# Product datasheet

Specifications



## Circuit breaker, ComPacT NSX160F AC/DC, 18kA/415VAC, 2 poles, TMD trip unit 125A

C16F2TM125

## Main

| | |
|---|---|
| **Range** | ComPacT |
| **Product name** | ComPacT NSX |
| **Device short name** | NSX160F |
| **Product or component type** | Circuit breaker |
| **Device application** | Distribution |
| **Poles description** | 2P |
| **Protected poles description** | 2D |
| **[In] rated current** | 125 A at 40 °C |
| **[Ue] rated operational voltage** | 690 V AC 50/60 Hz<br>500 V DC |
| **Network type** | AC<br>DC |
| **Network frequency** | 50/60 Hz |
| **Suitability for isolation** | Yes conforming to EN/IEC 60947-2 |
| **Utilisation category** | Category A |
| **Breaking capacity** | 36 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>18 kA Icu at 380/415 V AC 50/60 Hz 1P conforming to IEC 60947-2<br>15 kA Icu at 440 V AC 50/60 Hz 1P conforming to IEC 60947-2<br>10 kA Icu at 500/525 V AC 50/60 Hz 2P conforming to IEC 60947-2<br>5 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA Icu at 250 V DC 50/60 Hz 1 pole conforming to IEC 60947-2<br>36 kA Icu at 500 V DC 50/60 Hz 2 poles in series conforming to IEC 60947-2 |
| **Breaking capacity code** | F 18 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** | 750 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 breaking capacity** | 36 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>18 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>15 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>10 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>5 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA at 250 V DC 50/60 Hz conforming to IEC 60947-2<br>36 kA at 500 V DC 50/60 Hz conforming to IEC 60947-2 |
| **Mechanical durability** | 20000 cycles |
| **Electrical durability** | 20000 cycles at 277 V In/2<br>10000 cycles at 277 V In |
| **Power dissipation per pole** | 10.78 W |
| **Mounting support** | Backplate |
| **Mounting position** | Horizontal and vertical<br>Flat on the back |
| **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** | 125 A at 40 °C |
| **Long-time pick-up adjustment type Ir (thermal protection)** | Fixed |
| **[Ir] long-time protection pick-up adjustment range** | 1 x In |
| **Long-time protection delay adjustment type tr** | Fixed |
| **Instantaneous protection pick-up adjustment type Ii** | Fixed |
| **[Ii] instantaneous protection pick-up adjustment range** | 1000 A |
| **Earth-leakage protection** | Without |
| **Width (W)** | 70 mm |
| **Height (H)** | 161 mm |
| **Depth (D)** | 86 mm |
| **Net weight** | 1.2 kg |

# Environment

| | |
|---|---|
| **Standards** | EN/IEC 60947-2 |
| **Overvoltage category** | III |
| **Electrical shock protection class** | Class II on front face |
| **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 |
| **Package 1 Height** | 7.900 cm |
| **Package 1 Width** | 13.000 cm |
| **Package 1 Length** | 17.600 cm |
| **Package 1 Weight** | 1.285 kg |
| **Unit Type of Package 2** | S03 |
| **Number of Units in Package 2** | 12 |
| **Package 2 Height** | 30.000 cm |
| **Package 2 Width** | 30.000 cm |
| **Package 2 Length** | 40.000 cm |
| **Package 2 Weight** | 15.820 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 | **126 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **7 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.4 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0.1 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **116 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **2 kg CO2 eq.** |
| Environmental Disclosure | Product Environmental Profile |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **Yes** |
| SCIP Number | **3874e08b-fcb8-4aa9-87c4-d36abebf2833** |
| 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 | **Yes** |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **54** |
| End of life manual availability | End of Life Information |
| 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** |