

Product datasheet

Specifications



Circuit breaker, ComPacT NSX100M AC/DC, 25kA/415VAC, 2 poles, TMD trip unit 50A

C10M2TM050

Main

Range	ComPacT
Product name	ComPacT NSX
Device short name	NSX100M
Product or component type	Circuit breaker
Device application	Distribution
Poles description	2P
Protected poles description	2D
[In] rated current	50 A at 40 °C
[Ue] rated operational voltage	690 V AC 50/60 Hz 500 V DC
Network type	AC DC
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 IEC 60947-2 25 kA Icu at 380/415 V AC 50/60 Hz 1P conforming to IEC 60947-2 25 kA Icu at 440 V AC 50/60 Hz 1P conforming to IEC 60947-2 18 kA Icu at 500/525 V AC 50/60 Hz 2P conforming to IEC 60947-2 8 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 250 V DC 50/60 Hz 1 pole conforming to IEC 60947-2 85 kA Icu at 500 V DC 50/60 Hz 2 poles in series conforming to IEC 60947-2
Breaking capacity code	M 25 kA 415 V AC
Trip unit name	TM-D
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 AC 50/60 Hz conforming to IEC 60947-2
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-2

[Ics] rated service breaking capacity	85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 25 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 25 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 18 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2 8 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA at 250 V DC 50/60 Hz conforming to IEC 60947-2 85 kA at 500 V DC 50/60 Hz conforming to IEC 60947-2 36 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	20000 cycles
Electrical durability	20000 cycles at 277 V In/2 10000 cycles at 277 V In
Power dissipation per pole	4.11 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	35 mm
Protection type	L : for overload protection (thermal) I : for short-circuit protection (magnetic)
Trip unit rating	50 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Fixed
[Ir] long-time protection pick-up adjustment range	1 x In
Long-time protection delay adjustment type tr	Fixed
Instantaneous protection pick-up adjustment type li	Fixed
[li] instantaneous protection pick-up adjustment range	500 A
Earth-leakage protection	Without
Width (W)	70 mm
Height (H)	161 mm
Depth (D)	86 mm
Net weight	1.2 kg

Environment

Standards	EN/IEC 60947-2
Overvoltage category	III
Electrical shock protection class	Class II on front face
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	8.200 cm
Package 1 Width	13.000 cm
Package 1 Length	17.600 cm
Package 1 Weight	1.256 kg
Unit Type of Package 2	S03
Number of Units in Package 2	12
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	15.440 kg

Contractual warranty

Warranty (in months)	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	54 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	7 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.4 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	44 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	2 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	3874e08b-fcb8-4aa9-87c4-d36abebf2833
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	54
End of life manual availability	End of Life Information
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



Offer Marketing Illustration

Product benefits / Features



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 large circuit breaker is shown against a green circular 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 (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

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



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

Technical Illustration

Assembly's dimensions

