# Product datasheet

Specifications

## Circuit breaker, ComPacT NS1250N, 50kA at 415VAC, 4P, fixed, manually operated, MicroLogic 5.0E control unit, 1250A

C125N45EFM

## Main

| | |
|---|---|
| **Range** | ComPacT |
| **product name** | ComPacT NS new generation |
| **Range of product** | ComPacT NS630b...1600 new generation |
| **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** | 1250 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** | 85 kA Icu at 220/240 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>40 kA Icu at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>30 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **Performance level** | N 50 kA 415 V AC |
| **Trip unit name** | MicroLogic 5.0 E |
| **Trip unit technology** | Electronic |
| **Trip unit protection functions** | LSI |
| **control type** | Manually operated |
| **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 |
| **[Ics] rated service short-circuit breaking capacity** | 50 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>40 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>30 kA at 660/690 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 |

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|---|---|
| **Mechanical durability** | 10000 cycles |
| **Electrical durability** | 2000 cycles at 690 V In<br>3000 cycles at 690 V In/2<br>4000 cycles at 440 V In<br>5000 cycles at 440 V In/2 |
| **Power losses** | 44 W |
| **Mounting support** | Backplate |
| **Upside connection** | Front |
| **Downside connection** | Front |
| **Connection pitch** | 70 mm |
| **Protection type** | L : for overload protection (long time)<br>S : for short time short-circuit protection<br>I : for instantaneous short-circuit protection |
| **Trip unit rating** | 1250 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 |
| **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** | Adjustable |
| **[tsd] Short-time protection delay adjustment range** | 0.1…0.4 s $I^2t$=on<br>0…0.4 s $I^2t$=off |
| **Instantaneous protection pick-up adjustment type Ii** | Adjustable |
| **[Ii] instantaneous protection pick-up adjustment range** | Off<br>2...15 x In |
| **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** | With |
| **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** | IECEE CB Scheme |
| **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

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|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 37.000 cm |
| **Package 1 Width** | 38.000 cm |
| **Package 1 Length** | 30.000 cm |
| **Package 1 Weight** | 15.584 kg |

## 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

| | |
|---|---|
| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | **1100** |
| Environmental Disclosure | **Product Environmental Profile** |

## Use Better

### Materials and Substances

| | |
|---|---|
| Recycled metal content at CR level | **0** |
| Packaging made with recycled cardboard | **No** |
| Packaging without single use plastic | **No** |
| EU RoHS Directive | **Compliant with Exemptions** |
| SCIP Number | **76c2e213-3b51-4d8b-afdf-632ded42d731** |
| REACh Regulation | **REACh Declaration** |
| Halogen content performance | **Product contains halogen above thresholds** |
| PVC free | **No** |
| Silicon free | **No** |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Circularity Profile | **End of Life Information** |
| Removable battery | **User replaceable** |
| Take-back | **No** |
| WEEE | **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |