

# C12N4TM125B

Circuit breaker, ComPacT NSXm 160N, 50kA/415VAC, 4 poles 4D (neutral fully protected), TMD trip unit 125A, lugs/busbars



## 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                                    | 4P                                                                                                                                                                                           |
| Protected poles description                          | 4D                                                                                                                                                                                           |
| Neutral position                                     | Left                                                                                                                                                                                         |
| [In] rated current                                   | 125 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                          | 9.64 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                                              | 12 module                                                                                                    |
| Trip unit rating                                          | 125 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                                                                                                        |
| Neutral protection settings                               | 1 x Ir (4D)                                                                                                  |
| 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)                                                 | 108 mm                                                                                                       |
| Height (H)                                                | 137 mm                                                                                                       |
| Depth (D)                                                 | 80 mm                                                                                                        |
| Net weight                                                | 1.42 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             | 12 cm     |
| Package 1 Width              | 13 cm     |
| Package 1 Length             | 22 cm     |
| Package 1 Weight             | 1.6 kg    |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 6         |
| Package 2 Height             | 30 cm     |
| Package 2 Width              | 30 cm     |
| Package 2 Length             | 40 cm     |
| Package 2 Weight             | 10.19 kg  |
| Unit Type of Package 3       | P12       |
| Number of Units in Package 3 | 144       |
| Package 3 Height             | 150 cm    |
| Package 3 Width              | 80 cm     |
| Package 3 Length             | 120 cm    |
| Package 3 Weight             | 254.49 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                                                                                                                                                                                                                                                          |
| California proposition 65   | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |