

C10N47E100

Circuit breaker, ComPacT NSX100N,
50kA/415VAC, 4 poles, MicroLogic Vigi 7.2E
trip unit 100A



Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX100N
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
[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 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
Performance level	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

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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 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	50000 cycles
Electrical durability	50000 Cycles at 440 V In/2 30000 Cycles at 440 V In 20000 Cycles at 690 V In/2 10000 cycles at 690 V In
Power dissipation per pole	5.8 W N 5.8 W L1 and L3 3.9 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 protection 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 settings	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 protection 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 li	Adjustable
[li] 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
Earth-leakage protection specific mode	OFF using the IΔn rotary switch
Earth-leakage protection time delay adjustment type Δt	Adjustable

[Δt] Earth-leakage protection time delay adjustment range	0 Ms 60 Ms 150 Ms 500 Ms 1 s
Zone selective interlocking ZSI	Without
Number of slots for electrical auxiliaries	5 slot(s)
Local signalling	Flashing LED (green) for ready to operate LED 105 % Ir (red) for overload LED 90 % Ir (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	2.4 kg

Environment

Standards	EN/IEC 60947-2
Overvoltage category	Class II
Electrical shock protection class	Class II
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

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
Sustainable packaging	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information