

# C63N32M500

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



## 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 50 kA at 480 V AC 50/60 Hz conforming to UL 508
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	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	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 I <sub>r</sub> (thermal protection)	Adjustable 9 settings
[I <sub>r</sub> ] long-time protection pick-up adjustment range	250...500 A
Long-time protection delay adjustment type t <sub>r</sub>	Fixed
[t <sub>r</sub> ] long-time protection delay adjustment range	120 S at 1.5 x I <sub>r</sub> for trip class 5 6.5 S at 6 x I <sub>r</sub> for trip class 5 5 S at 7.2 x I <sub>r</sub> for trip class 5 240 S at 1.5 x I <sub>r</sub> for trip class 10 13.5 S at 6 x I <sub>r</sub> for trip class 10 10 S at 7.2 x I <sub>r</sub> for trip class 10 480 S at 1.5 x I <sub>r</sub> for trip class 20 26 S at 6 x I <sub>r</sub> for trip class 20 20 s at 7.2 x I <sub>r</sub> for trip class 20
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type I <sub>sd</sub>	Adjustable 9 settings
[I <sub>sd</sub> ] Short-time protection pick-up adjustment range	5...13 x I <sub>r</sub>
Short-time protection delay adjustment type t <sub>sd</sub>	Fixed
Instantaneous protection pick-up adjustment type I <sub>i</sub>	Fixed
[I <sub>i</sub> ] 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 % I <sub>th</sub> (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[RETURN]EAC[RETURN]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	2
Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	12.257 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
PVC free	Yes
Halogen content performance	Halogen free plastic parts product