

Product datasheet

Specifications



Circuit breaker, ComPacT
NSX100HB1, 75kA/690VAC, 4
poles 4D (neutral fully protected),
TMD trip unit 40A

C10V4TM040

Main

Range	ComPacT
Product name	ComPacT NSX
Device short name	NSX100HB1
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D
Neutral position	Left
[In] rated current	40 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 500 V AC 50/60 Hz conforming to IEC 60947-2 80 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 75 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Breaking capacity code	HB1 75 kA 690 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	800 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
[Ics] rated service breaking capacity	85 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 80 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 75 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	20000 cycles
Electrical durability	20000 cycles at 440 V In/2 10000 cycles at 440 V In 10000 cycles at 690 V In/2 5000 cycles at 690 V In

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Power dissipation per pole	5.47 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	40 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
[tr] long-time delay adjustment range	120...400 s at 1.5 x In 15 s at 6 x Ir
Neutral protection setting	1 x Ir (4D)
Instantaneous protection pick-up adjustment type Ii	Fixed
[Ii] instantaneous protection pick-up adjustment range	500 A
Earth-leakage protection	Without
Number of slots	5 slot(s)
Width (W)	140 mm
Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.4 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	14.000 cm

Package 1 Width	15.000 cm
Package 1 Length	20.000 cm
Package 1 Weight	2.450 kg
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	10.220 kg
Unit Type of Package 3	P12
Number of Units in Package 3	32
Package 3 Height	45.000 cm
Package 3 Width	80.000 cm
Package 3 Length	120.000 cm
Package 3 Weight	93.760 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	107 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	14 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]	88 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	4 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
Silicone-free	No

Use Longer

 Lifetime extension	
Repair	No

Use Again

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



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

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

