

Product data sheet

Specifications



Circuit breaker, ComPact NSX630N, 50kA/415VAC, MicroLogic 2.3M trip unit 500A, 3 poles 3d

LV432976

! To be discontinued on: 30 June 2023

! 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 in H1 2023 only limited to specific projects.

Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX400...630
Device short name	NSX630N
Product or component type	Circuit breaker
Device application	Motor
Number of poles	3P
Protected poles description	3t
[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 at 240 V AC 50/60 Hz conforming to UL 508 22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 85 kA Icu at 220/240 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 30 kA Icu at 500 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 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
Performance level	N 50 kA 415 V AC
Trip unit name	MicroLogic 2.3 M
Trip unit technology	Electronic
Trip unit protection functions	LSol
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	11 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 85 kA at 220/240 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 50 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 42 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	15000 cycles
Electrical durability	2000 cycles at 690 V In 6000 cycles at 690 V In/2 4000 cycles at 440 V In 8000 cycles at 440 V In/2
Mounting support	Backplate
Upside connection	Front
Downside connection	Front
Connection pitch	45 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	500 A at 65 °C
Motor tripping class	10 20 5
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	250...500 A
[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	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 LED 95 % Ith (red) for temperature over set point

Width (W)	140 mm
Height (H)	255 mm
Depth (D)	110 mm
Net weight	6.2 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	23.8 cm
Package 1 Width	16.5 cm
Package 1 Length	31.0 cm
Package 1 Weight	5.777 kg
Unit Type of Package 2	S04
Number of Units in Package 2	3
Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	18.457 kg

Offer Sustainability

Sustainable offer status	Green Premium product
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
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

Contractual warranty

Warranty 18 months

Recommended replacement(s)

LV432976 is replaced by:

1x



Circuit breaker, ComPacT NSX630N, 50kA/415VAC, 3 poles, MicroLogic 2.3M trip unit
500A
C63N32M500
