

# Product data sheet

Specifications



## circuit breaker ComPact NSX100N, 50 kA at 415 VAC, TMD trip unit 50 A, 3 poles 3d

LV429843

! To be discontinued on: 31 March 2022

! To be end-of-service on: 31 March 2022

! To be discontinued

### Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX100...250
Device short name	NSX100N
Product or component type	Circuit breaker
Device application	Distribution
Number of poles	3P
Protected poles description	3t
[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	85 kA at 240 V AC 50/60 Hz conforming to UL 508 10 kA Icu at 660/690 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 20 kA at 600 V AC 50/60 Hz conforming to UL 508 50 kA at 480 V AC 50/60 Hz conforming to UL 508 36 kA Icu at 500 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 90 kA Icu at 220/240 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
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<b>[Uimp] rated impulse withstand voltage</b>	8 kV
<b>[Ics] rated service short-circuit breaking capacity</b>	10 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 35 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 36 kA at 500 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 90 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2
<b>Mechanical durability</b>	50000 cycles
<b>Electrical durability</b>	10000 cycles at 690 V In 20000 cycles at 690 V In/2 30000 cycles at 440 V In 50000 cycles at 440 V In/2
<b>Mounting support</b>	Backplate
<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>Short-time protection pick-up adjustment type Isd</b>	Fixed
<b>[Isd] Short-time protection pick-up adjustment range</b>	500 A
<b>Short-time protection delay adjustment type tsd</b>	Fixed
<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

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 Weight	1.812 kg
Package 1 Height	11 cm
Package 1 width	14 cm
Package 1 Length	19 cm
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Weight	7.668 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: DINP, which is known to the State of California to cause cancer, and DIDP, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

Warranty	18 months
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## Recommended replacement(s)

LV429843 is replaced by:

1x



circuit breaker ComPacT NSX100N, 50 kA at 415 VAC, TMD trip unit 50 A, 3 poles 3d  
C10N3TM050