

# Product datasheet

Specifications



## Circuit breaker, ComPacT NSX630N, 50kA/415VAC, 3 poles, MicroLogic 2.3 trip unit 630A

C63N32D630

### Main

Range	ComPacT
product name	ComPacT NSX
Device short name	NSX630N
Product or component type	Circuit breaker
Device application	Distribution
Poles description	3P
Protected poles description	3D
[In] rated current	630 A at 40 °C
[Ue] rated operational voltage	690 V AC 50/60 Hz
Network type	AC
Network frequency	50/60 Hz
Suitability for isolation	Yes conforming to EN/IEC 60947-2
Utilisation category	Category A
[Icu] rated ultimate short-circuit breaking capacity	85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 42 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 240 V AC 50/60 Hz conforming to UL 60947-4-1 50 kA Icu at 480 V AC 50/60 Hz conforming to UL 60947-4-1 20 kA Icu at 600 V AC 50/60 Hz conforming to UL 60947-4-1
Performance level	N 50 kA 415 V AC
Trip unit name	MicroLogic 2.3
Trip unit technology	Electronic
Trip unit protection functions	LSol
control type	Toggle
Circuit breaker mounting mode	Fixed

### Complementary

[UI] rated insulation voltage	800 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV

<b>[Ics] rated service short-circuit breaking capacity</b>	85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 42 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 11 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
<b>Mechanical durability</b>	15000 cycles
<b>Electrical durability</b>	8000 cycles at 440 V In/2 4000 cycles at 440 V In 6000 cycles at 690 V In/2 2000 cycles at 690 V In
<b>Power dissipation per pole</b>	39.7 W
<b>Mounting support</b>	Backplate
<b>Mounting position</b>	Horizontal and vertical Flat on the back
<b>Upside connection</b>	Front
<b>Downside connection</b>	Front
<b>Connection pitch</b>	45 mm
<b>Protection type</b>	L : for overload protection (long time) So : for short time short-circuit protection with fixed delay I : for instantaneous short-circuit protection
<b>Trip unit rating</b>	630 A at 40 °C
<b>Long-time pick-up adjustment type Ir (thermal protection)</b>	Adjustable 9 settings
<b>[Ir] long-time protection pick-up adjustment range</b>	250...630 A
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[tr] long-time protection delay adjustment range</b>	400 s at 1.5 x Ir 16 s at 6 x Ir 11 s at 7.2 x Ir
<b>Thermal memory</b>	20 minutes before and after tripping
<b>Short-time protection pick-up adjustment type Isd</b>	Adjustable 9 settings
<b>[Isd] Short-time protection pick-up adjustment range</b>	1.5...10 x Ir
<b>Short-time protection delay adjustment type tsd</b>	Fixed
<b>Instantaneous protection pick-up adjustment type Ii</b>	Fixed
<b>[Ii] instantaneous protection pick-up adjustment range</b>	6900 A
<b>Earth-leakage protection</b>	Without
<b>Zone selective interlocking ZSI</b>	Without
<b>Number of slots for electrical auxiliaries</b>	6 slot(s)
<b>Local signalling</b>	Flashing LED (green) for ready to operate LED 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
<b>Width (W)</b>	140 mm
<b>Height (H)</b>	255 mm
<b>Depth (D)</b>	110 mm
<b>Net weight</b>	6.2 kg

## Environment

<b>Standards</b>	EN/IEC 60947-2
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<b>Overvoltage category</b>	Class II
<b>Electrical shock protection class</b>	Class II
<b>Pollution degree</b>	3 conforming to IEC 60664-1
<b>IP degree of protection</b>	IP40 conforming to IEC 60529
<b>IK degree of protection</b>	IK07 conforming to IEC 62262
<b>Ambient air temperature for operation</b>	-25...70 °C
<b>Ambient air temperature for storage</b>	-50...85 °C
<b>Relative humidity</b>	0...95 %
<b>Operating altitude</b>	0...2000 m without derating 2000 m...5000 m with derating

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	15.000 cm
<b>Package 1 Width</b>	16.000 cm
<b>Package 1 Length</b>	29.500 cm
<b>Package 1 Weight</b>	5.668 kg
<b>Unit Type of Package 2</b>	S04
<b>Number of Units in Package 2</b>	2
<b>Package 2 Height</b>	30.000 cm
<b>Package 2 Width</b>	40.000 cm
<b>Package 2 Length</b>	60.000 cm
<b>Package 2 Weight</b>	12.035 kg



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) **690**

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Recycled metal content at CR level **0**

Packaging made with recycled cardboard **Yes**

Packaging without single use plastic **No**

[EU RoHS Directive](#) **Compliant with Exemptions**

SCIP Number **25ca3248-85d0-423a-a9d8-5b7aeb52e7b6**

REACH Regulation [REACH Declaration](#)

Halogen content performance **Product contains halogen above thresholds**

PVC free **Yes**

Silicon free **No**

## Use Longer

### Lifetime extension

Upgradeability **No**

## Use Again

### Repack and remanufacture

Circularity Profile [End of Life Information](#)

Take-back **No**

WEEE  **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Offer Marketing Illustration

Product benefits / Features

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**ComPacT NSX**  
Range Accessories

Wireless auxiliary contact

Short terminal shield

Interphase barriers

Long terminal shield

Rotary handles

Standard auxiliary contact

MN undervoltage release

MX shunt release

Standard motor mechanism module

The image displays a collection of accessories for the ComPacT NSX circuit breaker range. At the top left, a green circular graphic partially overlaps a main circuit breaker unit. Below this, the title 'ComPacT NSX Range Accessories' is presented in a bold, sans-serif font. The accessories are arranged in a 3x3 grid, each accompanied by a small product photograph and a descriptive label. The labels are: 'Wireless auxiliary contact' (a small green component), 'Short terminal shield' (a black rectangular shield), 'Interphase barriers' (a black vertical barrier), 'Long terminal shield' (a larger black rectangular shield), 'Rotary handles' (a black handle with a green grip), 'Standard auxiliary contact' (a small metal component), 'MN undervoltage release' (a black rectangular component), 'MX shunt release' (a metal component with a yellow label), and 'Standard motor mechanism module' (a black rectangular component with a handle).

Offer Marketing Illustration

Product benefits / Features

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Offer Marketing Illustration

Product benefits / Features

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**ComPacT NSX**  
Technical Benefits

- Nominal current: 16 to 630 A and 9 breaking capacities for the 2 sizes of circuit breakers
- 1, 2, 3, and 4 pole versions available
- Large range of electronic and thermal-magnetic protections
- Plug and ready wiring system and communicating accessories
- Integrated earth leakage protection via MicroLogic Vigi (earth leakage circuit breaker - ELCB)
- Advanced trip unit with integrated power metering: I, U, P, E, THD, f, CosPhi

Offer Marketing Illustration

Product benefits / Features

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## ComPacT NSX Moulded Case Circuit Breaker



### Protection begins with prevention

Designed to prevent an electrical fire through integrated earth leakage protection with preventive maintenance thanks to its Everlink power connections.



### Maximize power availability

By providing corrective, preventive, and predictive maintenance for asset management thanks to our advanced MicroLogic trip units.



### Connectivity

Designed to connect to EcoStruxure Power, an IoT-connected architecture for improving every aspect of your power distribution system.

