

# Circuit breaker, ComPact NSX250F, 36kA/415VAC, TMD trip unit 160A, 3 poles 3d

LV431632

To be discontinued on: 30 June 2023

(!) 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 in H1 2023 only limited to specific projects.

### Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX100250
Device short name	NSX250F
Product or component type	Circuit breaker
Device application	Distribution
Number of poles	3P
Protected poles description	3t
[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
	V
Suitability for isolation	Yes conforming to EN/IEC 60947-2
Utilisation category	Category A
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Utilisation category  [Icu] rated ultimate short-circuit	Category A  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
Utilisation category  [Icu] rated ultimate short-circuit breaking capacity	Category A  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
Utilisation category  [Icu] rated ultimate short-circuit breaking capacity  Performance level	Category A  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
Utilisation category  [lcu] rated ultimate short-circuit breaking capacity  Performance level  Trip unit name	Category A  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  F 36 kA 415 V AC  TM-D
Utilisation category  [lcu] rated ultimate short-circuit breaking capacity  Performance level  Trip unit name  Trip unit technology	Category A  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  F 36 kA 415 V AC  TM-D  Thermal-magnetic

### Complementary

Complementary	
[Ui] rated insulation voltage	800 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
[lcs] 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 (thermal) I : for short-circuit protection (magnetic)
Trip unit rating	160 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable
[Ir] long-time protection pick-up adjustment range	0.71 x ln
Long-time protection delay adjustment type tr	Fixed
[Tr] long-time protection delay adjustment range	120400 s at 1.5 x ln 15 s at 6 x lr
Short-time protection pick-up adjustment type Isd	Fixed
[Isd] Short-time protection pick- up adjustment range	1250 A
Short-time protection delay adjustment type tsd	Fixed
Earth-leakage protection	Without
Number of slots for electrical auxiliaries	5 slot(s)
Width (W)	105 mm
Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.4 kg

# **Environment**

Standards	EN/IEC 60947
Product certifications	Marine CCC EAC
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	-2570 °C
Ambient air temperature for storage	-5085 °C
Relative humidity	095 %
Operating altitude	02000 m without derating 2000 m5000 m with derating
Packing Units	
Unit Type of Package 1	PCE
Number of Units in Package 1	1

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.0 cm
Package 1 Width	13.5 cm
Package 1 Length	19.0 cm
Package 1 Weight	1.947 kg
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	8.208 kg

# Offer Sustainability

Green Premium product
Compliant EU RoHS Declaration
Yes
China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Yes
Product Environmental Profile
End of Life Information
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
WARNING: This product can expose you to chemicals including: DINP, which is known to the State of California to cause cancer, and DIDP, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

### **Contractual warranty**

Warranty 18 months

# Recommended replacement(s)

LV431632 is replaced by:

1>



Circuit breaker, ComPacT NSX250F, 36kA/415VAC, 3 poles, TMD trip unit 160A C25F3TM160