Product datasheet

Specifications

Circuit breaker, ComPact NSX250H, 70kA/415VAC, MicroLogic 2.2M trip unit 220A, 3 poles 3d

LV431170

Discontinued on: 30 Jun 2023

Discontinued

Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX100...250
Device short name	NSX250H
Product or component type	Circuit breaker
Device application	Motor
Number of poles	3P
Protected poles description	3t
[In] rated current	220 A at 65 °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 65 kA at 480 V AC 50/60 Hz conforming to UL 508 10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 220/240 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 50 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 65 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 70 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 15 kA at 600 V AC 50/60 Hz conforming to UL 508
Performance level	H 70 kA 415 V AC
Trip unit name	MicroLogic 2.2 M
Trip unit technology	Electronic
Trip unit protection functions	LSoI
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

[Ics] rated service short-circuit breaking capacity	10 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 100 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 35 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 50 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 65 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 70 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	20000 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 (long time) So : for short time short-circuit protection with fixed delay I : for instantaneous short-circuit protection
Trip unit rating	220 A at 65 °C
Motor tripping class	20 5 10
Complementary motor protection	Phase unbalance
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	100...220 A
Long-time protection delay adjustment type tr	Fixed
[tr] long-time protection delay adjustment range	10 s at 7.2 x Ir for trip class 10 120 s at 1.5 x Ir for trip class 5 20 s at 7.2 x Ir for trip class 20 240 s at 1.5 x Ir for trip class 10 26 s at 6 x Ir for trip class 20 480 s at 1.5 x Ir for trip class 20 5 s at 7.2 x Ir for trip class 5 13.5 s at 6 x Ir for trip class 10 6.5 s at 6 x Ir for trip class 5
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type Isd	Adjustable 9 settings
[Isd] Short-time protection pick-up adjustment range	5...13 x Ir
Short-time protection delay adjustment type tsd	Fixed
Instantaneous protection pick-up adjustment type Ii	Fixed
[Ii] instantaneous protection pick-up adjustment range	3300 A
Earth-leakage protection	Without
Zone selective interlocking ZSI	Without
Number of slots for electrical auxiliaries	5 slot(s)
Local signalling	Flashing LED (green) for ready to operate LED 95 % Ith (red) for temperature over set point
Width (W)	105 mm
Height (H)	161 mm
Depth (D)	86 mm

Net weight	2.4 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	11.5 cm
Package 1 Width	14.0 cm
Package 1 Length	19.5 cm
Package 1 Weight	2.04 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	12.64 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	**555 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**
Carbon footprint of the manufacturing phase [A1 to A3]	**11 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.4 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.2 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**543 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.3 kg CO2 eq.**

Use Better

Materials and Substances

SCIP Number	**811c5f45-220d-4e22-b512-f9d771b72680**
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**