

# C12N3TM160B

Circuit breaker ComPacT NSXm N (50kA at 415VAC), 3 Poles 3d, 160A rating TMD trip unit, compression lugs and busbar connectors



## Main

|  |  |
|--|--|
| Range  | ComPacT new generation   |
| Product name   | ComPacT NSXm new generation  |
| Range of product                                     | ComPacT NSXm new generation  |
| Device short name                                    | NSXm 160N  |
| Product or component type                            | Circuit breaker  |
| Device application                                   | Distribution   |
| Poles description                                    | 3P   |
| Protected poles description                          | 3D   |
| [In] rated current                                   | 160 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 IEC 60947-2  |
| Utilisation category                                 | Category A   |
| [Icu] rated ultimate short-circuit breaking capacity | 90 KA Icu at 220...240 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA Icu at 380...415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | N 50 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

|   |  |
|---|--|
| [Ui] rated insulation voltage                       | 800 V AC 50/60 Hz  |
| [Uimp] rated impulse withstand voltage              | 8 kV   |
| [Ics] rated service short-circuit breaking capacity | 90 KA at 220...240 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA at 380...415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2 |
| Mechanical durability                               | 20000 cycles   |
| Electrical durability                               | 20000 Cycles at 440 V In/2<br>10000 Cycles at 440 V In<br>10000 Cycles at 690 V In/2<br>5000 cycles at 690 V In  |
| Power dissipation per pole                          | 12.21 W  |
| Mounting support                                    | Backplate  |
| Mounting position                                   | Horizontal and vertical<br>Flat on the back  |
| Upside connection                                   | Front  |
| Downside connection                                 | Front  |

|   |  |
|---|--|
| Connection terminals                                      | Compression lug/busbar   |
| Connection pitch  | 35 Mm with spreaders<br>27 mm without spreaders  |
| 9 mm pitches  | 9 module   |
| Trip unit rating  | 160 A at 40 °C   |
| Long-time pick-up adjustment type Ir (thermal protection) | Adjustable   |
| [Ir] long-time protection pick-up adjustment range        | 0.7...1 x In   |
| Long-time protection delay adjustment type tr             | Fixed  |
| Instantaneous protection pick-up adjustment type li       | Fixed  |
| [li] instantaneous protection pick-up adjustment range    | 1250 A   |
| Earth-leakage protection                                  | Without  |
| Number of slots for electrical auxiliaries                | 1 slot(s) for auxiliary switch OF<br>1 slot(s) for alarm switch SD<br>1 slot(s) for voltage release MN or MX |
| Local signalling  | Flag (green) for presence of auxiliary contacts  |
| Width (W)   | 81 mm  |
| Height (H)  | 137 mm   |
| Depth (D)   | 80 mm  |
| Net weight  | 1.06 kg  |
| Colour  | Grey (RAL 7016)  |

## Environment

|                                       |   |
|---------------------------------------|---|
| Standards                             | EN/IEC 60947                                    |
| 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                    | 2000 m without derating<br>5000 m with derating |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 9 cm      |
| Package 1 Width              | 12 cm     |
| Package 1 Length             | 22 cm     |
| Package 1 Weight             | 1.148 kg  |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 9         |
| Package 2 Height             | 30 cm     |
| Package 2 Width              | 30 cm     |
| Package 2 Length             | 40 cm     |
| Package 2 Weight             | 10.7 kg   |
| Unit Type of Package 3       | P12       |
| Number of Units in Package 3 | 216       |
| Package 3 Height             | 150 cm    |
| Package 3 Width              | 80 cm     |
| Package 3 Length             | 120 cm    |
| Package 3 Weight             | 304.89 kg |

## Offer Sustainability

|                             |   |
|-----------------------------|---|
| Sustainable offer status    | Green Premium product                         |
| REACH Regulation            | <a href="#">REACH Declaration</a>             |
| EU RoHS Directive           | Compliant with Exemptions                     |
| Mercury free                | Yes   |
| China RoHS Regulation       | <a href="#">China RoHS Declaration</a>        |
| RoHS exemption information  | <a href="#">Yes</a>                           |
| Environmental Disclosure    | <a href="#">Product Environmental Profile</a> |
| Circularity Profile         | No need of specific recycling operations      |
| Halogen content performance | Halogen free plastic parts product            |