

Product datasheet

Specifications



circuit breaker ComPacT
NSX250HB2, 100 kA at 690 VAC,
MicroLogic 5.2 E trip unit 250 A, 4
poles 4d

C25W45E250

EAN Code: 3606482002456

Main

Range	ComPacT
Product name	ComPacT NSX
Device short name	NSX250HB2
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	250 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 5.2 E
Trip unit technology	Electronic
Trip unit protection functions	LSI
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
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
Power dissipation per pole	17.6 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 (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection
Trip unit rating	250 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	100...250 A
Long-time protection delay adjustment type tr	Adjustable
[tr] long-time delay adjustment range	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
Neutral protection setting	0.5 x Ir (3D + N/2) 1 x Ir (4D) 1.6 x Ir (3D + OSN) No protection (3D)
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type Isd	Adjustable 9 settings
[Isd] Short-time protection pick-up adjustment range	1.5...10 x Ir
Short-time protection delay adjustment type tsd	Adjustable 5 settings
[tsd] short-time delay adjustment range	0...0.4 s I ² t=off 0.1...0.4 s I ² t=on
Instantaneous protection pick-up adjustment type Ii	Adjustable
[Ii] instantaneous protection pick-up adjustment range	1.5...12 x In
Earth-leakage protection	Without
Zone selective interlocking ZSI	With
Number of slots	5 slot(s)
Local signalling	Flashing LED (green) for ready to operate LED 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
Display type	LCD display
Type of measurement	Energy meter
Communication of data	Instantaneous and demand values Demand current and power Maintenance indicators Maximeters/minimeters Time-stamped histories and event tables Energy metering Power quality Protection and alarm settings
Width (W)	140 mm

Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.8 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	-40...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	2.650 kg
Unit Type of Package 2	S03
Number of Units in Package 2	3
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.370 kg
Unit Type of Package 3	P12
Number of Units in Package 3	24
Package 3 Height	45.000 cm
Package 3 Width	80.000 cm
Package 3 Length	120.000 cm
Package 3 Weight	78.960 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 313

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[EU RoHS Directive](#) Compliant with Exemptions

SCIP Number 811c5f45-220d-4e22-b512-f9d771b72680

REACH Regulation [REACH Declaration](#)

Halogen-free status Product contains halogen above thresholds

PVC free Yes

Silicone-free No

Use Longer

Lifetime extension

Updatability Yes

Use Again

Repack and remanufacture

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

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

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 green circular graphic partially shows a circuit breaker. 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



Technical Illustration

Assembly's dimensions

