

Product datasheet

Specifications



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

LV438593

⚠ Discontinued on: 15 Jun 2023

⚠ Discontinued

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
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-2

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Ics] rated service short-circuit breaking capacity	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
Mechanical durability	20000 cycles
Electrical durability	10000 cycles at 277 V In 20000 cycles at 277 V In/2
Mounting support	Backplate
Upside connection	Front
Downside connection	Front
Connection pitch	35 mm
Protection type	for overload protection (thermal) for short-circuit protection (magnetic)
Trip unit rating	20 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Fixed
[Ir] long-time protection pick-up adjustment range	1 In
[Im] magnetic protection pick-up range	190 A
Earth-leakage protection	Without
Width (W)	70 mm
Height (H)	161 mm
Depth (D)	86 mm

Environment

Standards	EN/IEC 60947
Product certifications	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	8.0 cm

Package 1 Width	13.0 cm
Package 1 Length	17.5 cm
Package 1 Weight	1.281 kg
Unit Type of Package 2	S03
Number of Units in Package 2	12
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	15.859 kg

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

 Environmental footprint	
Total lifecycle Carbon footprint	179 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	7 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	172 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.2 kg CO2 eq.

Use Better

 Materials and Substances	
SCIP Number	3874e08b-fcb8-4aa9-87c4-d36abebf2833
EU RoHS Directive	Compliant By Exemption

Use Longer

 Lifetime extension	
Repair	No

Use Again

 Repack and remanufacture	
End of life manual availability	End of Life Information
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins