

# Product datasheet

Specifications



## Circuit breaker, ComPacT NSX630N, 50kA/415VAC, 3 poles, TMD trip unit 600A

C63N3TM630

EAN Code: 3606486107706

### 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	600 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
Breaking capacity	85 kA Icu at 220/240 V AC 50/60 Hz conforming to EN/IEC 60947-2 50 kA Icu at 380/415 V AC 50/60 Hz conforming to EN/IEC 60947-2 42 kA Icu at 440 V AC 50/60 Hz conforming to EN/IEC 60947-2 30 kA Icu at 500 V AC 50/60 Hz conforming to EN/IEC 60947-2 22 kA Icu at 525 V AC 50/60 Hz conforming to EN/IEC 60947-2 10 kA Icu at 660/690 V AC 50/60 Hz conforming to EN/IEC 60947-2
Breaking capacity code	N 50 kA 415 V AC
Trip unit name	TM-D
Trip unit technology	Thermal-magnetic
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
[Ics] rated service breaking capacity	85 kA at 220/240 V AC 50/60 Hz conforming to EN/IEC 60947-2 50 kA at 380/415 V AC 50/60 Hz conforming to EN/IEC 60947-2 42 kA at 440 V AC 50/60 Hz conforming to EN/IEC 60947-2 30 kA at 500 V AC 50/60 Hz conforming to EN/IEC 60947-2 11 kA at 525 V AC 50/60 Hz conforming to EN/IEC 60947-2 10 kA at 660/690 V AC 50/60 Hz conforming to EN/IEC 60947-2
Mechanical durability	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 DIN rail
<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 (thermal) I : for short-circuit protection (magnetic)
<b>Trip unit rating</b>	600 A at 40 °C
<b>Long-time pick-up adjustment type Ir (thermal protection)</b>	Adjustable
<b>[Ir] long-time protection pick-up adjustment range</b>	0.7...1 x In
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[tr] long-time delay adjustment range</b>	120...400 s at 1.5 x In 15 s at 6 x Ir
<b>Instantaneous protection pick-up adjustment type Ii</b>	Adjustable
<b>[Ii] instantaneous protection pick-up adjustment range</b>	3.3...8 x In
<b>Earth-leakage protection</b>	Without
<b>Number of slots</b>	6 slot(s)
<b>Contact position indicator</b>	Yes
<b>Width (W)</b>	140 mm
<b>Height (H)</b>	255 mm
<b>Depth (D)</b>	110 mm
<b>Product weight</b>	6.2 kg

## Environment

<b>Standards</b>	EN/IEC 60947-2
<b>Overvoltage category</b>	III
<b>Electrical shock protection class</b>	Class II on front face
<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>	15.100 cm
<b>Package 1 Width</b>	15.800 cm
<b>Package 1 Length</b>	29.100 cm
<b>Package 1 Weight</b>	5.590 kg
<b>Unit Type of Package 2</b>	P12
<b>Number of Units in Package 2</b>	36
<b>Package 2 Height</b>	44.000 cm
<b>Package 2 Width</b>	80.000 cm
<b>Package 2 Length</b>	120.000 cm
<b>Package 2 Weight</b>	215.500 kg

## Contractual warranty

<b>Warranty (in months)</b>	18
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## 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

Total lifecycle Carbon footprint	1 991 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	41 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.2 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 939 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	10 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

### Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>

### Use Longer




### Lifetime extension

Repair	No
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### Use Again



### Repack and remanufacture

Recyclability potential, in %	59
End of life manual availability	No need of specific recycling operations
Take-back	No
WEEE Label	 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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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 illustration displays a collection of accessories for the ComPacT NSX circuit breaker range. At the top left, a large image shows a three-phase circuit breaker with a green top cover. Below this, nine individual accessories are arranged in a 3x3 grid, each with a small image and a text label. The accessories include: a wireless auxiliary contact (green and black), a short terminal shield (black), interphase barriers (black), a long terminal shield (black), rotary handles (black with green accents), a standard auxiliary contact (grey), an MN undervoltage release (black), an MX shunt release (yellow and black), and a standard motor mechanism module (black).

Offer Marketing Illustration

Product benefits / Features

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The image shows a ComPacT NSX circuit breaker, a black industrial-grade device with a green handle and terminal block. It is positioned on the left side of a white rectangular area, which is partially overlaid by a large green circular graphic on the left edge.

### 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.

