



## Main

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|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                  | Compact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Product name                           | Compact NSX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Product or component type              | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Device short name                      | Compact NSX100N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Device application                     | Distribution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Poles description                      | 4P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Protected poles description            | 4t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Neutral position                       | Left                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Network type                           | AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Network frequency                      | 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| [In] rated current                     | 80 A at 40 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [Ui] rated insulation voltage          | 800 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| [Uimp] rated impulse withstand voltage | 8 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [Ue] rated operational voltage         | 690 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Breaking capacity code                 | N 50 kA 415 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Breaking capacity                      | 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>20 kA at 600 V AC 50/60 Hz conforming to UL 508<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 |
| [Ics] rated service 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                                                                                                                                                                                  |
| Suitability for isolation              | Yes conforming to EN 60947-2<br>Yes conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                                |                             |
|--------------------------------|-----------------------------|
| Utilisation category           | Category A                  |
| Trip unit name                 | TM-D                        |
| Trip unit technology           | Thermal-magnetic            |
| Trip unit protection functions | LI                          |
| Pollution degree               | 3 conforming to IEC 60664-1 |

## Complementary

|                                           |                                                                                                                                                                                                              |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control type                              | Toggle                                                                                                                                                                                                       |
| Mounting mode                             | Fixed                                                                                                                                                                                                        |
| Mounting support                          | Backplate                                                                                                                                                                                                    |
| Upside connection                         | Front                                                                                                                                                                                                        |
| Downside connection                       | Front                                                                                                                                                                                                        |
| Auxiliary contact composition             | Without                                                                                                                                                                                                      |
| Mechanical durability                     | 50000 cycles                                                                                                                                                                                                 |
| Electrical durability                     | 10000 cycles 690 V In conforming to IEC 60947-2<br>20000 cycles 690 V In/2 conforming to IEC 60947-2<br>30000 cycles 440 V In conforming to IEC 60947-2<br>50000 cycles 440 V In/2 conforming to IEC 60947-2 |
| Connection pitch                          | 35 mm                                                                                                                                                                                                        |
| Local signalling                          | Positive contact indication                                                                                                                                                                                  |
| Neutral protection setting                | 1 x Ir (4t)                                                                                                                                                                                                  |
| Protection type                           | L : for overload protection (thermal)<br>I : for short-circuit protection (magnetic)                                                                                                                         |
| Trip unit rating                          | 80 A at 40 °C                                                                                                                                                                                                |
| Long time pick-up adjustment type Ir      | Adjustable                                                                                                                                                                                                   |
| Long time pick-up adjustment range        | 0.7...1 x In                                                                                                                                                                                                 |
| Long time delay adjustment type           | Fixed                                                                                                                                                                                                        |
| [Tr] long-time delay adjustment range     | 120...400 s at 1.5 x In<br>15 s at 6 x Ir                                                                                                                                                                    |
| Short-time pick-up adjustment type Isd    | Fixed                                                                                                                                                                                                        |
| [Isd] short-time pick-up adjustment range | 640 A                                                                                                                                                                                                        |
| Short-time delay adjustment type          | Fixed                                                                                                                                                                                                        |
| Height                                    | 161 mm                                                                                                                                                                                                       |
| Width                                     | 140 mm                                                                                                                                                                                                       |
| Depth                                     | 86 mm                                                                                                                                                                                                        |
| Product weight                            | 2.4 kg                                                                                                                                                                                                       |
| Compatibility code                        | NSX100                                                                                                                                                                                                       |

## Environment

|                                       |                              |
|---------------------------------------|------------------------------|
| Overvoltage category                  | Class II                     |
| Electrical shock protection class     | Class II                     |
| Standards                             | EN/IEC 60947<br>UL 508       |
| Product certifications                | CCC<br>Marine<br>EAC         |
| IP degree of protection               | IP40 conforming to IEC 60529 |
| IK degree of protection               | IK07 conforming to IEC 62262 |
| Ambient air temperature for operation | -35...70 °C                  |
| Ambient air temperature for storage   | -55...85 °C                  |

## Offer Sustainability

|                          |                       |
|--------------------------|-----------------------|
| Sustainable offer status | Green Premium product |
|--------------------------|-----------------------|

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

### Contractual warranty

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