

# Product data sheet

Specifications



circuit breaker ComPact NSX100N,  
50 kA at 415 VAC, TMD trip unit 80  
A, 4 poles 3d

LV429851

! To be discontinued on: 30 June 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	4P
Protected poles description	3t
Neutral position	Left
[In] rated current	80 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

<b>[Ui] rated insulation voltage</b>	800 V AC 50/60 Hz
<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>	80 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>	640 A
<b>Short-time protection delay adjustment type tsd</b>	Fixed
<b>Earth-leakage protection</b>	Without
<b>Neutral protection settings</b>	No protection (3t)
<b>Number of slots for electrical auxiliaries</b>	5 slot(s)
<b>Width (W)</b>	140 mm
<b>Height (H)</b>	161 mm
<b>Depth (D)</b>	86 mm
<b>Net weight</b>	2.4 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

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	2.204 kg
<b>Package 1 Height</b>	14.5 cm
<b>Package 1 width</b>	17.56 cm
<b>Package 1 Length</b>	19 cm
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	6
<b>Package 2 Weight</b>	13.63 kg
<b>Package 2 Height</b>	30 cm
<b>Package 2 width</b>	30 cm
<b>Package 2 Length</b>	40 cm

## 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>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	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

<b>Warranty</b>	18 months
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## Recommended replacement(s)

LV429851 is replaced by:

1x



Circuit breaker, ComPact NSX100N, 50kA/415VAC, 4 poles 3D (neutral not protected), TMD trip unit 80A

C10N6TM080

