

# Product data sheet

Specifications



## Circuit breaker, ComPact NSX160F, 36kA/415VAC, MicroLogic 2.2 trip unit 160A, 4 poles 4d

LV430780

! 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 NSX100...250
Device short name	NSX160F
Product or component type	Circuit breaker
Device application	Distribution
Number of poles	4P
Protected poles description	3t 4t 3t + N/2
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	10 kA at 600 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 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
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

<b>[Ui] rated insulation voltage</b>	800 V AC 50/60 Hz
<b>[Uimp] rated impulse withstand voltage</b>	8 kV
<b>[Ics] rated service short-circuit breaking capacity</b>	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
<b>Mechanical durability</b>	40000 cycles
<b>Electrical durability</b>	7500 cycles at 690 V In 15000 cycles at 690 V In/2 20000 cycles at 440 V In 40000 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>	160 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>	63...160 A
<b>Long-time protection delay adjustment type tr</b>	Fixed
<b>[Tr] long-time protection delay adjustment range</b>	11 s at 7.2 x Ir 16 s at 6 x Ir 400 s at 1.5 x Ir
<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>	2400 A
<b>Earth-leakage protection</b>	Without
<b>Neutral protection settings</b>	0.5 x Ir (3t + N/2) 1 x Ir (4t) No protection (3t)
<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

Net weight	2.6 kg
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## 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	14.2 cm
Package 1 Width	14.8 cm
Package 1 Length	19.3 cm
Package 1 Weight	2.432 kg
Unit Type of Package 2	S04
Number of Units in Package 2	9
Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	22.654 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
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

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Warranty

18 months

## Recommended replacement(s)

LV430780 is replaced by:

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1x



Circuit breaker, ComPacT NSX160F, 36kA/415VAC, 4 poles, MicroLogic 2.2 trip unit  
160A  
C16F42D160

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