

# C10M2TM020

Circuit breaker, ComPacT NSX100M AC/DC, 25kA/415VAC, 2 poles, TMD trip unit 20A



## Main

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product name                                         | ComPacT NSX new generation                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Device short name                                    | NSX100M                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Product or component type                            | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Device application                                   | Distribution                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Poles description                                    | 2P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Protected poles description                          | 2D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [In] rated current                                   | 20 A at 40 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| [Ue] rated operational voltage                       | 690 V AC 50/60 Hz<br>500 V DC                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Network type                                         | AC<br>DC                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 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 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>25 KA Icu at 380/415 V AC 50/60 Hz 1P conforming to IEC 60947-2<br>25 KA Icu at 440 V AC 50/60 Hz 1P conforming to IEC 60947-2<br>18 KA Icu at 500/525 V AC 50/60 Hz 2P conforming to IEC 60947-2<br>8 KA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>85 KA Icu at 250 V DC 50/60 Hz 1 pole conforming to IEC 60947-2<br>85 KA Icu at 500 V DC 50/60 Hz 2 poles in series conforming to IEC 60947-2 |
| Performance level                                    | M 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

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage                       | 750 V AC 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| [Uimp] rated impulse withstand voltage              | 8 kV conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| [Ics] rated service short-circuit breaking capacity | 85 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>25 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>25 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>18 KA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>8 KA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>85 KA at 250 V DC 50/60 Hz conforming to IEC 60947-2<br>85 KA at 500 V DC 50/60 Hz conforming to IEC 60947-2<br>36 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 |
| Mechanical durability                               | 20000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Electrical durability                               | 20000 Cycles at 277 V In/2<br>10000 cycles at 277 V In                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                                                           |                                                                                      |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------|
| Power dissipation per pole                                | 6.42 W                                                                               |
| Mounting support                                          | Backplate                                                                            |
| Mounting position                                         | Horizontal and vertical<br>Flat on the back                                          |
| Upside connection                                         | Front                                                                                |
| Downside connection                                       | Front                                                                                |
| Connection pitch                                          | 35 mm                                                                                |
| Protection type                                           | L : for overload protection (thermal)<br>I : for short-circuit protection (magnetic) |
| Trip unit rating                                          | 20 A at 40 °C                                                                        |
| Long-time pick-up adjustment type Ir (thermal protection) | Fixed                                                                                |
| [Ir] long-time protection pick-up adjustment range        | 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    | 190 A                                                                                |
| Earth-leakage protection                                  | Without                                                                              |
| Width (W)                                                 | 70 mm                                                                                |
| Height (H)                                                | 161 mm                                                                               |
| Depth (D)                                                 | 86 mm                                                                                |
| Net weight                                                | 1.2 kg                                                                               |

## Environment

|                                       |                                                              |
|---------------------------------------|--------------------------------------------------------------|
| 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<br>2000 m...5000 m with derating |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 7.5 cm   |
| Package 1 Width              | 13 cm    |
| Package 1 Length             | 17.5 cm  |
| Package 1 Weight             | 1.286 kg |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 12       |
| Package 2 Height             | 30 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 15.83 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        | <a href="#"> End Of Life Information</a>       |
| PVC free                   | Yes                                                                                                                             |