

# Product datasheet

Specifications



circuit breaker Compact NSX100F,  
36 kA at 415 VAC, TMD trip unit 80  
A, 3 poles 3d

LV429631

⚠ Discontinued on: 03 July 2023

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## Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX100...250
Device short name	NSX100F
Product or component type	Circuit breaker
Device application	Distribution
Number of poles	3P
Protected poles description	3t
[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	10 kA at 600 V AC 50/60 Hz conforming to UL 508 25 kA at 480 V AC 50/60 Hz conforming to UL 508 85 kA at 240 V AC 50/60 Hz conforming to UL 508 22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 25 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 8 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	F 36 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>	11 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 35 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 12.5 kA at 500 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>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 Height	14.0 cm
Package 1 Width	11.5 cm
Package 1 Length	19.0 cm
Package 1 Weight	1.773 kg
Unit Type of Package 2	S04
Number of Units in Package 2	12
Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	22.042 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
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Recommended replacement(s)

LV429631 is replaced by:

1x



Circuit breaker, ComPacT NSX100F, 36kA/415VAC, 3 poles, TMD trip unit 80A C10F3TM080