

# Product datasheet

Specifications



circuit breaker basic frame,  
ComPacT NSX100N, 50 kA at 415  
VAC 50/60 Hz, 100 A, without trip  
unit, 3 poles

C10N3

## Main

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product name                                         | ComPacT NSX new generation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Device short name                                    | NSX100N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Product or component type                            | Basic frame                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Device application                                   | Distribution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Poles description                                    | 3P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [In] rated current                                   | 100 A at 40 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [Ue] rated operational voltage                       | 690 V AC 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 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 | 10 kA at 600 V AC 50/60 Hz conforming to UL 508<br>85 kA at 240 V AC 50/60 Hz conforming to UL 508<br>10 kA Icu at 660/690 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>50 kA at 480 V AC 50/60 Hz conforming to UL 508<br>36 kA Icu at 500 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>90 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | N 50 kA 415 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Control type                                         | Toggle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Mounting mode                                        | Fixed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Complementary

|                                                     |                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage                       | 800 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 | 10 kA at 660/690 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>36 kA at 500 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>90 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 |
| Mechanical durability                               | 50000 cycles conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                   |
| Electrical durability                               | 10000 cycles 690 V AC 50/60 Hz In conforming to IEC 60947-2                                                                                                                                                                                                                                                                                              |

|                     |                                                                                                                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | 20000 cycles 690 V AC 50/60 Hz In/2 conforming to IEC 60947-2<br>30000 cycles 440 V AC 50/60 Hz In conforming to IEC 60947-2<br>50000 cycles 440 V AC 50/60 Hz In/2 conforming to IEC 60947-2 |
| Mounting support    | Backplate                                                                                                                                                                                     |
| Upside connection   | Front                                                                                                                                                                                         |
| Downside connection | Front                                                                                                                                                                                         |
| Connection pitch    | 35 mm                                                                                                                                                                                         |
| Protection type     | Without protection                                                                                                                                                                            |
| Width (W)           | 105 mm                                                                                                                                                                                        |
| Height (H)          | 161 mm                                                                                                                                                                                        |
| Depth (D)           | 86 mm                                                                                                                                                                                         |

## Environment

|                                       |                              |
|---------------------------------------|------------------------------|
| Standards                             | EN/IEC 60947-2<br>UL 508     |
| Product certifications                | UL<br>CSA                    |
| 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                  |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 1.431 kg |
| Package 1 Height             | 11.2 cm  |
| Package 1 width              | 14 cm    |
| Package 1 Length             | 19.2 cm  |
| Unit Type of Package 2       | P12      |
| Number of Units in Package 2 | 56       |
| Package 2 Weight             | 97.5 kg  |
| Package 2 Height             | 42.5 cm  |
| Package 2 width              | 80 cm    |
| Package 2 Length             | 120 cm   |
| Unit Type of Package 3       | S03      |
| Number of Units in Package 3 | 7        |
| Package 3 Weight             | 10.38 kg |
| Package 3 Height             | 30 cm    |
| Package 3 width              | 30 cm    |
| Package 3 Length             | 40 cm    |

## Offer Sustainability

|                  |                                   |
|------------------|-----------------------------------|
| 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 |

Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|