

Product data sheet

Characteristics

C25V45E100

Circuit breaker, ComPacT NSX250HB1,
75kA/690VAC, 4 poles, MicroLogic 5.2E trip
unit 100A



Main

Range	ComPacT new generation
Product name	ComPacT NSX new generation
Device short name	NSX250HB1
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	100 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 5.2 E
Trip unit technology	Electronic
Trip unit protection functions	LSI
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	2.7 W
Mounting support	Backplate
Mounting position	Horizontal and vertical Flat on the back
Upside connection	Front

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Downside connection	Front
Connection pitch	35 mm
Protection type	L : for overload protection (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection
Trip unit rating	100 A at 40 °C
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	40...100 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 lsd	Adjustable 9 settings
[lsd] 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 l ² t=off 0.1...0.4 s l ² t=on
Instantaneous protection pick-up adjustment type li	Adjustable
[li] instantaneous protection pick-up adjustment range	1.5...15 x In
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 105 % Ir (red) for overload LED 90 % Ir (orange) for overload
Display type	LCD display
Type of measurement	Energy meter
Communication of data	Power quality Instantaneous and demand values Maximeters/Minimeters Maintenance indicators Protection and alarm settings Time-stamped histories and event tables Energy metering Demand current and power
Width (W)	140 mm
Height (H)	161 mm
Depth (D)	86 mm
Net weight	2.8 kg

Environment

Standards	EN/IEC 60947
Product certifications	EAC[RETURN]CCC[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	15.0 cm
Package 1 Length	20.0 cm
Package 1 Weight	2.8 kg
Unit Type of Package 2	S03
Number of Units in Package 2	3
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	8.4 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<input checked="" type="checkbox"/> REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	<input checked="" type="checkbox"/> China RoHS Declaration
RoHS exemption information	<input checked="" type="checkbox"/> Yes
Environmental Disclosure	<input checked="" type="checkbox"/> Product Environmental Profile
Circularity Profile	<input checked="" type="checkbox"/> End Of Life Information