Product datasheet

Specifications



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

LV429841

Discontinued

Discontinued on: 3 Jul 2023

End-of-service on: 30 Jun 2025

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	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

[Ui] rated insulation voltage	800 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV

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	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
Mechanical durability	50000 cycles
Electrical durability	5000 cycles at 690 V In 10000 cycles at 690 V In/2 10000 cycles at 440 V In 20000 cycles at 440 V In/2
Mounting support	Backplate
Upside connection	Front
Downside connection	Front
Connection pitch	35 mm
Protection type	L : for overload protection (thermal) I : for short-circuit protection (magnetic)
Trip unit rating	80 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable
[Ir] long-time protection pick-up adjustment range	0.7...1 x In
Long-time protection delay adjustment type tr	Fixed
[tr] long-time protection delay adjustment range	120…400 s at 1.5 x In 15 s at 6 x Ir
Short-time protection pick-up adjustment type Isd	Fixed
[Isd] Short-time protection pick-up adjustment range	640 A
Short-time protection delay adjustment type tsd	Fixed
Earth-leakage protection	Without
Number of slots for electrical auxiliaries	5 slot(s)
Width (W)	105 mm
Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.05 kg

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	11.000 cm
Package 1 Width	14.000 cm
Package 1 Length	19.000 cm
Package 1 Weight	1.771 kg
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.504 kg
Unit Type of Package 3	P12
Number of Units in Package 3	32
Package 3 Height	45.000 cm
Package 3 Width	80.000 cm
Package 3 Length	120.000 cm
Package 3 Weight	72.032 kg

Contractual warranty

Warranty (in months)	18

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	362

Use Better

Materials and Substances

EU RoHS Directive	Compliant with Exemptions
SCIP Number	3874e08b-fcb8-4aa9-87c4-d36abebf2833

Use Again

Repack and remanufacture

End of life manual availability	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins