

Product data sheet

Specifications



Circuit breaker, ComPact NSX250F, 36kA/415VAC, MicroLogic 2.2 trip unit 160A, 4 poles 4d

LV431781

! To be discontinued on: 31 December 2022

! 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 until Q4 2022 only limited to specific projects.

Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX100...250
Device short name	NSX250F
Product or component type	Circuit breaker
Device application	Distribution
Number of poles	4P
Protected poles description	3t + N/2 4t 3t
Neutral position	Left
[In] rated current	160 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	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 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 35 kA at 480 V AC 50/60 Hz conforming to UL 508 30 kA Icu at 500 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	F 36 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
[Ics] rated service short-circuit breaking capacity	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 85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 22 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 8 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	20000 cycles
Electrical durability	5000 cycles at 690 V In 10000 cycles at 690 V In/2 10000 cycles at 440 V In 20000 cycles at 440 V In/2
Mounting support	Backplate
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	160 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	63...160 A
Long-time protection delay adjustment type tr	Fixed
[Tr] long-time protection delay adjustment range	11 s at 7.2 x Ir 16 s at 6 x Ir 400 s at 1.5 x Ir
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 li	Fixed
[li] instantaneous protection pick-up adjustment range	2400 A
Earth-leakage protection	Without
Neutral protection settings	0.5 x Ir (3t + N/2) 1 x Ir (4t) No protection (3t)
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	2.8 kg
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Environment

Standards	EN/IEC 60947
Product certifications	EAC Marine CCC
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 Weight	2.717 kg
Package 1 Height	14.5 cm
Package 1 width	17.74 cm
Package 1 Length	19.0 cm

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 Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months
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Recommended replacement(s)

LV431781 is replaced by:

1x



Circuit breaker, ComPacT NSX250F, 36kA/415VAC, 4 poles, MicroLogic 2.2 trip unit
160A

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