

# Product data sheet

Specifications



## Circuit breaker, ComPacT NSX100F, 36kA/415VAC, 4 poles, MicroLogic Vigi 4.2 trip unit 40A

C10F44V040

### Main

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                                                                                                                                          |
| Product name                                         | ComPacT NSX new generation                                                                                                                                                                                                                                                                                                                                                      |
| Device short name                                    | NSX100F                                                                                                                                                                                                                                                                                                                                                                         |
| Product or component type                            | Earth leakage circuit breaker                                                                                                                                                                                                                                                                                                                                                   |
| Device application                                   | Distribution                                                                                                                                                                                                                                                                                                                                                                    |
| Poles description                                    | 4P                                                                                                                                                                                                                                                                                                                                                                              |
| Protected poles description                          | 4D<br>3D + N/2<br>3D                                                                                                                                                                                                                                                                                                                                                            |
| Neutral position                                     | Left                                                                                                                                                                                                                                                                                                                                                                            |
| [In] rated current                                   | 40 A at 40 °C                                                                                                                                                                                                                                                                                                                                                                   |
| [Ue] rated operational voltage                       | 440 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 | 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>25 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>8 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | F 36 kA 415 V AC                                                                                                                                                                                                                                                                                                                                                                |
| Trip unit name                                       | Micrologic 4.2                                                                                                                                                                                                                                                                                                                                                                  |
| Trip unit technology                                 | Electronic                                                                                                                                                                                                                                                                                                                                                                      |
| Trip unit protection functions                       | LSolR                                                                                                                                                                                                                                                                                                                                                                           |
| Control type                                         | Toggle                                                                                                                                                                                                                                                                                                                                                                          |
| Circuit breaker mounting mode                        | Fixed                                                                                                                                                                                                                                                                                                                                                                           |

### Complementary

|                                        |                   |
|----------------------------------------|-------------------|
| [Ui] rated insulation voltage          | 500 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>35 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>12 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>11 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>4 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| <b>Mechanical durability</b>                                       | 50000 cycles                                                                                                                                                                                                                                                                                                                                            |
| <b>Electrical durability</b>                                       | 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                                                                                                                                                                                                                                        |
| <b>Power dissipation per pole</b>                                  | 0.93 W N<br>0.93 W L1 and L3<br>0.78 W L2                                                                                                                                                                                                                                                                                                               |
| <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 (long time)<br>So : for short time short-circuit protection with fixed delay<br>I : for instantaneous short-circuit protection<br>R : for earth-leakage protection                                                                                                                                                          |
| <b>Trip unit rating</b>                                            | 40 A at 40 °C                                                                                                                                                                                                                                                                                                                                           |
| <b>Long-time pick-up adjustment type Ir (thermal protection)</b>   | Adjustable 9 settings                                                                                                                                                                                                                                                                                                                                   |
| <b>[Ir] long-time protection pick-up adjustment range</b>          | 18...40 A                                                                                                                                                                                                                                                                                                                                               |
| <b>Long-time protection delay adjustment type tr</b>               | Fixed                                                                                                                                                                                                                                                                                                                                                   |
| <b>[Tr] long-time protection delay adjustment range</b>            | 400 s at 1.5 x Ir<br>16 s at 6 x Ir<br>11 s at 7.2 x Ir                                                                                                                                                                                                                                                                                                 |
| <b>Neutral protection settings</b>                                 | 0.5 x Ir (3D + N/2)<br>1 x Ir (4D)<br>No protection (3D)                                                                                                                                                                                                                                                                                                |
| <b>Thermal memory</b>                                              | 20 minutes before and after tripping                                                                                                                                                                                                                                                                                                                    |
| <b>Short-time protection pick-up adjustment type Isd</b>           | Adjustable                                                                                                                                                                                                                                                                                                                                              |
| <b>[Isd] Short-time protection pick-up adjustment range</b>        | 1.5...10 x Ir                                                                                                                                                                                                                                                                                                                                           |
| <b>Short-time protection delay adjustment type tsd</b>             | Fixed                                                                                                                                                                                                                                                                                                                                                   |
| <b>[Tsd] Short-time protection delay adjustment range</b>          | 0.02 s                                                                                                                                                                                                                                                                                                                                                  |
| <b>Instantaneous protection pick-up adjustment type Ii</b>         | Fixed                                                                                                                                                                                                                                                                                                                                                   |
| <b>[Ii] instantaneous protection pick-up adjustment range</b>      | 600 A                                                                                                                                                                                                                                                                                                                                                   |
| <b>Earth-leakage protection</b>                                    | Integrated                                                                                                                                                                                                                                                                                                                                              |
| <b>Earth-leakage protection class</b>                              | Class A                                                                                                                                                                                                                                                                                                                                                 |
| <b>Earth-leakage protection sensivity adjustment type IΔn</b>      | Adjustable                                                                                                                                                                                                                                                                                                                                              |
| <b>[IΔn] earth-leakage protection sensitivity adjustment range</b> | 30 mA<br>100 mA<br>300 mA<br>500 mA<br>1 A<br>3 A<br>5 A                                                                                                                                                                                                                                                                                                |

|                                                           |                                                                                                                   |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Earth-leakage protection specific mode                    | OFF using the IΔn rotary switch                                                                                   |
| Earth-leakage protection time delay adjustment type Δt    | Adjustable                                                                                                        |
| [Δt] Earth-leakage protection time delay adjustment range | 0 ms<br>60 ms<br>150 ms<br>500 ms<br>1 s                                                                          |
| Zone selective interlocking ZSI                           | Without                                                                                                           |
| Number of slots for electrical auxiliaries                | 5 slot(s)                                                                                                         |
| Local signalling                                          | Flashing LED (green) for ready to operate<br>LED 105 % Ir (red) for overload<br>LED 90 % Ir (orange) for overload |
| Width (W)                                                 | 140 mm                                                                                                            |
| Height (H)                                                | 161 mm                                                                                                            |
| Depth (D)                                                 | 86 mm                                                                                                             |
| Net weight                                                | 2.4 kg                                                                                                            |

## Environment

|                                       |                                                              |
|---------------------------------------|--------------------------------------------------------------|
| Standards                             | EN/IEC 60947                                                 |
| Product certifications                | CCC<br>EAC<br>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             | 14 cm   |
| Package 1 Width              | 14.5 cm |
| Package 1 Length             | 19 cm   |
| Package 1 Weight             | 2.52 kg |
| Unit Type of Package 2       | S03     |
| Number of Units in Package 2 | 3       |
| Package 2 Height             | 30 cm   |
| Package 2 Width              | 30 cm   |
| Package 2 Length             | 40 cm   |

|                  |          |
|------------------|----------|
| Package 2 Weight | 8.124 kg |
|------------------|----------|

Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>                                                                                                                                                                                                                                                                         |
| 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> |

Recommended replacement(s)