

# Product datasheet

Specifications



circuit breaker Compact NSX100F,  
36 kA at 415 VAC, Micrologic 2.2 M  
trip unit 100 A, 3 poles 3d

LV429825

Discontinued on: 31 March 2023

Discontinued

## Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX100...250
Device short name	NSX100F
Product or component type	Circuit breaker
Device application	Motor
Number of poles	3P
Protected poles description	3t
[In] rated current	100 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	10 kA at 600 V AC 50/60 Hz conforming to UL 508 25 kA at 480 V AC 50/60 Hz conforming to UL 508 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 25 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 8 kA Icu at 660/690 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
Performance level	F 36 kA 415 V AC
Trip unit name	MicroLogic 2.2 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
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<b>[Uimp] rated impulse withstand voltage</b>	8 kV
<b>[Ics] rated service short-circuit breaking capacity</b>	11 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 35 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 36 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 4 kA at 660/690 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 12.5 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2
<b>Mechanical durability</b>	50000 cycles
<b>Electrical durability</b>	10000 cycles at 690 V In 20000 cycles at 690 V In/2 30000 cycles at 440 V In 50000 cycles at 440 V In/2
<b>Mounting support</b>	Backplate
<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>	100 A at 65 °C
<b>Motor tripping class</b>	20 5 10
<b>Complementary motor protection</b>	Phase unbalance
<b>Long-time pick-up adjustment type Ir (thermal protection)</b>	Adjustable 9 settings
<b>[Ir] long-time protection pick-up adjustment range</b>	50...100 A
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[Tr] long-time protection delay adjustment range</b>	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
<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>	5...13 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>	1500 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 95 % Ith (red) for temperature over set point
<b>Width (W)</b>	105 mm

Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.05 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	11.000 cm
Package 1 Width	14.000 cm
Package 1 Length	19.000 cm
Package 1 Weight	1.820 kg
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.700 kg
Unit Type of Package 3	P12
Number of Units in Package 3	32
Package 3 Height	45.000 cm
Package 3 Width	80.000 cm
Package 3 Length	120.000 cm
Package 3 Weight	73.600 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>
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
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### Recommended replacement(s)