

# Product datasheet

Specifications



## Circuit breaker, ComPacT NSX630HB1, 75kA/690VAC, 4 poles, MicroLogic 6.3E trip unit 630A

C63V46E630

### Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX630HB1
Product or component type	Circuit breaker
Device application	Distribution
Poles description	4P
Protected poles description	4D 3D + OSN 3D + N/2 3D
Neutral position	Left
[In] rated current	630 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 Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 80 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 75 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	HB1 75 kA 690 V AC
Trip unit name	MicroLogic 6.3 E
Trip unit technology	Electronic
Trip unit protection functions	LSIG
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	85 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 80 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2

Mechanical durability	15000 cycles
Electrical durability	8000 cycles at 440 V In/2 4000 cycles at 440 V In 6000 cycles at 690 V In/2 2000 cycles at 690 V In
Power dissipation per pole	39.69 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	45 mm
Protection type	L : for overload protection (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection G : for ground fault protection
Trip unit rating	630 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	250...630 A
Long-time protection delay adjustment type tr	Adjustable
[Tr] long-time protection delay adjustment range	15...400 s at 1.5 x Ir 0.5...16 s at 6 x Ir 0.35...11 s at 7.2 x Ir
Neutral protection settings	0.5 x Ir (3D + N/2) 1 x Ir (4D) 1.6 x Ir (3D + OSN) No protection (3D)
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type Isd	Adjustable
[Isd] Short-time protection pick-up adjustment range	1.5...10 x Ir
Short-time protection delay adjustment type tsd	Adjustable 5 settings
[Tsd] Short-time protection delay adjustment range	0...0.4 s I²t=off 0.1...0.4 s I²t=on
Instantaneous protection pick-up adjustment type Ii	Adjustable
[Ii] instantaneous protection pick-up adjustment range	1.5...11 x In
Ground-fault protection pick-up adjustment type Ig	Adjustable 9 settings
[Ig] ground-fault protection pick-up adjustment range	0.4...1 x In for In = 40 A 0.2...1 x In for In > 40 A Ig enable on/off
Ground-fault protection time delay adjustment type tg	Adjustable 5 settings
[Tg] ground-fault protection time delay adjustment range	0...0.4 s I²t=off 0.1...0.4 s I²t=on
Earth-leakage protection	Without
Zone selective interlocking ZSI	With
Number of slots for electrical auxiliaries	6 slot(s)

Local signalling	Flashing LED (green) for ready to operate LED 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
Display type	LCD display
Type of measurement	Energy meter
Communication of data	Demand current and power Instantaneous and demand values Power quality Energy metering Maintenance indicators Maximeters/minimeters Time-stamped histories and event tables Protection and alarm settings
Width (W)	185 mm
Height (H)	255 mm
Depth (D)	110 mm
Net weight	8.13 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	-40...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	15.2 cm
Package 1 Width	20.3 cm
Package 1 Length	29.2 cm
Package 1 Weight	7.651 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>
PVC free	Yes
Halogen content performance	Halogen free plastic parts product

Recommended replacement(s)