

# Product datasheet

Specifications



## Circuit breaker, ComPacT NSX250N, 50kA/415VAC, 4 poles, MicroLogic 2.2 trip unit 250A

C25N42D250

### Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX250N
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	250 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 15 kA at 600 V AC 50/60 Hz conforming to UL 508
Performance level	N 50 kA 415 V AC
Trip unit name	MicroLogic 2.2
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

<b>[Ics] rated service short-circuit breaking capacity</b>	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
<b>Mechanical durability</b>	20000 cycles
<b>Electrical durability</b>	20000 cycles at 440 V In/2 10000 cycles at 440 V In 10000 cycles at 690 V In/2 5000 cycles at 690 V In
<b>Power dissipation per pole</b>	17.6 W
<b>Mounting support</b>	Backplate
<b>Mounting position</b>	Horizontal and vertical Flat on the back
<b>Upside connection</b>	Front
<b>Downside connection</b>	Front
<b>Connection pitch</b>	35 mm
<b>Protection type</b>	L : for overload protection (long time) So : for short time short-circuit protection with fixed delay I : for instantaneous short-circuit protection
<b>Trip unit rating</b>	250 A at 40 °C
<b>Long-time pick-up adjustment type Ir (thermal protection)</b>	Adjustable 9 settings
<b>[Ir] long-time protection pick-up adjustment range</b>	100...250 A
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[Tr] long-time protection delay adjustment range</b>	400 s at 1.5 x Ir 16 s at 6 x Ir 11 s at 7.2 x Ir
<b>Neutral protection settings</b>	0.5 x Ir (3D + N/2) 1 x Ir (4D) No protection (3D)
<b>Thermal memory</b>	20 minutes before and after tripping
<b>Short-time protection pick-up adjustment type Isd</b>	Adjustable 9 settings
<b>[Isd] Short-time protection pick-up adjustment range</b>	1.5...10 x Ir
<b>Short-time protection delay adjustment type tsd</b>	Fixed
<b>Instantaneous protection pick-up adjustment type li</b>	Fixed
<b>[li] instantaneous protection pick-up adjustment range</b>	3000 A
<b>Earth-leakage protection</b>	Without
<b>Zone selective interlocking ZSI</b>	Without
<b>Number of slots for electrical auxiliaries</b>	5 slot(s)
<b>Local signalling</b>	Flashing LED (green) for ready to operate LED 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
<b>Width (W)</b>	140 mm
<b>Height (H)</b>	161 mm
<b>Depth (D)</b>	86 mm
<b>Net weight</b>	2.8 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	18.0 cm
Package 1 Length	19.0 cm
Package 1 Weight	2.614 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	17.624 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>

Recommended replacement(s)