Product data sheet
Characteristics

C10N42D100
Circuit breaker ComPacT NSX100N, 50kA at 415VAC, MicroLogic 2.2 trip unit 100A, 4 poles 4d



Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX100N
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D 3D + N/2 3D + N/2
Neutral position	Left
[In] rated current	100 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	90 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 50 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 KA Icu at 500 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 10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	N 50 kA 415 V AC
Trip unit name	Micrologic 2.2
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	90 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 50 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 KA at 500 V AC 50/60 Hz conforming to IEC 60947-2 35 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	50000 cycles
Electrical durability	50000 Cycles at 440 V In/2 30000 Cycles at 440 V In 20000 Cycles at 690 V In/2 10000 cycles at 690 V In

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Power dissipation per pole	4.7 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
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	100 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	40...100 A
Long-time protection delay adjustment type tr	Fixed
[tr] long-time protection delay adjustment range	400 S at 1.5 x Ir 16 S at 6 x Ir 11 s at 7.2 x Ir
Neutral protection settings	0.5 x Ir (3D + N/2) 1 x Ir (4D) No protection (3D)
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	1.5...10 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	1500 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 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
Width (W)	140 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	15.0 cm
Package 1 Width	15.0 cm
Package 1 Length	20.0 cm
Package 1 Weight	2.385 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	16.25 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information