

# Product datasheet

Specifications



## Circuit breaker ComPacT NSXm N (50kA at 415VAC), 4 Poles 4d, 160A rating Micrologic 4.1 trip unit, lugs and busbar connectors

C12N44V160B

### Main

Range	ComPacT
Product name	ComPacT NSXm
Device short name	NSXm 160N
Product or component type	Earth leakage 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	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
Performance level	N 50 kA 415 V AC
Trip unit name	MicroLogic 4.1
Trip unit technology	Electronic
Trip unit protection functions	LSolR
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
[Ics] rated service short-circuit 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
Mechanical durability	20000 cycles
Electrical durability	20000 cycles at 440 V In/2 10000 cycles at 440 V In
Power dissipation per pole	12.3 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 terminals</b>	compression lug/busbar
<b>Connection pitch</b>	35 mm with spreaders 27 mm without spreaders
<b>9 mm pitches</b>	12 module
<b>Trip unit rating</b>	160 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>	63...160 A
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[tr] long-time protection delay adjustment range</b>	200 s at 1.5 x Ir 8 s at 6 x Ir 5 s at 7.2 x Ir
<b>Neutral protection settings</b>	1 x Ir (4D)
<b>Thermal memory</b>	20 minutes before and after tripping
<b>Short-time protection pick-up adjustment type Isd</b>	Adjustable 9 settings
<b>[Isd] Short-time protection pick-up adjustment range</b>	1.5...10 x Ir
<b>Short-time protection delay adjustment type tsd</b>	Fixed
<b>Instantaneous protection pick-up adjustment type Ii</b>	Fixed
<b>[Ii] instantaneous protection pick-up adjustment range</b>	2000 A
<b>Earth-leakage protection</b>	Integrated
<b>Earth-leakage protection class</b>	Class A Class AC
<b>Earth-leakage protection sensitivity adjustment type IΔn</b>	Adjustable
<b>[IΔn] earth-leakage protection sensitivity adjustment range</b>	30 mA 100 mA 300 mA 500 mA 1 A 3 A 5 A
<b>Earth-leakage sensitivity</b>	30 mA for class A 100 mA for class A 300 mA for class A 500 mA for class A 1 A for class A 30 mA for class AC 100 mA for class AC 300 mA for class AC 500 mA for class AC 1 A for class AC 3 A for class AC 5 A for class AC
<b>Earth-leakage protection time delay adjustment type Δt</b>	Adjustable
<b>[Δt] Earth-leakage protection time delay adjustment range</b>	0 ms 60 ms 150 ms 500 ms 1000 ms

<b>Number of slots for electrical auxiliaries</b>	1 slot(s) for auxiliary switch OF 1 slot(s) for alarm switch SD 1 slot(s) for voltage release MN or MX
<b>Local signalling</b>	Flag (green) for presence of auxiliary contacts
<b>Width (W)</b>	108 mm
<b>Height (H)</b>	144 mm
<b>Depth (D)</b>	80 mm
<b>Net weight</b>	1.63 kg
<b>Colour</b>	Grey (RAL 7016)

## Environment

<b>Standards</b>	EN/IEC 60947-2
<b>Overvoltage category</b>	IV
<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>	2000 m without derating 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>	15.0 cm
<b>Package 1 Width</b>	13.0 cm
<b>Package 1 Length</b>	19.0 cm
<b>Package 1 Weight</b>	1.654 kg
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	4
<b>Package 2 Height</b>	30.0 cm
<b>Package 2 Width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Package 2 Weight</b>	6.998 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	219 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Carbon footprint of the manufacturing phase [A1 to A3]	17 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.3 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]	4 kg CO2 eq.

### Use Better



### Materials and Packaging

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	Af3d4202-1697-430d-83ec-d7a972ac0ddb
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	Halogen free plastic parts product
PVC free	Yes
Silicone-free	No

### Use Longer



### Lifetime extension

Repair	No
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### Use Again



### Repack and remanufacture

Recyclability potential, in %	56
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



Offer Marketing Illustration

Product benefits / Features

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## Compact NSXm Range Accessories



Wireless  
indication auxiliary



Long terminal  
shield



Standard  
auxiliary contact



Rotary handles



Inter-phase barrier



Toggle padlocking  
device



MN undervoltage  
release



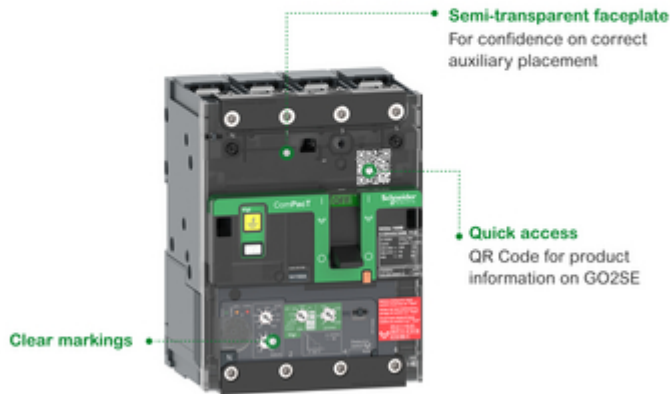
Standard MX shunt  
release

Offer Marketing Illustration

Product benefits / Features

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## CompacT NSXm Technical Features



Offer Marketing Illustration

Product benefits / Features

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## CompacT NSXm Earth leakage 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

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## 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

Technical Illustration

Assembly's dimensions

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