

# Product data sheet

Specifications



## Circuit breaker, ComPact NSX250H, 70kA/415VAC, TMD trip unit 200A, 4 poles 3d

LV431681

! 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                                    | NSX250H  |
| Product or component type                            | Circuit breaker  |
| Device application                                   | Distribution   |
| Number of poles                                      | 4P   |
| Protected poles description                          | 3t   |
| Neutral position                                     | Left   |
| [In] rated current                                   | 200 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 | 85 kA at 240 V AC 50/60 Hz conforming to UL 508<br>65 kA at 480 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>100 kA Icu at 220/240 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 Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>65 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>70 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>15 kA at 600 V AC 50/60 Hz conforming to UL 508 |
| Performance level                                    | H 70 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

|  |   |
|--|---|
| <b>[Ui] rated insulation voltage</b>                             | 800 V AC 50/60 Hz   |
| <b>[Uimp] rated impulse withstand voltage</b>                    | 8 kV  |
| <b>[Ics] rated service short-circuit breaking capacity</b>       | 10 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA at 220/240 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>50 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>65 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>70 kA at 380/415 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>  | 200 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>                                    | EAC<br>CCC<br>Marine  |
| <b>Overvoltage category</b>                                      | Class II  |
| <b>Electrical shock protection class</b>                         | 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             | 14.5 cm  |
| Package 1 Width              | 16.86 cm |
| Package 1 Length             | 19.0 cm  |
| Package 1 Weight             | 2.672 kg |

## Offer Sustainability

|                            |  |
|----------------------------|--|
| Sustainable offer status   | Green Premium product  |
| 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 | Yes  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>  |
| Circularity Profile        | <a href="#">End of Life Information</a>  |
| California proposition 65  | WARNING: This product can expose you to chemicals including: DINP, which is known to the State of California to cause cancer, and DIDP, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

## Contractual warranty

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

## Recommended replacement(s)

LV431681 is replaced by:

1x



Circuit breaker, ComPacT NSX250H, 70kA/415VAC, 4 poles 3D (neutral not protected), TMD trip unit 200A  
C25H6TM200