

# Product datasheet

Specifications



## Circuit breaker, ComPacT NSX630S DC, 100kA/750VDC, 3 poles, TM-DC trip unit 500A

C63S3TM500D

### Main

Range	ComPacT
Product name	ComPacT NSX DC
Device short name	NSX630S DC
Product or component type	Circuit breaker
Device application	Distribution
Poles description	3P
Protected poles description	3D
[In] rated current	500 A at 40 °C
[Ue] rated operational voltage	750 V DC
Network type	DC
Suitability for isolation	Yes conforming to EN/IEC 60947-2
Utilisation category	Category A
Breaking capacity	100 kA Icu at 24...125 V DC 1 pole conforming to IEC 60947-2 100 kA Icu at 250 V DC 1 pole conforming to IEC 60947-2 100 kA Icu at 500 V DC 2 poles in series conforming to IEC 60947-2 100 kA Icu at 750 V DC 3 poles in series conforming to IEC 60947-2
Breaking capacity code	S 100 kA 500 V DC
Trip unit name	TM-DC
Trip unit technology	Thermal-magnetic
Trip unit protection functions	LI
Control type	Toggle
Circuit breaker mounting mode	Fixed

### Complementary

[Ui] rated insulation voltage	750 V DC conforming to IEC 60947-2
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-2
[Ics] rated service breaking capacity	100 kA at 24...125 V DC conforming to IEC 60947-2 100 kA at 250 V DC conforming to IEC 60947-2 100 kA at 500 V DC conforming to IEC 60947-2 100 kA at 750 V DC conforming to IEC 60947-2
Mechanical durability	5000 cycles
Electrical durability	2000 cycles at 750 V In/2 1000 cycles at 750 V In
Mounting support	Backplate

Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	45 mm
Protection type	L : for overload protection (thermal) I : for short-circuit protection (magnetic)
Trip unit rating	500 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable
[Ir] long-time protection pick-up adjustment range	0.7...1 x In
Long-time protection delay adjustment type tr	Fixed
Instantaneous protection pick-up adjustment type li	Adjustable
[li] instantaneous protection pick-up adjustment range	2.5...5 x In
Earth-leakage protection	Without
Number of slots	6 slot(s)
Width (W)	140 mm
Height (H)	255 mm
Depth (D)	110 mm
Net weight	8.0 kg

## Environment

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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	14.700 cm
Package 1 Width	20.000 cm
Package 1 Length	29.100 cm
Package 1 Weight	5.554 kg
Unit Type of Package 2	S04
Number of Units in Package 2	3
Package 2 Height	30 cm
Package 2 Width	40 cm

<b>Package 2 Length</b>	60 cm
<b>Package 2 Weight</b>	17.312 kg
<b>Unit Type of Package 3</b>	P12
<b>Number of Units in Package 3</b>	12
<b>Package 3 Height</b>	45.000 cm
<b>Package 3 Width</b>	80.000 cm
<b>Package 3 Length</b>	120.000 cm
<b>Package 3 Weight</b>	81.248 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	1 626 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Carbon footprint of the manufacturing phase [A1 to A3]	36 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.5 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 577 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	11 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	E01033b9-a29d-4247-893c-b0642e7209e8
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes
Silicone-free	No

## 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	Yes
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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**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 partial view of the main circuit breaker is shown against a green background. Below it, 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 and green), a standard auxiliary contact (white), 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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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.



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 semi-circle 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

Image of product / Alternate images

Alternative

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