

Product datasheet

Specifications



Circuit breaker ComPacT NSXm E (16kA at 415VAC), 4 Poles 3d, 160A rating TMD trip unit, compression lugs and busbar connectors

C12E6TM160B

Main

Range	ComPacT
Product name	ComPacT NSXm
Device short name	NSXm 160E
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	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 IEC 60947-2
Utilisation category	Category A
[Icu] rated ultimate short-circuit breaking capacity	25 kA Icu at 220...240 V AC 50/60 Hz conforming to IEC 60947-2 16 kA Icu at 380...415 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	E 16 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	25 kA at 220...240 V AC 50/60 Hz conforming to IEC 60947-2 16 kA at 380...415 V AC 50/60 Hz conforming to IEC 60947-2 10 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	No protection (3D)
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	12.0 cm
Package 1 Width	11.5 cm
Package 1 Length	21.0 cm
Package 1 Weight	1.388 kg
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	8.704 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	210 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 Packaging

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 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 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 Technical Features



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.



Technical Illustration

Assembly's dimensions

