

# Product data sheet

Specifications



## Circuit breaker, VigiComPact NSX100B, 25kA/415VAC, TM-D trip unit 80A, add-on Vigi MH module, 4P 3d

LV429701

! Discontinued

! Discontinued on: Oct 13, 2021

### Main

|                                                      |                                                                                                                                                                                                                                                      |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPact                                                                                                                                                                                                                                              |
| Product name                                         | ComPact NSX                                                                                                                                                                                                                                          |
| Range of product                                     | ComPact NSX100...250                                                                                                                                                                                                                                 |
| Device short name                                    | VigiCompact NSX100B                                                                                                                                                                                                                                  |
| Product or component type                            | Circuit breaker with Vigi add-on                                                                                                                                                                                                                     |
| Device application                                   | Distribution                                                                                                                                                                                                                                         |
| Number of poles                                      | 4P                                                                                                                                                                                                                                                   |
| Protected poles description                          | 3t                                                                                                                                                                                                                                                   |
| Neutral position                                     | Left                                                                                                                                                                                                                                                 |
| [In] rated current                                   | 80 A at 40 °C                                                                                                                                                                                                                                        |
| [Ue] rated operational voltage                       | 440 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                                                                                                                                                                                                                     |
| [Uimp] rated impulse withstand voltage              | 8 kV                                                                                                                                                                                                                                  |
| [Ics] rated service short-circuit breaking capacity | 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>7.5 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 |

List Price displayed is VAT EXCLUSIVE.

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

|                                                             |                                                                                                                  |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Mechanical durability                                       | 50000 cycles                                                                                                     |
| Electrical durability                                       | 10000 cycles at 690 V In<br>20000 cycles at 690 V In/2<br>30000 cycles at 440 V In<br>50000 cycles at 440 V In/2 |
| Mounting support                                            | Backplate                                                                                                        |
| Upside connection                                           | Front                                                                                                            |
| Downside connection                                         | Front                                                                                                            |
| Connection pitch                                            | 35 mm                                                                                                            |
| 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 (thermal protection)   | Adjustable                                                                                                       |
| [Ir] long-time protection pick-up adjustment range          | 0.7...1 x In                                                                                                     |
| Long-time protection delay adjustment type tr               | Fixed                                                                                                            |
| [tr] long-time protection delay adjustment range            | 120...400 s at 1.5 x In<br>15 s at 6 x Ir                                                                        |
| Short-time protection pick-up adjustment type Isd           | Fixed                                                                                                            |
| [Isd] Short-time protection pick-up adjustment range        | 640 A                                                                                                            |
| Short-time protection delay adjustment type tsd             | Fixed                                                                                                            |
| Earth-leakage protection                                    | With                                                                                                             |
| Earth-leakage add-on module name                            | MH                                                                                                               |
| Earth-leakage protection class                              | Class A                                                                                                          |
| Earth-leakage protection sensitivity adjustment type IΔn    | Adjustable 5 settings                                                                                            |
| [IΔn] earth-leakage protection sensitivity adjustment range | 0.03...10 A                                                                                                      |
| Earth-leakage protection time delay adjustment type Δt      | Adjustable 4 settings                                                                                            |
| Neutral protection settings                                 | No protection (3t)                                                                                               |
| Number of slots for electrical auxiliaries                  | 6 slot(s)                                                                                                        |
| Width (W)                                                   | 140 mm                                                                                                           |
| Height (H)                                                  | 236 mm                                                                                                           |
| Depth (D)                                                   | 86 mm                                                                                                            |
| Net weight                                                  | 2.4 kg                                                                                                           |

## Environment

|                                   |                              |
|-----------------------------------|------------------------------|
| Standards                         | EN/IEC 60947                 |
| Product certifications            | CCC<br>EAC<br>Marine         |
| Overvoltage category              | Class II                     |
| Electrical shock protection class | 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   |

## 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 >](#)

### Use Better

| Materials and Substances |                           |
|--------------------------|---------------------------|
| EU RoHS Directive        | <a href="#">Compliant</a> |
| PVC free                 | Yes                       |

### 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 |