

# Product data sheet

Specifications



## Circuit breaker, ComPact NSX100F AC/DC, 18kA/415VAC, TMD trip unit 20A, 2 poles 2d

LV438593

! To be discontinued on: 31 December 2022

! To be discontinued

**Important message :** This product has been switched to new ComPact range and is no longer commercialized. It will continue to be available until Q4 2022 only limited to specific projects.

### Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX100...250 ComPact NSX100...250 DC
Device short name	NSX100F
Product or component type	Circuit breaker
Device application	Distribution
Number of poles	2P
Protected poles description	2t
[In] rated current	20 A at 40 °C
[Ue] rated operational voltage	690 V AC 50/60 Hz 500 V DC
Network type	DC 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	5 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 36 kA Icu at 250 V DC 1P conforming to IEC 60947-2 36 kA Icu at 125 V DC 1P conforming to IEC 60947-2 36 kA Icu at 500 V DC 2P conforming to IEC 60947-2 10 kA Icu at 500/525 V AC 50/60 Hz conforming to IEC 60947-2 15 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 18 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 36 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	F 18 kA 415 V AC
Trip unit name	TM-D
Trip unit technology	Thermal-magnetic
Control type	Toggle
Circuit breaker mounting mode	Fixed

### Complementary

[Ui] rated insulation voltage	750 V AC 50/60 Hz conforming to IEC 60947-2
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<b>[Uimp] rated impulse withstand voltage</b>	8 kV conforming to IEC 60947-2
<b>[Ics] rated service short-circuit breaking capacity</b>	5 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 36 kA at 250 V DC conforming to IEC 60947-2 36 kA at 125 V DC conforming to IEC 60947-2 36 kA at 500 V DC conforming to IEC 60947-2 10 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2 15 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 18 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 36 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2
<b>Mechanical durability</b>	20000 cycles
<b>Electrical durability</b>	10000 cycles at 277 V In 20000 cycles at 277 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>	for overload protection (thermal) for short-circuit protection (magnetic)
<b>Trip unit rating</b>	20 A at 40 °C
<b>Long-time pick-up adjustment type Ir (thermal protection)</b>	Fixed
<b>[Ir] long-time protection pick-up adjustment range</b>	1 In
<b>[Im] magnetic protection pick-up range</b>	190 A
<b>Earth-leakage protection</b>	Without
<b>Width (W)</b>	70 mm
<b>Height (H)</b>	161 mm
<b>Depth (D)</b>	86 mm

## 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

Package 1 Weight	1.281 kg
Package 1 Height	8.0 cm
Package 1 width	13.0 cm
Package 1 Length	17.5 cm
Unit Type of Package 2	S03
Number of Units in Package 2	12
Package 2 Weight	15.859 kg
Package 2 Height	30.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 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	Yes
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>
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)

LV438593 is replaced by:



Circuit breaker, ComPacT NSX100F AC/DC, 18kA/415VAC, 2 poles, TMD trip unit 20A  
C10F2TM020