Product datasheet

Specifications

Circuit breaker, ComPacT NSX630N, 50kA/415VAC, 3 poles, MicroLogic 1.3M trip unit 500A

C63N31M500

Main

Range	ComPacT new generation
product name	ComPacT NSX new generation
Device short name	NSX630N
Product or component type	Circuit breaker
Device application	Motor protection
Poles description	3P
Protected poles description	3D
[In] rated current	500 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 Icu at 220/240 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 42 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 240 V AC 50/60 Hz conforming to UL 60947-4-1 50 kA Icu at 480 V AC 50/60 Hz conforming to UL 60947-4-1 20 kA Icu at 600 V AC 50/60 Hz conforming to UL 60947-4-1
Performance level	N 50 kA 415 V AC
Trip unit name	MicroLogic 1.3 M
Trip unit technology	Electronic
Trip unit protection functions	SI
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	85 kA at 220/240 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 42 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 11 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 10 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	15000 cycles
Electrical durability	8000 cycles at 440 V In/2 4000 cycles at 440 V In 6000 cycles at 690 V In/2 2000 cycles at 690 V In
Power dissipation per pole	25 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	45 mm
Protection type	S : for short time short-circuit protection I : for instantaneous short-circuit protection
Trip unit rating	500 A at 65 °C
Short-time protection pick-up adjustment type Isd	Adjustable 9 settings
[Isd] Short-time protection pick-up adjustment range	2500 A 3000 A 3500 A 4000 A 4500 A 5000 A 5500 A 6000 A 6500 A
Short-time protection delay adjustment type tsd	Fixed
Instantaneous protection pick-up adjustment type Ii	Fixed
[Ii] instantaneous protection pick-up adjustment range	6500 A
Earth-leakage protection	Without
Zone selective interlocking ZSI	Without
Number of slots for electrical auxiliaries	6 slot(s)
Local signalling	Flashing LED (green) for ready to operate
Width (W)	140 mm
Height (H)	255 mm
Depth (D)	110 mm
Net weight	6.2 kg

Environment

Standards	EN/IEC 60947-2
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	15.200 cm
Package 1 Width	15.300 cm
Package 1 Length	29.000 cm
Package 1 Weight	5.759 kg
Unit Type of Package 2	S04
Number of Units in Package 2	2
Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2 Length	60.000 cm
Package 2 Weight	12.168 kg
Unit Type of Package 3	P12
Number of Units in Package 3	8
Package 3 Height	45.000 cm
Package 3 Width	80.000 cm
Package 3 Length	120.000 cm
Package 3 Weight	60.672 kg

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

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	453
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Recycled metal content at CR level	0
EU RoHS Directive	Compliant with Exemptions
REACh Regulation	REACh Declaration
PVC free	Yes
Silicon free	No

Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Halogen content performance	Product contains halogen above thresholds
Take-back	No