Product data sheet
Characteristics

LV433630
circuit breaker ComPact NSX400HB1, 75 kA at 690 VAC, MicroLogic 6.3 E-M trip unit 320 A, 3 poles 3d

Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX400...630
Device short name	NSX400HB1
Product or component type	Circuit breaker
Device application	Motor
Number of poles	3P
Protected poles description	3t
[In] rated current	320 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	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-M
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 75 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	15000 cycles
Electrical durability	3000 Cycles at 690 V In 6000 Cycles at 690 V In/2 6000 Cycles at 440 V In 12000 cycles at 440 V In/2
Mounting support	Backplate
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	320 A at 65 °C
Motor tripping class	10 30 20 5
Complementary motor protection	Underload Protracted starting time Phase unbalance Stalled rotor
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	160...320 A
Long-time protection delay adjustment type tr	Adjustable
[tr] long-time protection delay adjustment range	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 30 S at 7.2 x Ir for trip class 30 38 S at 6 x Ir for trip class 30 720 s at 1.5 x Ir for trip class 30
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	5...13 x Ir
Short-time protection delay adjustment type tsd	Fixed
Instantaneous protection pick-up adjustment type Ii	Fixed
[Ii] instantaneous protection pick-up adjustment range	4800 A
Ground-fault protection pick-up adjustment type Ig	Adjustable 9 settings
[Ig] ground-fault protection pick-up adjustment range	0.2...1 x In 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
Earth-leakage protection	Without
Number of slots for electrical auxiliaries	6 slot(s)
Local signalling	Flashing LED (green) for ready to operate LED 95 % Ith (red) for temperature over set point
Display type	LCD display
Type of measurement	Energy meter
Communication of data	Phase sequence Protection and alarm settings Maintenance indicators Power quality Maximeters/Minimeters Time-stamped histories and event tables Thermal image function Demand current and power Energy metering Instantaneous and demand values
Width (W)	140 mm
Height (H)	255 mm
Depth (D)	110 mm
Net weight	6.05 kg

Environment

Standards	EN/IEC 60947
Product certifications	CCC Marine 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	-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 Weight	5.82 kg
Package 1 Height	15.2 cm
Package 1 width	15.2 cm
Package 1 Length	29.2 cm

Offer Sustainability

EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Contractual warranty

Warranty	18 months