

# C10N3MA013

Circuit breaker, ComPacT NSX100N,  
50kA/415VAC, 3 poles, MA trip unit 12.5A



## Main

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                                                                                                                                           |
| Product name                                         | ComPacT NSX new generation                                                                                                                                                                                                                                                                                                                                                       |
| Device short name                                    | NSX100N                                                                                                                                                                                                                                                                                                                                                                          |
| Product or component type                            | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                  |
| Device application                                   | Motor protection                                                                                                                                                                                                                                                                                                                                                                 |
| Poles description                                    | 3P                                                                                                                                                                                                                                                                                                                                                                               |
| Protected poles description                          | 3D                                                                                                                                                                                                                                                                                                                                                                               |
| [In] rated current                                   | 12.5 A at 65 °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 | 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<br>36 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>35 KA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>10 KA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | N 50 kA 415 V AC                                                                                                                                                                                                                                                                                                                                                                 |
| Trip unit name                                       | MA                                                                                                                                                                                                                                                                                                                                                                               |
| Trip unit technology                                 | Magnetic                                                                                                                                                                                                                                                                                                                                                                         |
| Trip unit protection functions                       | I                                                                                                                                                                                                                                                                                                                                                                                |
| 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<br>36 KA at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>35 KA at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>10 KA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Mechanical durability                               | 50000 cycles                                                                                                                                                                                                                                                                                                                                             |
| Electrical durability                               | 50000 Cycles at 440 V In/2<br>30000 Cycles at 440 V In<br>20000 Cycles at 690 V In/2<br>10000 cycles at 690 V In                                                                                                                                                                                                                                         |
| Power dissipation per pole                          | 0.63 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                                        | I : for short-circuit protection (magnetic) |
| Trip unit rating                                       | 12.5 A at 65 °C                             |
| Short-time protection pick-up adjustment type Isd      | Adjustable 9 settings                       |
| [Isd] Short-time protection pick-up adjustment range   | 6...14 x In                                 |
| Instantaneous protection pick-up adjustment type Ii    | Adjustable 9 settings                       |
| [Ii] instantaneous protection pick-up adjustment range | 6...14 x In                                 |
| 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

|                                       |                                                              |
|---------------------------------------|--------------------------------------------------------------|
| 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             | 12.0 cm  |
| Package 1 Width              | 18.0 cm  |
| Package 1 Length             | 19.0 cm  |
| Package 1 Weight             | 1.832 kg |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 6        |
| Package 2 Height             | 30.0 cm  |
| Package 2 Width              | 30.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 11.4 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                                           |