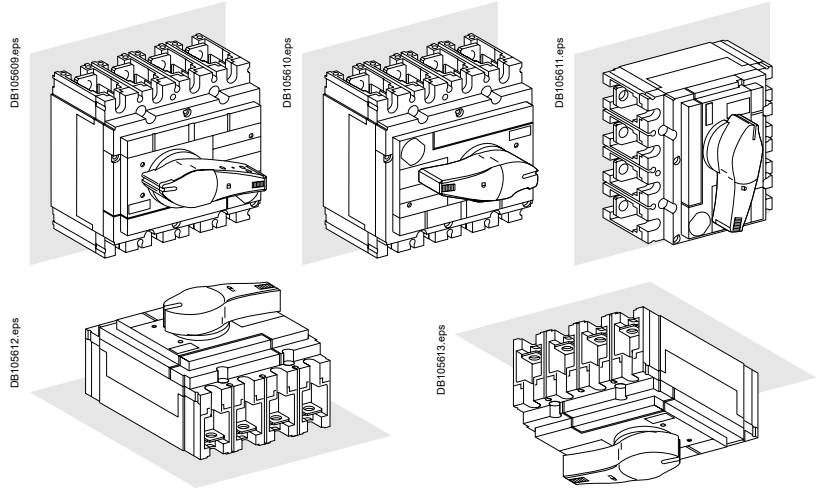


B

Possible Installation Positions and Mounting Techniques

B

Possible installation positions



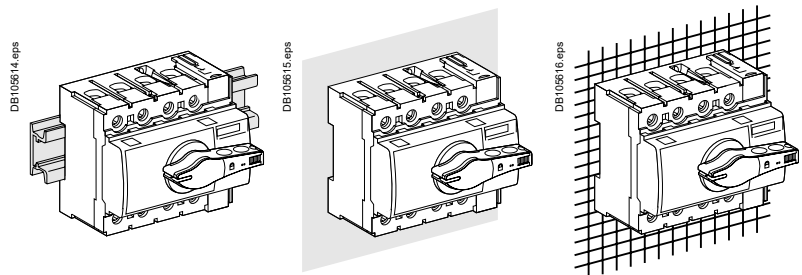
Possible mounting

INS40 to 160

Symmetrical rail

Plain mounting plate

Slotted mounting plate

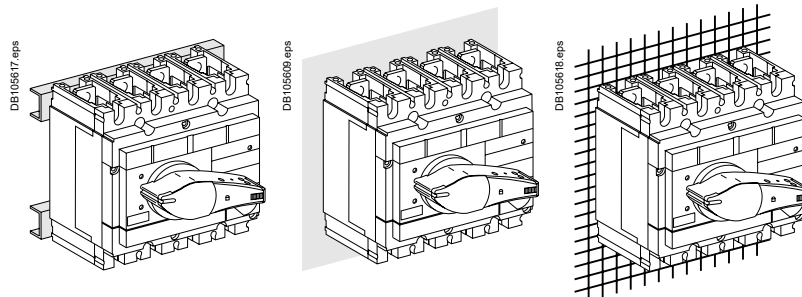


INS250-100 to 630 - INV100 to 630

Rails

Plain mounting plate

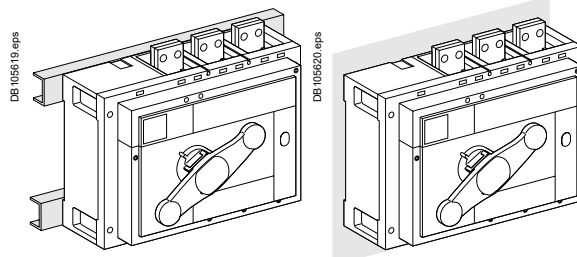
Slotted mounting plate



INS/INV630b to 2500

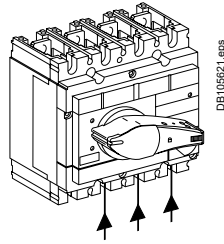
Rails

Plain mounting plate



Reverse supply

ComPact INS/INV switch-disconnectors may be supplied indifferently via the top or bottom terminals, without any reduction in performance.



Neutral pole position

On Schneider Electric switch-disconnectors, the neutral pole is traditionally located on the left-hand side. On the INS and INV ranges, the four poles are identical and the neutral pole can therefore be located on the right-hand side simply by adding an appropriate label.

Conductor materials and electrodynamic forces

ComPact INS/INV switch-disconnectors may be connected using either bare copper, tinned copper or tinned aluminium conductors (flexible or rigid bars, cables). In the event of a short-circuit, thermal and electrodynamic forces are exerted on the conductors. The conductors must therefore be adequately sized and suitably supported.

Note that the terminals of electrical devices (switch-disconnectors, contactors, circuit breakers, etc.) should not be considered to contribute to the support of the conductors.

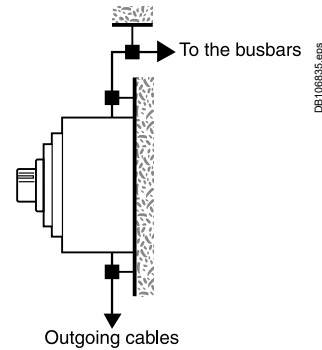
Cables ties and flexible bars

The table below indicates the maximum distances between cable ties depending on the prospective short-circuit current.

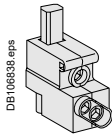
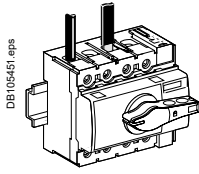
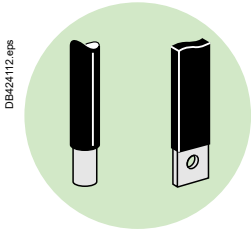
Care must be taken not to exceed a distance of 400 mm between ties mechanically secured to the switchboard frame.

Type of tie	"Panduit" type					"Sarel" type		
	Width: 4.5 mm Max. load: 22 kg Colour: white					Width: 9 mm Max. load: 90 kg Colour: black		
Max. distance between ties (mm)	200	100	50	350	200	100	70	50 (double ties)
Short-circuit current (kA rms)	10	15	20	20	27	35	45	100

Note: for cables $\geq 50 \text{ mm}^2$, 9 mm wide ties must be used.



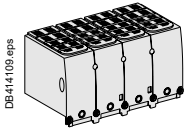
B



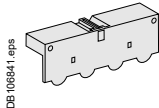
Distribution connector.

B

If $500\text{ V} \leq U \leq 690\text{ V}$, long terminal shields are mandatory.



Terminal shields.



Terminal shrouds.

Front connection of bare copper and aluminium cables

ComPacT INS40 to INS80 switch-disconnectors are equipped as standard with connectors for bare copper or aluminium cables (1.5 to 50 mm² rigid cables, 1.5 to 35 mm² flexible cables)

Distribution connector

This connector screws directly into the switch-disconnector terminals for connection of three cables of the following types:

- 1 to 10 mm² flexible cables^[1]
- 1.5 to 16 mm² rigid cables.

Pole pitch

18 mm

		Standard device	With distribution connector
<p>DB106761.eps</p>	Bars	e (mm) ≤ 15 L (mm) 13	- 13
	Lugs	L (mm) ≤ 10 S (mm ²) 1.5 to 50 rigid Cu / Al 1.5 to 35 flexible	≤ 10 1.5 to 16 rigid 1 to 10 flexible ^[1]
	Torque	(Nm) 5	2

[1] Connection of 1.5 to 4 mm² flexible cables requires crimped or auto-crimping ferrules.

Insulation of live parts

- With long terminal shields.
- With terminal shrouds.

Front connection of insulated bars and cables with crimped lugs

ComPacT INS100 to INS160 switch-disconnectors are equipped as standard with terminals comprising nuts with M6 screws for direct connection of insulated bars or cables with lugs.

Lugs

The special lugs for copper cables may be used for cables with cross-sectional areas up to 95 mm². Secure the lugs by hexagonal crimping or punching. Lugs are supplied with interphase-barrier and are compatible with the terminal shields.

Pole pitch

30 mm

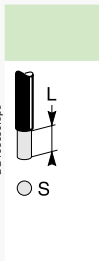
Dimensions



Bars	d (mm)	≤ 10
	e (mm)	2...6.4
	L (mm)	≤ 21
Lugs	L (mm)	15
	Ø (mm)	≥ 6.2
Torque	(Nm)	8

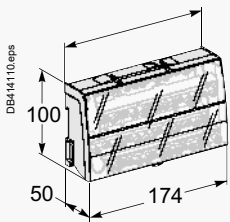
Front connection of bare copper and aluminium cables

- 1-cable connectors snap directly onto the device terminals (1 to 10 mm² flexible cables^[1])
- Distribution connectors for 4 flexible cables (1.5 to 25 mm² rigid cables or 1.5 to 16 mm² flexible cables^[1]) are screwed directly to the device terminals. These connectors are supplied with interphase-barrier (mandatory installation) which may be replaced by long terminal shields
- Linery DS distribution block supplied via tunnel terminals. Provides 12 screwless spring type and 1 screw type outgoing terminals.



		1-cable connector		Distribution connector
Lugs	L (mm)	15		15
	S (mm ²) Cu / Al	1.5 to 35 rigid	50 to 95 rigid	1.5 to 25 rigid
		1.5 to 35 flexible ^[1]	50 to 95 flexible	1.5 to 16 flexible ^[1]
Torque (Nm)	10	12	3	
Linery DS				
Torque (Nm)	Supply: 5 Nm Distribution: 3 Nm			

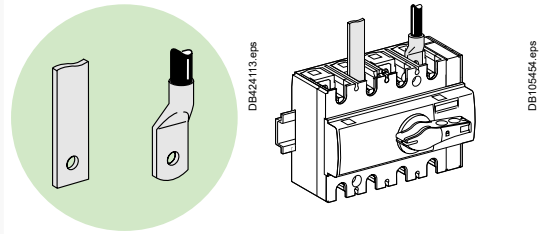
[1] Connection of 1.5 to 4 mm² flexible cables requires crimped or auto-crimping ferrules.



Multi-stage distribution block (e.g. LGY416048).

Insulation of live parts

- With long terminal shields.
- With terminal shrouds.
- Interphase-barrier:
 - distribution blocks, lugs, right-angle/straight/edgewise terminal extensions and spreaders are supplied with interphase-barrier
 - interphase-barrier may be positioned horizontally or vertically
 - they may be replaced by long terminal shields.



DB424113.eps

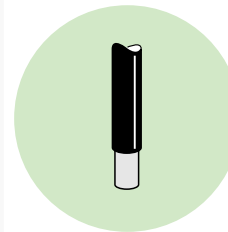
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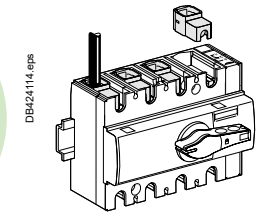
Lug.

DB106839.eps

B

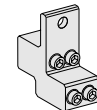


1-cable connector.



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DB105457.eps



Distribution connector.

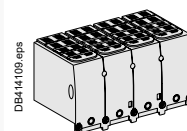
DB105459.eps



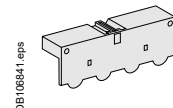
Connectors 240 mm².

DB423225.eps

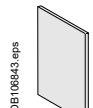
If 500 V ≤ U ≤ 690 V, interphase-barrier or long terminal shields are mandatory.



Terminal shields.



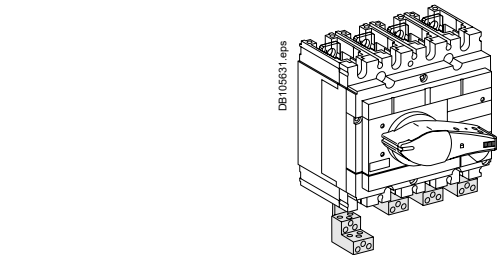
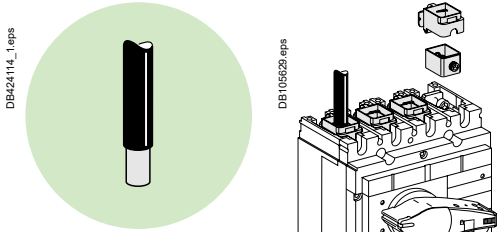
Terminal shrouds.



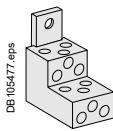
Interphase-barrier.

ComPacT INS250-100 to 250 ComPacT INV100 to 250

B



1-cable connector.



Distribution connector.



Connectors 240 mm².

Front connection of bare copper and aluminium cables

Bare-cable connectors for ComPact INS/INV switch-disconnectors may be used for both copper and aluminium cables.

1-cable connectors

The connectors snap directly on to the device terminals or clip onto right-angle and straight terminal extensions as well as spreaders. These connectors are supplied with interphase-barrier.

Material: steel connector I ≤ 160 A and tinned aluminium connector I ≤ 250 A.

6-cable distribution connectors

These connectors are screwed directly to device terminals. These connectors are supplied with interphase-barrier (mandatory installation) which may be replaced by long terminal shields. Each connector can receive six cables with cross-sectional areas ranging from 1.5 to 35 mm² each.

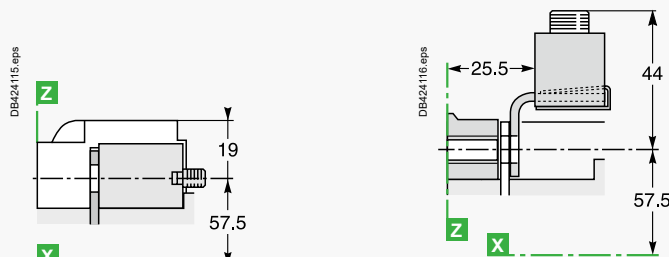
Material: tinned aluminium.

1-cable connector	Steel ≤ 160 A	Aluminium ≤ 250 A	
L (mm)	20	20	
S (mm ²) Cu / Al	1.5...95 ^[1]	25...50	70...95 120...185
Torque (Nm)	12	20	26 26
Distribution connector, 6 cables Cu or Al			
L (mm)	15 or 30		
S (mm ²) Cu / Al	1.5...6 ^[1]	8...35	
Torque (Nm)	4	6	

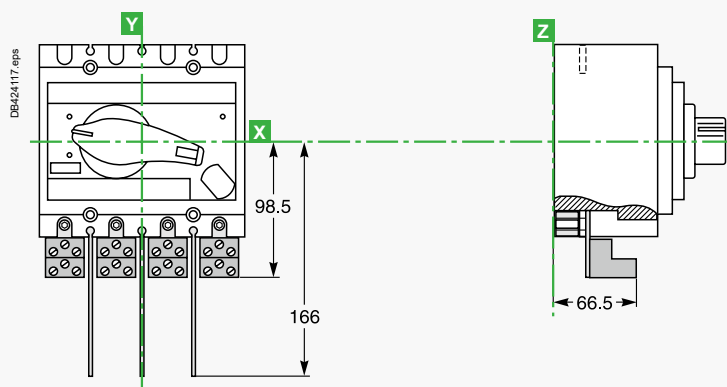
[1] Connection of 1.5 to 4 mm² flexible cables requires crimped or auto-crimping ferrules.

Dimensions

1-cable connector



Distribution connector, 6 cables



ComPacT INS250-100 to 250 ComPacT INV100 to 250

Front connection of insulated bars and cables with crimped lugs

ComPacT INS250-100 to INS250 and INV100 to 250 switch-disconnectors are equipped as standard with terminals receiving snap-in nuts and M8 screws for direct connection of insulated bars or cables with lugs.

Lugs

- The small lugs for copper cables may be used for cables with the following cross-sectional areas 120, 150 or 185 mm² (secure the lugs by hexagonal crimping or punching).
- The small lugs for aluminium cables may be used for cables with the following cross-sectional areas 150 or 185 mm² (secure the lugs by hexagonal crimping).

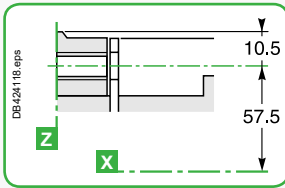
Pole pitch

35 mm

Dimensions

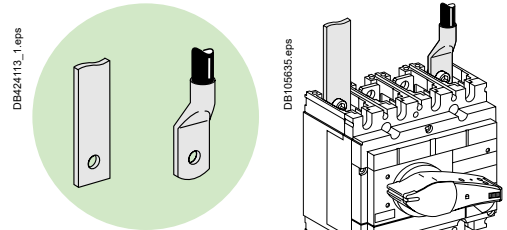
Bars	d (mm)	≤ 10
	e (mm)	≤ 6
	L (mm)	≤ 25
	Ø (mm)	≥ 10
Lugs	L (mm)	≤ 25
	Ø (mm)	≥ 10
Torque	(Nm)	15

Dimensions

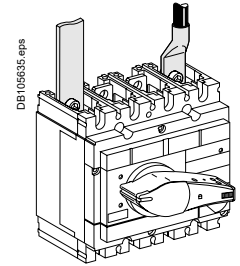


Insulation of live parts

- With short or long terminal shields.
- Interphase-barrier:
 - distribution blocks, lugs, right-angle/straight/edgewise terminal extensions and spreaders are supplied with interphase-barrier
 - interphase-barrier may be positioned horizontally or vertically
 - they may be replaced by long terminal shields.
- One-piece spreader: the one-piece spreader increases the pitch to correspond to that of the upstream device and provides protection against direct contact (see page <?>).



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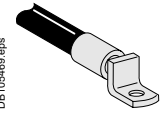


DB105635.eps



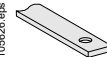
DB105455.eps

Small lugs for copper cables.



DB105469.eps

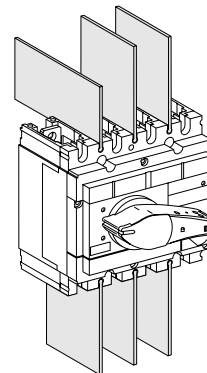
Small lugs for aluminium cables.



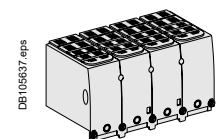
DB105626.eps

Bar.

If $500\text{ V} \leq U \leq 690\text{ V}$, interphase-barrier or short or long terminal shields are mandatory.

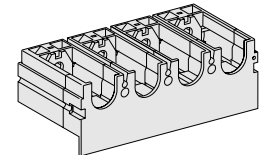


Interphase-barrier.



DB105637.eps

Terminal shields.



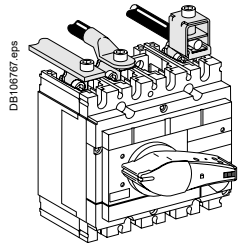
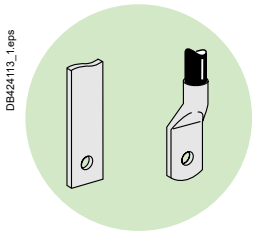
One-piece spreader.

DB414109_1.eps

DB105471.eps

B

ComPacT INS250-100 to 250 ComPacT INV100 to 250

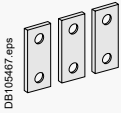


B

Front connection with accessories

Straight terminal extensions

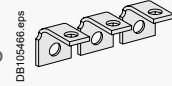
Material: tinned copper.



Connection of two cables with lugs.

Right-angle extensions

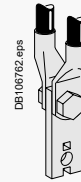
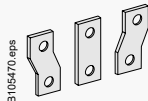
Material: tinned copper.



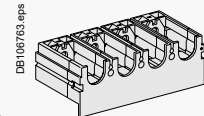
Insulation stripping lengths and tightening torques for cables, bare bars and cables with lugs are identical to those for direct connection to devices.

Spreader

Material: tinned copper.



Connection of two cables with lugs.



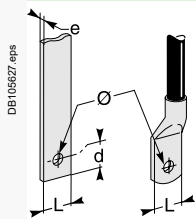
One-piece spreader.

Separate parts.

Pole pitch

45 mm

Dimensions

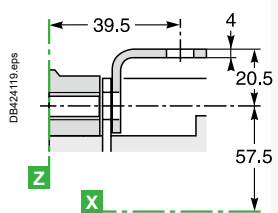


Bars	d (mm)	≤ 10
	e (mm)	≤ 6
	L (mm)	≤ 25
	Ø (mm)	8.5
Lugs	L (mm)	≤ 25
	Ø (mm)	8.5
Torque	(Nm)	15 ^[1]

[1] Tightening torque for spreader.

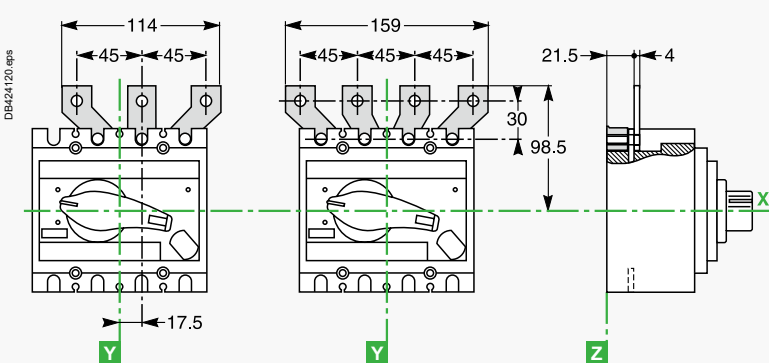
Spreaders, straight terminal extensions and right-angle terminal extensions are supplied with interphase-barrier.

Right-angle terminal extensions

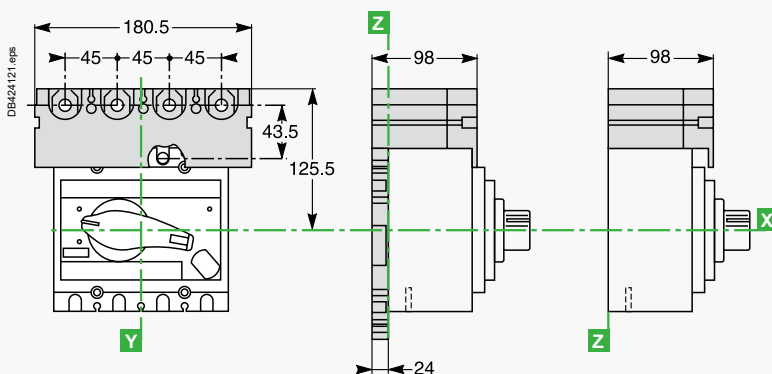


Dimensions

Spreader and straight terminal extensions



One-piece spreader 3P/4P



ComPacT INS250-100 to 250 ComPacT INV100 to 250

Rear connection

The rear connections are simply fitted to the device connection terminals. All combinations of rear connection lengths and positions are possible on a given switch-disconnector. The switch-disconnector is mounted on a backplate. For the connection of cables without lugs, the 1-cable connectors for ComPact INS100-250 to INS250 and INV100 to 250 may be simply clipped onto the rear connections.

Bars or cables with crimped lugs

ComPact INS250-100 to INS250 and INV100 to 250 switch-disconnectors may be equipped with long or short rear connections, or a mix of the two. The connections may be positioned flat, on edge or at 45° angles, or any combination thereof. Material of rear connections: tinned copper.

Pole pitch

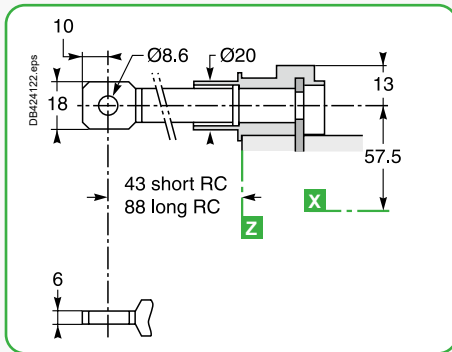
35 mm

Dimensions

	Bars	d (mm)	≤ 10
		e (mm)	≤ 6
		L (mm)	≤ 25
		Ø (mm)	≥ 8
	Lugs	L (mm)	≤ 25
		Ø (mm)	≥ 8
Torque	(Nm)	5 ^[1]	

[1] Tightening torque for rear connections.

Dimensions



Bare cables (copper or aluminium)

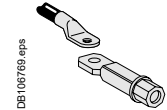
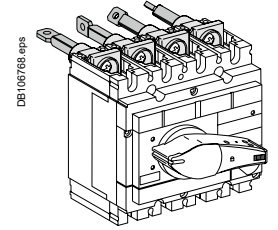
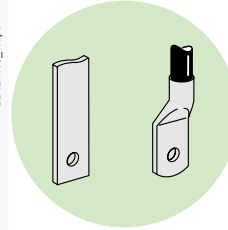
The rear connections may be equipped with 1-cable connectors secured by clips.

	1-cable connector	Steel ≤ 160 A	Aluminium ≤ 250 A
L (mm)	20	20	20
S (mm ²) Cu / Al	1.5...95 ^[1]	120...185	
Torque (Nm)	12	26	
Distribution connector, 6 cables Cu or Al			
L (mm)	15 or 30		
S (mm ²) Cu / Al	1.5...6 ^[1]	8...35	
Torque (Nm)	4	6	

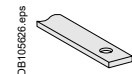
[1] Connection of 1.5 to 4 mm² flexible cables requires crimped or auto-crimping ferrules.

Insulation stripping lengths and tightening torques for cables, bare bars and cables with lugs are identical to those for direct connection to devices.

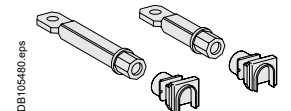
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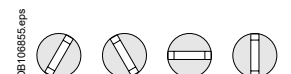
Connection of bars or cables with lugs.



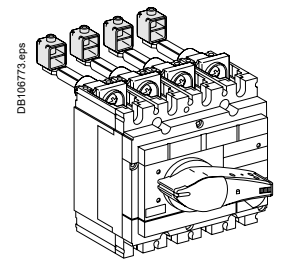
Bar.



Two lengths.



Four positions.

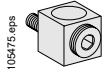
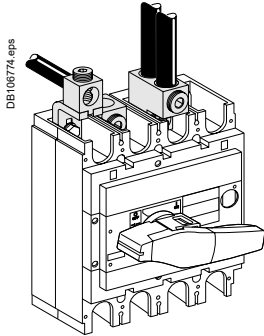
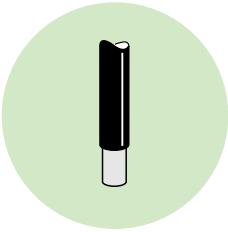


Rear connection with bar.

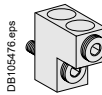
B

ComPacT INS320 to 630 ComPacT INV400 to 630

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1-cable connector.



2-cable connector.

B

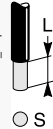
Front connection of bare copper and aluminium cables

Bare-cable connectors for ComPacT INS/INV switch-disconnectors may be used for both copper and aluminium cables.

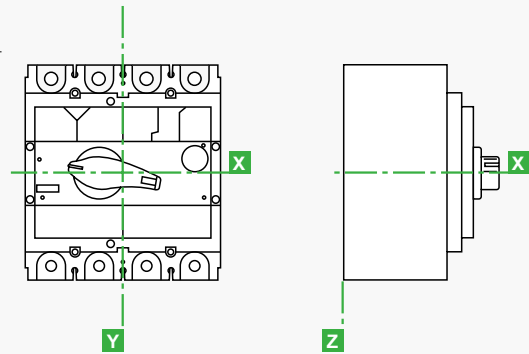
1-cable and 2-cable connectors

1-cable and 2-cable connectors, made of tinned aluminium for copper and aluminium cables, are screwed to the device terminals or to right-angle terminal extensions. These connectors are supplied with interphase-barrier.

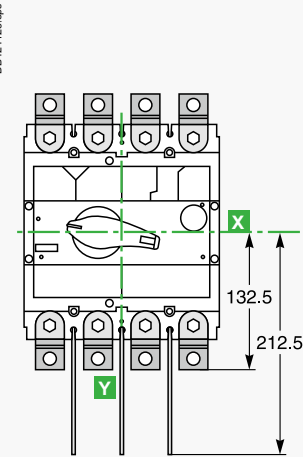
	1-cable connector	2-cable connector
Torque (Nm)	31	31



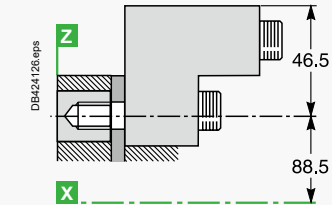
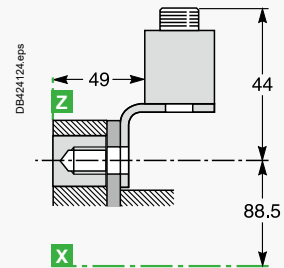
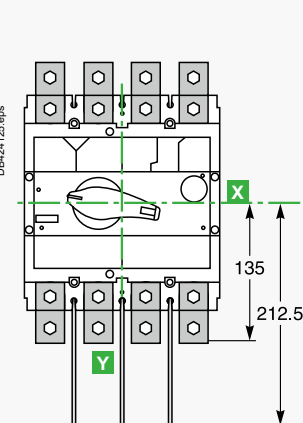
Dimensions



1-cable connector



2-cable connector



ComPacT INS320 to 630 ComPacT INV400 to 630

Front connection of insulated bars and cables with crimped lugs

ComPacT INS320 to 630 and INV400 to 630 switch-disconnectors are equipped as standard with terminals receiving snap-in nuts and M10 screws for direct connection of bars or cables with lugs.

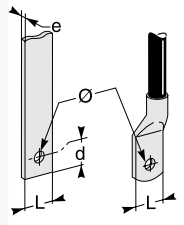
Lugs

- The small lugs for copper cables may be used for cables with the following cross-sectional areas 240 or 300 mm² (secure the lugs by hexagonal crimping or punching).
- The small lugs for aluminium cables may be used for cables with the following cross-sectional areas 240 or 300 mm² (secure the lugs by hexagonal crimping).

Pole pitch

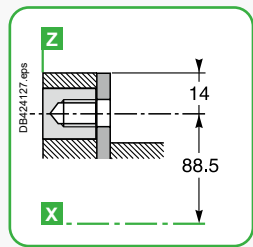
45 mm

Dimensions



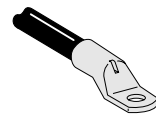
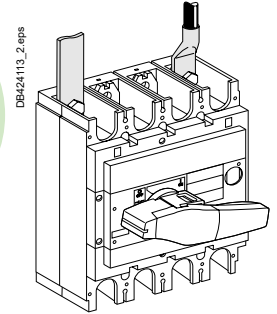
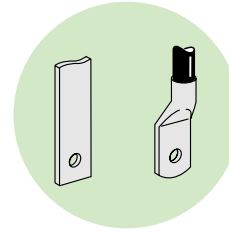
Bars	d (mm)	≤ 15
	e (mm)	3 ≤ e ≤ 10
	L (mm)	≤ 32
	Ø (mm)	≥ 10
Lugs	L (mm)	≤ 32
	Ø (mm)	≥ 10
Torque	(Nm)	50

Dimensions

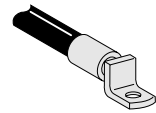


Insulation of live parts

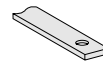
- With short or long terminal shields.
- Interphase-barrier:
 - distribution blocks, lugs, right-angle/straight/edgewise terminal extensions and spreaders are supplied with interphase-barrier
 - interphase-barrier may be positioned horizontally or vertically
 - they may be replaced by long terminal shields.



Small lugs for copper cables.

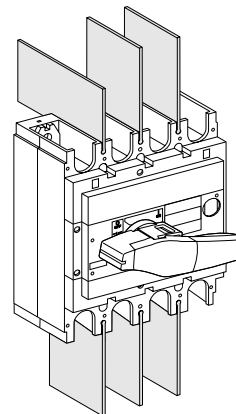


Small lugs for aluminium cables.

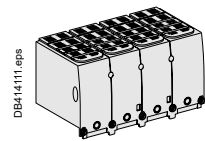


Bar.

If 500 V ≤ U ≤ 690 V, interphase-barrier or short or long terminal shields are mandatory.

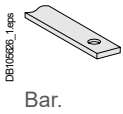
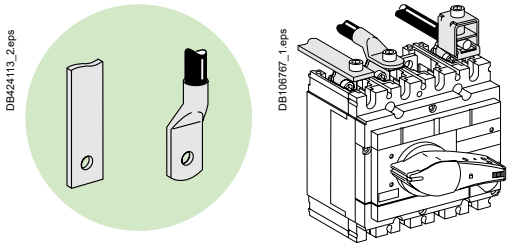


Interphase-barrier.



Terminal shields.

ComPacT INS320 to 630 ComPacT INV400 to 630



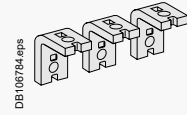
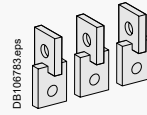
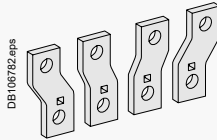
B

Front connection with accessories

Spreader
Material: tinned copper.

Edgewise terminal extensions
Material: tinned copper.

Right-angle extensions
Material: tinned copper.
Installation on upstream terminals.



Pole pitch

Without spreader	45 mm
With spreader	52.5 or 70 mm

Dimensions

With spreader With edgewise terminal ext.

	Bars	d (mm)	e (mm)	L (mm)	Ø (mm)
Bars		≤ 15	3 ≤ e ≤ 10	≤ 32	> 10.5
		≤ 15	3 ≤ e ≤ 10	≤ 32	> 10.5
		≤ 15	3 ≤ e ≤ 10	≤ 32	> 10.5
Lugs		≤ 32	≤ 32	≤ 32	10.5
		≤ 32	≤ 32	≤ 32	10.5
Torque		50 [1]	50 [1]	50 [1]	50 [1]
		50 [1]	50 [1]	50 [1]	50 [1]

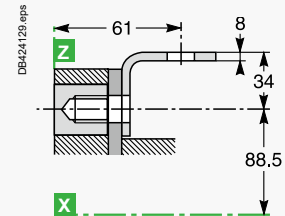
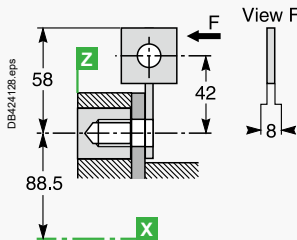
[1] Tightening torque for spreader.

Spreaders, straight terminal extensions and right-angle terminal extensions are supplied with interphase-barrier.

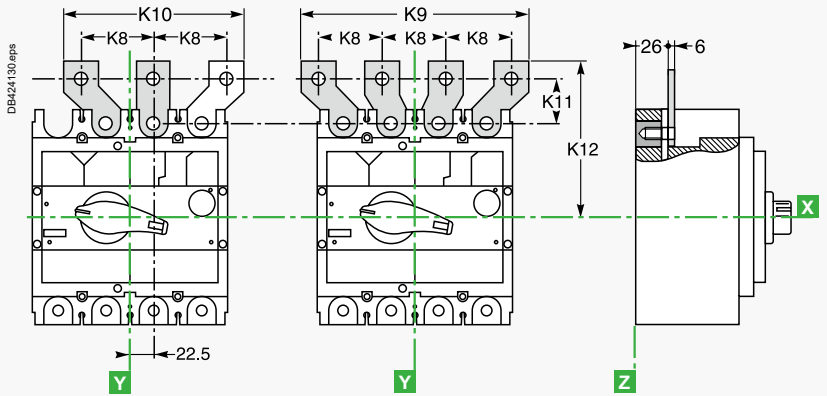
Dimensions

Edgewise terminal extensions

Right-angle terminal extensions



Spreader



Type		K8	K9	K10	K11	K12
Spreader	Width in mod. of 52.5 mm	52.5	187.5	135	39	142.5
	Width in mod. of 70 mm	70	240	170	52.5	156

ComPacT INS320 to 630 ComPacT INV400 to 630

Rear connection

The rear connections are simply fitted to the device connection terminals. All combinations of rear connection lengths and positions are possible on a given switch-disconnector. The switch-disconnector is mounted on a backplate.

Bars or cables with crimped lugs

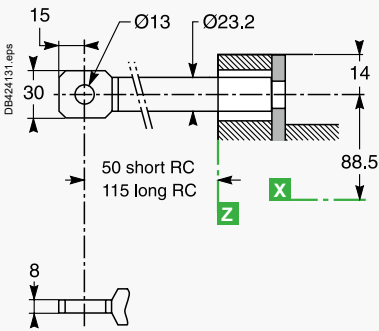
ComPacT INS320 to 630 and INV400 to 630 switch-disconnectors may be equipped with long or short rear connections, or a mix of the two. The connections may be positioned flat, on edge or at 45° angles, or any combination thereof. Material of rear connections: tinned copper.

Dimensions

	Bars	d (mm)	≤ 15
		e (mm)	3 ≤ e ≤ 10
		L (mm)	≤ 32
		Ø (mm)	> 10.5
	Lugs	L (mm)	≤ 32
		Ø (mm)	≥ 10.5
	Torque	(Nm)	20 ^[1]

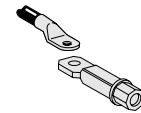
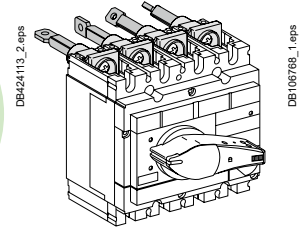
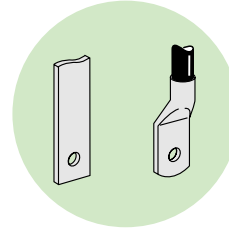
[1] Tightening torque for rear connections.

Dimensions

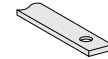


Bare cables (copper or aluminium)

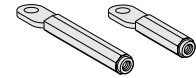
The rear connections may be equipped with 1-cable connectors secured by clips. Insulation stripping lengths and tightening torques for cables, bare bars and cables with lugs are identical to those for direct connection to devices.



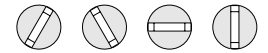
Connection of bars or cables with lugs.



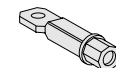
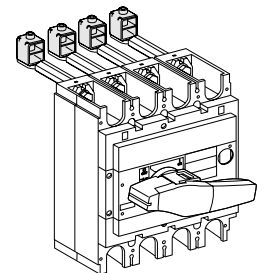
Bar.



Two lengths.



Four positions.



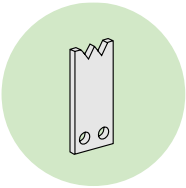
Rear connection with bar.

B

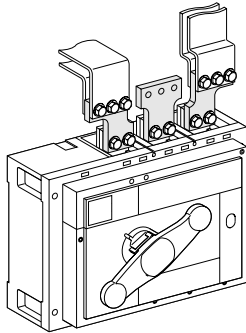
ComPacT INS630b to 1600

ComPacT INV630b to 1600

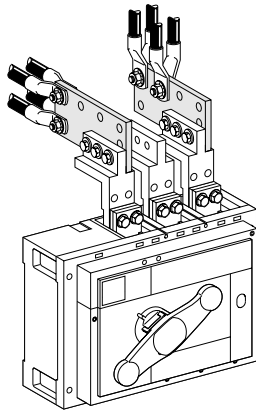
DB424131_1_eps



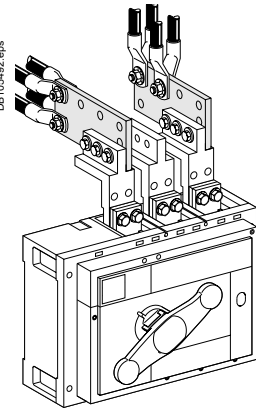
DB105487_eps



DB105482_eps



DB105402_eps



2-cable connector.

Connections

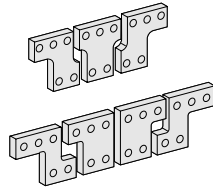
There are many solutions to connect bars:

- vertical connection adapters to connect edgewise bars
- spreaders with a 95 mm pole pitch to increase the clearance between bars.

Spreaders

Spreaders increase the pole pitch of a switch-disconnector for greater clearance between the bars. They are not compatible with terminal shields.

DB105488_eps

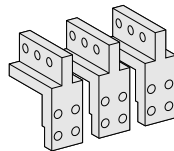


Spreaders.

Vertical connection adapters

For connection of edgewise bars.

DB105489_eps



Vertical connection adapters.

Adapters for cables with crimped lugs

Cable-lug adapters are used in conjunction with vertical connection adapters.

They may be used to connect one to four cables ($S \leq 300 \text{ mm}^2$) with crimped lugs.

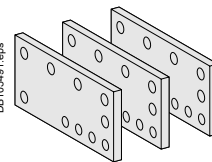
To ensure adequate mechanical strength, the cable-lug adapters must be secured together by spacers.

DB106783_eps



Lugs for copper cables.

DB105491_eps



Adapters for cables with crimped lugs.

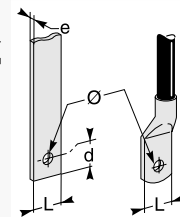
Pole pitch

Without spreader 70 mm

With spreader 95 mm

Dimensions		With spreader	With vertical connection adapters	With cable lug adapters
Bars	d (mm)	12.5	≤ 12.5	-
	e (mm)	$3 \leq e \leq 10$	$3 \leq e \leq 10$	-
	L (mm)	≤ 80	≤ 80	-
	\varnothing (mm)	12	> 12	-
Lugs	L (mm)	-	-	≤ 40
	\varnothing (mm)	-	-	≤ 12
Torque	(Nm)	50 ^[1]	50	50 ⁽¹⁾

DB105627_2_eps



[1] Tightening torque for spreader.

B

Installation Recommendations

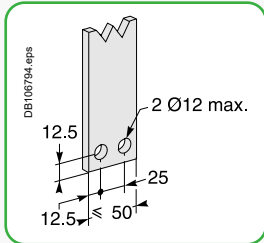
ComPacT INS630b to 1600

ComPacT INV630b to 1600

Front connection of insulated bars

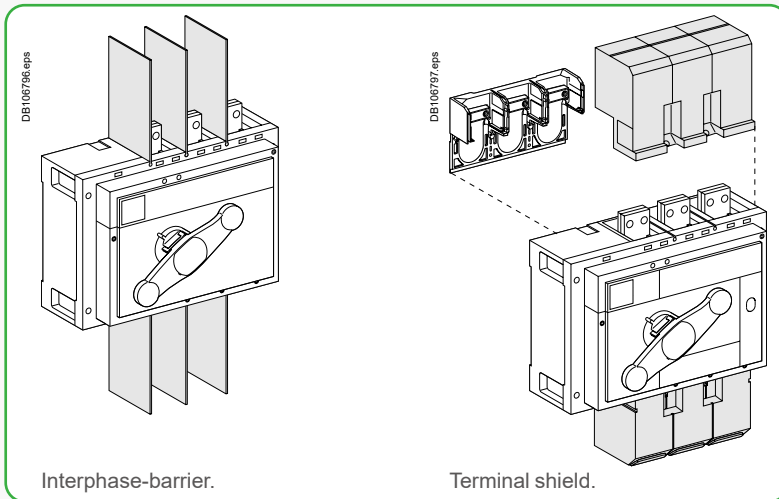
Connection of bars

ComPacT INS/INV switch-disconnectors are equipped with terminals for direct connection of bars.



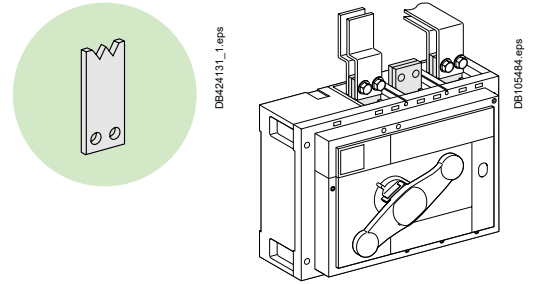
Insulation of live parts

- With terminal shields.
- Interphase-barrier:
 - interphase-barrier may be positioned horizontally or vertically
 - they may be replaced by long terminal shields.



Compatibility of terminal shields + base for connections

	Base	Terminal shields	Spreader	Interphase-barrier
Base	-	YES	YES	NO
Terminal shields	YES	-	NO	NO
Spreader	NO	NO	-	YES
Interphase-barrier	NO	NO	YES	-



If $500\text{ V} \leq U \leq 690\text{ V}$, interphase-barrier or short or long terminal shields are mandatory.

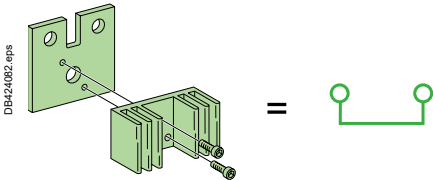
B

Installation Recommendations

Connection Accessories

Series connection of poles for direct current applications.

With ComPact INS/INV switch-disconnectors, it is easy to create a large number of series pole arrangements using prefabricated connections mounted on site during equipment installation.

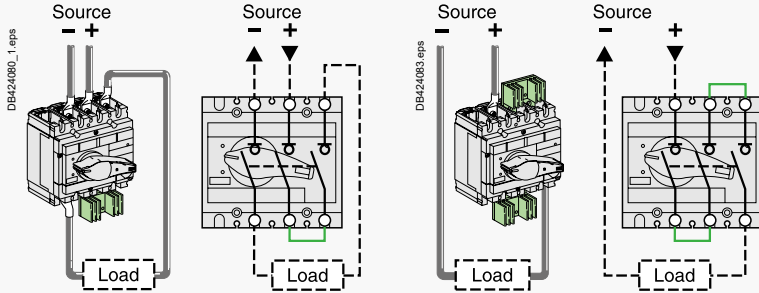


One type of connection per frame size, two catalogue numbers for all series connections.

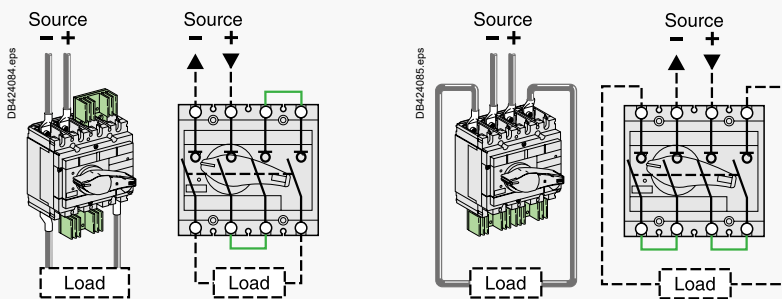
B

Examples of series connection

Three-pole devices

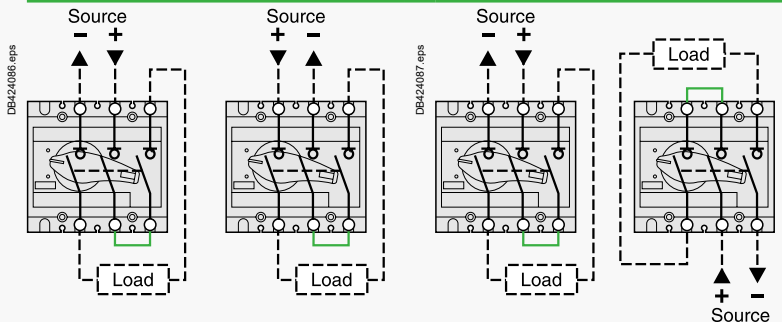


Four-pole devices



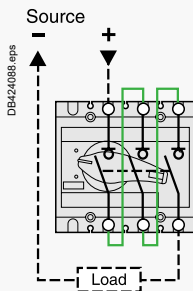
Great flexibility for connections

- Indifferent connection of polarities, from left to right or right to left.
- Indifferent connection of upstream and downstream cables to top or bottom terminals.
- Series connection of poles is possible by upstream/downstream connections. Creation of the connections is the responsibility of the panel builder or the installer.



Indifferent connection of polarities.

Upstream/downstream connections to top or bottom connectors.

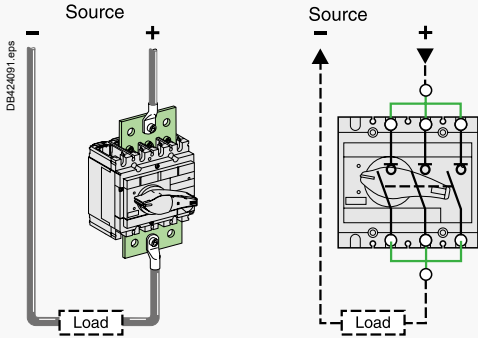


Series connection of poles is possible by upstream/downstream connections (user made).

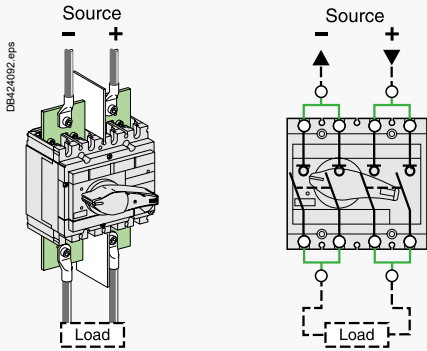
Parallel connection of poles for direct current applications.

Examples of parallel connection

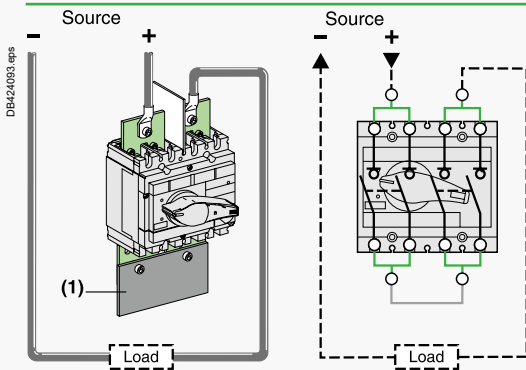
Three-pole devices



Four-pole devices (2 x 2 poles in parallel)



It is possible to mix series and parallel connections

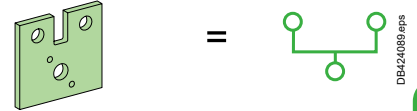


Note: creation of the additional connection (1) is the responsibility of the panel builder or the installer.

Great flexibility for connections

- Indifferent connection of polarities, from left to right or right to left.
- Indifferent connection of upstream and downstream cables to top or bottom terminals.

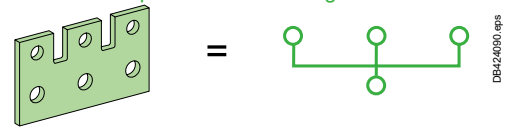
The exceptional performance levels of ComPact INS/INV switch-disconnectors mean the poles can be parallel connected. This technique virtually doubles, triples or quadruples the current rating depending on the type of circuit breaker and thus reduces the cost of solutions.



B

Parallel pole connection accessories are identical to those for series connections. They are equipped with heat sinks.

Customer connections are made directly to the connection plates after removing the heat sinks.

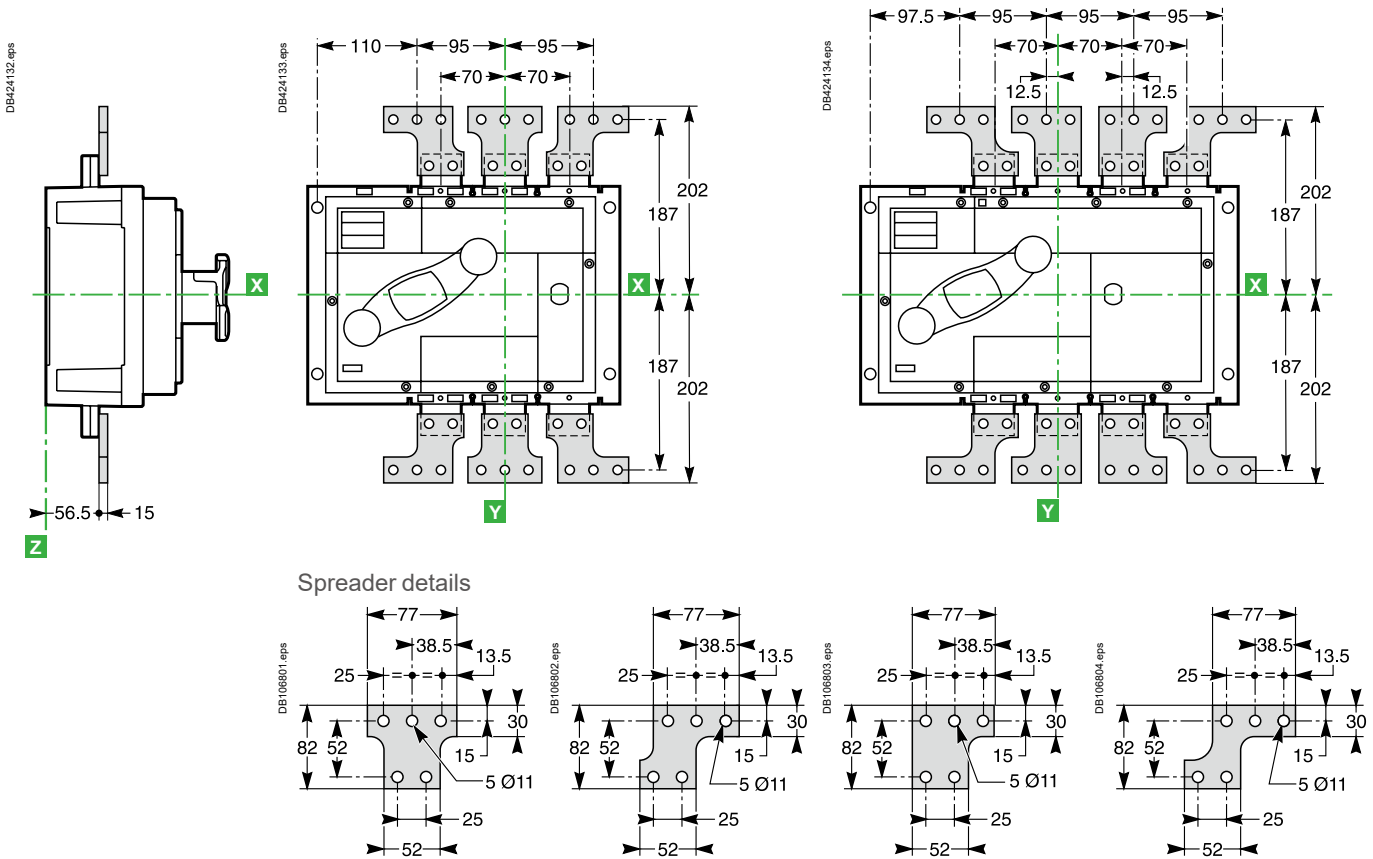


Specific connections are required for parallel connection of three poles.

ComPacT INS630b to 1600 ComPacT INV630b to 1600

Dimensions

Connection with spreaders

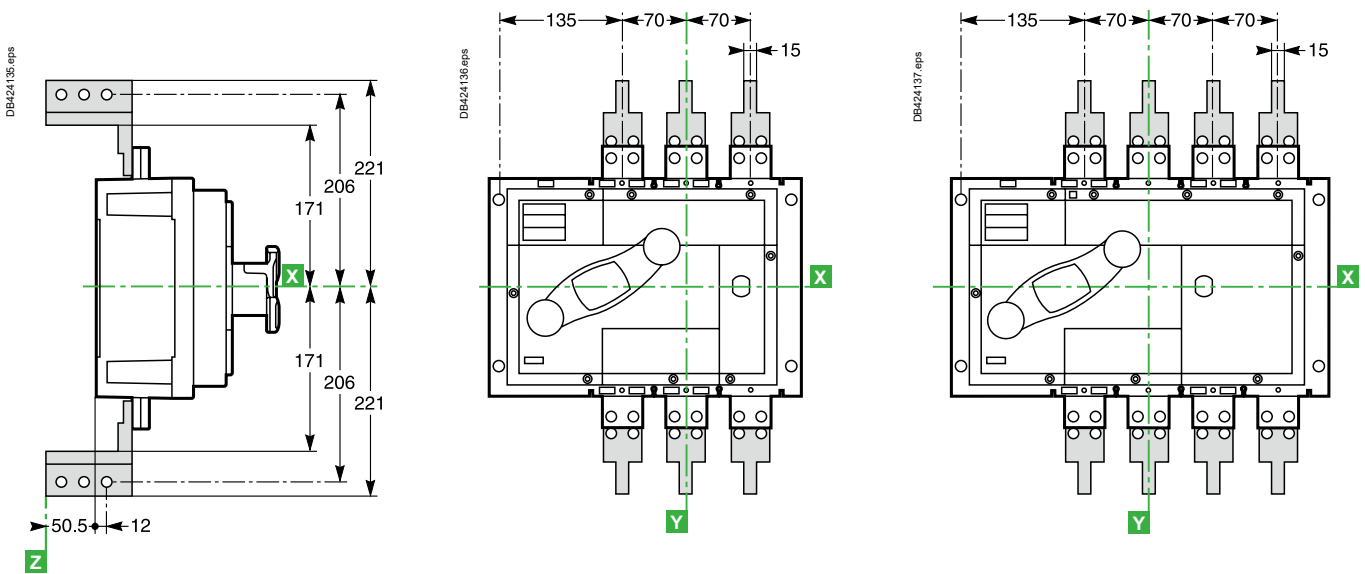


Spreader details

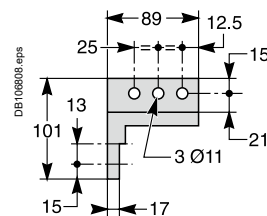
For 3P switch-disconnectors.

For 4P switch-disconnectors.

Connection with vertical connection adapters



Connector details



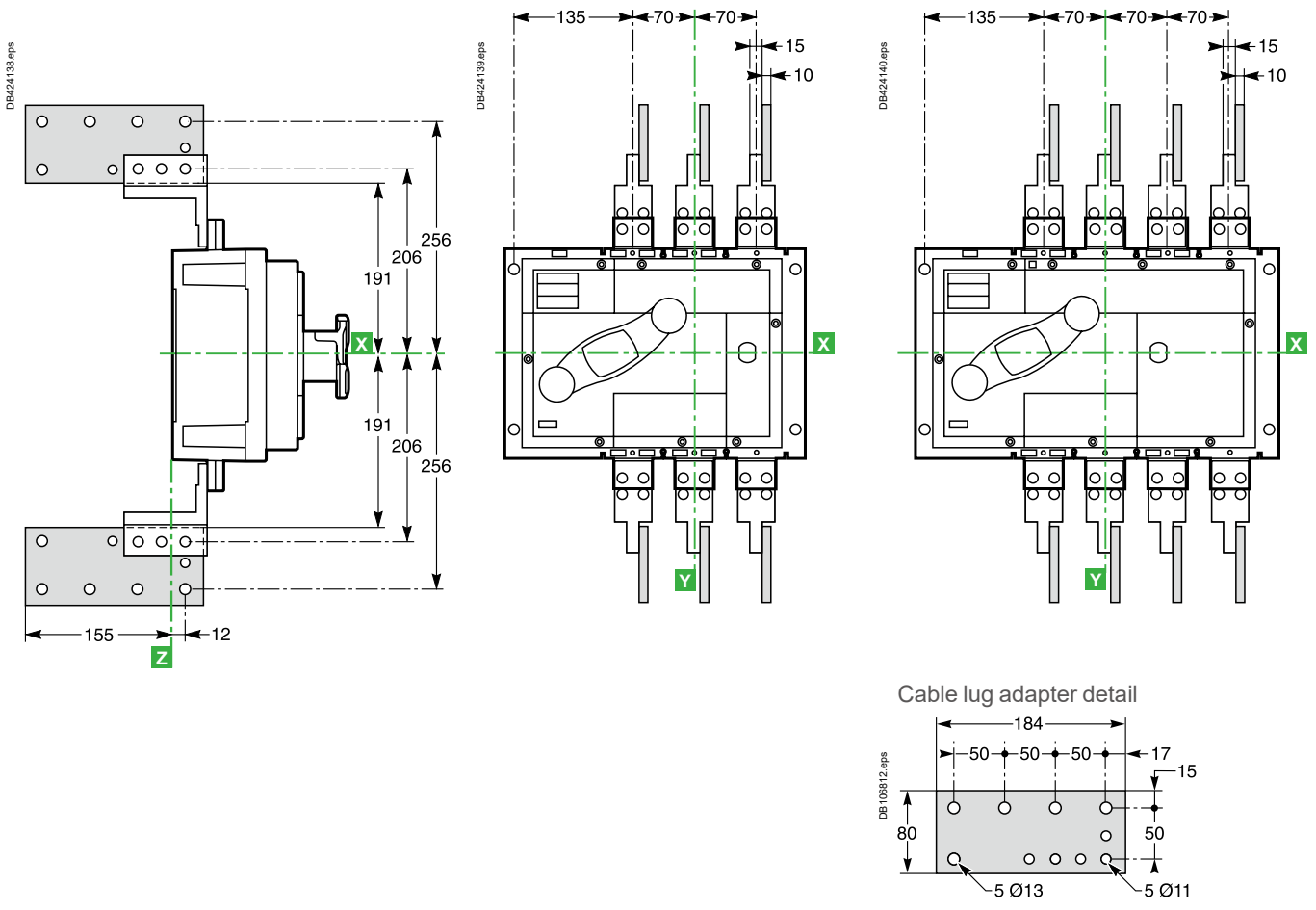
Note: lines **X** and **Y** indicate the axes of symmetry of the switch-disconnector.
Reference plane **Z** corresponds to the back of the switch-disconnector.
2 connection possibilities on vertical connection adapters (21 mm between centres).
Recommended connection screws: M10 class 8.8.
Tightening torque: 50 Nm with contact washer.

Installation Recommendations

ComPacT INS630b to 1600

ComPacT INV630b to 1600

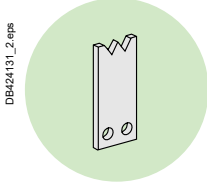
Connection with Vertical Connection Adapters



B

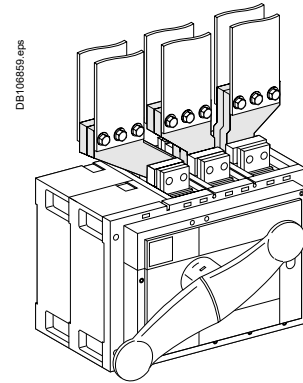
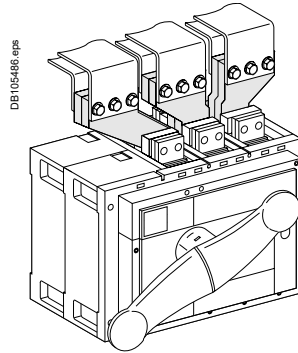
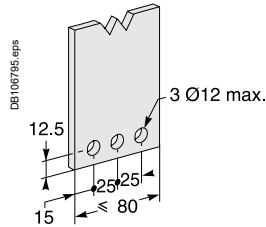
ComPacT INS2000 to 2500 ComPacT INV2000 to 2500

Front Connection of Insulated Bars

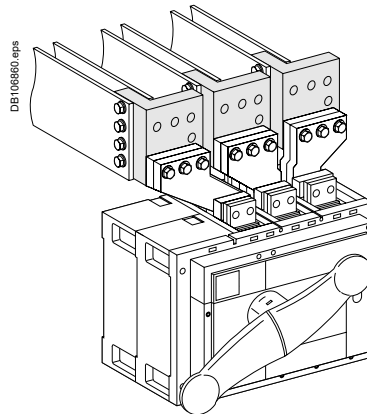


Connection of bars

ComPacT INS/INV switch-disconnectors are equipped with terminals for direct connection of bars.



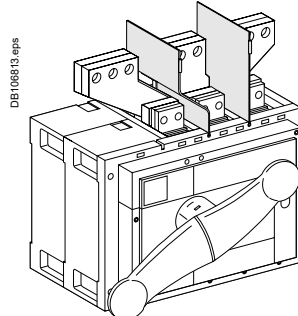
Connector for Connection of Edgewise Bars



If $500\text{ V} \leq U \leq 690\text{ V}$, interphase-barrier are mandatory.

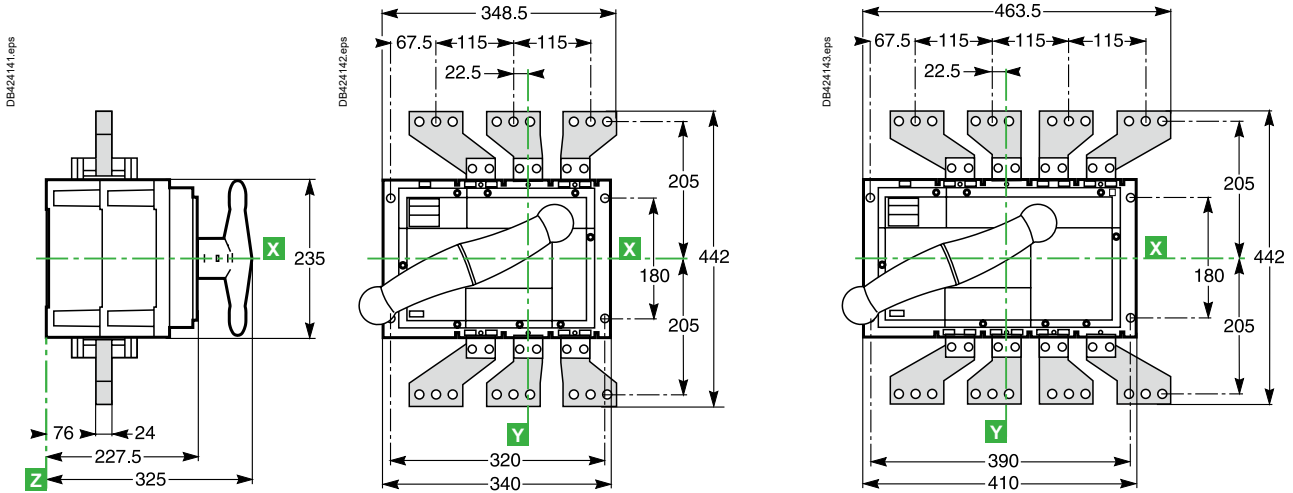
Insulation of Live Parts

Interphase-barrier

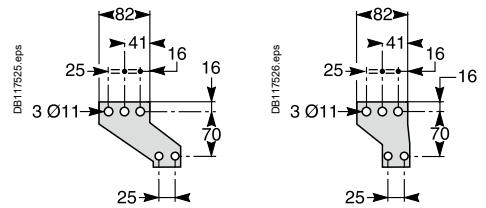


Dimensions

Connection with spreaders

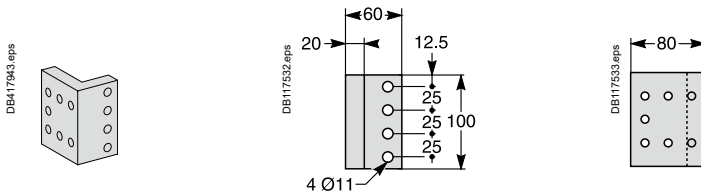


Spreader details



For 3P and 4P switch-disconnectors.

Connection with spreaders



Note: lines **X** and **Y** indicate the axes of symmetry of the switch-disconnector.
Reference plane **Z** corresponds to the back of the switch-disconnector.

Installation Recommendations

Use at High Temperatures

Power Dissipated and Resistance Per Pole

ComPact INS	40	63	80	100	125	160		
Rating (A)	40	63	80	100	125	160		
Resistance per pole (mΩ)	0.3	0.3	0.3	0.2	0.2	0.2		
Power dissipated per pole (W)	0.5	1.2	1.9	2	3.1	5.1		
ComPact INS/INV	100	160	200	250	320	400	500	630
Rating (A)	100	160	200	250	320	400	500	630
Resistance per pole (mΩ)	0.15	0.15	0.15	0.15	0.06	0.06	0.06	0.06
Power dissipated per pole (W)	1.5	4	6	9.5	6.1	9.6	15	24
ComPact INS/INV	800	1000	1250	1600	2000	2500		
Rating (A)	800	1000	1250	1600	2000	2500		
Resistance per pole (mΩ)	0.024	0.024	0.024	0.024	0.012	0.012		
Power dissipated per pole (W)	16	24	38	62	48	75		

Temperature Derating

ComPact INS	40	63	80	100	125	160		
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Front connection with bare-cable connectors or lugs

Thermal current I _{th} at	60 °C	40	63	80	100	125	160		
	65 °C	40	63	80	100	125	160		
	70 °C	40	63	80	100	125	150		

ComPact INS/INV	100	160	200	250	320	400	500	630
------------------------	------------	------------	------------	------------	------------	------------	------------	------------

Front connection / rear connection

Thermal current I _{th} at	60 °C	100	160	200	250	320	400	500	630
	65 °C	100	160	200	250	320	400	500	590
	70 °C	100	160	200	250	320	400	500	550

Front connection with right-angle terminal extension + bare-cable connectors

Thermal current I _{th} at	55 °C	100	160	200	250	320	400	500	630
	60 °C	100	160	200	250	320	400	500	590
	65 °C	100	160	200	250	320	400	500	550
	70 °C	100	160	200	240	320	400	500	510

Front connection / rear connection with ammeter or CT module

Thermal current I _{th} at	40 °C	100	160	200	250	320	400	500	600
	50 °C	100	160	200	250	320	400	500	575
	55 °C	100	160	200	250	320	400	500	540
	60 °C	100	160	200	240	320	400	500	505
	65 °C	100	160	200	230	320	400	480	480
	70 °C	100	160	200	210	320	400	450	450

ComPact INS/INV	630b	800 with or without term. shield	1000 with or without term. shield	1250 with term. shield	without term. shield	1600 with term. shield	without term. shield	2000 with term. shield	2500 without term. shield
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Direct connection by flat-facing bars ^[1]

Thermal current I _{th} at	40 °C	630	800	1000	1250	1250	1600	1600	2000	2500
	45 °C	630	800	1000	1250	1250	1570	1600	2000	2500
	50 °C	630	800	1000	1250	1250	1500	1550	2000	2500
	55 °C	630	800	1000	1250	1250	1420	1470	2000	2500
	60 °C	630	800	1000	1250	1250	1340	1390	2000	2500
	65 °C	630	800	1000	1250	1250	1250	1300	2000	2500
	70 °C	630	800	1000	1060	1210	1060	1210	2000	2400

Connection by flat-facing bars via spreaders, without terminal shields ^[2]

Thermal current I _{th} at	40 °C	630	800	1000	1250	1600	-	-	-
	45 °C	630	800	1000	1250	1600	-	-	-
	50 °C	630	800	1000	1250	1580	-	-	-
	55 °C	630	800	1000	1250	1500	-	-	-
	60 °C	630	800	1000	1250	1420	-	-	-
	65 °C	630	800	1000	1250	1330	-	-	-
	70 °C	630	800	1000	1240	1240	-	-	-

Connection of edgewise bars via vertical connection adapters or cables via vertical connection adapters with cable-lug adapters

Thermal current I _{th} at	40 °C	630	800	1000	1250	1600	1600	-	-
	45 °C	630	800	1000	1250	1600	1600	-	-
	50 °C	630	800	1000	1250	1600	1600	-	-
	55 °C	630	800	1000	1250	1600	1600	-	-
	60 °C	630	800	1000	1250	1600	1600	-	-
	65 °C	630	800	1000	1250	1520	1560	-	-
	70 °C	630	800	1000	1250	1410	1450	-	-

[1] INS/INV1600: 4 bars 50 x 5. [2] INS/INV1600: 3 bars 80 x 5.

Note: thermal current I_{th} in Amps (QA).

Dimensions and Connection

ComPacT INS40 to 160 C-2

ComPacT INS250-100 to 630
ComPacT INV100 to 630 C-5

ComPacT INS630b to 1600
ComPacT INV630b to 1600 C-9

ComPacT INS2000 to 2500
ComPacT INV2000 to 2500 C-11

**Mechanical Interlocks
for Direct and Extended Handles**
INS40 to 630, INV100 to 630 C-13

Installation of Downstream Coupling
INS250-100 to 630, INV100 to 630 C-14

Front-Panel Accessories
INS250-100 to 2500, INV100 to 2500 C-15

**Parallel or Series Connection Accessories
for Direct Current**
ComPacT INS250-100 to 250
ComPacT INV100 to 250 C-16

**Parallel or Series Connection Accessories
for Direct Current**
ComPacT INS320 to 630
ComPacT INV400 to 630 C-18



Other Chapters

Functions and Characteristics A-1

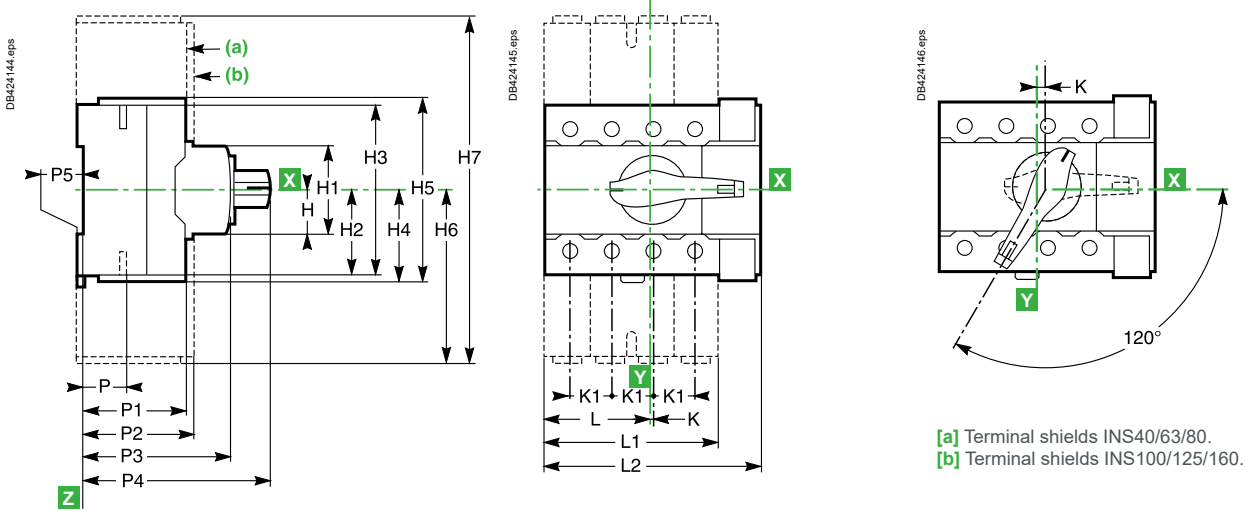
Installation Recommendations B-1

Complementary Technical Information D-1

Catalogue Numbers E-1

Dimensions

Front handle

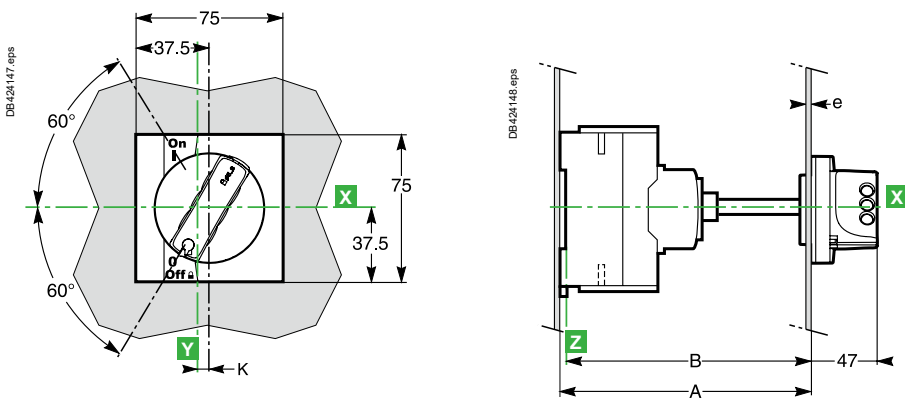


[a] Terminal shields INS40/63/80.
[b] Terminal shields INS100/125/160.

Dimensions (mm)

Type	H	H1	H2	H3	H4	H5	H6	H7	K	K1	L	L1	L2	P	P1	P2	P3	P4	P5
INS40/63/80	22.5	45	40.5	81	42.5	85	73.5	147	1	18	46	73	90	23.3	43	47	62.5	79	5
INS100/125/160	22.5	45	50	100	50	100	110	220	7.5	30	75	119	135	21.5	45	47	62.5	79	5

Extended front handle



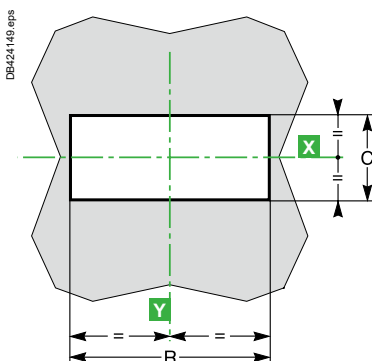
Dimensions (mm)

Type	A (on back plate)		B (on rail)	
	Min.	Max.	Min.	Max.
INS40/63/80	128	519	123	514
INS100/125/160	128	519	123	514

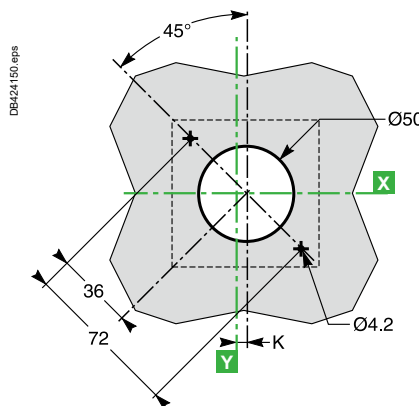
Type	e	K	Length of shaft
INS40/63/80	1...3	1	A - 69
INS100/125/160	1...3	7.5	A - 69

Door or front panel cutout for front handle

Direct



Extended



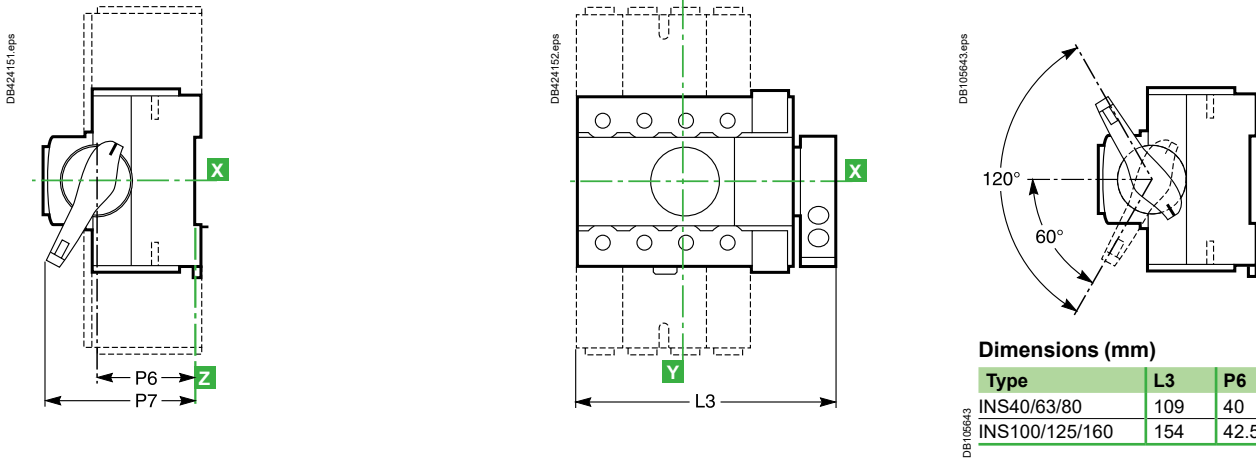
Dimensions (mm)

Type	C	R	K
INS40/63/80	47	92	1
INS100/125/160	47	137	7.5

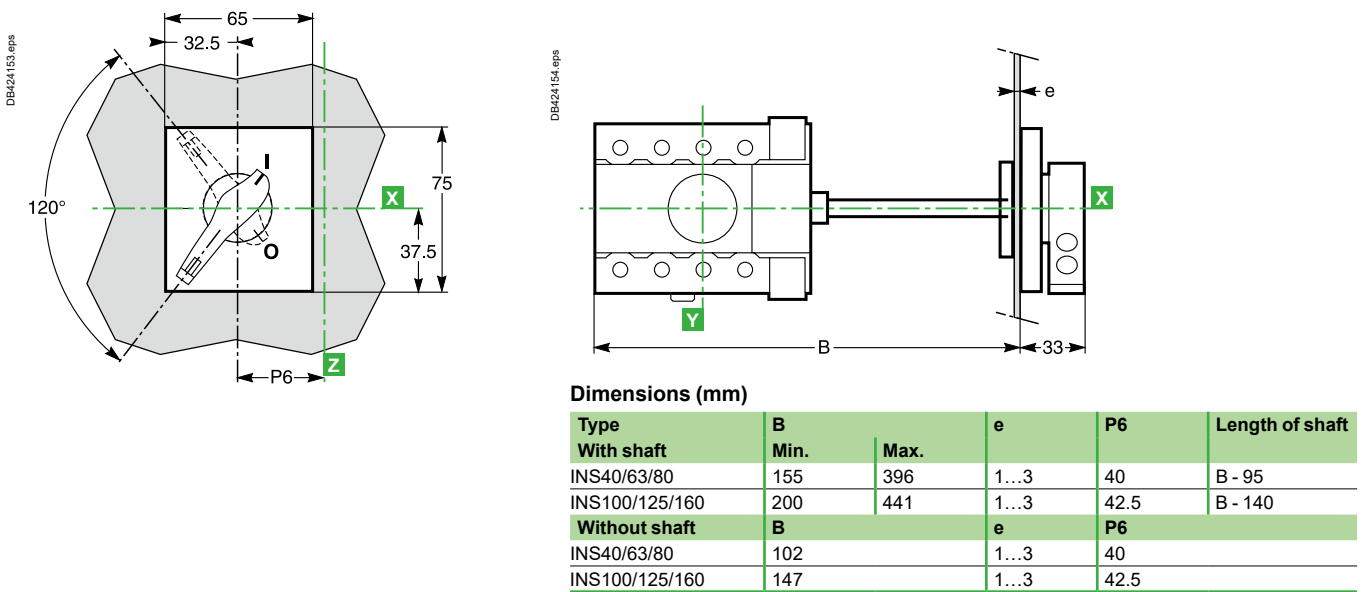
Note: lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

Dimensions

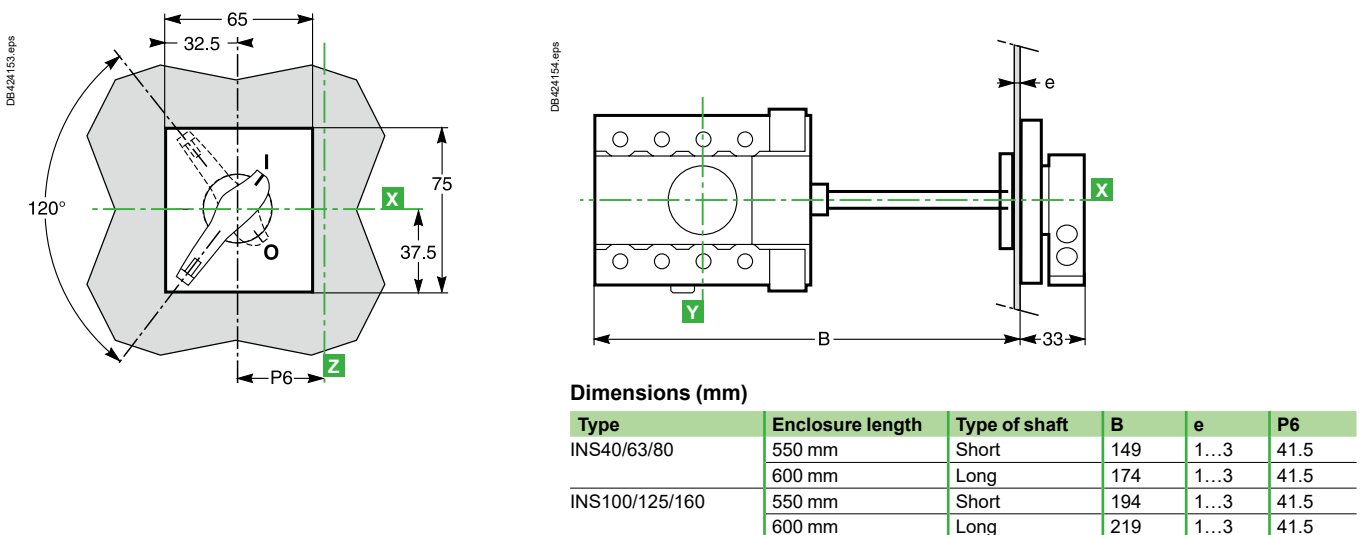
Lateral handle



Extended lateral handle

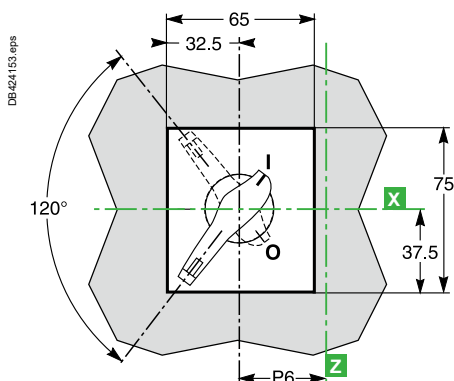


Lateral handle for functional enclosure



Dimensions

Front Panel Cutout for Lateral Handle



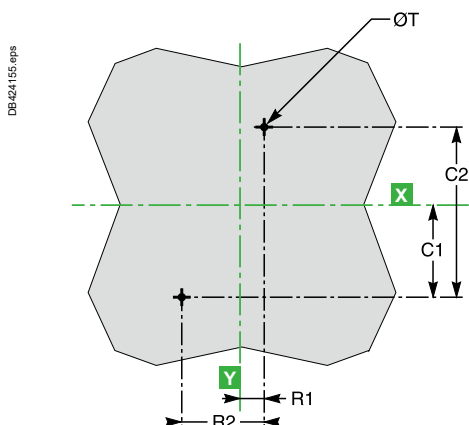
Dimensions (mm)

Type	P6
INS40/63/80	40
INS100/125/160	42.5

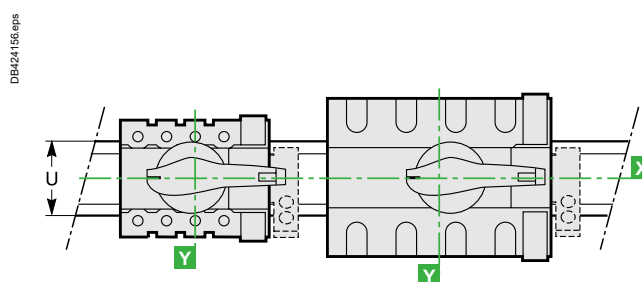
C

Installation

On a backplate



On rail

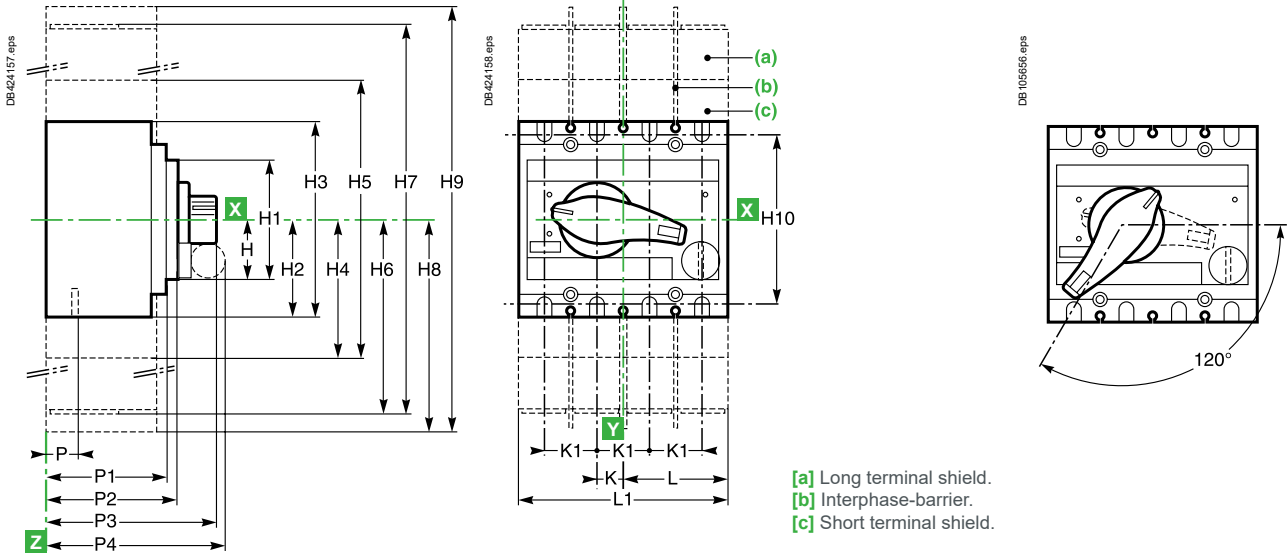


Dimensions (mm)

Type	C1	C2	R1	R2	ØT	U
INS40/63/80	40	80	10	36	4.5	35
INS100/125/160	37.5	75	22.5	60	4.5	35

Dimensions

Front Handle

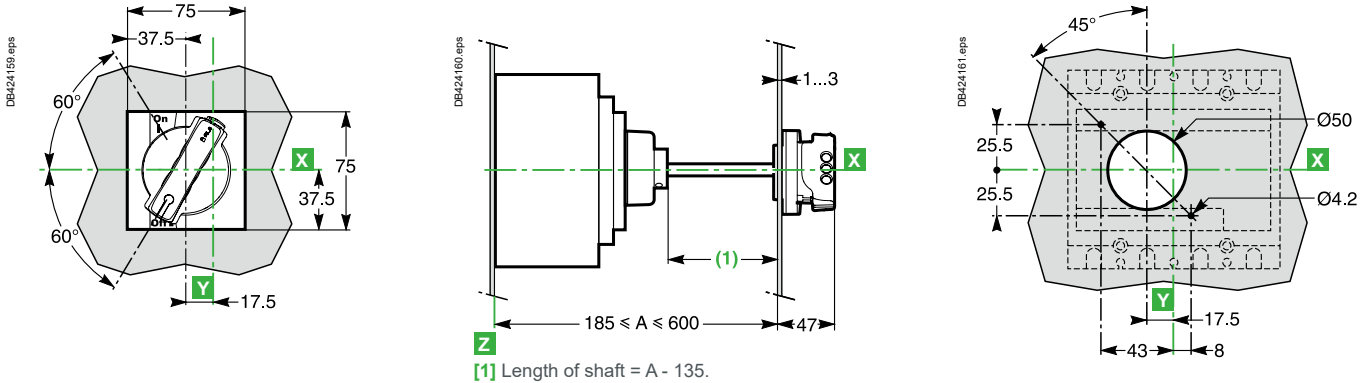


Dimensions (mm)

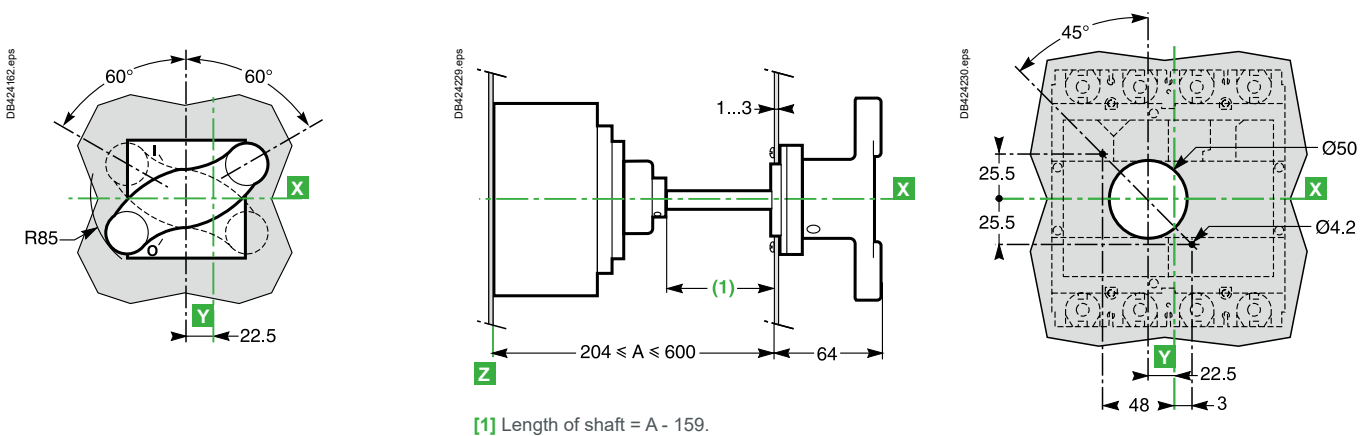
Type	H	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	K	K1	L	L1	P	P1	P2	P3	P4	
INS250	40	80	68	136	82	164	133	266	166	332	115	17.5	35	70	140	21.5	86	96	131	138	
INV100/250																					
INS320/630	61.5	123	102.5	205	118	236	175	350	212.5	425	177	22.5	45	92.5	185	26	110	120	160.4	162	
INV400/630																					

Extended Front Handle

INS250-100 to 250 and INV100 to 250



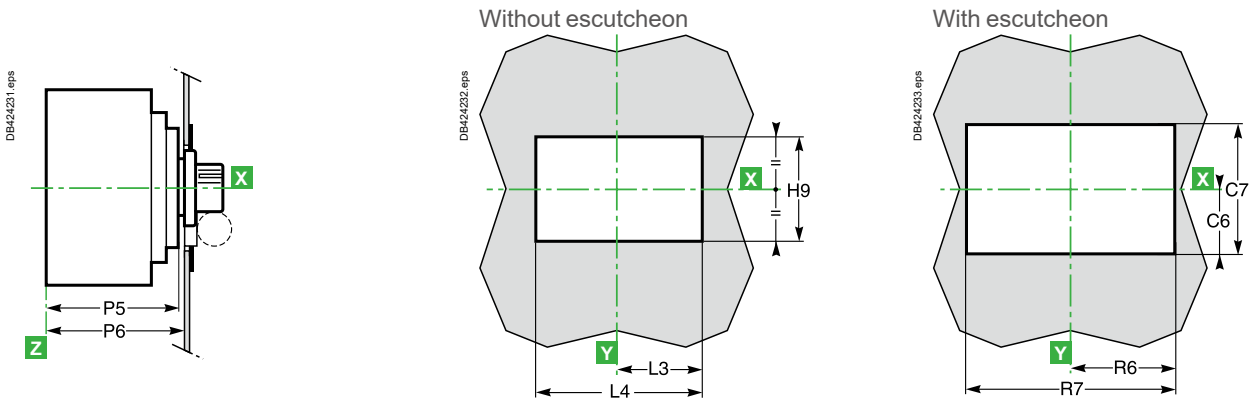
INS320 to 630 and INV400 to 630



Note: Lines **X** and **Y** indicate the axes of symmetry of the switch-disconnector.
Reference plane **Z** corresponds to the back of the switch-disconnector.

ComPacT INS250-100 to 630 ComPacT INV100 to 630

Door or front panel cutout for front handle

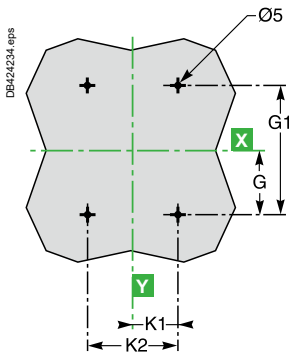


Dimensions (mm)

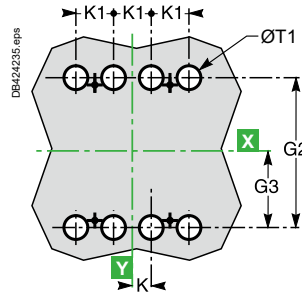
Type	C6	C7	H9	L3	L4	P5	P6	R6	R7
INS/INV100 to 250	51.5	103	82	66	132	96	98	81	162
INS/INV320 to 630	76.5	153	125	86	172	120	122	101	202

Installation

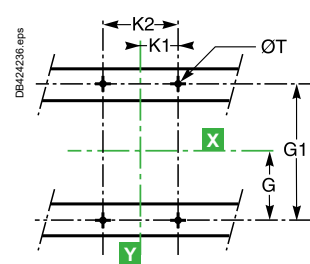
On panel fixed/FC



On panel fixed/RC



On rail

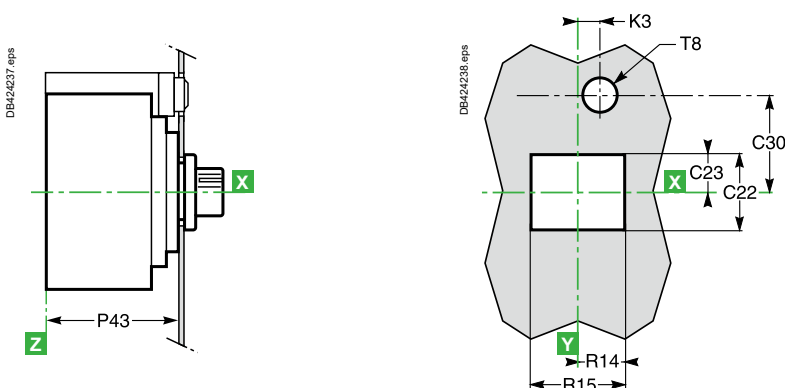


Dimensions (mm)

Type	G	G1	G2	G3	K	K1	K2	ØT	ØT1
INS/INV100 to 250	50	100	115	57.5	17.5	35	70	6	24
INS/INV320 to 630	75	150	177	88.5	22.5	45	90	6	32

Front panel cutout

Switch-disconnector equipped with a voltage-presence indicator



Dimensions (mm)

Type	P43	R14	R15	C22	C23	C30	T8	K3
INS/INV100 to 250	98	65	132	82	40	58.5	31	18
INS/INV320 to 630	122	86	172	125	62.85	97	31	22.7

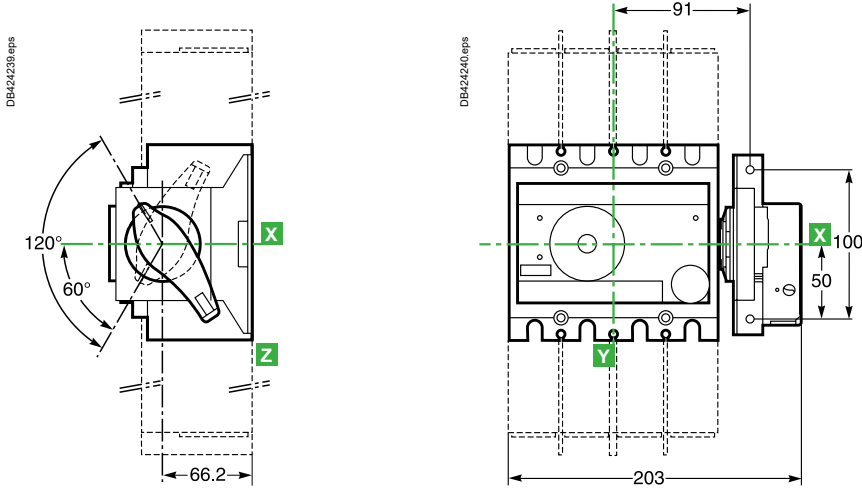
Dimensions and Connection

ComPacT INS250-100 to 630

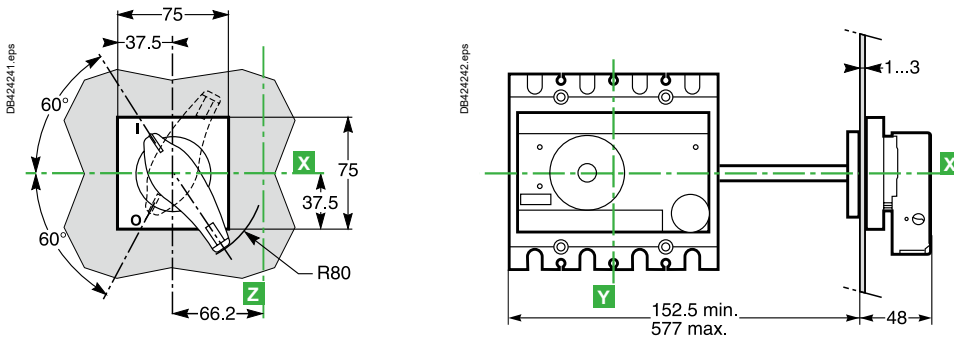
ComPacT INV100 to 630

Dimensions

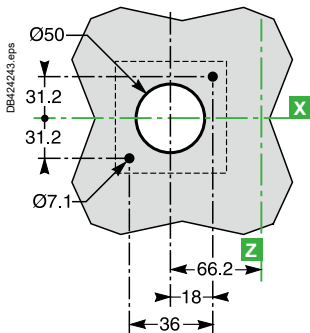
Lateral handle (only for INS250-100 to 250 and INV100 to 250)



Extended lateral handle (only for INS250-100 to 250 and INV100 to 250)



Door or front panel cutout for lateral handle (only for INS250-100 to 250 and INV100 to 250)

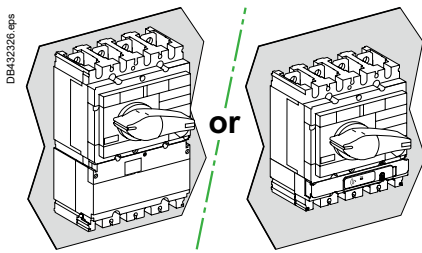
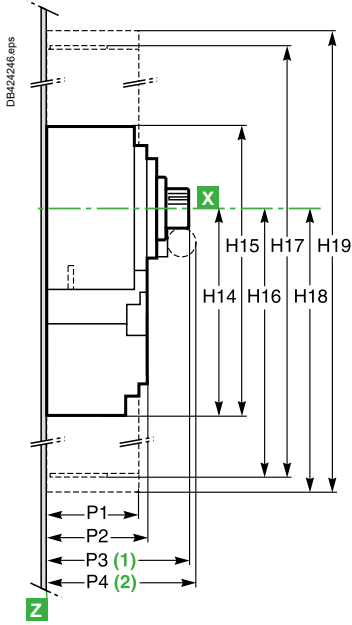


Dimensions and Connection

ComPacT INS250-100 to 630 ComPacT INV100 to 630

Dimensions

Switch-disconnector equipped with PowerTag NSX module



- [1] To front of direct handle.
- [2] To front of key.

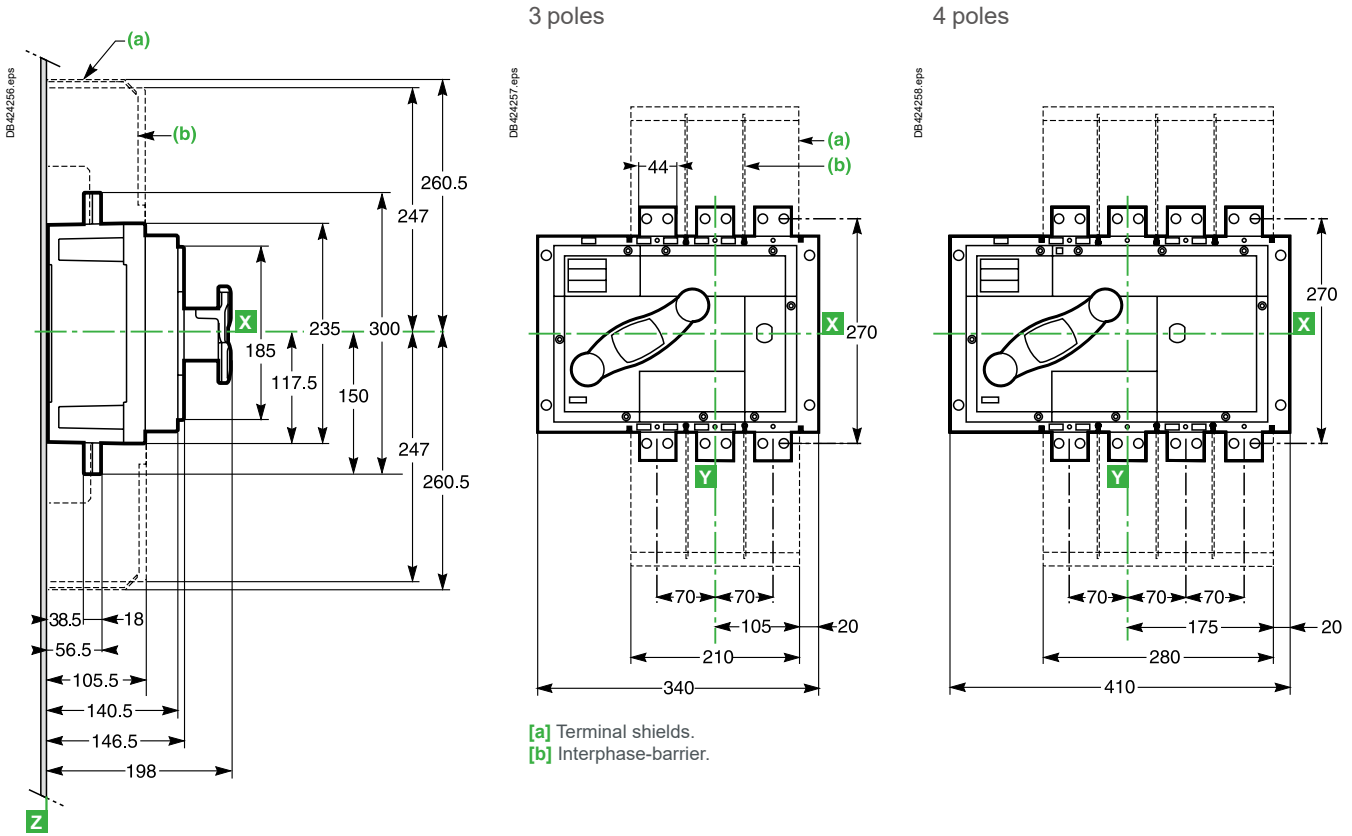


ComPacT INS630b to 1600

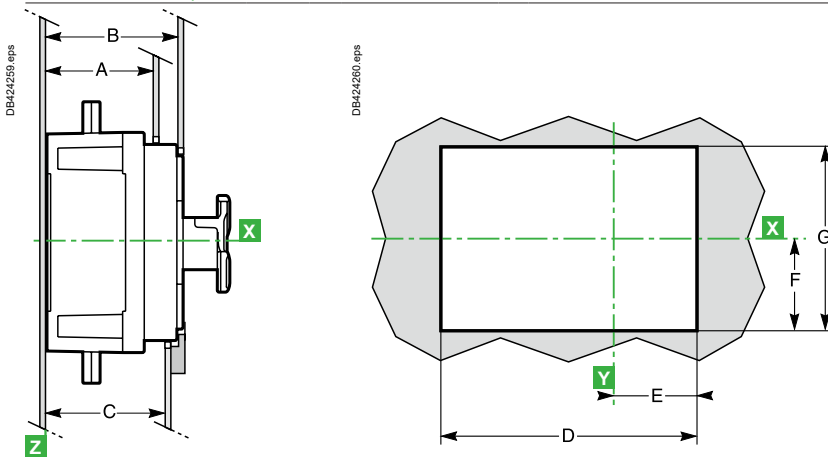
ComPacT INV630b to 1600

Dimensions

Direct front handle



Door or front panel cutout for extended handle



Cutout for switch-disconnector cover (mm)

Type	A	D	E	F	G
3P	107	299	103	108	216
4P	107	369	173	108	216

Cutout for switch-disconnector front (mm)

Type	B	D	E	F	G
3P	142	274	90.5	95.5	191
4P	142	344	160.5	95.5	191

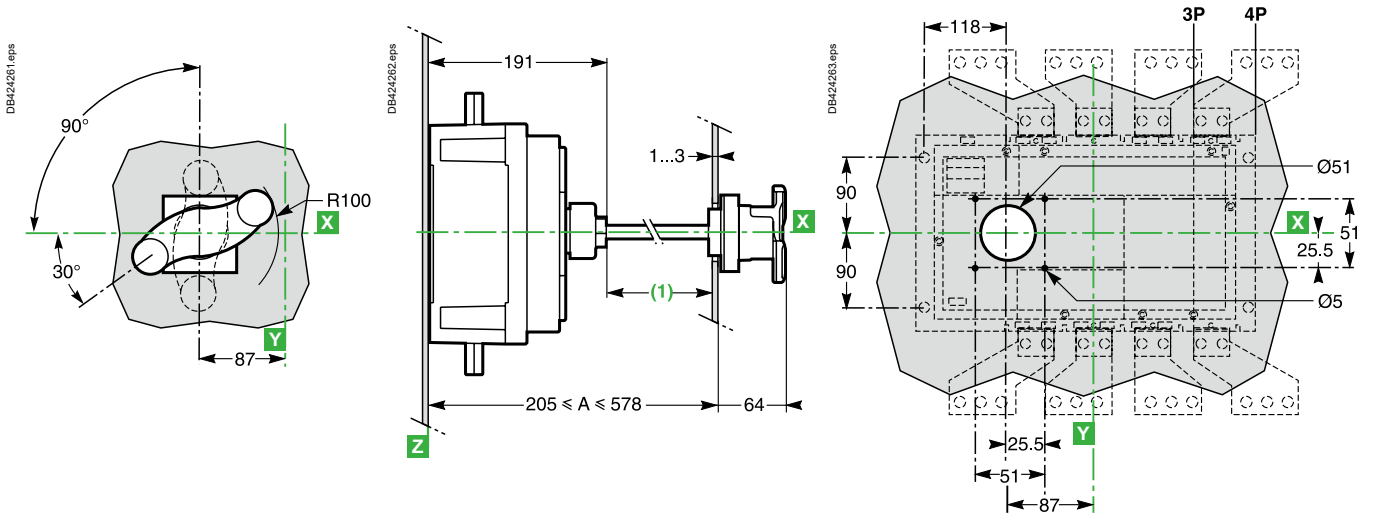
Cutout for escutcheon (mm)

Type	C	D	E	F	G
3P	132	330	120	123	246
4P	132	400	190	123	246

Note: Lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

ComPacT INS630b to 1600 ComPacT INV630b to 1600

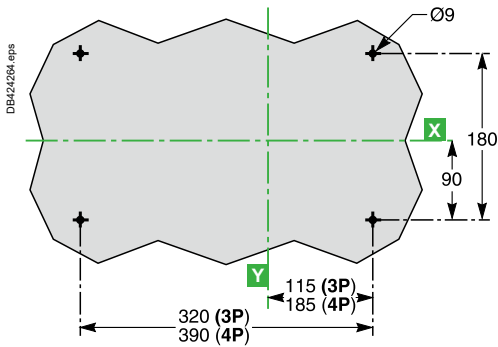
Extended front handle



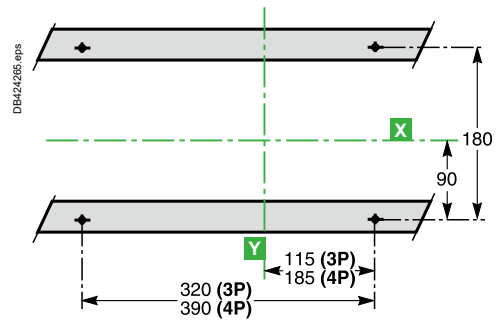
[1] Length of shaft = A - 151.

Installation

On backplate



On rail



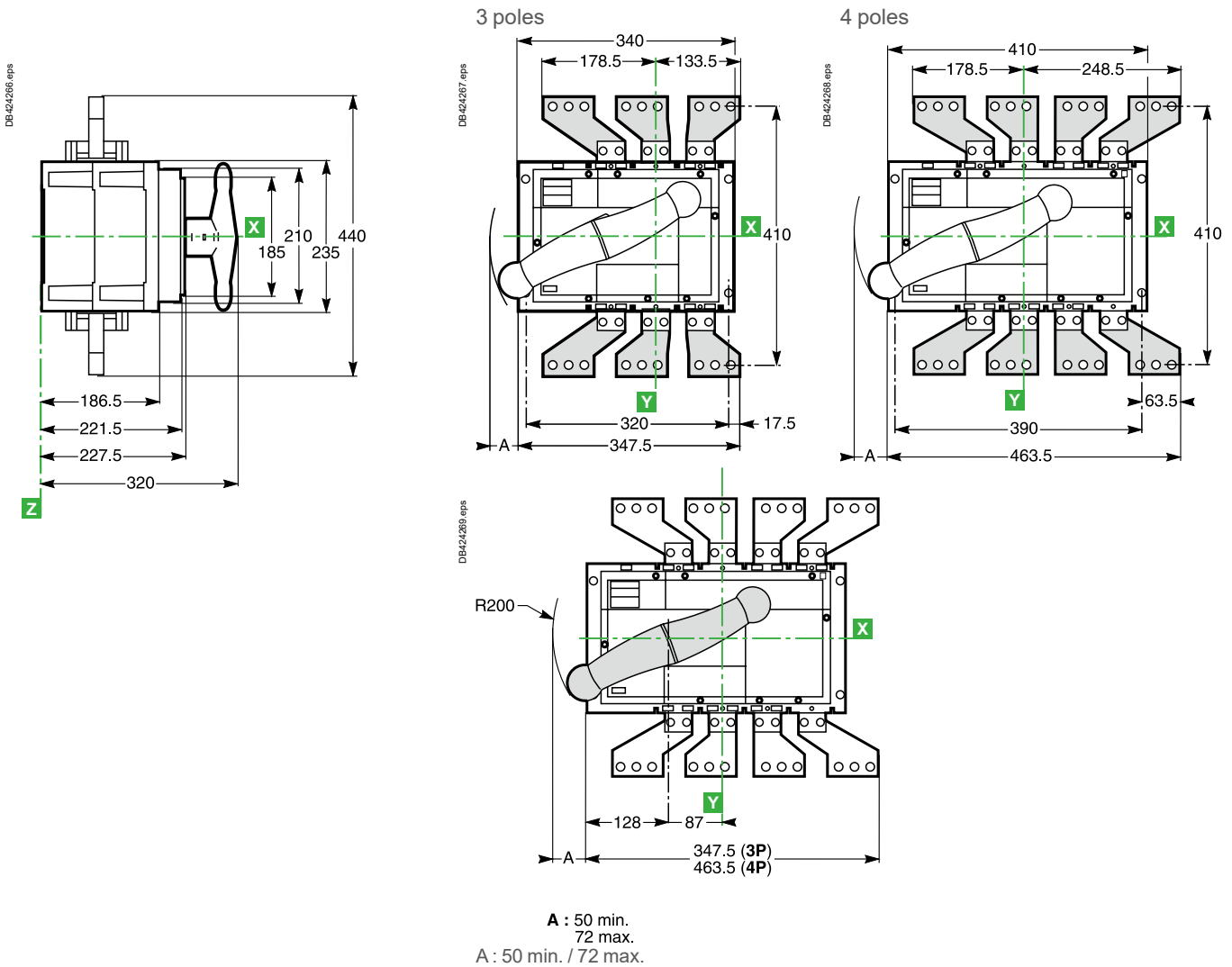
Dimensions and Connection

ComPacT INS2000 to 2500

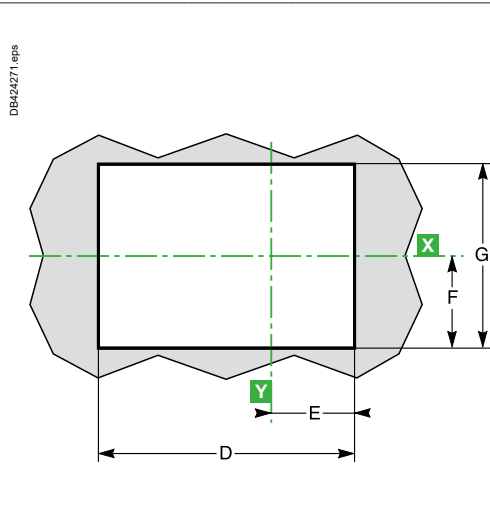
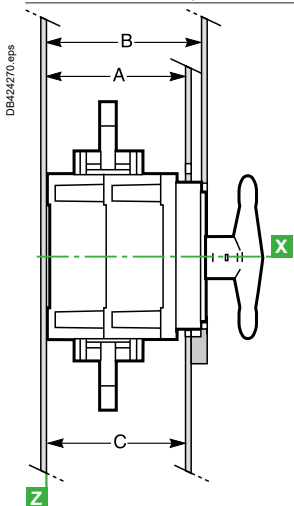
ComPacT INV2000 to 2500

Dimensions

Direct front handle



Door or front panel cutout for front handle



Cutout for switch-disconnector cover (mm)

Type	A	D	E	F	G
3P	188	299	103	108	216
4P	188	369	173	108	216

Cutout without escutcheon (mm)

Type	B	D	E	F	G
3P	223	274	90.5	95.5	191
4P	223	344	160.5	95.5	191

Cutout with escutcheon (mm)

Type	C	D	E	F	G
3P	213	327	110	121.5	243
4P	213	397	180	121.5	243

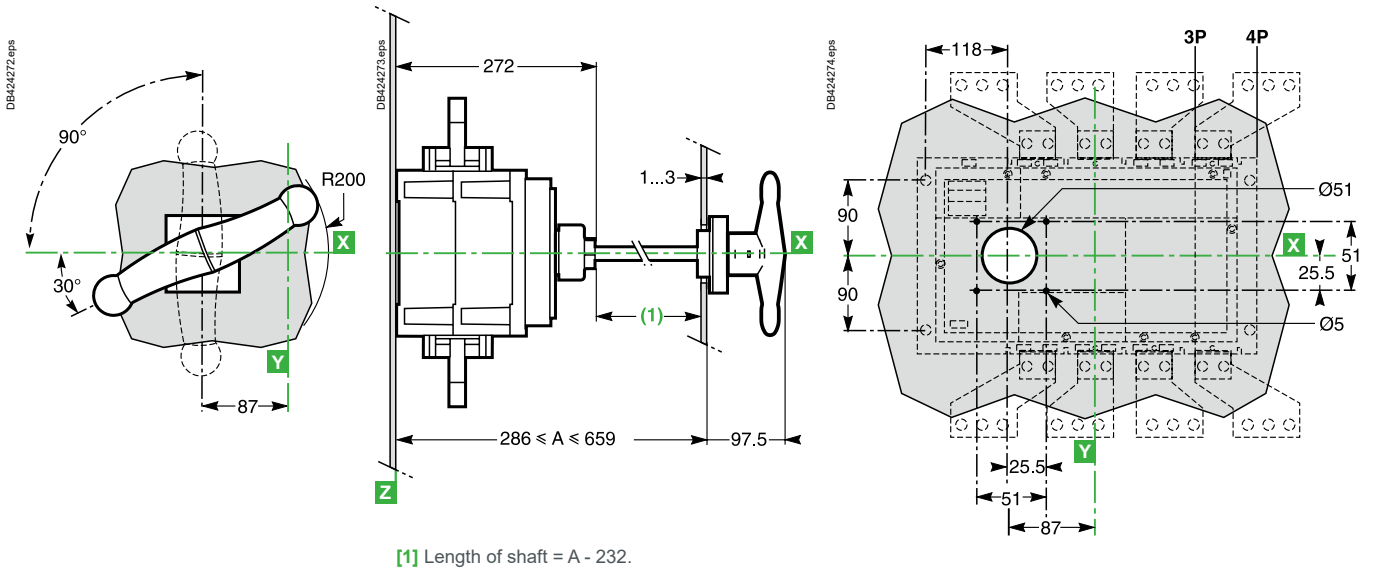
Note: Lines X and Y indicate the axes of symmetry of the switch-disconnector. Reference plane Z corresponds to the back of the switch-disconnector.

Dimensions and Connection

ComPacT INS2000 to 2500

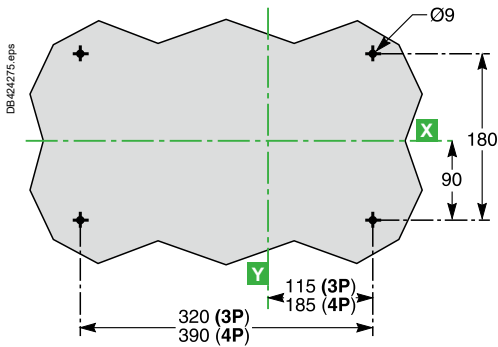
ComPacT INV2000 to 2500

Extended front handle



Installation

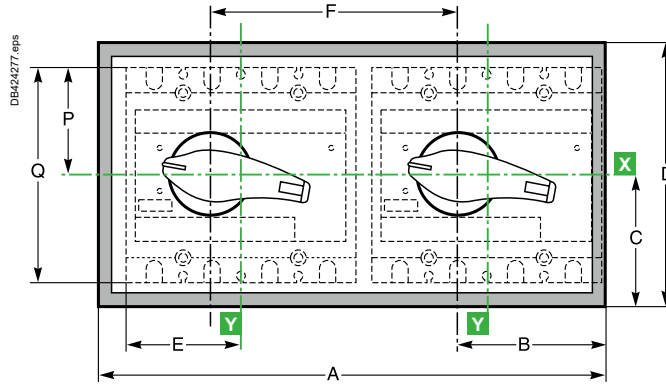
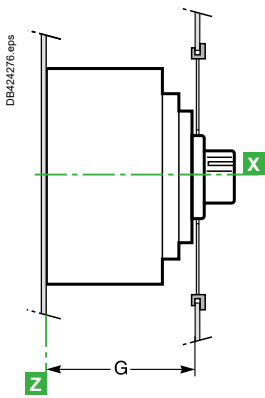
On backplate



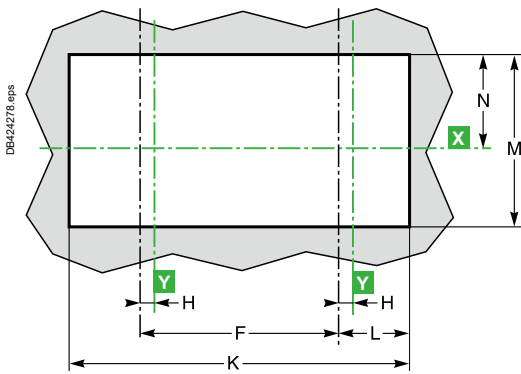
Mechanical Interlocks for Direct and Extended Handles

INS40 to 630, INV100 to 630

Dimensions for Direct Handle (INS250-100 to 630 and INV100 to 630)



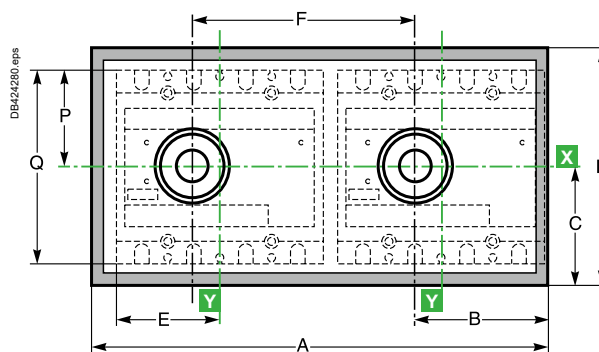
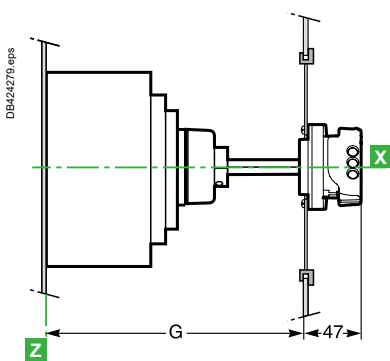
Door Cutout



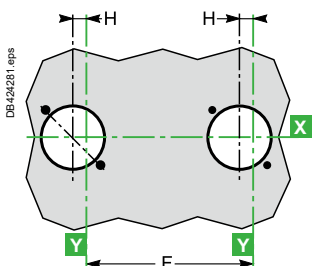
Dimensions (mm)

Type	A	B	C	D	E	F	G	H	K	L	M	N	P	Q
INS250	325	90	87.5	175	70	156	106	17.5	295	75.5	150	75	68	136
INV100/250														
INS320/630	416	115	100	200	92.5	210	130	22.5	386	100	175	74.5	102.5	205
INV400/630														

Dimensions for Extended Handle (INS250-100 to 630 and INV100 to 630)



Door Cutout



Dimensions (mm)

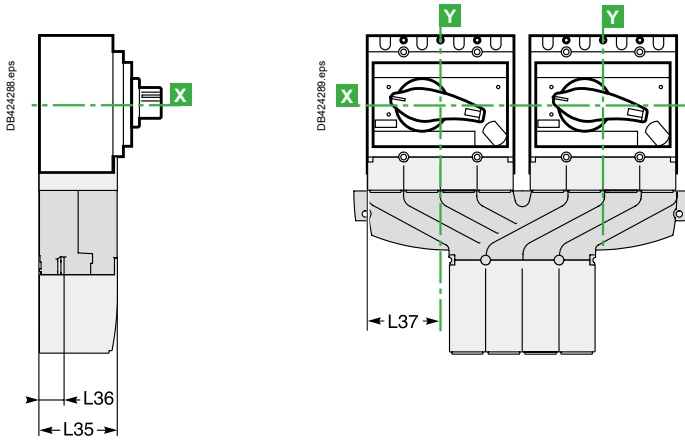
Type	A	B	C	D	E	F	G	H	P	Q	
INS40/80	-	-	-	-	46	156	155	396	-	45	90
INS100/160	-	-	-	-	70	156	128	519	-	50	100
INS250	325	90	87.5	175	70	156	185	600	17.5	68	136
INV100/250											
INS320/630	416	115	100	200	92.5	210	204	600	22.5	102.5	205
INV400/630											

Note: Lines X and Y indicate the axes of symmetry of the switch-disconnector. Reference plane Z corresponds to the back of the switch-disconnector.

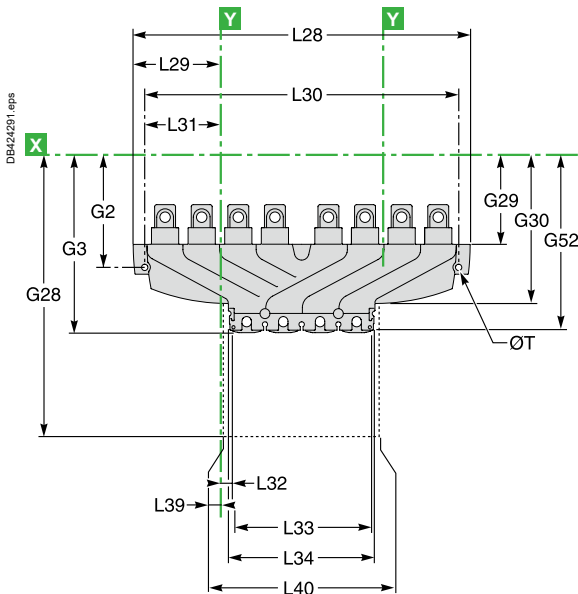
Installation of Downstream Coupling

INS250-100 to 630, INV100 to 630

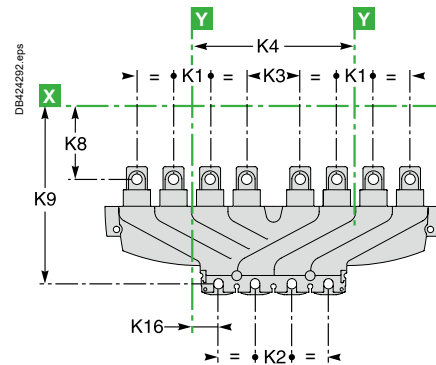
Dimensions



Dimensions



Connection



Dimensions (mm)

Type	G2	G3	G28	G29	G30	G52	K1	K2	K3	K4	K8	K9	K16
INS250-100/160/200/250	105.5	169	232	83.5	140	165.5	35	35	51	156	57.5	157.5	25.5
INS320/400/500/630	141	240.7	313	119	195.6	240	45	45	75	210	88.5	225.7	37.5

Dimensions (mm)

Type	L28	L29	L30	L31	L32	L33	L34	L35	L36	L37	L39	L40	ØT
INS250-100/160/200/250	320	83	300	72	12.8	130.5	139.5	74.5	21.5	70	8.5	140	6
INS320/400/500/630	425	107.5	400	95	17.35	175.3	184.7	98.5	26	92.5	12.65	184.7	6

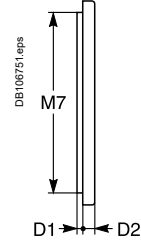
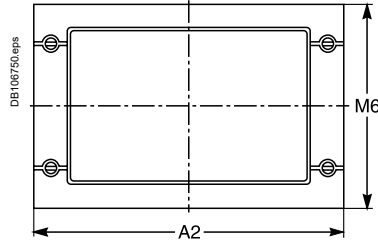
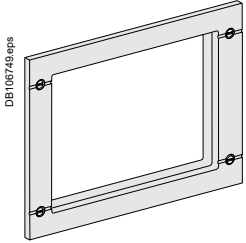
Note: Lines X and Y indicate the axes of symmetry of the switch-disconnector. Reference plane Z corresponds to the back of the switch-disconnector.

Front-Panel Accessories

INS250-100 to 2500, INV100 to 2500

Front-Panel Escutcheon

For switch-disconnectors

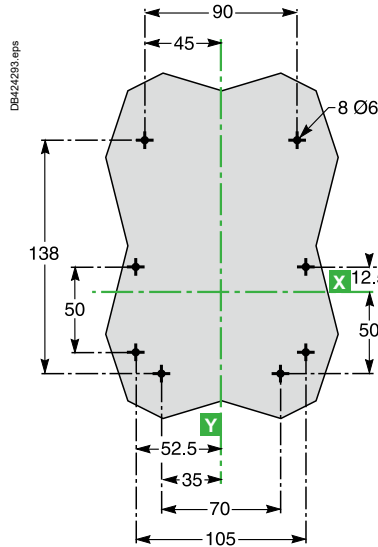
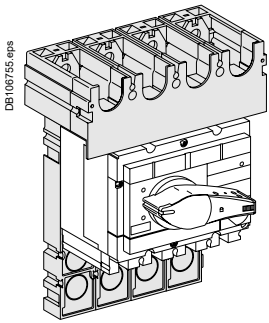


Dimensions (mm)

Type		A2	D1	D2	M6	M7
INS630b/2500	3P	346	3.5	11.5	257.5	242 x 326.5
INV630b/2500	4P	416	3.5	11.5	257.5	242 x 396.5



Front Alignment (only for INS/INV250-100)



Note: Lines **X** and **Y** indicate the axes of symmetry of the switch-disconnector.
Reference plane **Z** corresponds to the back of the switch-disconnector.

Parallel or Series Connection Accessories for Direct Current ComPacT INS250-100 to 250 ComPacT INV100 to 250

With Series Connections

3P

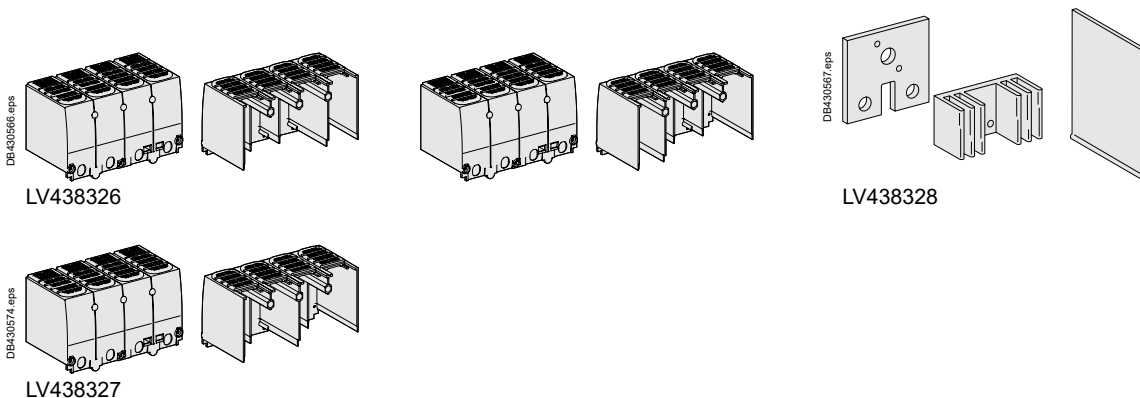
	<p>Terminal shield</p> <p>Terminal extension</p>	<p>1 x LV438326</p> <p>1 x LV438328</p>		<p>1 x LV438326</p> <p>2 x LV438328</p>	

4P

	<p>Terminal shield</p> <p>Terminal extension</p>	<p>1 x LV438327</p> <p>2 x LV438328</p>		<p>1 x LV438326</p> <p>2 x LV438328</p>	

	<p>Terminal shield</p> <p>Terminal extension</p>	<p>1 x LV438327 + 1 x LV438326</p> <p>3 x LV438328</p>

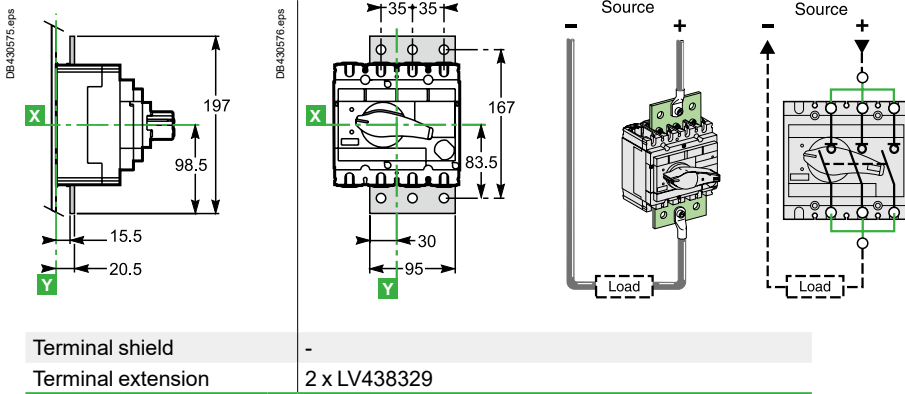
Accessories



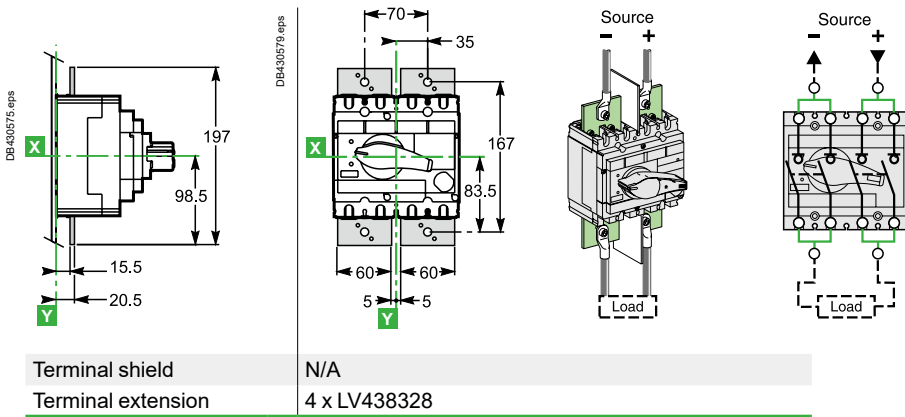
Parallel or Series Connection Accessories for Direct Current ComPacT INS250-100 to 250 ComPacT INV100 to 250

With parallel connections

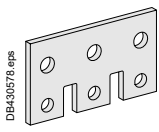
3P



4P



Accessories



LV438329

Parallel or Series Connection Accessories for Direct Current ComPacT INS320 to 630 ComPacT INV400 to 630

With series connections

3P

<p>DB430561.eps 58.5 407 203.5 23 X Z</p>	<p>DB430562.eps 7.5 75 Source + - + Load</p>	<p>DB430564.eps 7.5 75 37.5 75 Source + - + Load</p>
<p>Terminal shield Terminal extension</p>	<p>1 x LV438295 + 1 x LV432594 1 x LV438338</p>	<p>1 x LV438295 + 1 x LV438294 2 x LV438338</p>

4P

<p>DB430581.eps 58.5 407 203.5 23 X Z</p>	<p>DB430588.eps 75 75 7.5 Source + - + Load</p>	<p>DB430590.eps 7.5 75 37.5 75 Source + - + Load</p>
<p>Terminal shield Terminal extension</p>	<p>1 x LV438294 + 1 x LV432594 2 x LV438338</p>	<p>1 x LV438294 + 1 x LV438295 2 x LV438338</p>

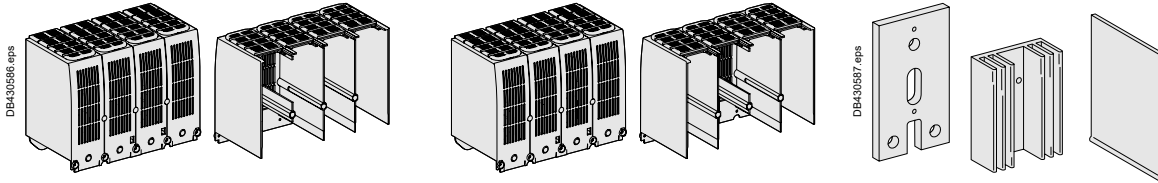
<p>DB430561.eps 58.5 407 203.5 23 X Z</p>	<p>DB430562.eps 75 75 7.5 Source + - + Load</p>
<p>Terminal shield Terminal extension</p>	<p>1 x LV438293 + 1 x LV438294 3 x LV438338</p>



Dimensions and Connection

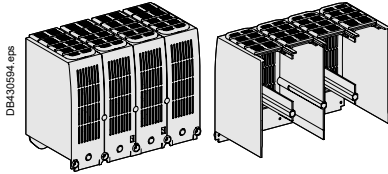
Parallel or Series Connection Accessories for Direct Current ComPacT INS320 to 630 ComPacT INV400 to 630

Accessories



LV438294 and LV438295

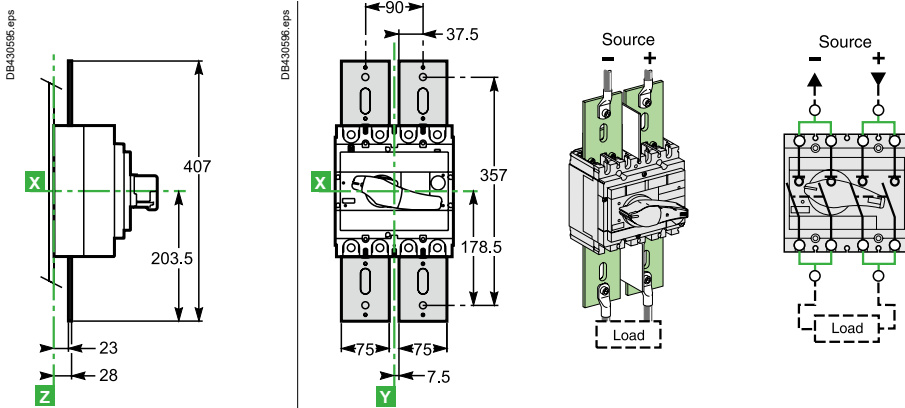
LV438338



LV438293

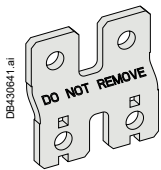
With Parallel Connections

4P



- Terminal shield: N/A or 1 x LV438327 (if you use LV438307)
- Terminal extension: 4 x LV438338 (proposal replace by 1 x LV438307)

Accessories



LV438307

Complementary Technical Information

Switch-Disconnecter - Circuit Breaker Coordination

Upstream: iC60, C120, NG125
 Downstream: ComPacT INS40 to INS250, INV100 to INV250 D-2

Upstream: ComPacT NSXm
 Downstream: ComPacT INS40 to 250, ComPacT INV100 to 250 .. D-3

Upstream: ComPacT NSX100 to 250
 Downstream: ComPacT INS40 to INS250, INV100 to INV250..... D-4

Upstream: ComPacT NSX400 to 630
 Downstream: ComPacT INS/INV100 to 630..... D-5

Upstream: ComPacT NS630b to 3200, MasterPact MTZ1
 Downstream: ComPacT INS/INV500 to 2500..... D-6

Upstream: MasterPact MTZ2
 Downstream: ComPacT INS/INV500 to 2500..... D-7

Upstream: ComPacT NSXm, ComPacT NSX100 to 250
 Downstream: ComPacT INS40 to 250, ComPacT INV100 to 250 .. D-8

Upstream: ComPacT NSX400 to 630
 Downstream: ComPacT INS/INV100 to 630..... D-10

Upstream: ComPacT NS630b to 3200, MasterPact MTZ1/2
 Downstream: ComPacT INS/INV500 to 2500..... D-11

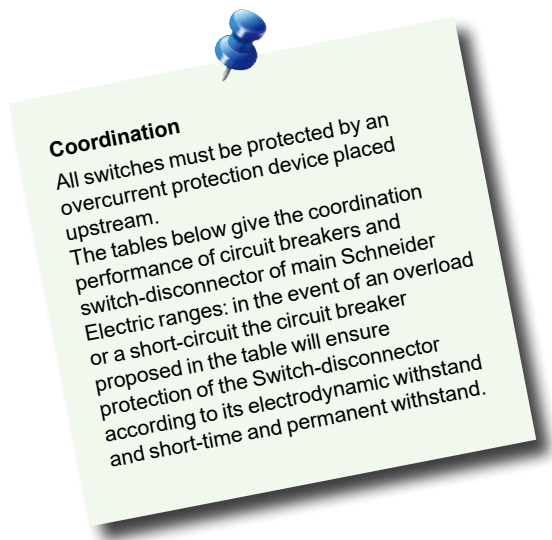
Upstream: ComPacT NSX400 to 630
 Downstream: ComPacT INS/INV100 to 630..... D-12

Upstream: ComPacT NS630b to 3200, MasterPact MTZ1/2
 Downstream: ComPacT INS/INV 500 to 2500..... D-13

Upstream: ComPacT NSX100 to 630
 Downstream: ComPacT INS/INV500 to 1000 D-14

Switch-Disconnecter - Fuse Coordination

Upstream: gG, aM, BS fuses
 Downstream: ComPacT INS40 to 630, INV100 to 360 D-15



Other Chapters

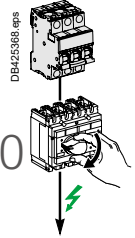
Functions and Characteristics A-1
 Installation Recommendations B-1
 Dimensions and Connection C-1
 Catalogue Numbers E-1



Switch-Disconnecter - Circuit Breaker Coordination

Upstream: iC60, C120, NG125

Downstream: ComPacT INS40 to INS250, INV100 to INV250



$U_e \leq 415 \text{ V AC}$

Downstream	Switch-disconnector	INS40	INS63	INS80	INS100	INS 250-100 INV100	INS125	INS160	INS 250-160 INV160	INS 250-200 INV200	INS250 INV250
	Ith (A) 60°	40	63	80	100	100	125	160	160	250	250
	Icw (kA)	3	3	3	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kA)	15	15	15	20	30	20	20	30	30	30

Upstream	Rating	Icu (kA)	Switch-disconnector conditional short-circuit current and related making capacity										
Circuit breaker	415 V	415 V											
iC60N B-C-D Curves	≤ 32	10	T	T	T	T	T	T	T	T	T	T	T
	40	10	T	T	T	T	T	T	T	T	T	T	T
	50	10		T	T	T	T	T	T	T	T	T	T
	63	10		T	T	T	T	T	T	T	T	T	T
iC60H B-C-D Curves	≤ 32	15	T	T	T	T	T	T	T	T	T	T	T
	40	15	T	T	T	T	T	T	T	T	T	T	T
	50	15		T	T	T	T	T	T	T	T	T	T
	63	15		T	T	T	T	T	T	T	T	T	T
iC60L B-C-D-K-Z Curves	≤ 25	25	T	T	T	T	T	T	T	T	T	T	T
	32	20	T	T	T	T	T	T	T	T	T	T	T
	40	20		T	T	T	T	T	T	T	T	T	T
	50	15		T	T	T	T	T	T	T	T	T	T
	63	15		T	T	T	T	T	T	T	T	T	T
C120N B-C-D Curves	63	10		T	T	T	T	T	T	T	T	T	T
	80	10			T	T	T	T	T	T	T	T	T
	1P 240V	100				T	T	T	T	T	T	T	T
	2, 3, 4P 415 V	125					T	T	T	T	T	T	T
C120H B-C-D Curves	63	20		T	T	T	T	T	T	T	T	T	T
	80	20			T	T	T	T	T	T	T	T	T
	1P 240V	100				T	T	T	T	T	T	T	T
	2, 3, 4P 415 V	125					T	T	T	T	T	T	T
NG125N B-C-D Curves	≤ 40	25	T	T	T	T	T	T	T	T	T	T	T
	63	25		T	T	T	T	T	T	T	T	T	T
	80	25			T	T	T	T	T	T	T	T	T
	100	25				T	T	T	T	T	T	T	T
	125	25					T	T	T	T	T	T	T
NG125H C Curves	≤ 40	36	T	T	T	T	T	T	T	T	T	T	T
	63	36		T	T	T	T	T	T	T	T	T	T
	80	36			T	T	T	T	T	T	T	T	T
	100	36				T	T	T	T	T	T	T	T
	125	36					T	T	T	T	T	T	T
NG125L B-C-D Curves	≤ 40	50	T	T	T	T	T	T	T	T	T	T	T
	63	50		T	T	T	T	T	T	T	T	T	T
	80	50			T	T	T	T	T	T	T	T	T

- T : Protection of the switch-disconnector is ensured but combination not very relevant
- T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
- 36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured

Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NSXm

Downstream: ComPacT INS40 to 250, ComPacT INV100 to 250

Ue ≤ 440 V AC

Downstream	Switch-disconnector	INS40	INS63	INS80	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	40	63	80	100	100	125	160	160	200	200
	Icw (kA)	3	3	3	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kA)	15	15	15	20	30	20	20	30	30	30

Upstream	Icu (kA)		Ir	Switch-disconnector conditional short-circuit current and related making capacity											
Circuit breaker:	415 V	440 V													
NSXm E TMD, Micrologic	16	10	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T	T	T
			Ir ≤ 50		T	T	T	T	T	T	T	T	T	T	T
			Ir ≤ 63		T	T	T	T	T	T	T	T	T	T	T
			Ir ≤ 80			T	T	T	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T	T	T
			Ir ≤ 160							T	T	T	T	T	T
NSXm B TMD, Micrologic	25	20	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T	T	
			Ir ≤ 50		T	T	T	T	T	T	T	T	T	T	
			Ir ≤ 63		T	T	T	T	T	T	T	T	T	T	
			Ir ≤ 80			T	T	T	T	T	T	T	T	T	
			Ir ≤ 100				T	T	T	T	T	T	T	T	
			Ir ≤ 125						T	T	T	T	T	T	
			Ir ≤ 160							T	T	T	T	T	
NSXm F TMD, Micrologic	36	35	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T	T	
			Ir ≤ 50		T	T	T	T	T	T	T	T	T		
			Ir ≤ 63		T	T	T	T	T	T	T	T	T		
			Ir ≤ 80			T	T	T	T	T	T	T	T		
			Ir ≤ 100				T	T	T	T	T	T	T		
			Ir ≤ 125						T	T	T	T	T		
			Ir ≤ 160							T	T	T	T		
NSXm N TMD, Micrologic	50	50	Ir ≤ 40	36/75	36/75	36/75	T	T	T	T	T	T	T		
			Ir ≤ 50		36/75	36/75	T	T	T	T	T	T			
			Ir ≤ 63		36/75	36/75	T	T	T	T	T	T			
			Ir ≤ 80			36/75	T	T	T	T	T	T			
			Ir ≤ 100				T	T	T	T	T	T			
			Ir ≤ 125						T	T	T	T			
			Ir ≤ 160							T	T	T			
NSXm H TMD, Micrologic	70	65	Ir ≤ 40	36/75	36/75	36/75	T	T	T	T	T	T			
			Ir ≤ 50		36/75	36/75	T	T	T	T	T				
			Ir ≤ 63		36/75	36/75	T	T	T	T	T				
			Ir ≤ 80			36/75	T	T	T	T	T				
			Ir ≤ 100				T	T	T	T	T				
			Ir ≤ 125						T	T	T				
			Ir ≤ 160							T	T				

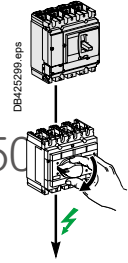
- T : Protection of the switch-disconnector is ensured but combination not very relevant
- : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
- 36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured



Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NSX100 to 250

Downstream: ComPacT INS40 to INS250, INV100 to INV250

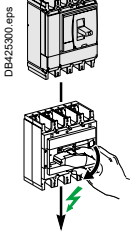


Ue ≤ 440 V AC

Downstream	Switch-disconnector	INS40	INS63	INS80	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
		Ith A 60°	40	63	80	100	100	125	160	160	200
Icw (kA)		3	3	3	5.5	8.5	5.5	5.5	8.5	8.5	8.5
Icm (kA)		15	15	15	20	30	20	20	30	30	30

Upstream circuit breaker	Icu (kA)			Ir	Switch-disconnector conditional short-circuit current and related making capacity											
	415V	440V														
NSX100B NSX160B TMD / TMG / Micrologic	25	20	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T	T	T	
				Ir ≤ 63	T	T	T	T	T	T	T	T	T	T	T	
				Ir ≤ 80			T	T	T	T	T	T	T	T	T	T
				Ir ≤ 100				T	T	T	T	T	T	T	T	T
				Ir ≤ 125						T	T	T	T	T	T	T
NSX250B TMD / TMG / Micrologic	25	20	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T	T		
				Ir ≤ 63	T	T	T	T	T	T	T	T	T	T		
				Ir ≤ 80			T	T	T	T	T	T	T	T		
				Ir ≤ 100				T	T	T	T	T	T	T		
				Ir ≤ 125						T	T	T	T	T		
NSX100F NSX160F TMD / TMG / Micrologic	36	35	Ir ≤ 40	36/75	36/75	36/75	T	T	T	T	T	T	T	T		
				Ir ≤ 63	36/75	36/75	T	T	T	T	T	T	T			
				Ir ≤ 80			36/75	T	T	T	T	T	T			
				Ir ≤ 100				T	T	T	T	T	T			
				Ir ≤ 125						T	T	T	T			
NSX250F TMD / TMG / Micrologic	36	35	Ir ≤ 40	25/52	25/52	25/52	T	T	T	T	T	T	T			
				Ir ≤ 63	25/52	25/52	T	T	T	T	T	T				
				Ir ≤ 80			25/52	T	T	T	T	T				
				Ir ≤ 100				T	T	T	T	T				
				Ir ≤ 125						T	T	T				
NSX100N/H NSX160N/H TMD / TMG / Micrologic	50/70	50/65	Ir ≤ 40	25/52	25/52	25/52	T	T	T	T	T	T				
				Ir ≤ 63	25/52	25/52	T	T	T	T	T					
				Ir ≤ 80			25/52	T	T	T	T					
				Ir ≤ 100				T	T	T	T					
				Ir ≤ 125						T	T					
NSX250N/H TMD / TMG / Micrologic	50/70	50/65	Ir ≤ 40	25/52	25/52	25/52	T	T	T	T	T					
				Ir ≤ 63	25/52	25/52	T	T	T	T						
				Ir ≤ 80			25/52	T	T	T						
				Ir ≤ 100				T	T	T						
				Ir ≤ 125						T						
NSX100S/L/R TMD / TMG / Micrologic	100/ 150/ 200	90/ 130/ 200	Ir ≤ 40	36/75	36/75	36/75	65/143	T	65/143	65/143	T	T				
				Ir ≤ 63	36/75	36/75	36/75	65/143	T	65/143	65/143					
				Ir ≤ 80			36/75	65/143	T	65/143	65/143					
				Ir ≤ 100				65/143	T	65/143	65/143					
				NSX160S/L TMD / TMG / Micrologic	100/ 150	90/ 130	Ir ≤ 40	36/75	36/75	36/75	65/143	T	65/143	65/143	T	T
Ir ≤ 63	36/75	36/75	36/75					65/143	T	65/143	65/143					
Ir ≤ 80			36/75					65/143	T	65/143	65/143					
Ir ≤ 100								65/143	T	65/143	65/143					
Ir ≤ 125										65/143	65/143					
NSX250S/L/R TMD / TMG / Micrologic	100/ 150/ 200	90/ 130/ 200	Ir ≤ 40	25/52	25/52	25/52	65/143	T	65/143	65/143	T	T				
				Ir ≤ 63	25/52	25/52	25/52	65/143	T	65/143	65/143					
				Ir ≤ 80			25/52	65/143	T	65/143	65/143					
				Ir ≤ 100				65/143	T	65/143	65/143					
				Ir ≤ 125						65/143	65/143					

- T** : Protection of the switch-disconnector is ensured but combination not very relevant
- T** : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
- 36/75** : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured



Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NSX400 to 630

Downstream: ComPacT INS/INV100 to 630

Ue ≤ 440 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250-INV250	INS320-INV320	INS400-INV400	INS500-INV500	INS630-INV630	INS630b-INV630b
		Ith A 60°	100	125	160	160	200	250	320	400	500	630	630
	Icw (kA)	5.5	8.5	5.5	5.5	8.5	8.5	8.5	20	20	20	20	35
	Icm (kA)	20	30	20	20	30	30	30	50	50	50	50	75

Upstream Circuit breaker	Icu (kA)		Setting Ir	Switch-disconnector conditional short-circuit current and related making capacity											
	415 V	440 V		16/32	T	16/32	16/32	T	T	T	T	T	T	T	T
NSX400F NSX630F Micrologic	36	30	Ir = 100 [1]	16/32	T	16/32	16/32	T	T	T	T	T	T	T	T
			Ir ≤ 160			16/32	T	T	T	T	T	T	T	T	T
			Ir ≤ 200						T	T	T	T	T	T	T
			Ir ≤ 250								T	T	T	T	T
			Ir ≤ 320									T	T	T	T
			Ir ≤ 400										T	T	T
			Ir ≤ 500											T	T
NSX400N NSX630N Micrologic	50	42	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
			Ir ≤ 160			16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
			Ir ≤ 200						36/75	36/75	T	T	T	T	T
			Ir ≤ 250							36/75	T	T	T	T	T
			Ir ≤ 320								T	T	T	T	T
			Ir ≤ 400									T	T	T	T
			Ir ≤ 500										T	T	T
NSX400H NSX630H Micrologic	70	65	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
			Ir ≤ 160			16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
			Ir ≤ 200						36/75	36/75	T	T	T	T	T
			Ir ≤ 250							36/75	T	T	T	T	T
			Ir ≤ 320								T	T	T	T	T
			Ir ≤ 400									T	T	T	T
			Ir ≤ 500										T	T	T
NSX400S NSX630S Micrologic	100	90	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
			Ir ≤ 160			16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
			Ir ≤ 200						36/75	36/75	T	T	T	T	T
			Ir ≤ 250							36/75	T	T	T	T	T
			Ir ≤ 320								T	T	T	T	T
			Ir ≤ 400									T	T	T	T
			Ir ≤ 500										T	T	T
NSX400L NSX630L Micrologic	150	130	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
			Ir ≤ 160			16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
			Ir ≤ 200						36/75	36/75	T	T	T	T	T
			Ir ≤ 250							36/75	T	T	T	T	T
			Ir ≤ 320								T	T	T	T	T
			Ir ≤ 400									T	T	T	T
			Ir ≤ 500										T	T	T
NSX400R NSX630R Micrologic	200	200	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	150/330	150/330	150/330	150/330	T
			Ir ≤ 160			16/32	16/32	36/75	36/75	36/75	150/330	150/330	150/330	150/330	T
			Ir ≤ 200						36/75	36/75	150/330	150/330	150/330	150/330	T
			Ir ≤ 250							36/75	150/330	150/330	150/330	150/330	T
			Ir ≤ 320								150/330	150/330	150/330	150/330	T
			Ir ≤ 400									150/330	150/330	150/330	T
			Ir ≤ 500										150/330	150/330	T
Ir ≤ 630											150/330	T			

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA

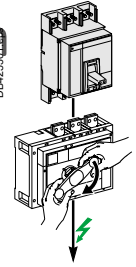
: Protection of the switch-disconnector is not ensured

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NS630b to 3200, MasterPacT MTZ1

Downstream: ComPacT INS/INV500 to 2500

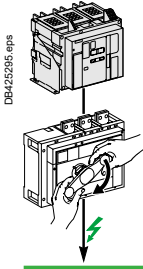


$U_e \leq 440 \text{ V AC}$

Downstream	Switch-disconnector	INS500	INS630	INS630b	INS800	INS1000	INS1250	INS1600	INS2000	INS2500	
		INV500	INV630	INV630b	INV800	INV1000	INV1250	INV1600	INV2000	INV2500	
		Ith A 60°	500	630	630	800	1000	1250	1600	2000	2500
		Icw (kA)	20	20	35	35	35	35	35	50	50
Icm (kA)	50	50	75	75	75	75	75	105	105		

Upstream Circuit breaker	Icu (kA)		Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity									
	415 V	440 V		20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
NS630bN	50	50	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
NS800N			Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
NS1000N			Ir ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
NS1250N			Ir ≤ 1000					35/75	35/75	35/75	35/75	T	T
NS1600N			Ir ≤ 1250						35/75	35/75	35/75	T	T
			Ir ≤ 1600							35/75	35/75	T	T
NS630bH	70	65	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
NS800H			Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
NS1000H			Ir ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105	
NS1250H			Ir ≤ 1000					35/75	35/75	35/75	50/105	50/105	
NS1600H			Ir ≤ 1250						35/75	35/75	50/105	50/105	
			Ir ≤ 1600							35/75	50/105	50/105	
NS630bL	150	130	Ir ≤ 500	50/105	50/105	T	T	T	T	T	T	T	
NS800L			Ir ≤ 630		50/105	T	T	T	T	T	T	T	
NS1000L			Ir ≤ 800				T	T	T	T	T	T	
			Ir ≤ 1000					T	T	T	T	T	
NS630bLB	200	200	Ir ≤ 500	90/200	90/200	T	T	T	T	T	T	T	
NS800LB			Ir ≤ 630		90/200	T	T	T	T	T	T	T	
			Ir ≤ 800				T	T	T	T	T	T	
NS1600bN	70	65	Ir ≤ 1250						35/75	35/75	50/105	50/105	
NS2000N			Ir ≤ 1600							35/75	50/105	50/105	
NS2500N			Ir ≤ 2000								50/105	50/105	
NS3200N			Ir ≤ 2500									50/105	
NS1600bH	85	85	Ir ≤ 1250						35/75	35/75	50/105	50/105	
NS2000H			Ir ≤ 1600							35/75	50/105	50/105	
NS2500H			Ir ≤ 2000								50/105	50/105	
NS3200H			Ir ≤ 2500									50/105	
MTZ1 06H1	42	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T	
MTZ1 08H1			Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T	
MTZ1 10H1			Ir ≤ 800				35/75	35/75	35/75	35/75	T	T	
MTZ1 12H1			Ir ≤ 1000					35/75	35/75	35/75	T	T	
MTZ1 16H1			Ir ≤ 1250						35/75	35/75	T	T	
			Ir ≤ 1600							35/75	T	T	
MTZ1 06H2	50	50	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T	
MTZ1 08H2			Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T	
MTZ1 10H2			Ir ≤ 800				35/75	35/75	35/75	35/75	T	T	
MTZ1 12H2			Ir ≤ 1000					35/75	35/75	35/75	T	T	
MTZ1 16H2			Ir ≤ 1250						35/75	35/75	T	T	
			Ir ≤ 1600							35/75	T	T	
MTZ1 06H3	66	66	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
MTZ1 08H3			Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
MTZ1 10H3			Ir ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105	
MTZ1 12H3			Ir ≤ 1000					35/75	35/75	35/75	50/105	50/105	
MTZ1 16H3			Ir ≤ 1250						35/75	35/75	50/105	50/105	
			Ir ≤ 1600							35/75	50/105	50/105	
MTZ1 06L1	150	130	Ir ≤ 500	50/105	50/105	100/220	100/220	100/220	100/220	100/220	100/220	100/220	
MTZ1 08L1			Ir ≤ 630		50/105	100/220	100/220	100/220	100/220	100/220	100/220	100/220	
MTZ1 10L1			Ir ≤ 800				100/220	100/220	100/220	100/220	100/220	100/220	
			Ir ≤ 1000					100/220	100/220	100/220	100/220	100/220	

- T : Protection of the switch-disconnector is ensured but combination not very relevant
- T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
- 36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured



Switch-Disconnecter - Circuit Breaker Coordination

Upstream: MasterPacT MTZ2

Downstream: ComPacT INS/INV500 to 2500

Ue ≤ 440 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
Ith A 60°		500	630	630	800	1000	1250	1600	2000	2500
Icw (kA)		20	20	35	35	35	35	35	50	50
Icm (kA)		50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA)		Setting I _r	Switch-disconnector conditionnal short-circuit current and related making capacity									
	415 V	440 V		20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
MTZ2 08N1	42	42	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
MTZ2 10N1			I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
MTZ2 12N1			I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
MTZ2 16N1			I _r ≤ 1000					35/75	35/75	35/75	35/75	T	T
MTZ2 20N1			I _r ≤ 1250						35/75	35/75	35/75	T	T
			I _r ≤ 1600							35/75	35/75	T	T
			I _r ≤ 2000								35/75	T	T
MTZ2 08H1	66	66	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
MTZ2 10H1			I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
MTZ2 12H1			I _r ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105	
MTZ2 16H1			I _r ≤ 1000					35/75	35/75	35/75	50/105	50/105	
MTZ2 20H1			I _r ≤ 1250						35/75	35/75	50/105	50/105	
MTZ2 25H1			I _r ≤ 1600							35/75	35/75	50/105	
			I _r ≤ 2000								50/105	50/105	
			I _r ≤ 2500									50/105	
MTZ2 08H2	100	100	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
MTZ2 10H2			I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
MTZ2 12H2			I _r ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105	
MTZ2 16H2			I _r ≤ 1000					35/75	35/75	35/75	50/105	50/105	
MTZ2 20H2			I _r ≤ 1250						35/75	35/75	50/105	50/105	
MTZ2 25H2			I _r ≤ 1600						35/75	35/75	50/105	50/105	
MTZ2 20H3	150	150	I _r ≤ 2000								50/105	50/105	
MTZ2 25H3			I _r ≤ 2500									50/105	

- T : Protection of the switch-disconnector is ensured but combination not very relevant
- T : Switch-disconnector is Totally coordinated up to I_{cu} of circuit breaker installed on supply side
- 36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured



Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NSXm, ComPacT NSX100 to 250

Downstream: ComPacT INS40 to 250, ComPacT INV100 to 250

Ue: 500-525 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	100	100	125	160	160	200	250
	Icw (kA)	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kA)	20	30	20	20	30	30	30

Upstream Circuit breaker	Icu (kA)		Ir	Switch-disconnector conditional short-circuit current and related making capacity							
	500 V	525 V									
NSXm E/B TMD	8/10	-	Ir ≤ 40	T	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T	
			Ir ≤ 63	T	T	T	T	T	T	T	
NSXm F TMD	15	10	Ir ≤ 40	T	T	T	T	T	T	T	
			Ir ≤ 50	T	T	T	T	T	T		
			Ir ≤ 63	T	T	T	T	T	T		
NSXm N TMD	25	15	Ir ≤ 40	T	T	T	T	T	T	T	
			Ir ≤ 50	T	T	T	T	T	T		
			Ir ≤ 63	T	T	T	T	T	T		
NSXm H TMD	30	22	Ir ≤ 40	T	T	T	T	T	T	T	
			Ir ≤ 50	T	T	T	T	T	T		
			Ir ≤ 63	T	T	T	T	T	T		
NSX100B NSX160B NSX250B TMD / TMG / Micrologic	15	-	Ir ≤ 100	T	T	T	T	T	T	T	
			Ir ≤ 125			T	T	T	T		
			Ir ≤ 160				T	T	T		
			Ir ≤ 200					T	T		
NSX100F NSX160F NSX250F TMD / TMG / Micrologic	25	22	Ir ≤ 100	T	T	T	T	T	T		
			Ir ≤ 125			T	T	T			
			Ir ≤ 160				T	T			
			Ir ≤ 200					T			
NSX100N NSX160N NSX250N TMD / TMG / Micrologic	36	35	Ir ≤ 100	22/46	T	22/46	T	T	T		
			Ir ≤ 125			22/46	T	T			
			Ir ≤ 160				T	T			
			Ir ≤ 200					T			
NSX100H NSX160H NSX250H TMD / TMG / Micrologic	50	35	Ir ≤ 100	22/46	T	22/46	T	T	T		
			Ir ≤ 125			22/46	T	T			
			Ir ≤ 160				T	T			
			Ir ≤ 200					T			
NSX100S NSX160S NSX250S TMD / TMG / Micrologic	65	40	Ir ≤ 100	22/46	T	22/46	T	T	T		
			Ir ≤ 125			22/46	T	T			
			Ir ≤ 160				T	T			
			Ir ≤ 200					T			
NSX100L NSX160L NSX250L TMD / TMG / Micrologic	70	50	Ir ≤ 100	22/46	T	22/46	T	T	T		
			Ir ≤ 125			22/46	T	T			
			Ir ≤ 160				T	T			
			Ir ≤ 200					T			
NSX100R NSX250R TMD / TMG / Micrologic	80	65	Ir ≤ 100	22/46	T	22/46	T	T	T		
			Ir ≤ 125			22/46	T	T			
			Ir ≤ 160				T	T			
			Ir ≤ 200					T			
			Ir ≤ 250						T		

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA

: Protection of the switch-disconnector is not ensured

Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NSXm, ComPacT NSX100 to 250

Downstream: ComPacT INS40 to 250, ComPacT INV100 to 250

Ue: 690 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
		I _{th} A 60°	100	100	125	160	160	200
I _{cw} (kA)		5.5	8.5	5.5	5.5	8.5	8.5	8.5
I _{cm} (kA)		20	30	20	20	30	30	30

Upstream Circuit breaker	I _{cu} (kA) 690 V	I _r	Switch-disconnector conditional short-circuit current and related making capacity						
NSXm N TMD	10	I _r ≤ 40	T	T	T	T	T	T	T
		I _r ≤ 50	T	T	T	T	T	T	T
		I _r ≤ 63	T	T	T	T	T	T	T
NSXm H TMD	10	I _r ≤ 40	T	T	T	T	T	T	T
		I _r ≤ 50	T	T	T	T	T	T	T
		I _r ≤ 63	T	T	T	T	T	T	T
NSX100F NSX160F NSX250F TMD / TMG / Micrologic	8	I _r ≤ 100	T	T	T	T	T	T	T
		I _r ≤ 125			T	T	T	T	T
		I _r ≤ 160				T	T	T	T
		I _r ≤ 200						T	T
		I _r ≤ 250							T
NSX100N NSX160N NSX250N TMD / TMG / Micrologic	10	I _r ≤ 100	T	T	T	T	T	T	T
		I _r ≤ 125			T	T	T	T	T
		I _r ≤ 160				T	T	T	T
		I _r ≤ 200						T	T
		I _r ≤ 250							T
NSX100H NSX160H NSX250H TMD / TMG / Micrologic	10	I _r ≤ 100	T	T	T	T	T	T	T
		I _r ≤ 125			T	T	T	T	T
		I _r ≤ 160				T	T	T	T
		I _r ≤ 200						T	T
		I _r ≤ 250							T
NSX100S NSX160S NSX250S TMD / TMG / Micrologic	15	I _r ≤ 100	T	T	T	T	T	T	T
		I _r ≤ 125			T	T	T	T	T
		I _r ≤ 160				T	T	T	T
		I _r ≤ 200						T	T
		I _r ≤ 250							T
NSX100L NSX160L NSX250L TMD / TMG / Micrologic	20	I _r ≤ 100	T	T	T	T	T	T	T
		I _r ≤ 125			T	T	T	T	T
		I _r ≤ 160				T	T	T	T
		I _r ≤ 200						T	T
		I _r ≤ 250							T
NSX100R NSX250R TMD / TMG / Micrologic	45	I _r ≤ 100	20/40	T	20/40	20/40	T	T	T
		I _r ≤ 125			20/40	20/40	T	T	T
		I _r ≤ 160				20/40	T	T	T
		I _r ≤ 200						T	T
		I _r ≤ 250							T

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to I_{cu} of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA

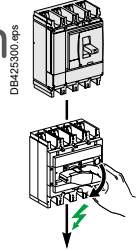
: Protection of the switch-disconnector is not ensured



Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NSX400 to 630

Downstream: ComPacT INS/INV100 to 630



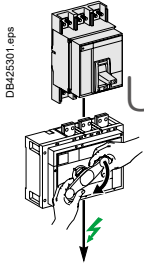
Ue: 500-525 V AC

Downstream	Switch-Disconnecter	INS250-100 INV100	INS250-160 INV160	INS250-200 INV200	INS250 INV250	INS320 INV320	INS400 INV400	INS500 INV500	INS630 INV630	INS630b INV630b
		Ith A 60°	100	160	200	250	320	400	500	630
	Icw (kA)	8.5	8.5	8.5	8.5	20	20	20	20	35
	Icm (kA)	30	30	30	30	50	50	50	50	75

Upstream	Icu (kA)		Ir	Switch-disconnector conditionnal short-circuit current and related making capacity									
	500 V	525 V		INS250-100 INV100	INS250-160 INV160	INS250-200 INV200	INS250 INV250	INS320 INV320	INS400 INV400	INS500 INV500	INS630 INV630	INS630b INV630b	
NSX400F NSX630F Micrologic	25	20	Ir = 100 [1]	T	T	T	T	T	T	T	T	T	
			Ir ≤ 160		T	T	T	T	T	T	T	T	
			Ir ≤ 200			T	T	T	T	T	T	T	
			Ir ≤ 250				T	T	T	T	T	T	
			Ir ≤ 320					T	T	T	T	T	
			Ir ≤ 400						T	T	T	T	
			Ir ≤ 500							T	T	T	
NSX400N NSX630N Micrologic	30	22	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 200			25/52	25/52	T	T	T	T	T	
			Ir ≤ 250				25/52	T	T	T	T	T	
			Ir ≤ 320					T	T	T	T	T	
			Ir ≤ 400						T	T	T	T	
			Ir ≤ 500							T	T	T	
NSX400H NSX630H Micrologic	50	35	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 200			25/52	25/52	T	T	T	T	T	
			Ir ≤ 250				25/52	T	T	T	T	T	
			Ir ≤ 320					T	T	T	T	T	
			Ir ≤ 400						T	T	T	T	
			Ir ≤ 500							T	T	T	
NSX400S NSX630S Micrologic	65	40	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 200			25/52	25/52	T	T	T	T	T	
			Ir ≤ 250				25/52	T	T	T	T	T	
			Ir ≤ 320					T	T	T	T	T	
			Ir ≤ 400						T	T	T	T	
			Ir ≤ 500							T	T	T	
NSX400L NSX630L Micrologic	70	50	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 200			25/52	25/52	T	T	T	T	T	
			Ir ≤ 250				25/52	T	T	T	T	T	
			Ir ≤ 320					T	T	T	T	T	
			Ir ≤ 400						T	T	T	T	
			Ir ≤ 500							T	T	T	
NSX400R NSX630R Micrologic	80	65	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T	
			Ir ≤ 200			25/52	25/52	T	T	T	T	T	
			Ir ≤ 250				25/52	T	T	T	T	T	
			Ir ≤ 320					T	T	T	T	T	
			Ir ≤ 400						T	T	T	T	
			Ir ≤ 500							T	T	T	
Ir ≤ 630								T	T				

- T : Protection of the switch-disconnector is ensured but combination not very relevant
- T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
- 36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured

[1] NSX400 with Micrologic 250 A can be set down to 100 A.



Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NS630b to 3200, MasterPacT MTZ1/2
Downstream: ComPacT INS/INV500 to 2500

Ue: 500-525 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	500	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kA)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 500-525 V	I _r	Switch-disconnector conditional short-circuit current and related making capacity									
			INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500	
NS630bN NS800N NS1000N NS1250N NS1600N	40	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1000					35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1250 I _r ≤ 1600						35/75	35/75	35/75	T	T
NS630bH NS800H NS1000H NS1250H NS1600H	50	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1000					35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1250 I _r ≤ 1600						35/75	35/75	35/75	T	T
NS630bL NS800L NS1000L	100	I _r ≤ 500	36/75	36/75	T	T	T	T	T	T	T	T
		I _r ≤ 630		36/75	T	T	T	T	T	T	T	T
		I _r ≤ 800				T	T	T	T	T	T	T
		I _r ≤ 1000					T	T	T	T	T	T
NS630bLB NS800LB	100	I _r ≤ 500	70/154	70/154	T	T	T	T	T	T	T	T
		I _r ≤ 630		70/154	T	T	T	T	T	T	T	T
		I _r ≤ 800				T	T	T	T	T	T	T
NS1600bN NS2000N NS2500N NS3200N	65	I _r ≤ 1250						35/75	35/75	50/105	50/105	
		I _r ≤ 1600							35/75	50/105	50/105	
		I _r ≤ 2000								50/105	50/105	
		I _r ≤ 2500									50/105	
MTZ1 06H1/H2 MTZ1 08H1/2 MTZ1 10H1/2 MTZ1 12H1/2 MTZ1 16H1/2	42	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1000					35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1250 I _r ≤ 1600						35/75	35/75	35/75	T	T
MTZ1 06L1 MTZ1 08L1 MTZ1 10L1	100	I _r ≤ 500	36/75	36/75	T	T	T	T	T	T	T	T
		I _r ≤ 630		36/75	T	T	T	T	T	T	T	T
		I _r ≤ 800				T	T	T	T	T	T	T
		I _r ≤ 1000					T	T	T	T	T	T
MTZ2 08N1 MTZ2 10N1 MTZ2 12N1 MTZ2 16N1 MTZ2 20N1	42	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1000					35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1250						35/75	35/75	35/75	T	T
		I _r ≤ 1600 I _r ≤ 2000							35/75	35/75	T	T
MTZ2 08 MTZ2 10 MTZ2 12 MTZ2 16 MTZ2 20 MTZ2 25 MTZ2 32 MTZ2 40	H1/H/H3/L1 66/85/130	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105	
		I _r ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105	
		I _r ≤ 1000					35/75	35/75	35/75	50/105	50/105	
		I _r ≤ 1250						35/75	35/75	50/105	50/105	
		I _r ≤ 1600						35/75	35/75	50/105	50/105	
		I _r ≤ 2000							35/75	50/105	50/105	
		I _r ≤ 2500								50/105	50/105	

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to I_{cu} of circuit breaker installed on supply side

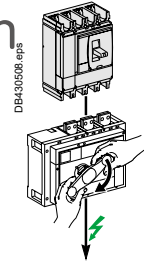
36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA

: Protection of the switch-disconnector is not ensured

Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NSX400 to 630

Downstream: ComPacT INS/INV100 to 630



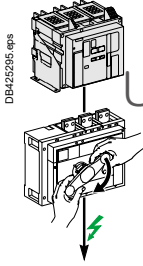
Ue: 690 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	630	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kA)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker 690 V	Icu (kA)	Ir	Switch-disconnector conditional short-circuit current and related making capacity									
			INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500	
NSX400F NSX630F Micrologic	10	Ir = 100 ^[1]	T	T	T	T	T	T	T	T	T	
		Ir ≤ 160		T	T	T	T	T	T	T	T	
		Ir ≤ 200			T	T	T	T	T	T	T	
		Ir ≤ 250				T	T	T	T	T	T	
		Ir ≤ 320					T	T	T	T	T	
		Ir ≤ 400						T	T	T	T	
		Ir ≤ 500							T	T	T	
NSX400N NSX630N Micrologic	10	Ir = 100 ^[1]	T	T	T	T	T	T	T	T	T	
		Ir ≤ 160		T	T	T	T	T	T	T	T	
		Ir ≤ 200			T	T	T	T	T	T	T	
		Ir ≤ 250				T	T	T	T	T	T	
		Ir ≤ 320					T	T	T	T	T	
		Ir ≤ 400						T	T	T	T	
		Ir ≤ 500							T	T	T	
NSX400H NSX630H Micrologic	20	Ir = 100 ^[1]	T	T	T	T	T	T	T	T	T	
		Ir ≤ 160		T	T	T	T	T	T	T	T	
		Ir ≤ 200			T	T	T	T	T	T	T	
		Ir ≤ 250				T	T	T	T	T	T	
		Ir ≤ 320					T	T	T	T	T	
		Ir ≤ 400						T	T	T	T	
		Ir ≤ 500							T	T	T	
NSX400S NSX630S Micrologic	25	Ir = 100 ^[1]	T	T	T	T	T	T	T	T	T	
		Ir ≤ 160		T	T	T	T	T	T	T	T	
		Ir ≤ 200			T	T	T	T	T	T	T	
		Ir ≤ 250				T	T	T	T	T	T	
		Ir ≤ 320					T	T	T	T	T	
		Ir ≤ 400						T	T	T	T	
		Ir ≤ 500							T	T	T	
NSX400L NSX630L Micrologic	35	Ir = 100 ^[1]	25/52	25/52	25/52	25/52	T	T	T	T	T	
		Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T	
		Ir ≤ 200			25/52	25/52	T	T	T	T	T	
		Ir ≤ 250				25/52	T	T	T	T	T	
		Ir ≤ 320					T	T	T	T	T	
		Ir ≤ 400						T	T	T	T	
		Ir ≤ 500							T	T	T	
NSX400R NSX630R Micrologic	45	Ir = 100 ^[1]	25/52	25/52	25/52	25/52	T	T	T	T	T	
		Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T	
		Ir ≤ 200			25/52	25/52	T	T	T	T	T	
		Ir ≤ 250				25/52	T	T	T	T	T	
		Ir ≤ 320					T	T	T	T	T	
		Ir ≤ 400						T	T	T	T	
		Ir ≤ 500							T	T	T	

- T : Protection of the switch-disconnector is ensured but combination not very relevant
- T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
- 36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured

[1] NSX400 with Micrologic 250 A can be set down to 100 A.



Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NS630b to 3200, MasterPacT MTZ1/2
Downstream: ComPacT INS/INV 500 to 2500

Ue: 690 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	630	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kA)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 690 V	Ir	Switch-disconnector conditional short-circuit current and related making capacity									
NS630bN NS800N NS1000N NS1250N NS1600N	30	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1000					35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1250 I _r ≤ 1600						35/75	35/75	35/75	T	T
NS630bH NS800H NS1000H NS1250H NS1600H	42	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	50/105	50/105
		I _r ≤ 1000					35/75	35/75	35/75	35/75	50/105	50/105
		I _r ≤ 1250 I _r ≤ 1600						35/75	35/75	35/75	50/105	50/105
NS630bLB NS800LB	75	I _r ≤ 500	70/154	70/154	T	T	T	T	T	T	T	
		I _r ≤ 630		70/154	T	T	T	T	T	T	T	
		I _r ≤ 800			T	T	T	T	T	T	T	
NS1600bN NS2000N NS2500N NS3200N	65	I _r ≤ 1250						35/75	35/75	50/105	50/105	
		I _r ≤ 1600						35/75	35/75	50/105	50/105	
		I _r ≤ 2000								50/105	50/105	
		I _r ≤ 2500									50/105	
MTZ1 06H1/H2 MTZ1 08H1/2 MTZ1 10H1/2 MTZ1 12H1/2 MTZ1 16H1/2	42	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1000					35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1250 I _r ≤ 1600						35/75	35/75	35/75	T	T
MTZ1 06L1 MTZ1 08L1 MTZ1 10L1	25	I _r ≤ 500	T	T	T	T	T	T	T	T	T	
		I _r ≤ 630		T	T	T	T	T	T	T	T	
		I _r ≤ 800				T	T	T	T	T	T	
		I _r ≤ 1000					T	T	T	T	T	
MTZ2 08N1 MTZ2 10N1 MTZ2 12N1 MTZ2 16N1 MTZ2 20N1	42	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1000					35/75	35/75	35/75	35/75	T	T
		I _r ≤ 1250						35/75	35/75	35/75	T	T
		I _r ≤ 1600 I _r ≤ 2000							35/75	35/75	T	T
MTZ2 08 MTZ2 10 MTZ2 12 MTZ2 16 MTZ2 20 MTZ2 25 MTZ2 32 MTZ2 40	H1/H2/H3/L1 66/85/100/100	I _r ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		I _r ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		I _r ≤ 800				35/75	35/75	35/75	35/75	35/75	50/105	50/105
		I _r ≤ 1000					35/75	35/75	35/75	35/75	50/105	50/105
		I _r ≤ 1250						35/75	35/75	35/75	50/105	50/105
		I _r ≤ 1600						35/75	35/75	35/75	50/105	50/105
		I _r ≤ 2000							35/75	35/75	50/105	50/105
		I _r ≤ 2500								35/75	50/105	50/105

- T : Protection of the switch-disconnector is ensured but combination not very relevant
- T : Switch-disconnector is totally coordinated up to I_{cu} of circuit breaker installed on supply side
- 36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured



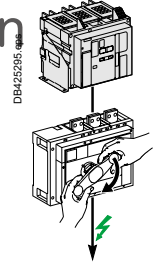
Switch-Disconnecter - Circuit Breaker Coordination

Upstream: ComPacT NSX100 to 630

Downstream: ComPacT INS/INV500 to 1000

Ue: 500-525 V AC

Ue: 690 V AC



Downstream	Switch-disconnector	NSX100NA	NSX160NA	NSX250NA	NSX400NA	NSX630NA
	Ith A 60°	100	160	250	400	630
	Icw (kA)	1.8	2.5	3.5	5	6
	Icm (kA)	2.6	3.6	4.9	7.1	8.5

Upstream Circuit breaker	Icu (kA)			I _r	Switch-disconnector conditional short-circuit current and related making capacity				
	500 V	525 V	690 V						
NSX100B NSX160B NSX250B TMD / TMG / Micrologic	15	-	-	I _r ≤ 50	T	T	T	T	T
				I _r ≤ 100	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
NSX100F NSX160F NSX250F TMD / TMG / Micrologic	25	22	8	I _r ≤ 50	T	T	T	T	T
				I _r ≤ 100	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
NSX400F NSX630F Micrologic	25	20	10	I _r = 100 [1]	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
				I _r ≤ 400				T	T
NSX100N NSX160N NSX250N TMD / TMG / Micrologic	36	35	10	I _r ≤ 50	T	T	T	T	T
				I _r ≤ 100	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
NSX400N NSX630N Micrologic	30	22	10	I _r = 100 [1]	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
				I _r ≤ 400				T	T
NSX100H NSX160H NSX250H TMD / TMG / Micrologic	50	35	10	I _r ≤ 50	T	T	T	T	T
				I _r ≤ 100	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
NSX400H NSX630H Micrologic	50	35	20	I _r = 100 [1]	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
				I _r ≤ 400				T	T
NSX100S NSX160S NSX250S TMD / TMG / Micrologic	65	40	15	I _r ≤ 50	T	T	T	T	T
				I _r ≤ 100	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
NSX400S NSX630S Micrologic	65	40	25	I _r = 100 [1]	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
				I _r ≤ 400				T	T
NSX100L NSX160L NSX250L TMD / TMG / Micrologic	70	50	20	I _r ≤ 50	T	T	T	T	T
				I _r ≤ 100	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
NSX400L NSX630L Micrologic	70	50	35	I _r = 100 [1]	T	T	T	T	T
				I _r ≤ 160		T	T	T	T
				I _r ≤ 250			T	T	T
				I _r ≤ 400				T	T
				I _r ≤ 630					T

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

: Protection of the switch-disconnector is not ensured

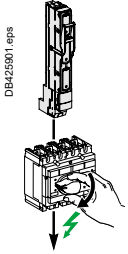
[1] NSX400 with Micrologic 250 A can be set down to 100 A.

Switch-Disconnecter - Fuse Coordination

Upstream: gG, aM, BS fuses

Downstream: ComPacT INS40 to 630, INV100 to 360

Ue ≤ 500 V AC



Downstream	Switch-Disconnecter	ComPacT INS 40 - 160						ComPacT INS250 ComPacT INV				ComPacT INS ComPacT INV			
		40	63	80	100	125	160	100	160	200	250	320	400	500	630
	Ith (A) 60°	40	63	80	100	125	160	100	160	200	250	320	400	500	630
	Icw (kA)	3	3	3	5.5	5.5	5.5	8.5	8.5	8.5	8.5	20	20	20	20
	Icm (kA)	15	15	15	20	20	20	30	30	30	30	50	50	50	50

Upstream Fuse type	Rating	Switch-disconnector conditionnal short-circuit current and related making capacity													
gG fuse link without overload relay	25	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40		T	T	T	T	T	T	T	T	T	T	T	T	T
	50		T	T	T	T	T	T	T	T	T	T	T	T	T
	63				T	T	T	T	T	T	T	T	T	T	T
	80				T	T	T	T	T	T	T	T	T	T	T
	100					T	T	T	T	T	T	T	T	T	T
	125						T	T	T	T	T	T	T	T	T
	160							T	T	T	T	T	T	T	T
	200								T	T	T	T	T	T	T
	225-250									T	T	T	T	T	T
	300-315										T	T	T	T	T
	355											T	T	T	T
	400												T	T	T
450													T	T	
500														T	
gG fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50-63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	80/176	80/176	80/176	T	T	T	T	T	T	T	T	T	T	T
	160	36/75	36/75	36/75	50/105	50/105	50/105	T	T	T	T	T	T	T	T
	200				36/75	36/75	36/75	T	T	T	T	T	T	T	T
	225-250							T	T	T	T	T	T	T	T
	300							T	T	T	T	T	T	T	T
	315							T	T	T	T	T	T	T	T
	355							50/105	50/105	50/105	50/105	T	T	T	T
	400-450											T	T	T	T
	500											T	T	T	T
	630											50/105	50/105	50/105	50/105
800												50/105	50/105	50/105	
aM Fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50 - 63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	80/176	80/176	80/176	T	T	T	T	T	T	T	T	T	T	T
	100	50/105	50/105	50/105	T	T	T	T	T	T	T	T	T	T	T
	125				T	T	T	T	T	T	T	T	T	T	T
	160				50/105	50/105	50/105	T	T	T	T	T	T	T	T
	200				36/75	36/75	36/75	T	T	T	T	T	T	T	T
	225							80/176	80/176	80/176	80/176	T	T	T	T
	250							50/105	50/105	50/105	50/105	T	T	T	T
	300-315											T	T	T	T
	355-400											T	T	T	T
	450											50/105	50/105	50/105	50/105
	500											50/105	50/105	50/105	50/105
	630											30/63	30/63	30/63	30/63
BS Fuse link with overload relay	32M63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63M80	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63M100	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100M125	50/105	50/105	50/105	T	T	T	T	T	T	T	T	T	T	T
	100M160				50/105	50/105	50/105	T	T	T	T	T	T	T	T
	100M200							T	T	T	T	T	T	T	T
	200M250							T	T	T	T	T	T	T	T
	200M315											T	T	T	T
	315M400											50/105	50/105	50/105	50/105
	400M500											40/84	40/84	40/84	40/84

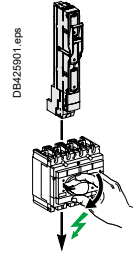
- T** : Protection of the switch-disconnector is ensured but combination not very relevant
- T** : Switch-disconnector is totally coordinated up to the breaking capacity of the fuse installed on supply side.
- 36/75** : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured

Note: Current limitation characteristics can be significantly different from one manufacturer to another. This table can not dispense to check selected fuse characteristics

Switch-Disconnecter - Fuse Coordination

Upstream: gG, aM, BS fuses

Downstream: ComPacT INS40 to 630, INV100 to 630



U_e ≤ 690 V AC

Downstream	Switch-Disconnecter	ComPacT INS 40 - 160			ComPacT INS250 ComPacT INV				ComPacT INS ComPacT INV			
		100	125	160	100	160	200	250	320	400	500	630
	I _{th} (A) 60°	100	125	160	100	160	200	250	320	400	500	630
	I _{cw} (kA)	5.5	5.5	5.5	8.5	8.5	8.5	8.5	20	20	20	20
	I _{cm} (kA)	20	20	20	30	30	30	30	50	50	50	50

Upstream												
Fuse type	Rating											
gG fuse link without overload relay	25	T										
	32	T										
	40	T										
	50	T										
	63	T										
	80	T										
	100	T										
	125		T									
	160			T								
	200				T							
	225-250					T						
	300-315						T					
	355							T				
	400								T			
	450									T		
500										T		
gG fuse link with overload relay	40	T										
	50-63	T										
	80	T										
	100	T										
	125	T										
	160		T									
	200			T								
	225-250				T							
	300					T						
	315						T					
	355							T				
	400-450								T			
	500									T		
	630								50/105	50/105	50/105	50/105
	800											50/105
aM Fuse link with overload relay	40	T										
	50 - 63	T										
	80	T										
	100	T										
	125		T									
	160			T								
	200				T							
	225					50/105	50/105	50/105	50/105			
	250									T		
	300-315										T	
	355-400											T
	450									50/105	50/105	50/105
	500									50/105	50/105	50/105
	630											30/63

- T : Protection of the switch-disconnector is ensured but combination not very relevant
- T : Switch-disconnector is totally coordinated up to I_{cu} of circuit breaker installed on supply side
- 36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kA
- : Protection of the switch-disconnector is not ensured

Note: Current limitation characteristics can be significantly different from one manufacturer to another. This table can not dispense to check selected fuse characteristics.

Catalogue Numbers

INS40 to 160
 Complete fixed/FC device and accessories E-2
 Accessories E-3

INS250-100 to 630
 Complete fixed/FC device and accessories E-5

INS250-100 to 630
 Complete fixed/FC device and accessories E-6

INV100 to 630
 Complete fixed/FC device and specific accessories E-7

INS250-100 to 250 and INV100 to 250
 Accessories E-8

INS320 to 630 and INV400 to 630
 Accessories E-11

INS630b to 2500
 Complete fixed/FC device and accessories E-13
 Complete fixed/FC device and specific accessories E-14

INS630b to 2500 and INV630b to 2500
 Accessories E-15

**INSE80 (40 to 80 A) Molded Case Switch
 UL489/CSA C22-2 N° 5.2**
 Complete fixed/FC device and accessories E-17

**INSJ400 (250 to 400 A) Molded Case Switch
 UL489/ CSA C22-2 N° 5.2**
 Complete fixed/FC device and accessories E-19

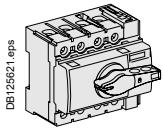


Other Chapters
 Functions and Characteristics A-1
 Installation Recommendations B-1
 Dimensions and Connection C-1
 Complementary Technical Information D-1

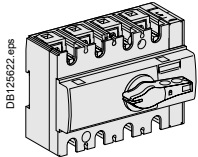
INS40 to 160

Complete fixed/FC Device and Accessories

ComPacT INS40 to 160 Standard Version with Black Handle

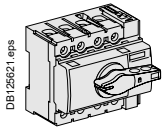


	3P	4P
ComPacT INS40	28900	28901
ComPacT INS63	28902	28903
ComPacT INS80	28904	28905
ComPacT INS80PV - Photovoltaic	-	28907

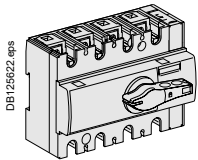


	3P	4P
ComPacT INS100	28908	28909
ComPacT INS125	28910	28911
ComPacT INS160	28912	28913

ComPacT INS40 to 160 with Red Handle and Yellow Front



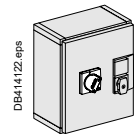
	3P	4P
ComPacT INS40	28916	28917
ComPacT INS63	28918	28919
ComPacT INS80	28920	28921



	3P	4P
ComPacT INS100	28924	28925
ComPacT INS125	28926	28927
ComPacT INS160	28928	28929

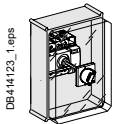
Individual Enclosures

IP55 heavy-duty sheetmetal enclosure



For INS40 to INS160 with extended standard rotary handle	31208
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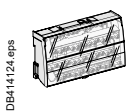
IP55 heavy-duty insulating enclosure



For INS40 to INS160 with extended standard rotary handle	28967
For INS40 to INS160 with extended red handle on yellow front	28968

Linery Distribution Blocks

Multi-stage Linery DS distribution block 4P






INS100 to 160	100 A, 4 x 7 holes (3 x 10 mm ² + 3 x 16 mm ² + 1 x 25 mm ²)	LGY410028
	125 A, 4 x 12 holes (4 x 16 mm ² + 7 x 25 mm ² + 1 x 35 mm ²)	LGY412548
	125 A, 4 x 15 holes (11 x 16 mm ² + 3 x 25 mm ² + 1 x 35 mm ²)	LGY412560
	160 A, 4 x 12 holes (1 x 70 mm ² + 3 x 35 mm ² + 8 x 25 mm ²)	LGY416048
Neutral terminal strip	100 A, 4 x 7 holes (2 x 25 mm ² + 5 x 16 mm ²)	LGYN1007
	125 A, 4 x 12 holes (1 x 35 mm ² + 7 x 25 mm ² + 4 x 16 mm ²)	LGYN12512
	125 A, 4 x 15 holes (4 x 35 mm ² + 11 x 25 mm ²)	LGYN12515

E

Connection Accessories (cont.)

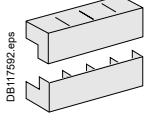
Connectors for bare Cu or Al cables

	Snap-in	INS100 to 160 S ≤ 95 mm ²	Set of 3	28947
			Set of 4	28948
	Distribution connector for 3 rigid cables up to 16 mm ² or 3 flexible cables up to 10 mm ²	INS40 to 80	Set of 3	19096 ^[1]
			Set of 4	19091 ^[1]
	Distribution connector for 4 rigid cables up to 25 mm ² or 4 flexible cables up to 16 mm ²	INS100 to 160	Set of 3	28949
			Set of 4	28950

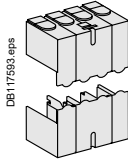
Crimp lugs for copper cables

	For 95 mm ² cables with interphase barriers	INS100 to 160	Set of 3	28951
			Set of 4	28952

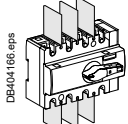
Terminal shrouds

	INS40 to 80	3P/4P	Set of 2	28955
			INS100 to 160	3P/4P

Terminal shields


	INS40 to 80	3P/4P	Set of 2	28957
			INS100 to 160	3P/4P

Interphase barriers

	INS100 to 160	3P/4P	Set of 6	28959
---	---------------	-------	----------	--------------

Electrical Auxiliaries

Auxiliary contacts

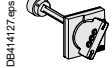
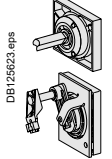
	1 CAF / CAO standard (early make or break)	INS40 to 160	29450
	1 CAF / CAO low level (early make or break)	INS40 to 160	29452

Rotary Handles

Direct front control or lateral control

Built-in

Accessories for conversion to extended rotary handles

	Front control (handle included)	For black handle	INS40 to 160	LV428941
		For red handle on yellow front	INS40 to 160	LV428942
	Lateral control (handle not included)	For black handle	INS40 to 160	28943
		For red handle on yellow front	INS40 to 160 ^[2]	28944
		Lateral control on PRAGMA F functional enclosure ^[3] (handle not included)	For black handle	INS40 to 160

[1] The terminal shield 28957 can't be used with this connector.

[2] For red/yellow switch versions only.

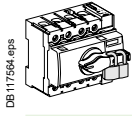
[3] Not available with Prisma.

E

INS40 to 160 Accessories

Locking and Interlocking

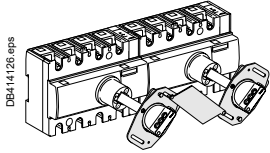
Handle locking



By 1 to 3 padlocks (OFF position), hasp dia. 5 to 8 mm, or by lead seals

Built-in

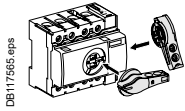
Interlocking for extended rotary handles



Mechanical interlocking for INS40 to INS160

28953

Spare Parts



Black handle

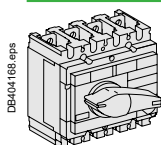
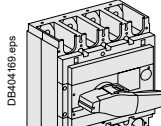
28962

Catalogue Numbers

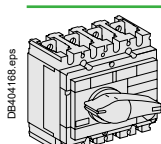
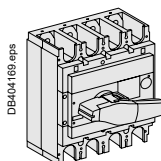
INS250-100 to 630

Complete fixed/FC Device and Accessories

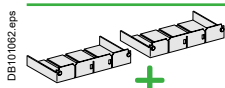
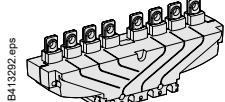
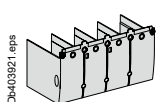
ComPacT INS250 to 630 Standard Version with Black Handle

 DB404168 eps	ComPacT INS250-100A	3P	4P
	ComPacT INS250-160A	31100	31101
	ComPacT INS250-200A	31104	31105
	ComPacT INS250	31102	31103
 DB404169 eps	ComPacT INS250	31106	31107
	ComPacT INS320	3P	4P
	ComPacT INS400	31108	31109
	ComPacT INS500	31110	31111
	ComPacT INS630	31112	31113
		31114	31115

ComPacT INS250 to 630 With Red Handle and Yellow Front

 DB404168 eps	ComPacT INS250-100A	3P	4P
	ComPacT INS250-160A	31120	31121
	ComPacT INS250	31124	31125
 DB404169 eps	ComPacT INS250	31126	31127
	ComPacT INS400	3P	4P
	ComPacT INS630	31130	31131
		31134	31135

Downstream Coupling Accessories

 DB101062 eps	Short terminal shields (1 pair) + "normal" source/"replacement" source	
	INS250/INS250	3/4P
 DB413292 eps	INS320 to INS630/INS320 to INS630	LV429359
		LV432620
 DB403921 eps	Long terminal shields (1 piece)	
	INS250 long terminal shield	LV429518
	INS320 to INS630	
	Long terminal shield, 45 mm (1 piece)	LV432594
	Long terminal shield for spreaders, 52.5 mm (1 piece)	LV432596

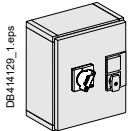


INS250-100 to 630

Complete fixed/FC Device and Accessories

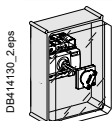
Individual Enclosures

IP55 heavy-duty sheetmetal enclosure



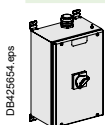
For INS250-100 to 250 with extended standard rotary handle	31210
For INS320 to 630 with extended standard rotary handle	31212
For INS320 to 630 with extended red rotary handle on yellow front	31213

IP55 heavy-duty insulating enclosure



For INS250-100 to 250 with extended standard rotary handle	31204
For INS250-100 to 250 with extended red rotary handle on yellow front	31205
For INS320 to 630 with extended red rotary handle on yellow front	31207

IP66



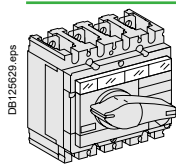
Enclosed disconnecter switch 200 A 3P in Stainless steel IP66 enclosure	LV431229 ^{[1][2]}
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[1] Only available for Norway, Sweden, Denmark, Finland).

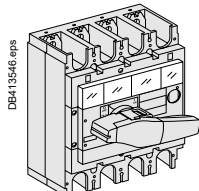
[2] Available in september 2017.

Complete fixed/FC Device and Specific Accessories

ComPacT INV100 to 630 standard version with black handle

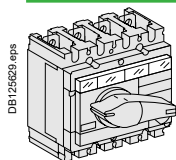


	3P	4P
ComPacT INV100	31160	31161
ComPacT INV160	31164	31165
ComPacT INV250	31166	31167

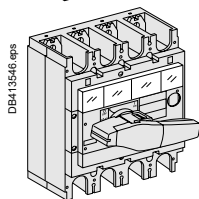


	3P	4P
ComPacT INV400	31170	31171
ComPacT INV630	31174	31175

ComPacT INV100 to 630 with Red Handle and Yellow Front



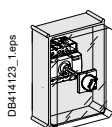
	3P	4P
ComPacT INV100	31180	31181
ComPacT INV160	31184	31185
ComPacT INV250	31186	31187



	3P	4P
ComPacT INV400	31190	31191
ComPacT INV630	31194	31195

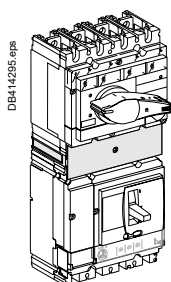
Individual Enclosures

IP55 heavy-duty insulating enclosure

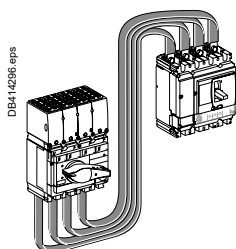


For INV100 to 250 with extended standard rotary handle	31204
For INV100 to 250 with extended red rotary handle on yellow front	31205
For INV400 to 630 with extended red rotary handle on yellow front	31207

Combination with ComPacT NSX Devices for Tarif Jaune / Tarif Vert



INV100 to 250 combination with NSX250	31066
INV400 to 630 combination with NSX250	31067
Front alignment base for INV400 to 630 combination with NSX250	LV431064
INV400 to 630 combination with NSX400/630	31068



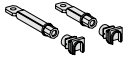

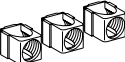
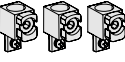


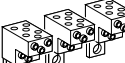


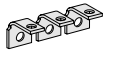

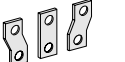
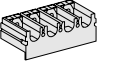
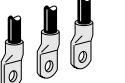

Flexible connection assembly for vertical INV100 to 250 with vertical NSX250 beside	31071
Flexible connection assembly for vertical INV400 to 630 with vertical NSX400/630 beside	31072
Flexible connection assembly for vertical INV400 to 630 with vertical NSX250 beside	31093

[1] Valid for new Prisma only.



INS250-100 to 250 and INV100 to 250 Accessories

Connection Accessories

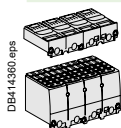
Rear connections				
	Short (1 pair)			LV429235
	Long (1 pair)			LV429236
Cable connectors				
	Snap-on, for cables:	Steel: 1.5 to 95 mm ² ; ≤ 160 A	Set of 3	LV429242
			Set of 4	LV429243
		Aluminium: 25 to 95 mm ² ; ≤ 250 A	Set of 3	LV429227
			Set of 4	LV429228
		Aluminium: 120 to 185 mm ² ; ≤ 250 A	Set of 3	LV429259
			Set of 4	LV429260
		Aluminium: 120 to 240 mm ² ; ≤ 250 A	Set of 3	LV429244
			Set of 4	LV429245
	Tab connector for voltage tap on 185 mm ² cable connector		Set of 10	LV429348
	Clip for cable connector		Set of 10	LV429241
	Distribution connector for six 1.5 to 35 mm ² cables with interphase barriers		Set of 3	LV429248
			Set of 4	LV429249
	Aluminium connectors for 2 cables: 2 x (50 to 120 mm ²); ≤ 250 A		Set of 3	LV429218
			Set of 4	LV429219
Linergy DS distribution block				
	Linergy DS 250 A	For 14 holes (1 x 15.3 mm ² + 1 x 10 mm ² + 4 x 6 mm ² + 8 x 7.5 mm ²)	1P	LGY125014
Terminal extensions (supplied with 2 or 3 interphase barriers)				
	Right-angle terminal extensions ^[1]		Set of 3	LV429261
			Set of 4	LV429262
	Straight terminal extensions ^[1]		Set of 3	LV429263
			Set of 4	LV429264
Spreaders (for upstream or downstream connection)				
	Separate for each pole		3P	LV431563
			4P	LV431564
	One-piece Front alignment base for one-piece spreader (when mounting with LV432594 and LV432596, refer installation page C-16)		3/4P	LV431061
			3/4P	LV431064
Crimp lugs for copper cables (supplied with 2 or 3 interphase barriers)				
	For 120 mm ² cables		Set of 3	LV429252
			Set of 4	LV429256
	For 150 mm ² cables		Set of 3	LV429253
			Set of 4	LV429257
	For cable 185 mm ² cables		Set of 3	LV429254
			Set of 4	LV429258
Crimp lugs for aluminium cables (supplied with 2 or 3 interphase barriers)				
	For 150 mm ² cables		Set of 3	LV429504
			Set of 4	LV429505
	For 185 mm ² cables		Set of 3	LV429506
			Set of 4	LV429507

[1] Supplied with 2 or 3 interphase barriers.

INS250-100 to 250 and INV100 to 250 Accessories

Connection accessories

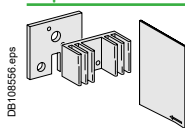
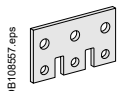
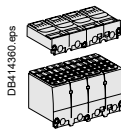
Terminal shields

	1 Short	3/4 P	LV429516
	1 Long	3/4 P	LV429518

Interphase barriers


		Set of 6	LV429329
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Special connection accessories for INS250-100 to 250DC and INV100 to 250DC

	Terminal extensions for series or parallel connection of two poles ^[1]	1 connection plate equipped with heat sink + 1 interphase barrier	LV438328
	<p>[1] Series connection of:</p> <p>2 poles = 1 terminal extension</p> <p>3 poles = 2 terminal extensions</p> <p>4 poles = 3 terminal extensions</p> <p>Parallel connection of:</p> <p>2 poles = 2 terminal extensions</p> <p>4 poles = 4 terminal extensions</p>		
	Terminal extensions for parallel connection of three poles:		
	Parallel connection of:	3 poles = set of 2 terminal extensions	LV438329
	4P terminal shields for series connection of poles	Set of 1	LV438326
	4P terminal shields for parallel connection of poles (2P/4P)	Set of 1	LV438327

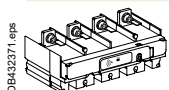
Electrical auxiliaries

Auxiliary contacts (changeover type)

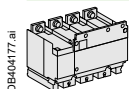
	CAM (early make or break)	29450
	Low level CAM (early make or break)	29452

Indication and measurement modules

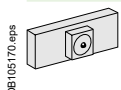
PowerTag NSX

	Rating (A)	250
	3P+N (suitable for ComPact INS/INV) 3P or 4P	LV434021

Current transformer module and voltage output (4P)

	Rating (A)	100	LV429462
		150	LV430562
		250	LV431570

Voltage presence indicator

	Rating (A)	250	LV429325
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INS250-100 to 250 and INV100 to 250 Accessories

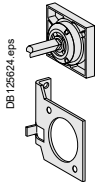
Rotary Handles

Front control



Direct for INS/INV250	Built-in
Extended	
For INS/INV250 with standard rotary handle	LV431050
For INS/INV250 with red handle on yellow front	^[1] LV431051
For complete source changeover assembly	31055

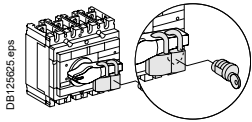
Lateral control



Direct lateral control for INS/INV250	
Lateral support	31054
+ standard lateral control assembly	31057
or + red and yellow lateral control assembly	^[1] 31058
Extended lateral control for INS/INV250	
Standard lateral control assembly	31057
Red and yellow lateral control assembly	^[1] 31058

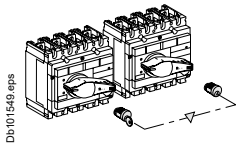
Locking and Interlocking for INS/INV and Source Changeover Systems

Locking for INS/INV



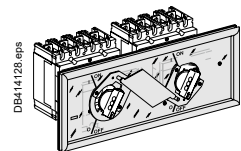
Handle locking by 1 to 3 padlocks (in OFF position)	Built-in
By keylock	
Keylocking device	31087
+ Ronis 1351B.500 keylock	41940
or + Profalux KS5 B24 D4Z keylock	42888

Interlocking with key (2 keylocks / 1 key)



By 2 keylocks	
INS250 keylocking device	2 x 31087
INS320-630 keylocking device	2 x 31088
+ Ronis 1351B.500 keylock	41950
or + Profalux KS5 B24 D4Z keylock	42878

Interlocking for INS/INV with direct or extended rotary handle



Mechanical interlocking for INS250	31073
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Installation Accessories

Lead seal accessories

LV429375

Spare parts

12 snap-in nuts for fixed/FC(M8)	LV430554
100 identification labels	29314
Bag of screws	LV429312
Black handle	31082
Red handle	^[1] 31083
Viewport for INV100/160/250	31089

^[1] For red/yellow switch versions only.

E

INS320 to 630 and INV400 to 630 Accessories

Connection Accessories

Rear connections

	Short (1 pair)	LV432475
	Long (1 pair)	LV432476

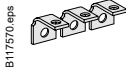

Cable connectors

	For 1 cable, 35 mm ² to 300 mm ²	Set of 3	LV432479 ^[1]
		Set of 4	LV432480 ^[2]
	For 2 cables, 35 mm ² to 240 mm ²	Set of 3	LV432481 ^[1]
		Set of 4	LV432482 ^[2]
	Tab connector for voltage tap on cable connector	Set of 10	LV429348

^[1] Kit comprising 2 interphase barriers.

^[2] Kit comprising 3 interphase barriers.


Terminal extensions (supplied with 2 or 3 interphase barriers)

	Right-angle terminal extensions	Set of 3	LV432484
		Set of 4	LV432485
	Edgewise terminal extensions	Set of 3	LV432486
		Set of 4	LV432487


Spreaders (for upstream or downstream connection)

	One-piece	52.5 mm	3P	LV432490
			4P	LV432491
	70 mm	3P	LV432492	
		4P	LV432493	

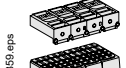
Crimp lugs for copper cables (supplied with 2 or 3 interphase barriers)

	For 240 mm ² cables	Set of 3	LV432500
		Set of 4	LV432501
	For 300 mm ² cables	Set of 3	LV432502
		Set of 4	LV432503

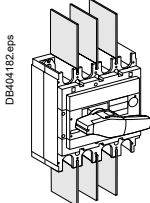
Crimp lugs for aluminium cables (supplied with 2 or 3 interphase barriers)

	For 240 mm ² cables	Set of 3	LV432504
		Set of 4	LV432505
	For 300 mm ² cables	Set of 3	LV432506
		Set of 4	LV432507

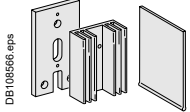
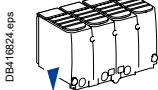
Terminal shields

	1 Short	3/4P	LV432592
	1 Long	3/4P	LV432594
	1 Long for 52.5 mm spreader (supplied with insulating plate)	3/4P	LV432596

Interphase barriers

	Set of 6	LV432570
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Special connection accessories for INS/INV320 to 630DC

	Terminal extensions for series or parallel connection of two poles ^[3]	1 connection plate equipped with heat sink + 1 interphase barrier	LV438338
	^[3] Series connection of: 2 poles = 1 terminal extension 3 poles = 2 terminal extensions 4 poles = 3 terminal extensions	Parallel connection of: 2 poles = 2 terminal extensions 4 poles = 4 terminal extensions	
	4P terminal shields for series connection of poles	Set of 2	LV438346
	4P terminal shields for series connection of poles	Set of 2	LV438337



INS320 to 630 and INV400 to 630 Accessories

Electrical Auxiliaries

Auxiliary contacts (changeover type)

DB117563.eps

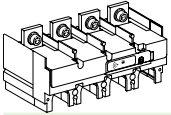


1 OF/CAF/CAO (early make or break)	29450
1 OF/CAF/CAO low level (early make or break)	29452

Indication and Measurement Modules

PowerTag NSX

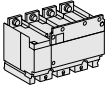
DB432372.eps



Rating (A)	630
3P+N (suitable for ComPacT INS/INV 3P or 4P)	LV434023

Current transformer module (4P)

DB604177.ai

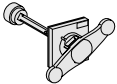


Rating (A)	400	LV432658
	630	LV432858
	400 with voltage output	LV432654
	630 with voltage output	LV432862

Rotary Handles

Extended front control

DB404185.eps

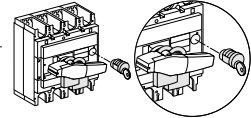


For INS320/400/630 with standard rotary handle	31052
For INS320/400/630 with red handle on yellow front	^[1] 31053
For complete source changeover assembly	31055

Locking and Interlocking for INS/INV and Source Changeover Systems

Locking for INS/INV

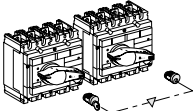
DB404186.eps



Handle locking by 1 to 3 padlocks (in OFF position)	Built-in
By keylock	31088
Keylocking device	41940
+ Ronis 1351B.500 keylock	42888
or + Profalux KS5 B24 D4Z keylock	

Interlocking with key (2 keylocks / 1 key)

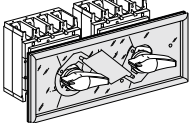
DB101549.eps



By 2 keylocks	INS250 keylocking device	2 x	31087
	INS320-630 keylocking device	2 x	31088
	+ Ronis 1351B.500 keylock		41950
	or + Profalux KS5 B24 D4Z keylock		42878

Interlocking for INS/INV with direct or extended rotary handle

DB404187.eps



Mechanical interlocking for INS320/400/630	31074
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Installation Accessories

Lead seal accessories

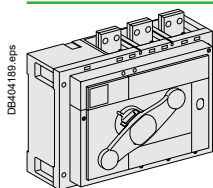
LV429375

Spare Parts

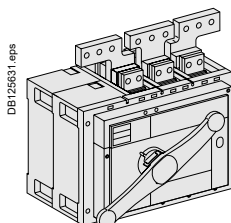
Bag of screws	LV432552
Black handle	31084

Complete Fixed/FC Device and Accessories

ComPacT INS630b to 2500 Standard Version with Black Handle

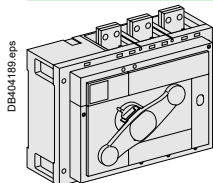


	3P	4P
ComPacT INS630b	31342	31343
ComPacT INS800	31330	31331
ComPacT INS1000	31332	31333
ComPacT INS1250	31334	31335
ComPacT INS1600	31336	31337



ComPacT INS2000	31338	31339
ComPacT INS2500	31340	31341

ComPacT INS800 to 1600 with Red Handle and Yellow Front



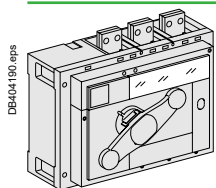
	3P	4P
ComPacT INS800	31344	31345
ComPacT INS1000	31346	31347
ComPacT INS1250	31348	31349
ComPacT INS1600	31350	31351



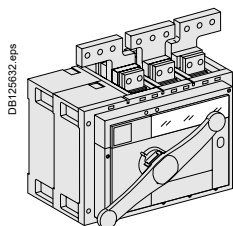
INV630b to 2500

Complete fixed/FC Device and Specific Accessories

ComPacT INV630b to 2500 Standard Version with Black Handle

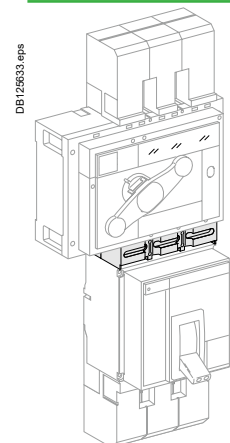


	3P	4P
ComPacT INV630b	31370	31371
ComPacT INV800	31358	31359
ComPacT INV1000	31360	31361
ComPacT INV1250	31362	31363
ComPacT INV1600	31364	31365



ComPacT INV2000	31366	31367
ComPacT INV2500	31368	31369

Combination With ComPacT NS Devices (for tarif vert)



	3P	4P
INV630b/1000/1250 combination with NS800/1000/1250	31385	31386
Terminal shield	31313	31314

E

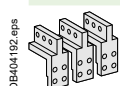
Catalogue Numbers

INS630b to 2500 and INV630b to 2500

Accessories

Connection Accessories

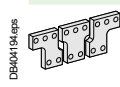

Vertical connection adapters

	INS/INV630b-1600	3P	Set of 3	31301
		4P	Set of 4	31302

Cable lug adapters

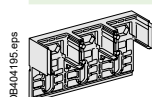
	INS/INV630b-1600	3P	Set of 3	33644
		4P	Set of 4	33645

Busbar connection (not compatible with terminal shield)

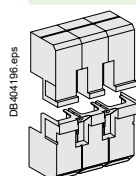
	INS/INV630b-1600	3P	Set of 3	31305
		4P	Set of 4	31306
	1 right angle connector for busbar (edgewise) to INS2000/2500			31310

Insulation Accessories

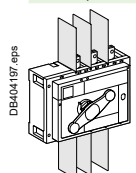
Base for terminal shield (not compatible with interphase barriers)

	INS/INV630b-1600	3P		31307
		4P		31308

Terminal shield


	INS/INV630b-1600	3P		LV433638
		4P		LV433639

Interphase barriers (not compatible with terminal shield and base)

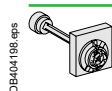
	INS/INV630b-1600	4P	Set of 6	31315
	INS/INV2000/2500	4P	Set of 6	31319

Electrical Auxiliaries

Auxiliary contacts (changeover type) INS/INV630b-2500

	1 OF/CAF/CAO standard (early make or break)			29450
	1 OF/CAF/CAO low level (early make or break)			29452

Extended Front Control

	INS/INV630b-2500	For standard rotary handle (handle not included)		31288
	INS/INV630b-1600	For red handle on yellow front (handle not included)	[1]	31289

[1] For red/yellow switch versions only.

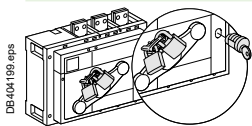
E

INS630b to 2500 and INV630b to 2500

Accessories

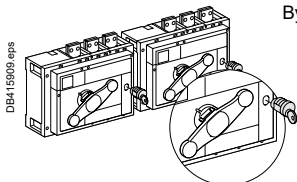
Locking and Interlocking

Locking for INS/INV630b to 2500



Handle locking by 1 to 3 padlocks (in OFF position)	Built-in
By keylock	31291
Keylocking device	41940
+ Ronis 1351B.500 keylock	42888
or + Profalux KS5 B24 D4Z keylock	

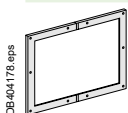
Interlocking for INS/INV630b to 2500



By keylock	Keylocking device	2 x	31291
	+ Ronis 1351B.500 keylock (1 key)		41950
	or + Profalux KS5 B24 D4Z keylock (1 key)		42878

Installation Accessories

Escutcheon

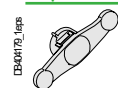


INS630b-2500	3P/4P	31295
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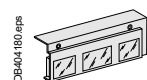
Lead seal accessories

31316

Spare Parts



INS/INV630b-1600	Black handle	31296
	Red handle	^[1] 31297
INS/INV2000-2500	Black handle	31298
Spare zamack piece for black handle INS/INV 2000-2500		LV431285



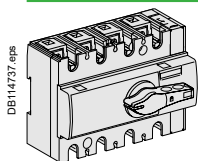
Viewport for INV630b/2500	3P	31293
	4P	31294

[1] For red/yellow switch versions only.

INSE80 (40 to 80 A) Molded Case Switch UL489/CSA C22-2 N° 5.2

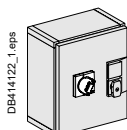
Complete fixed/FC Device and Accessories

ComPacT INSE80 (40 to 80 A) Standard Version with Black Handle

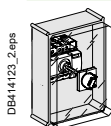
	ComPacT INSE80	40 A	3P 28994	4P 28995
		60 A	28996	28997
		80 A	28998	28999

Individual Enclosures

IP55 heavy-duty sheetmetal enclosure ^[1]


	For INSE80-40 A to INSE80-80 A with extended standard rotary handle			31208

IP55 heavy-duty insulating enclosure ^[1]



	For INSE80-40 A to INSE80-80 A with extended standard rotary handle			28967
	For INSE80-40 A to INSE80-80 A with extended red handle on yellow front			28968

Connection Accessories


Multi-stage Linergy DS distribution block (for bare cables)

	INSE80-40 A to	125 A, 4 x 10 holes (5 x 10 mm ² + 4 x 16 mm ² + 1 x 35 mm ²)	LGY412548
	INSE80-80 A ^[1]	125 A, 4 x 17 holes (8 x 10 mm ² + 8 x 16 mm ² + 1 x 35 mm ²)	LGY412560

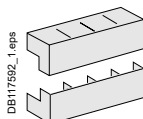
Connectors for bare Cu or Al cables

	Snap-on	INSE80-40 A to INSE80-80 A	Set of 3	28947
		1.5 to 95 mm ²	Set of 4	28948
	Distribution connector for 4 rigid cables up to 25 mm ² or 4 flexible cables up to 16 mm ²	INSE80-40 A to INSE80-80 A ^[1]	Set of 3	28949
			Set of 4	28950

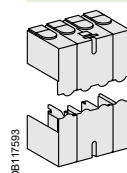
Crimp lugs for copper cables ^[1]

	For 95 mm ² cables with interphase barriers	INSE80-40 A to INSE80-80 A	Set of 3	28951
			Set of 4	28952

Terminal shrouds

	INSE80-40 A to INSE80-80 A	3P/4P	Set of 2	28956

Terminal shieldsé

	INSE80-40 A to INSE80-80 A	3P/4P	Set of 2	28958

[1] Not UL Listed.

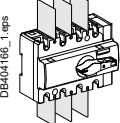


INSE80 (40 to 80 A) Molded Case Switch UL489/CSA C22-2 N° 5.2

Complete fixed/FC Device and Accessories


Connection Accessories (cont.)

Interphase barriers

	INSE80-40 A to INSE80-80 A	3P/4P	Set of 6	28959

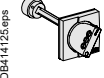
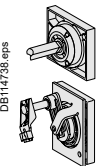
Electrical Auxiliaries

Auxiliary contacts

	1 CAF / CAO (standard)		INSE80-40 A to INSE80-80 A	29450
	1 CAF / CAO (low level)		INSE80-40 A to INSE80-80 A	29452

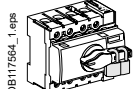
Rotary Handles

Accessories for conversion to extended rotary handles

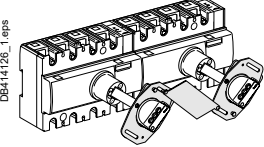
	Front control (handle included)	For black handle	INSE80-40 A to INSE80-80 A	LV428941
		For red handle on yellow front	INSE80-40 A to INSE80-80 A	LV428942
	Lateral control (handle not included)	For black handle	INSE80-40 A to INSE80-80 A	28943
		For red handle on yellow front	INSE80-40 A to INSE80-80 A	28944
	Lateral control on PRAGMA F functional enclosure ^[2] (handle not included)	For black handle	INSE80-40 A to INSE80-80 A	28945^[3]

Locking and Interlocking

Handle locking

	By 1 to 3 padlocks (OFF position), hasp dia. 5 to 8 mm, or by lead seals			Built-in

Interlocking for extended rotary handles

	Mechanical ^[1]			28953

Spare Parts

	Black handle			28962

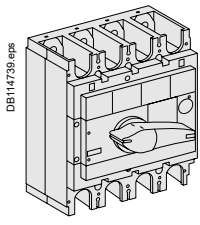
[1] Not UL listed.

[2] Not available with Prisma.

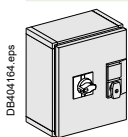
INSJ400 (250 to 400 A) Molded Case Switch UL489/ CSA C22-2 N° 5.2

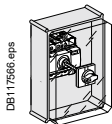
Complete fixed/FC Device and Accessories

ComPacT INSJ400 (250 A to 400 A) Standard Version with Black Handle

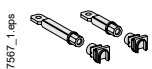
	ComPacT INSJ400-250 A	3P
	ComPacT INSJ400-400 A	31118
		31136



Individual Enclosures

IP55 heavy-duty sheetmetal enclosure ^[1]		
	For INSJ400-250 to 400 A with extended standard rotary handle	31212
	For INSJ400-250 to 400 A with extended red rotary handle on yellow front	31213

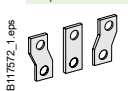
IP55 heavy-duty insulating enclosure ^[1]		
	For INSJ400-250 to 400 A with extended red rotary handle on yellow front	31207

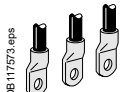
Connection Accessories


Rear connections		
	Short (1 pair)	LV432475
	Long (1 pair)	LV432476

Cable connectors		
	For 1 cable, 35 mm ² to 300 mm ²	Set of 3 LV432479
		Set of 4 LV432480
	For 2 cables, 35 mm ² to 240 mm ²	Set of 3 LV432481
		Set of 4 LV432482
	Tab connector for voltage tap on cable connector	Set of 10 LV429348

Terminal extensions (supplied with 2 or 3 interphase barriers)		
	Right-angle terminal extensions	Set of 3 LV432484
		Set of 4 LV432485
	Edgewise terminal extensions	Set of 3 LV432486
		Set of 4 LV432487

Spreaders (for upstream or downstream connection)			
	One-piece	52.5 mm	3P LV432490
			4P LV432491
	70 mm	3P LV432492	
		4P LV432493	

Crimp lugs for copper cables (supplied with 2 or 3 interphase barriers) ^[1]		
	For 240 mm ² cables	Set of 3 LV432500
		Set of 4 LV432501
	For 300 mm ² cables	Set of 3 LV432502
		Set of 4 LV432503

Crimp lugs for aluminium cables (supplied with 2 or 3 interphase barriers) ^[1]		
	For 240 mm ² cables	Set of 3 LV432504
		Set of 4 LV432505
	For 300 mm ² cables	Set of 3 LV432506
		Set of 4 LV432507

[1] Not UL Listed.

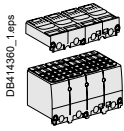


INSJ400 (250 to 400 A) Molded Case Switch UL489/CSA C22-2 N° 5.2

Complete fixed/FC Device and Accessories

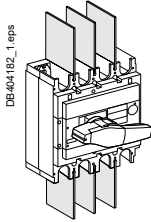
Connection Accessories (cont.)

Terminal shields



1 Short	3/4P	LV432592
1 Long	3/4P	LV432594
1 Long for 52.5 mm spreader (supplied with insulating plate)	3/4P	LV432596

Interphase barriers



Set of 6	LV432570
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Electrical Auxiliaries

Auxiliary contacts (changeover type)



OF or CAM (early make or break)	29450
OF or CAM low level (early make or break)	29452

Rotary Handles

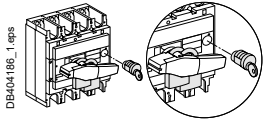
Extended front control



For INSJ400-250 to 400 A with standard rotary handle	31052
For INSJ400-250 to 400 A with red handle on yellow front + red handle ⁽¹⁾	31053

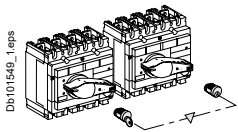
Locking and Interlocking and Source Changeover Systems

Locking



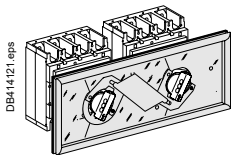
Handle locking by 1 to 3 padlocks (in OFF position)	Built-in
By keylock	31088
Keylocking device	41940
+ Ronis 1351B.500 keylock	42888
or + Profalux KS5 B24 D4Z keylock	

Interlocking with key (2 keylocks / 1 key)



By 2 keylocks	INSJ400-250 to 400 A keylocking device	2 x	31088
	+ Ronis 1351B.500 keylock	2 x	41950
	or + Profalux KS5 B24 D4Z keylock	2 x	42878

Interlocking with direct or extended rotary handle



Mechanical interlocking for INSJ400-250 to 400 A	31074
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Installation Accessories

Lead seal accessories

LV429375

Spare Parts

Black handle	31084
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