

# Product data sheet

Specifications



## Circuit breaker, ComPact NSX400HB2, 100kA/690VAC, MicroLogic 5.3E trip unit 400A, 4 poles 4d

LV433647

! Discontinued

! Discontinued on: Feb 10, 2023

**Product availability:** Non-Stock - Not normally stocked in distribution facility  
**Important message:** This product has been switched to new ComPacT range and is no longer commercialized.

### Main

|                                                      |                                                                                                                                      |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPact                                                                                                                              |
| Product name                                         | ComPact NSX                                                                                                                          |
| Range of Product                                     | ComPact NSX400...630                                                                                                                 |
| Device short name                                    | NSX400HB2                                                                                                                            |
| Product or Component Type                            | Circuit breaker                                                                                                                      |
| Device Application                                   | Distribution                                                                                                                         |
| Number of poles                                      | 4P                                                                                                                                   |
| Protected poles description                          | 3t + N/2<br>3t<br>3t + OSN<br>4t                                                                                                     |
| Neutral position                                     | Left                                                                                                                                 |
| Line Rated Current                                   | 400 A 104 °F (40 °C)                                                                                                                 |
| [Ue] rated operational voltage                       | 690 V AC 50/60 Hz                                                                                                                    |
| Network type                                         | AC                                                                                                                                   |
| Network Frequency                                    | 50/60 Hz                                                                                                                             |
| Suitability for isolation                            | Yes EN/IEC 60947-2                                                                                                                   |
| Utilisation category                                 | Category A                                                                                                                           |
| [Icu] rated ultimate short-circuit breaking capacity | 100 kA Icu 500 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 525 V AC 50/60 Hz IEC 60947-2<br>100 kA Icu 660/690 V AC 50/60 Hz IEC 60947-2 |
| Performance level                                    | HB2 100 kA 690 V AC                                                                                                                  |
| Trip unit name                                       | MicroLogic 5.3 E                                                                                                                     |
| Trip unit technology                                 | Electronic                                                                                                                           |
| Trip unit protection functions                       | LSI                                                                                                                                  |
| Control Type                                         | Toggle                                                                                                                               |
| Circuit breaker mounting mode                        | Fixed                                                                                                                                |

### Complementary

|                               |                   |
|-------------------------------|-------------------|
| [Ui] rated insulation voltage | 800 V AC 50/60 Hz |
|-------------------------------|-------------------|

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                                                  |                                                                                                                                          |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>[Uimp] rated impulse withstand voltage</b>                    | 8 kV                                                                                                                                     |
| <b>[Ics] rated service short-circuit breaking capacity</b>       | 100 kA 500 V AC 50/60 Hz IEC 60947-2<br>100 kA 525 V AC 50/60 Hz IEC 60947-2<br>100 kA 660/690 V AC 50/60 Hz IEC 60947-2                 |
| <b>Mechanical durability</b>                                     | 15000 cycles                                                                                                                             |
| <b>Electrical durability</b>                                     | 3000 cycles 690 V In<br>6000 cycles 690 V In/2<br>6000 cycles 440 V In<br>12000 cycles 440 V In/2                                        |
| <b>Mounting Support</b>                                          | Backplate                                                                                                                                |
| <b>Upside connection</b>                                         | Front                                                                                                                                    |
| <b>Downside connection</b>                                       | Front                                                                                                                                    |
| <b>Connection pitch</b>                                          | 1.8 in (45 mm)                                                                                                                           |
| <b>Protection type</b>                                           | L : for overload protection (long time)<br>S : for short time short-circuit protection<br>I : for instantaneous short-circuit protection |
| <b>Trip unit rating</b>                                          | 400 A 104 °F (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>        | 160...400 A                                                                                                                              |
| <b>Long-time protection delay adjustment type tr</b>             | Adjustable                                                                                                                               |
| <b>[tr] long-time protection delay adjustment range</b>          | 15...400 s 1.5 x Ir<br>0.35...11 s 7.2 x Ir<br>0.5...16 s 6 x Ir                                                                         |
| <b>Thermal memory</b>                                            | 20 minutes before and after tripping                                                                                                     |
| <b>Short-time protection pick-up adjustment type Isd</b>         | Adjustable 9 settings                                                                                                                    |
| <b>[Isd] Short-time protection pick-up adjustment range</b>      | 1.5...10 x Ir                                                                                                                            |
| <b>Short-time protection delay adjustment type tsd</b>           | Adjustable 5 settings                                                                                                                    |
| <b>[tsd] Short-time protection delay adjustment range</b>        | 0...0.4 s                                                                                                                                |
| <b>Instantaneous protection pick-up adjustment type Ii</b>       | Adjustable                                                                                                                               |
| <b>[Ii] instantaneous protection pick-up adjustment range</b>    | 1.5...12 x In                                                                                                                            |
| <b>Earth-leakage protection</b>                                  | Without                                                                                                                                  |
| <b>Neutral protection settings</b>                               | 0.5 x Ir 3t + N/2)<br>1 x Ir 4t)<br>1.6 x Ir 3t + OSN)<br>No protection 3t)                                                              |
| <b>Zone selective interlocking ZSI</b>                           | With                                                                                                                                     |
| <b>Number of slots for electrical auxiliaries</b>                | 6                                                                                                                                        |
| <b>Local signalling</b>                                          | Flashing LED (green) for ready to operate<br>LED 105 % Ir (red) for overload<br>LED 90 % Ir (orange) for overload                        |
| <b>Display Type</b>                                              | LCD display                                                                                                                              |
| <b>Type of Measurement</b>                                       | Energy meter                                                                                                                             |

|                       |                                                                                                                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Communication of data | Maintenance indicators<br>Protection and alarm settings<br>Energy metering<br>Maximeters/minimeters<br>Demand current and power<br>Instantaneous and demand values<br>Power quality<br>Time-stamped histories and event tables |
| Width (W)             | 7.3 in (185 mm)                                                                                                                                                                                                                |
| Height (H)            | 10.04 in (255 mm)                                                                                                                                                                                                              |
| Depth (D)             | 4.3 in (110 mm)                                                                                                                                                                                                                |
| Product Weight        | 17.4 lb(US) (7.9 kg)                                                                                                                                                                                                           |

## Environment

|                                       |                                                                               |
|---------------------------------------|-------------------------------------------------------------------------------|
| Standards                             | EN/IEC 60947                                                                  |
| Product Certifications                | EAC<br>Marine<br>CCC                                                          |
| Overvoltage category                  | Class II                                                                      |
| Electrical shock protection class     | Class II                                                                      |
| Pollution degree                      | 3 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 | -13...158 °F (-25...70 °C)                                                    |
| Ambient Air Temperature for Storage   | -40...185 °F (-40...85 °C)                                                    |
| Relative humidity                     | 0...95 %                                                                      |
| Operating altitude                    | 0...6561.68 ft (0...2000 m) without derating<br>2000 m...5000 m with derating |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US10DE201101  |
| Discount Schedule | 0DE2          |
| GTIN              | 3606480481062 |
| Returnability     | No            |

## Packing Units

|                        |                        |
|------------------------|------------------------|
| Unit Type of Package 1 | PCE                    |
| Nbr. of units in pkg.  | 1                      |
| Package 1 Height       | 6.0 in (15.2 cm)       |
| Package 1 Width        | 8.0 in (20.3 cm)       |
| Package 1 Length       | 11.5 in (29.2 cm)      |
| Package weight(Lbs)    | 17.81 lb(US) (8.08 kg) |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

|                                                        |                |
|--------------------------------------------------------|----------------|
| Total lifecycle Carbon footprint                       | 816 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 42 kg CO2 eq.  |
| Carbon footprint of the distribution phase [A4]        | 2 kg CO2 eq.   |
| Carbon footprint of the installation phase [A5]        | 0.8 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 770 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 1 kg CO2 eq.   |

## Use Better



### Materials and Substances

|                           |                                                                                                                                                                                                                                                                                                                                    |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SCIP Number               | 25ca3248-85d0-423a-a9d8-5b7aeb52e7b6                                                                                                                                                                                                                                                                                               |
| EU RoHS Directive         | <a href="#">Compliant By Exemption</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> |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again



### Repack and remanufacture

|            |                                                                                                                                                                                                                  |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WEEE Label |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|