

Product data sheet

Characteristics

C10V42D100

Circuit breaker, ComPacT NSX100HB1,
75kA/690VAC, 4 poles, MicroLogic 2.2 trip unit
100A



Main

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|--|--|
| Range | ComPacT new generation |
| Product name | ComPacT NSX new generation |
| Device short name | NSX100HB1 |
| Product or component type | Circuit breaker |
| Device application | Distribution |
| Poles description | 4P |
| Protected poles description | 4D 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 2.2 |
| Trip unit technology | Electronic |
| Trip unit protection functions | LSol |
| Control type | Toggle |
| Circuit breaker mounting mode | Fixed |

Complementary

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| [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 | 4.7 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) So : for short time short-circuit protection with fixed delay 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 | Fixed |
| [tr] long-time protection delay adjustment range | 400 S at 1.5 x Ir 16 S at 6 x Ir 11 s at 7.2 x Ir |
| Neutral protection settings | 0.5 x Ir (3D + N/2) 1 x Ir (4D) No protection (3D) |
| 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 | 1.5...10 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 | 1500 A |
| Earth-leakage protection | Without |
| Zone selective interlocking ZSI | Without |
| 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 |
| Width (W) | 140 mm |
| Height (H) | 161 mm |
| Depth (D) | 86 mm |
| Net weight | 2.4 kg |

Environment

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| Standards | EN/IEC 60947 |
| Product certifications | Marine[RETURN]CCC[RETURN]IEAC |
| 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

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| 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 | 2.42 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 |

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| Package 2 Length | 40.0 cm |
| Package 2 Weight | 9.68 kg |

Offer Sustainability

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| 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 |