

# Product data sheet

Specifications



## Circuit breaker, ComPact NSX250B, 25kA/415VAC, TMD trip unit 250A, 4 poles 3d

LV431120

! To be discontinued on: 30 June 2023

! To be discontinued

**Important message :** This product has been switched to new ComPact range and is no longer commercialized. It will continue to be available in H1 2023 only limited to specific projects.

### Main

|  |  |
|--|--|
| Range  | ComPact  |
| Product name   | ComPact NSX  |
| Range of product                                     | ComPact NSX100...250   |
| Device short name                                    | NSX250B  |
| Product or component type                            | Circuit breaker  |
| Device application                                   | Distribution   |
| Number of poles                                      | 4P   |
| Protected poles description                          | 3t   |
| Neutral position                                     | Left   |
| [In] rated current                                   | 250 A at 40 °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 | 15 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>20 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>25 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>40 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | B 25 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 | 800 V AC 50/60 Hz |
|-------------------------------|-------------------|

|  |  |
|--|--|
| <b>[Uimp] rated impulse withstand voltage</b>                    | 8 kV   |
| <b>[Ics] rated service short-circuit breaking capacity</b>       | 20 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>25 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>40 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>15 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 |
| <b>Mechanical durability</b>                                     | 20000 cycles   |
| <b>Electrical durability</b>                                     | 5000 cycles at 690 V In<br>10000 cycles at 690 V In/2<br>10000 cycles at 440 V In<br>20000 cycles at 440 V In/2  |
| <b>Mounting support</b>  | Backplate  |
| <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>  | 250 A at 40 °C   |
| <b>Long-time pick-up adjustment type Ir (thermal protection)</b> | Adjustable   |
| <b>[Ir] long-time protection pick-up adjustment range</b>        | 0.7...1 x In   |
| <b>Long-time protection delay adjustment type tr</b>             | Fixed  |
| <b>[Tr] long-time protection delay adjustment range</b>          | 120...400 s at 1.5 x In<br>15 s at 6 x Ir  |
| <b>Short-time protection pick-up adjustment type Isd</b>         | Adjustable   |
| <b>[Isd] Short-time protection pick-up adjustment range</b>      | 5...10 x In  |
| <b>Short-time protection delay adjustment type tsd</b>           | Fixed  |
| <b>Earth-leakage protection</b>                                  | Without  |
| <b>Neutral protection settings</b>                               | No protection (3t)   |
| <b>Number of slots for electrical auxiliaries</b>                | 5 slot(s)  |
| <b>Width (W)</b>   | 140 mm   |
| <b>Height (H)</b>  | 161 mm   |
| <b>Depth (D)</b>   | 86 mm  |
| <b>Net weight</b>  | 2.8 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   |

|                                       |  |
|---------------------------------------|--|
| 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             | 14.500 cm |
| Package 1 Width              | 17.560 cm |
| Package 1 Length             | 19.000 cm |
| Package 1 Weight             | 2.629 kg  |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 4         |
| Package 2 Height             | 30.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 10.827 kg |

## 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   |
| 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>   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| California proposition 65  | WARNING: Cancer and Reproductive Harm - <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>                  |

## Contractual warranty

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

## Recommended replacement(s)

LV431120 is replaced by:



1x

Circuit breaker, ComPact NSX250B, 25kA/415VAC, 4 poles 3D (neutral not protected), TMD trip unit 250A  
C25B6TM250