

# Product data sheet

Specifications



## Circuit breaker, ComPacT NSX100N, 50kA/415VAC, 4 poles, MicroLogic Vigi 4.2 trip unit 100A

C10N44V100

### 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 + 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 4.2
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

<b>[Ics] rated service short-circuit breaking capacity</b>	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
<b>Mechanical durability</b>	50000 cycles
<b>Electrical durability</b>	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
<b>Power dissipation per pole</b>	5.8 W N 5.8 W L1 and L3 3.9 W L2
<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 pitch</b>	35 mm
<b>Protection type</b>	L : for overload protection (long time) So : for short time short-circuit protection with fixed delay I : for instantaneous short-circuit protection R : for earth-leakage protection
<b>Trip unit rating</b>	100 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>	40...100 A
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[Tr] long-time protection delay adjustment range</b>	400 s at 1.5 x Ir 16 s at 6 x Ir 11 s at 7.2 x Ir
<b>Neutral protection settings</b>	0.5 x Ir (3D + N/2) 1 x Ir (4D) No protection (3D)
<b>Thermal memory</b>	20 minutes before and after tripping
<b>Short-time protection pick-up adjustment type Isd</b>	Adjustable
<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>[Tsd] Short-time protection delay adjustment range</b>	0.02 s
<b>Instantaneous protection pick-up adjustment type Ii</b>	Fixed
<b>[Ii] instantaneous protection pick-up adjustment range</b>	1500 A
<b>Earth-leakage protection</b>	Integrated
<b>Earth-leakage protection class</b>	Class A
<b>Earth-leakage protection sensivity 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

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
Width (W)	140 mm
Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.4 kg

## Environment

Standards	EN/IEC 60947
Product certifications	CCC EAC Marine
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	-50...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	14.0 cm
Package 1 Width	14.5 cm
Package 1 Length	19.0 cm
Package 1 Weight	2.529 kg
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm

Package 2 Weight	10.486 kg
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Offer Sustainability

REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	<a href="#">Yes</a>
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

Recommended replacement(s)