

# Product datasheet

Specifications



## circuit breaker Compact NSXm Micrologic Vigi 4.1 50A 4P 16kA - lug/busbar

LV426756

⚠ Discontinued on: 15 Jun 2023

⚠ Discontinued

### Main

|                                                      |                                                                                                                                                                                              |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPact                                                                                                                                                                                      |
| Product name                                         | ComPact NSXm                                                                                                                                                                                 |
| Range of product                                     | ComPact NSXm                                                                                                                                                                                 |
| Device short name                                    | NSXm 50E                                                                                                                                                                                     |
| Product or component type                            | Earth leakage circuit breaker                                                                                                                                                                |
| Device application                                   | Protection<br>Distribution                                                                                                                                                                   |
| Number of poles                                      | 4P                                                                                                                                                                                           |
| Protected poles description                          | 4D                                                                                                                                                                                           |
| Neutral position                                     | Left                                                                                                                                                                                         |
| [In] rated current                                   | 50 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 | 25 kA Icu at 220...240 V AC 50/60 Hz conforming to IEC 60947-2<br>16 kA Icu at 380...415 V AC 50/60 Hz conforming to IEC 60947-2<br>10 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | E 16 kA 415 V AC                                                                                                                                                                             |
| Trip unit name                                       | MicroLogic 4.1                                                                                                                                                                               |
| Trip unit technology                                 | Electronic                                                                                                                                                                                   |
| Trip unit protection functions                       | LSolR                                                                                                                                                                                        |
| Control type                                         | Toggle                                                                                                                                                                                       |
| Circuit breaker mounting mode                        | By screws<br>Clip-on                                                                                                                                                                         |

### Complementary

|                                                     |                                                                                                                                                                                  |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage                       | 500 V AC 50/60 Hz                                                                                                                                                                |
| [Uimp] rated impulse withstand voltage              | 8 kV                                                                                                                                                                             |
| [Ics] rated service short-circuit breaking capacity | 25 kA at 220...240 V AC 50/60 Hz conforming to IEC 60947-2<br>16 kA at 380...415 V AC 50/60 Hz conforming to IEC 60947-2<br>10 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 |

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                                       | 20000 cycles                                                                                                                                                                                                                                                                  |
| Electrical durability                                       | 10000 cycles at 440 V In<br>20000 cycles at 440 V In/2                                                                                                                                                                                                                        |
| Mounting support                                            | Plate<br>DIN rail                                                                                                                                                                                                                                                             |
| Connection terminals                                        | compression lug/busbar                                                                                                                                                                                                                                                        |
| Connection pitch                                            | 35 mm with spreaders<br>27 mm without spreaders                                                                                                                                                                                                                               |
| 9 mm pitches                                                | 12 module                                                                                                                                                                                                                                                                     |
| Protection type                                             | L : for overload protection (thermal)<br>So : for short time short-circuit protection with fixed delay<br>I : for instantaneous short-circuit protection<br>R : for earth-leakage protection                                                                                  |
| Trip unit rating                                            | 50 A at 40 °C                                                                                                                                                                                                                                                                 |
| Long-time pick-up adjustment type Ir (thermal protection)   | Adjustable 9 settings                                                                                                                                                                                                                                                         |
| [Ir] long-time protection pick-up adjustment range          | 20...50 A                                                                                                                                                                                                                                                                     |
| Long-time protection delay adjustment type tr               | Fixed                                                                                                                                                                                                                                                                         |
| [tr] long-time protection delay adjustment range            | 5 s at 7.2 x Ir<br>8 s at 6 x Ir<br>200 s at 1.5 x Ir                                                                                                                                                                                                                         |
| Thermal memory                                              | 20 minutes before and after tripping                                                                                                                                                                                                                                          |
| Short-time protection pick-up adjustment type Isd           | Adjustable 9 settings                                                                                                                                                                                                                                                         |
| [Isd] Short-time protection pick-up adjustment range        | 1.5...10 x Ir                                                                                                                                                                                                                                                                 |
| Short-time protection delay adjustment type tsd             | Fixed                                                                                                                                                                                                                                                                         |
| [tsd] Short-time protection delay adjustment range          | 0.02 s                                                                                                                                                                                                                                                                        |
| Instantaneous protection pick-up adjustment type Ii         | Fixed                                                                                                                                                                                                                                                                         |
| [Ii] instantaneous protection pick-up adjustment range      | 750 A                                                                                                                                                                                                                                                                         |
| Earth-leakage protection                                    | Integrated                                                                                                                                                                                                                                                                    |
| Earth-leakage protection sensitivity adjustment type IΔn    | Adjustable                                                                                                                                                                                                                                                                    |
| [IΔn] earth-leakage protection sensitivity adjustment range | 0.03...5 A                                                                                                                                                                                                                                                                    |
| Earth-leakage sensitivity                                   | 30 mA for class A<br>100 mA for class A<br>300 mA for class A<br>500 mA for class A<br>1000 mA for class A<br>30 mA for class AC<br>100 mA for class AC<br>300 mA for class AC<br>500 mA for class AC<br>1000 mA for class AC<br>3000 mA for class AC<br>5000 mA for class AC |
| Earth-leakage protection time delay adjustment type Δt      | Adjustable                                                                                                                                                                                                                                                                    |
| [Δt] Earth-leakage protection time delay adjustment range   | 0 ms<br>60 ms<br>150 ms<br>500 ms<br>1000 ms                                                                                                                                                                                                                                  |
| Neutral protection settings                                 | No protection<br>1 x Ir                                                                                                                                                                                                                                                       |

|                                            |                                                                                                                   |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Number of slots for electrical auxiliaries | 1 slot(s) for auxiliary switch OF<br>1 slot(s) for alarm switch SD<br>1 slot(s) for voltage release MN or MX      |
| Local signalling                           | Flashing LED (green) for ready to operate<br>LED 105 % Ir (red) for overload<br>LED 90 % Ir (orange) for overload |
| Width (W)                                  | 108 mm                                                                                                            |
| Height (H)                                 | 144 mm                                                                                                            |
| Depth (D)                                  | 80 mm                                                                                                             |
| Net weight                                 | 1.63 kg                                                                                                           |
| Colour                                     | Grey (RAL 7016)                                                                                                   |

## Environment

|                                       |                                                            |
|---------------------------------------|------------------------------------------------------------|
| Standards                             | EN/IEC 60947                                               |
| Product certifications                | CCC<br>EAC                                                 |
| 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   | -40...85 °C                                                |
| Relative humidity                     | 0...95 %                                                   |
| Operating altitude                    | 0...2000 m without derating<br>2000...5000 m with derating |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 13 cm    |
| Package 1 Width              | 16 cm    |
| Package 1 Length             | 19 cm    |
| Package 1 Weight             | 1.825 kg |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 4        |
| Package 2 Height             | 30 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 7.741 kg |
| Unit Type of Package 3       | P06      |
| Number of Units in Package 3 | 32       |
| Package 3 Height             | 45 cm    |
| Package 3 Width              | 60 cm    |
| Package 3 Length             | 80 cm    |
| Package 3 Weight             | 48.92 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                       | 93 kg CO2 eq.                                 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 17 kg CO2 eq.                                 |
| Carbon footprint of the distribution phase [A4]        | 0.2 kg CO2 eq.                                |
| Carbon footprint of the installation phase [A5]        | 0 kg CO2 eq.                                  |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 75 kg CO2 eq.                                 |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 0.3 kg CO2 eq.                                |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |

## Use Better



### Materials and Substances

|                   |                                        |
|-------------------|----------------------------------------|
| SCIP Number       | 805e5c38-aa33-4f56-b9dc-becf56eba082   |
| EU RoHS Directive | <a href="#">Compliant By Exemption</a> |

## Use Longer



### Lifetime extension

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

## Use Again



### Repack and remanufacture

|                                 |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |