

Product data sheet

Characteristics

C10V36M050

Circuit breaker, ComPacT NSX100HB1,
75kA/690VAC, 3 poles, MicroLogic 6.2E-M trip
unit 50A



Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX100HB1
Product or component type	Circuit breaker
Device application	Motor protection
Poles description	3P
Protected poles description	3D
[In] rated current	50 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 6.2 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	20000 cycles
Electrical durability	20000 Cycles at 440 V In/2 10000 Cycles at 440 V In 10000 Cycles at 690 V In/2 5000 cycles at 690 V In
Power dissipation per pole	1.18 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front
Downside connection	Front
Connection pitch	35 mm

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Protection type	L : for overload protection (long time) So : for short time short-circuit protection I : for instantaneous short-circuit protection G : for ground fault protection
Trip unit rating	50 A at 65 °C
Motor tripping class	10 5 20 30
Complementary motor protection	Stalled rotor Underload Phase unbalance Protracted starting time
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	25...50 A
Long-time protection delay adjustment type tr	Adjustable
[tr] long-time protection delay adjustment range	120 S at 1.5 x Ir for trip class 5 6.5 S at 6 x Ir for trip class 5 5 S at 7.2 x Ir for trip class 5 240 S at 1.5 x Ir for trip class 10 13.5 S at 6 x Ir for trip class 10 10 S at 7.2 x Ir for trip class 10 480 S at 1.5 x Ir for trip class 20 26 S at 6 x Ir for trip class 20 20 S at 7.2 x Ir for trip class 20 720 S at 1.5 x Ir for trip class 30 38 S at 6 x Ir for trip class 30 30 s at 7.2 x Ir for trip class 30
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type lsd	Adjustable
[lsd] 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 li	Fixed
[li] instantaneous protection pick-up adjustment range	750 A
Ground-fault protection pick-up adjustment type Ig	Adjustable 9 settings
[lg] ground-fault protection pick-up adjustment range	0.6...1 x In for In = 25 A 0.3...1 x In for In = 50 A 0.2...1 x In for In > 50 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
Earth-leakage protection	Without
Zone selective interlocking ZSI	With
Number of slots for electrical auxiliaries	5 slot(s)
Local signalling	Flashing LED (green) for ready to operate LED 95 % lth (red) for temperature over set point
Display type	LCD display
Type of measurement	Energy meter
Communication of data	Maximeters/Minimeters Protection and alarm settings Demand current and power Maintenance indicators Power quality Phase sequence Time-stamped histories and event tables Energy metering Thermal image function Instantaneous and demand values
Width (W)	105 mm
Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.05 kg

Environment

Standards	EN/IEC 60947
Product certifications	CCC[RETURN]EAC[RETURN]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	14.0 cm
Package 1 Width	11.0 cm
Package 1 Length	20.0 cm
Package 1 Weight	1.89 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	7.56 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information