

Product datasheet

Specifications



Circuit breaker, ComPacT NSX250N, 50kA/415VAC, 4 poles, MicroLogic Vigi 7.2E trip unit 160A

C25N47E160

⚠ Discontinued on: 01 Dec 2024

⚠ To be discontinued

Price: 33,798.54 ZAR

Main

| | |
|--------------------------------|---|
| Range | ComPacT |
| Product name | ComPacT NSX |
| Device short name | NSX250N |
| Product or component type | Earth leakage circuit breaker |
| Device application | Distribution |
| Poles description | 4P |
| Protected poles description | 4D 3D + OSN 3D + N/2 3D |
| Neutral position | Left |
| [In] rated current | 160 A at 40 °C |
| [Ue] rated operational voltage | 440 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 | 90 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 50 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 35 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 240 V AC 50/60 Hz conforming to UL 60947-4-1 50 kA Icu at 480 V AC 50/60 Hz conforming to UL 60947-4-1 15 kA Icu at 600 V AC 50/60 Hz conforming to UL 60947-4-1 |
| Breaking capacity code | N 50 kA 415 V AC |
| Trip unit name | MicroLogic 7.2 E |
| Trip unit technology | Electronic |
| Trip unit protection functions | LSIR |
| Control type | Toggle |
| Circuit breaker mounting mode | Fixed |

Complementary

| | |
|--|-------------------|
| [Ui] rated insulation voltage | 500 V AC 50/60 Hz |
| [Uimp] rated impulse withstand voltage | 8 kV |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

| | |
|--|--|
| [Ics] rated service breaking capacity | 90 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 50 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 50 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 35 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 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 | 25 W N 25 W L1 and L3 20.6 W L2 |
| 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 R : for earth-leakage protection |
| Trip unit rating | 160 A at 40 °C |
| Long-time pick-up adjustment type Ir (thermal protection) | Adjustable 9 settings |
| [Ir] long-time protection pick-up adjustment range | 63...160 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) No protection (3D) |
| Thermal memory | 20 minutes before and after tripping |
| Short-time protection pick-up adjustment type Isd | Adjustable |
| [Isd] Short-time protection pick-up adjustment range | 1.5...10 x Ir |
| Short-time protection delay adjustment type tsd | Adjustable |
| [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...15 x In |
| Earth-leakage protection | Integrated |
| Earth-leakage protection class | Class A |
| Earth-leakage protection sensitivity adjustment type IΔn | Adjustable |

| | |
|--|--|
| [Δn] earth-leakage protection sensitivity adjustment range | 30 mA 100 mA 300 mA 500 mA 1 A 3 A 5 A |
| Operating mode | OFF using the I Δn rotary switch |
| Earth-leakage protection time delay adjustment type Δt | Adjustable |
| [Δt] residual earth-leakage time delay adjustment | 0 ms 60 ms 150 ms 500 ms 1 s |
| Zone selective interlocking ZSI | Without |
| Number of slots | 5 slot(s) |
| Local signalling | Flashing LED (green) for ready to operate LED 105 % I _r (red) for overload LED 90 % I _r (orange) for overload |
| Display type | LCD display |
| Type of measurement | Energy meter |
| Communication of data | Time-stamped histories and event tables Maintenance indicators Instantaneous and demand values Maximeters/minimeters Protection and alarm settings Power quality Energy metering Demand current and power |
| 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 | IV |
| 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 cm |

| | |
|------------------------------|--------|
| Package 1 Width | 15 cm |
| Package 1 Length | 19 cm |
| Package 1 Weight | 2.5 kg |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 6 |
| Package 2 Height | 30 cm |
| Package 2 Width | 30 cm |
| Package 2 Length | 40 cm |
| Package 2 Weight | 15 kg |

Contractual warranty

| | |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



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 182

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 1cc6e020-e2e4-4d89-9339-61a460082111

REACH Regulation [REACH Declaration](#)

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

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
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



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

