

Product datasheet

Specifications



Circuit breaker, ComPacT NSXm 160B, 25kA/415VAC, 4 poles 4D (neutral fully protected), TMD trip unit 160A, lugs/busbars

C12B4TM160B

Main

| | |
|--|--|
| Range | ComPacT |
| Product name | ComPacT NSXm |
| Device short name | NSXm 160B |
| Product or component type | Circuit breaker |
| Device application | Distribution |
| Poles description | 4P |
| Protected poles description | 4D |
| 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 IEC 60947-2 |
| Utilisation category | Category A |
| [Icu] rated ultimate short-circuit breaking capacity | 50 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 conforming to IEC 60947-2 20 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level | B 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 | 800 V AC 50/60 Hz |
| [Uimp] rated impulse withstand voltage | 8 kV |
| [Ics] rated service short-circuit breaking capacity | 50 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 20 kA at 440 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 |
| Power dissipation per pole | 13.7 W |

| | |
|---|--|
| Mounting support | Backplate |
| Mounting position | Horizontal and vertical Flat on the back |
| Upside connection | Front |
| Downside connection | Front |
| Connection terminals | compression lug/busbar |
| Connection pitch | 35 mm with spreaders 27 mm without spreaders |
| 9 mm pitches | 12 module |
| Trip unit rating | 160 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 |
| Neutral protection settings | 1 x Ir (4D) |
| Instantaneous protection pick-up adjustment type Ii | Fixed |
| [Ii] instantaneous protection pick-up adjustment range | 1250 A |
| Earth-leakage protection | Without |
| Number of slots for electrical auxiliaries | 1 slot(s) for auxiliary switch OF 1 slot(s) for alarm switch SD 1 slot(s) for voltage release MN or MX |
| Local signalling | Flag (green) for presence of auxiliary contacts |
| Width (W) | 108 mm |
| Height (H) | 137 mm |
| Depth (D) | 80 mm |
| Product weight | 1.42 kg |
| Colour | Grey (RAL 7016) |

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 | 2000 m without derating 5000 m with derating |

Packing Units

| | |
|------------------------------|-----|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |

| | |
|------------------------------|------------|
| Package 1 Height | 12.200 cm |
| Package 1 Width | 12.000 cm |
| Package 1 Length | 21.200 cm |
| Package 1 Weight | 1.377 kg |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 6 |
| Package 2 Height | 30.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 8.624 kg |
| Unit Type of Package 3 | P12 |
| Number of Units in Package 3 | 144 |
| Package 3 Height | 150.000 cm |
| Package 3 Width | 80.000 cm |
| Package 3 Length | 120.000 cm |
| Package 3 Weight | 254.490 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 | 209 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 8 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.2 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] | 197 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4] | 3 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |

Use Better

Materials and Substances

| | |
|--|--|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| SCIP Number | 4b89979a-b2b4-46f7-b291-ed2599c8d205 |
| EU RoHS Directive | Compliant By Exemption |
| REACH Regulation | Reference contains Substances of Very High Concern above the threshold |
| Halogen-free status | Halogen free plastic parts product |
| PVC free | Yes |
| Silicone-free | No |

Use Longer

Lifetime extension

| | |
|--------|----|
| Repair | No |
|--------|----|

Use Again

Repack and remanufacture

| | |
|---------------------------------|---|
| Recyclability potential, in % | 57 |
| End of life manual availability | No need of specific recycling operations |
| 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 NSXm Range Accessories



Wireless
indication auxiliary



Long terminal
shield



Standard
auxiliary contact



Rotary handles



Inter-phase barrier



Toggle padlocking
device



MN undervoltage
release



Standard MX shunt
release

Offer Marketing Illustration

Product benefits / Features

CompacT NSXm Moulded Case Circuit Breaker



Efficiency

It features integrated earth leakage protection and standardized accessories – which means you save space, time, and effort.



Reliability

Optimized in size and featuring innovations tailored to your needs. Roto-active™ breaking technology helps to increase operation lifespan.



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 NSXm

Technical Benefits



- Come in one size and are optimized for small spaces.
- 3 or 4 pole versions
- Rated currents: 16 to 160A
- Thermal-magnetic protections
- Breaking capacities under 240/415 V
16, 25, 36, 50, 70 kA
- Integrated earth leakage protection via MicroLogic Vigi (earth leakage circuit breaker - ELCB)
- EverLink™ connectors for bare cables

Offer Marketing Illustration

Product benefits / Features

CompacT NSXm Technical Features



Technical Illustration

Assembly's dimensions

