

# Product data sheet

Specifications



## Circuit breaker, ComPacT NSX100N, 50kA/415VAC, 3 poles, TMD trip unit 50A

C10N3TM050

### Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX100N
Product or component type	Circuit breaker
Device application	Distribution
Poles description	3P
Protected poles description	3D
[In] rated current	50 A at 40 °C
[Ue] rated operational voltage	690 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	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	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

<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>	4.11 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 pitch</b>	35 mm
<b>Protection type</b>	L : for overload protection (thermal) I : for short-circuit protection (magnetic)
<b>Trip unit rating</b>	50 A at 40 °C
<b>Long-time pick-up adjustment type Ir (thermal protection)</b>	Adjustable
<b>[Ir] long-time protection pick-up adjustment range</b>	0.7...1 x In
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[Tr] long-time protection delay adjustment range</b>	120...400 s at 1.5 x In 15 s at 6 x Ir
<b>Instantaneous protection pick-up adjustment type li</b>	Fixed
<b>[li] instantaneous protection pick-up adjustment range</b>	500 A
<b>Earth-leakage protection</b>	Without
<b>Number of slots for electrical auxiliaries</b>	5 slot(s)
<b>Width (W)</b>	105 mm
<b>Height (H)</b>	161 mm
<b>Depth (D)</b>	86 mm
<b>Net weight</b>	2.05 kg

## Environment

<b>Standards</b>	EN/IEC 60947
<b>Product certifications</b>	CCC EAC Marine
<b>Overvoltage category</b>	Class II
<b>Electrical shock protection class</b>	Class II
<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>	-50...85 °C
<b>Relative humidity</b>	0...95 %

<b>Operating altitude</b>	0...2000 m without derating 2000 m...5000 m with derating
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## Packing Units

<b>Unit Type of Package 1</b>	Db
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	11.0 cm
<b>Package 1 Width</b>	14.0 cm
<b>Package 1 Length</b>	19.0 cm
<b>Package 1 Weight</b>	1.812 kg
<b>Unit Type of Package 2</b>	Doboz
<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>	7.668 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>PVC free</b>	Yes
<b>California proposition 65</b>	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)