

# Product data sheet

Specifications



## Circuit breaker, ComPacT NSX100F AC/DC, 18kA/415VAC, 2 poles, TMD trip unit 16A

C10F2TM016

### Main

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product name                                         | ComPacT NSX new generation                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Device short name                                    | NSX100F                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Product or component type                            | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Device application                                   | Distribution                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Poles description                                    | 2P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Protected poles description                          | 2D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [In] rated current                                   | 16 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 | 36 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>18 kA Icu at 380/415 V AC 50/60 Hz 1P conforming to IEC 60947-2<br>15 kA Icu at 440 V AC 50/60 Hz 1P conforming to IEC 60947-2<br>10 kA Icu at 500/525 V AC 50/60 Hz 2P conforming to IEC 60947-2<br>5 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA Icu at 250 V DC 50/60 Hz 1 pole conforming to IEC 60947-2<br>36 kA Icu at 500 V DC 50/60 Hz 2 poles in series conforming to IEC 60947-2 |
| Performance level                                    | F 18 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 | 36 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>18 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 |

15 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2  
 10 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2  
 5 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2  
 36 kA at 250 V DC 50/60 Hz conforming to IEC 60947-2  
 36 kA at 500 V DC 50/60 Hz conforming to IEC 60947-2

|                                                                  |                                                                                      |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Mechanical durability</b>                                     | 20000 cycles                                                                         |
| <b>Electrical durability</b>                                     | 20000 cycles at 277 V In/2<br>10000 cycles at 277 V In                               |
| <b>Power dissipation per pole</b>                                | 2.92 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 pitch</b>                                          | 35 mm                                                                                |
| <b>Protection type</b>                                           | L : for overload protection (thermal)<br>I : for short-circuit protection (magnetic) |
| <b>Trip unit rating</b>                                          | 16 A at 40 °C                                                                        |
| <b>Long-time pick-up adjustment type Ir (thermal protection)</b> | Fixed                                                                                |
| <b>[Ir] long-time protection pick-up adjustment range</b>        | 1 x In                                                                               |
| <b>Long-time protection delay adjustment type tr</b>             | Fixed                                                                                |
| <b>Instantaneous protection pick-up adjustment type li</b>       | Fixed                                                                                |
| <b>[li] instantaneous protection pick-up adjustment range</b>    | 190 A                                                                                |
| <b>Earth-leakage protection</b>                                  | Without                                                                              |
| <b>Width (W)</b>                                                 | 70 mm                                                                                |
| <b>Height (H)</b>                                                | 161 mm                                                                               |
| <b>Depth (D)</b>                                                 | 86 mm                                                                                |
| <b>Net weight</b>                                                | 1.2 kg                                                                               |
| <b>Environment</b>                                               |                                                                                      |
| <b>Standards</b>                                                 | EN/IEC 60947                                                                         |
| <b>Product certifications</b>                                    | CCC<br>EAC<br>Marine                                                                 |
| <b>Overvoltage category</b>                                      | Class II                                                                             |
| <b>Electrical shock protection class</b>                         | Class II                                                                             |
| <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                                                                          |
| <b>Relative humidity</b>                                         | 0...95 %                                                                             |
| <b>Operating altitude</b>                                        | 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 Weight             | 1.282 kg  |
| Package 1 Height             | 8.0 cm    |
| Package 1 width              | 13.0 cm   |
| Package 1 Length             | 18.0 cm   |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 12        |
| Package 2 Weight             | 15.871 kg |
| Package 2 Height             | 30.0 cm   |
| Package 2 width              | 30.0 cm   |
| Package 2 Length             | 40.0 cm   |

## 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                                                                                                                                                                                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information                                                                                                                                                                       |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                                                                                                                                                                                     |
| PVC free                   | Yes                                                                                                                                                                                                                                                                                         |
| 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> |