

# Product datasheet

Specifications



circuit breaker Compact NSX100N,  
50 kA at 415 VAC, Micrologic 2.2  
trip unit 40 A, 3 poles 3d

LV429797

⚠ Discontinued on: 03 July 2023

⚠ 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	40 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	MicroLogic 2.2
Trip unit technology	Electronic
Trip unit protection functions	LSol
Control type	Toggle
Circuit breaker mounting mode	Fixed

## Complementary

[Ui] rated insulation voltage	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 (long time) So : for short time short-circuit protection with fixed delay I : for instantaneous short-circuit protection
<b>Trip unit rating</b>	40 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>	18...40 A
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[Tr] long-time protection delay adjustment range</b>	11 s at 7.2 x Ir 16 s at 6 x Ir 400 s at 1.5 x Ir
<b>Thermal memory</b>	20 minutes before and after tripping
<b>Short-time protection pick-up adjustment type Isd</b>	Adjustable 9 settings
<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>Instantaneous protection pick-up adjustment type li</b>	Fixed
<b>[li] instantaneous protection pick-up adjustment range</b>	600 A
<b>Earth-leakage protection</b>	Without
<b>Zone selective interlocking ZSI</b>	Without
<b>Number of slots for electrical auxiliaries</b>	5 slot(s)
<b>Local signalling</b>	Flashing LED (green) for ready to operate LED 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
<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
<b>Environment</b>	
<b>Standards</b>	EN/IEC 60947
<b>Product certifications</b>	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	11.0 cm
Package 1 Width	14.0 cm
Package 1 Length	19.0 cm
Package 1 Weight	1.852 kg
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	11.532 kg

### 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
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>
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

### Contractual warranty

Warranty	18 months
----------	-----------

### Recommended replacement(s)

LV429797 is replaced by:

1x



Circuit breaker, ComPacT NSX100N, 50kA/415VAC, 3 poles, MicroLogic 2.2 trip unit 40A  
C10N32D040