

# Product datasheet

Specifications



## Circuit breaker ComPacT NSX400HB2, 100kA at 690VAC, MicroLogic 6.3 E trip unit 400A, 4 poles 4d

C40W46E400

⚠ To be discontinued

⚠ Discontinued on: 1 Dec 2024

### Main

Range	ComPacT
Product name	ComPacT NSX
Device short name	NSX400HB2
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D 3D + OSN 3D + N/2 3D
Neutral position	Left
[In] rated current	400 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	100 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Breaking capacity code	HB2 100 kA 690 V AC
Trip unit name	MicroLogic 6.3 E
Trip unit technology	Electronic
Trip unit protection functions	LSIG
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	100 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 100 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 100 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

<b>Mechanical durability</b>	15000 cycles
<b>Electrical durability</b>	12000 cycles at 440 V In/2 6000 cycles at 440 V In 6000 cycles at 690 V In/2 3000 cycles at 690 V In
<b>Power dissipation per pole</b>	19.2 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) S : for short time short-circuit protection I : for instantaneous short-circuit protection G : for ground fault protection
<b>Trip unit rating</b>	400 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>	160...400 A
<b>Long-time protection delay adjustment type tr</b>	Adjustable
<b>[tr] long-time delay adjustment range</b>	15...400 s at 1.5 x Ir 0.5...16 s at 6 x Ir 0.35...11 s at 7.2 x Ir
<b>Neutral protection setting</b>	0.5 x Ir (3D + N/2) 1 x Ir (4D) 1.6 x Ir (3D + OSN) No protection (3D)
<b>Thermal memory</b>	20 minutes before and after tripping
<b>Short-time protection pick-up adjustment type Isd</b>	Adjustable
<b>[Isd] Short-time protection pick-up adjustment range</b>	1.5...10 x Ir
<b>Short-time protection delay adjustment type tsd</b>	Adjustable 5 settings
<b>[tsd] short-time delay adjustment range</b>	0...0.4 s I <sup>2</sup> t=off 0.1...0.4 s I <sup>2</sup> t=on
<b>Instantaneous protection pick-up adjustment type Ii</b>	Adjustable
<b>[Ii] instantaneous protection pick-up adjustment range</b>	1.5...12 x In
<b>Ground-fault protection pick-up adjustment type Ig</b>	Adjustable 9 settings
<b>[Ig] ground-fault pick-up adjustment range</b>	0.4...1 x In for In = 40 A 0.2...1 x In for In > 40 A Ig enable on/off
<b>Ground-fault protection time delay adjustment type tg</b>	Adjustable 5 settings
<b>[tg] Ground-fault time delay adjustment range</b>	0...0.4 s I <sup>2</sup> t=off 0.1...0.4 s I <sup>2</sup> t=on
<b>Earth-leakage protection</b>	Without
<b>Zone selective interlocking ZSI</b>	With
<b>Number of slots</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>Display type</b>	LCD display
<b>Type of measurement</b>	Energy meter
<b>Communication of data</b>	Time-stamped histories and event tables Maximeters/minimeters Instantaneous and demand values Demand current and power Power quality Protection and alarm settings Maintenance indicators Energy metering
<b>Width (W)</b>	185 mm
<b>Height (H)</b>	255 mm
<b>Depth (D)</b>	110 mm
<b>Net weight</b>	7.9 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>	-40...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>	15.2 cm
<b>Package 1 Width</b>	20.3 cm
<b>Package 1 Length</b>	29.2 cm
<b>Package 1 Weight</b>	8.06 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	386 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	58 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.9 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	310 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	16 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	Yes
SCIP Number	25ca3248-85d0-423a-a9d8-5b7aeb52e7b6
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes
Silicone-free	No

## Use Longer



### Lifetime extension

Repair	No
Updatability	Yes

## Use Again



### Repack and remanufacture

Recyclability potential, in %	60
End of life manual availability	<a href="#">End of Life Information</a>
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

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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 image displays a collection of nine accessories for the ComPacT NSX circuit breaker range. Each accessory is shown with a small photograph and a corresponding 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

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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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**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

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