

Product data sheet

Characteristics

C10B3TM080

Circuit breaker, ComPacT NSX100B,
25kA/415VAC, 3 poles, TMD trip unit 80A



Main

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|--|--|
| Range | ComPacT new generation |
| Product name | ComPacT NSX new generation |
| Device short name | NSX100B |
| Product or component type | Circuit breaker |
| Device application | Distribution |
| Poles description | 3P |
| Protected poles description | 3D |
| [In] rated current | 80 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 | 40 KA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 25 KA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 20 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 15 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level | B 25 kA 415 V AC |
| Trip unit name | TM-D |
| Trip unit technology | Thermal-magnetic |
| Trip unit protection functions | LI |
| 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 | 40 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 25 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 20 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2 7 KA at 500 V AC 50/60 Hz conforming to IEC 60947-2 |
| Mechanical durability | 50000 cycles |
| Electrical durability | 50000 Cycles at 440 V In/2 30000 Cycles at 440 V In 20000 Cycles at 690 V In/2 10000 cycles at 690 V In |
| Power dissipation per pole | 8.77 W |
| Mounting support | Backplate |
| Mounting position | Horizontal and vertical Flat on the back |

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|---|--|
| Upside connection | Front |
| Downside connection | Front |
| Connection pitch | 35 mm |
| Protection type | L : for overload protection (thermal) I : for short-circuit protection (magnetic) |
| Trip unit rating | 80 A at 40 °C |
| Long-time pick-up adjustment type I _r (thermal protection) | Adjustable |
| [I _r] long-time protection pick-up adjustment range | 0.7...1 x I _n |
| Long-time protection delay adjustment type t _r | Fixed |
| [t _r] long-time protection delay adjustment range | 120...400 S at 1.5 x I _n 15 s at 6 x I _r |
| Instantaneous protection pick-up adjustment type I _i | Fixed |
| [I _i] instantaneous protection pick-up adjustment range | 640 A |
| Earth-leakage protection | Without |
| Number of slots for electrical auxiliaries | 5 slot(s) |
| Width (W) | 105 mm |
| Height (H) | 161 mm |
| Depth (D) | 86 mm |
| Net weight | 2.05 kg |

Environment

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|---------------------------------------|--|
| 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 | -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 | 14.000 cm |
| Package 1 Width | 11.000 cm |
| Package 1 Length | 19.000 cm |
| Package 1 Weight | 1.781 kg |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 7 |
| Package 2 Height | 30.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 12.860 kg |

Offer Sustainability

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|--------------------------|--|
| 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 |

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|----------------------------|---|
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |
| PVC free | Yes |