

Product datasheet

Specifications



Circuit breaker, ComPacT NSX160F, 36kA/415VAC, 4 poles, MicroLogic Vigi 7.2E trip unit 100A

C16F47E100

⚠ Discontinued on: 01 Dec 2024

⚠ To be discontinued

Main

Range	ComPacT
Product name	ComPacT NSX
Device short name	NSX160F
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	100 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	85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 36 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 8 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 35 kA Icu at 480 V AC 50/60 Hz conforming to UL 60947-4-1 10 kA Icu at 600 V AC 50/60 Hz conforming to UL 60947-4-1
Breaking capacity code	F 36 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	85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 36 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 35 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 22 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 8 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	40000 cycles
Electrical durability	40000 cycles at 440 V In/2 20000 cycles at 440 V In 15000 cycles at 690 V In/2 7500 cycles at 690 V In
Power dissipation per pole	12.3 W N 12.3 W L1 and L3 10 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	100 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	40...100 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

[IΔn] 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 Δ n 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	2.6 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	2.83 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	16.98 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 102

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 accessories for the ComPacT NSX circuit breaker range. At the top left, a green circular graphic partially overlaps a photograph of a circuit breaker. Below this, the title 'ComPacT NSX Range Accessories' is presented in a bold, sans-serif font. The accessories are arranged in a 3x3 grid, each accompanied by a small product photograph and a descriptive label. The labels are: 'Wireless auxiliary contact' (a green and white module), 'Short terminal shield' (a grey metal plate), 'Interphase barriers' (a black vertical plate), 'Long terminal shield' (a grey metal plate), 'Rotary handles' (a green handle with a black knob), 'Standard auxiliary contact' (a grey module with two terminals), 'MN undervoltage release' (a black module with a white label), 'MX shunt release' (a grey module with a yellow label), and 'Standard motor mechanism module' (a black module with a silver handle).

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

