# Product datasheet

Specifications



Discontinued

## Circuit breaker, ComPact NS1600N, 50kA/415VAC, Micrologic 2.0E trip unit, 1600A, fixed, 4 poles 4d

34418

Discontinued on: 31 Mar 2024

## Main

| | |
|---|---|
| **Range** | ComPact |
| **Product name** | ComPact NS |
| **Range of product** | ComPact NS630b...1600 |
| **Device short name** | Compact NS1600N |
| **Product or component type** | Circuit breaker |
| **Device application** | Distribution |
| **Number of poles** | 4P |
| **Protected poles description** | 4D |
| **Neutral position** | Left |
| **(In) rated current up to 65 °C** | 1600 A at 50 °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 B |
| **[Icu] rated ultimate short-circuit breaking capacity** | 30 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>40 kA Icu at 500/525 V AC 50/60 Hz conforming to IEC 60947-2 |
| **Performance level** | N 50 kA 415 V AC |
| **Trip unit name** | MicroLogic 2.0 E |
| **Trip unit technology** | Electronic |
| **Trip unit protection functions** | LI |
| **Control type** | Rotary handle<br>Toggle |
| **Circuit breaker mounting mode** | Fixed |

## Complementary

| | |
|---|---|
| **[Ui] rated insulation voltage** | 800 V AC 50/60 Hz conforming to IEC 60947-2 |
| **[Uimp] rated impulse withstand voltage** | 8 kV 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

| | |
|---|---|
| **[Ics] rated service short-circuit breaking capacity** | 30 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>37 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>37 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>22 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>37 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 |
| **[Icw] rated short-time withstand current** | 19.2 kA 1 s conforming to IEC 60947-2 |
| **Mechanical durability** | 10000 cycles |
| **Electrical durability** | 1000 cycles at 690 V In<br>2000 cycles at 690 V In/2<br>2000 cycles at 440 V In<br>5000 cycles at 440 V In/2 |
| **Power losses** | 74 W |
| **Mounting support** | Backplate |
| **Upside connection** | Front |
| **Downside connection** | Front |
| **Connection pitch** | 70 mm |
| **Protection type** | L : for overload protection (long time)<br>I : for instantaneous short-circuit protection |
| **Trip unit rating** | 1600 A at 50 °C |
| **Long-time pick-up adjustment type Ir (thermal protection)** | Adjustable 9 settings |
| **[Ir] long-time protection pick-up adjustment range** | 0.4...1 x In |
| **Long-time protection delay adjustment type tr** | Adjustable 9 settings |
| **[tr] long-time protection delay adjustment range** | 12.5…600 s at 1.5 x Ir<br>0.5…24 s at 6 x Ir<br>0.7…16.6 s at 7.2 x Ir |
| **Thermal memory** | 20 mn |
| **Instantaneous protection pick-up adjustment type Ii** | Adjustable |
| **[Ii] instantaneous protection pick-up adjustment range** | 1.5...10 x Ir |
| **Earth-leakage protection** | Without |
| **Neutral protection settings** | No protection (3D)<br>0.5 x Ir (3D + N/2)<br>1 x Ir (4D) |
| **Zone selective interlocking ZSI** | Without |
| **Auxiliary contact composition** | 1 NO/NC |
| **Local signalling** | 4 LEDs (red) for fault indication<br>1 LED (yellow) for overload |
| **Display type** | LCD display |
| **Type of measurement** | Energy meter |
| **Width (W)** | 280 mm |
| **Height (H)** | 327 mm |
| **Depth (D)** | 147 mm |
| **Net weight** | 18 kg |

# Environment

| | |
|---|---|
| **Standards** | EN/IEC 60947-2 |
| **Product certifications** | ASTA<br>ASEFA |

| | |
|---|---|
| **Pollution degree** | 3 conforming to IEC 60947 |
| **IP degree of protection** | IP40 conforming to IEC 60529 |
| **IK degree of protection** | IK07 conforming to EN 50102 |
| **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 m...5000 m with derating |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 30.000 cm |
| **Package 1 Width** | 30.000 cm |
| **Package 1 Length** | 30.000 cm |
| **Package 1 Weight** | 17.035 kg |
| **Unit Type of Package 2** | P12 |
| **Number of Units in Package 2** | 8 |
| **Package 2 Height** | 75.000 cm |
| **Package 2 Width** | 80.000 cm |
| **Package 2 Length** | 120.000 cm |
| **Package 2 Weight** | 156.000 kg |

## Contractual warranty

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|---|---|
| **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 | **1 621 kg CO2 eq.** |
| Environmental Disclosure | **Product Environmental Profile** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **238 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **5 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **2 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **1 351 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **25 kg CO2 eq.** |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **No** |
| SCIP Number | **76c2e213-3b51-4d8b-afdf-632ded42d731** |
| EU RoHS Directive | **Compliant By Exemption** |
| REACh Regulation | **Reference contains Substances of Very High Concern above the threshold** |
| Halogen-free status | **Product contains halogen above thresholds** |
| PVC free | **No** |
| Silicone-free | **No** |

## Use Longer

### Lifetime extension

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

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **56** |
| End of life manual availability | **End of Life Information** |
| Removable battery | **User replaceable** |
| Take-back | **No** |

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