

# Product datasheet

Specifications



## Circuit breaker ComPacT NSXm F (36kA at 415VAC), 4 Poles 3d, 100A rating TMD trip unit, compression lugs and busbar connectors

C11F6TM100B

### Main

|                                                      |                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                                                                               |
| Product name                                         | ComPacT NSXm new generation                                                                                                                                                                                                                                                                                          |
| Range of product                                     | ComPacT NSXm new generation                                                                                                                                                                                                                                                                                          |
| Device short name                                    | NSXm 160F                                                                                                                                                                                                                                                                                                            |
| Product or component type                            | Circuit breaker                                                                                                                                                                                                                                                                                                      |
| Device application                                   | Distribution                                                                                                                                                                                                                                                                                                         |
| Poles description                                    | 4P                                                                                                                                                                                                                                                                                                                   |
| Protected poles description                          | 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 IEC 60947-2                                                                                                                                                                                                                                                                                        |
| Utilisation category                                 | Category A                                                                                                                                                                                                                                                                                                           |
| [Icu] rated ultimate short-circuit breaking capacity | 85 kA Icu at 220...240 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA Icu at 380...415 V AC 50/60 Hz conforming to IEC 60947-2<br>35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>15 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>10 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | F 36 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              |

|                                                                  |                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>[Ics] rated service short-circuit breaking capacity</b>       | 85 kA at 220...240 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA at 380...415 V AC 50/60 Hz conforming to IEC 60947-2<br>30 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>10 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>10 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 |
| <b>Mechanical durability</b>                                     | 20000 cycles                                                                                                                                                                                                                                                                                     |
| <b>Electrical durability</b>                                     | 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                                                                                                                                                                                  |
| <b>Power dissipation per pole</b>                                | 8.77 W                                                                                                                                                                                                                                                                                           |
| <b>Mounting support</b>                                          | Backplate                                                                                                                                                                                                                                                                                        |
| <b>Mounting position</b>                                         | Horizontal and vertical<br>Flat on the back                                                                                                                                                                                                                                                      |
| <b>Upside connection</b>                                         | Front                                                                                                                                                                                                                                                                                            |
| <b>Downside connection</b>                                       | Front                                                                                                                                                                                                                                                                                            |
| <b>Connection terminals</b>                                      | compression lug/busbar                                                                                                                                                                                                                                                                           |
| <b>Connection pitch</b>                                          | 35 mm with spreaders<br>27 mm without spreaders                                                                                                                                                                                                                                                  |
| <b>9 mm pitches</b>                                              | 12 module                                                                                                                                                                                                                                                                                        |
| <b>Trip unit rating</b>                                          | 100 A at 40 °C                                                                                                                                                                                                                                                                                   |
| <b>Long-time pick-up adjustment type Ir (thermal protection)</b> | Adjustable                                                                                                                                                                                                                                                                                       |
| <b>[Ir] long-time protection pick-up adjustment range</b>        | 0.7...1 x In                                                                                                                                                                                                                                                                                     |
| <b>Long-time protection delay adjustment type tr</b>             | Fixed                                                                                                                                                                                                                                                                                            |
| <b>Neutral protection settings</b>                               | No protection (3D)                                                                                                                                                                                                                                                                               |
| <b>Instantaneous protection pick-up adjustment type li</b>       | Fixed                                                                                                                                                                                                                                                                                            |
| <b>[li] instantaneous protection pick-up adjustment range</b>    | 1250 A                                                                                                                                                                                                                                                                                           |
| <b>Earth-leakage protection</b>                                  | Without                                                                                                                                                                                                                                                                                          |
| <b>Number of slots for electrical auxiliaries</b>                | 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                                                                                                                                                                                     |
| <b>Local signalling</b>                                          | Flag (green) for presence of auxiliary contacts                                                                                                                                                                                                                                                  |
| <b>Width (W)</b>                                                 | 108 mm                                                                                                                                                                                                                                                                                           |
| <b>Height (H)</b>                                                | 137 mm                                                                                                                                                                                                                                                                                           |
| <b>Depth (D)</b>                                                 | 80 mm                                                                                                                                                                                                                                                                                            |
| <b>Net weight</b>                                                | 1.42 kg                                                                                                                                                                                                                                                                                          |
| <b>Colour</b>                                                    | Grey (RAL 7016)                                                                                                                                                                                                                                                                                  |

## Environment

|                                              |                              |
|----------------------------------------------|------------------------------|
| <b>Standards</b>                             | EN/IEC 60947                 |
| <b>Pollution degree</b>                      | 3 conforming to IEC 60664-1  |
| <b>IP degree of protection</b>               | IP40 conforming to IEC 60529 |
| <b>IK degree of protection</b>               | IK07 conforming to IEC 62262 |
| <b>Ambient air temperature for operation</b> | -25...70 °C                  |
| <b>Ambient air temperature for storage</b>   | -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<br><a href="#">EU RoHS Declaration</a>                                                                      |
| Mercury free                | Yes                                                                                                                   |
| China RoHS Regulation       | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information |
| RoHS exemption information  | <a href="#">Yes</a>                                                                                                   |
| Environmental Disclosure    | <a href="#">Product Environmental Profile</a>                                                                         |
| Halogen content performance | Halogen free plastic parts product                                                                                    |

### Recommended replacement(s)