# Product datasheet

Specifications

Discontinued

## Circuit breaker, ComPact NSX160F, 36kA/415VAC, MicroLogic 2.2M trip unit 100A, 3 poles 3d

LV430986

Discontinued on: 27 Aug 2020

End-of-service on: 11 Mar 2025

## Main

| | |
|---|---|
| **Range** | ComPact |
| **Product name** | ComPact NSX |
| **Range of product** | ComPact NSX100...250 |
| **Device short name** | NSX160F |
| **Product or component type** | Circuit breaker |
| **Device application** | Motor |
| **Number of poles** | 3P |
| **Protected poles description** | 3t |
| **[In] rated current** | 100 A at 65 °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 A |
| **[Icu] rated ultimate short-circuit breaking capacity** | 10 kA at 600 V AC 50/60 Hz conforming to UL 508<br>85 kA at 240 V AC 50/60 Hz conforming to UL 508<br>22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>8 kA Icu at 660/690 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>35 kA at 480 V AC 50/60 Hz conforming to UL 508<br>30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 |
| **Performance level** | F 36 kA 415 V AC |
| **Trip unit name** | MicroLogic 2.2 M |
| **Trip unit technology** | Electronic |
| **Trip unit protection functions** | LSoI |
| **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 |

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** | 35 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>22 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>8 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **Mechanical durability** | 40000 cycles |
| **Electrical durability** | 7500 cycles at 690 V In<br>15000 cycles at 690 V In/2<br>20000 cycles at 440 V In<br>40000 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 (long time)<br>So : for short time short-circuit protection with fixed delay<br>I : for instantaneous short-circuit protection |
| **Trip unit rating** | 100 A at 65 °C |
| **Motor tripping class** | 10<br>5<br>20 |
| **Complementary motor protection** | Phase unbalance |
| **Long-time pick-up adjustment type Ir (thermal protection)** | Adjustable 9 settings |
| **[Ir] long-time protection pick-up adjustment range** | 50...100 A |
| **Long-time protection delay adjustment type tr** | Fixed |
| **[tr] long-time protection delay adjustment range** | 10 s at 7.2 x Ir for trip class 10<br>120 s at 1.5 x Ir for trip class 5<br>20 s at 7.2 x Ir for trip class 20<br>240 s at 1.5 x Ir for trip class 10<br>26 s at 6 x Ir for trip class 20<br>480 s at 1.5 x Ir for trip class 20<br>5 s at 7.2 x Ir for trip class 5<br>13.5 s at 6 x Ir for trip class 10<br>6.5 s at 6 x Ir for trip class 5 |
| **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** | 5...13 x Ir |
| **Short-time protection delay adjustment type tsd** | Fixed |
| **Instantaneous protection pick-up adjustment type Ii** | Fixed |
| **[Ii] instantaneous protection pick-up adjustment range** | 1500 A |
| **Earth-leakage protection** | Without |
| **Zone selective interlocking ZSI** | Without |
| **Number of slots for electrical auxiliaries** | 5 slot(s) |
| **Local signalling** | Flashing LED (green) for ready to operate<br>LED 95 % Ith (red) for temperature over set point |
| **Width (W)** | 105 mm |
| **Height (H)** | 161 mm |
| **Depth (D)** | 86 mm |

| | |
|---|---|
| **Net weight** | 2.2 kg |

## Environment

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|---|---|
| **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 |
| **Package 1 Height** | 11.150 cm |
| **Package 1 Width** | 17.260 cm |
| **Package 1 Length** | 19.000 cm |
| **Package 1 Weight** | 1.954 kg |
| **Unit Type of Package 2** | S04 |
| **Number of Units in Package 2** | 12 |
| **Package 2 Height** | 30.000 cm |
| **Package 2 Width** | 40.000 cm |
| **Package 2 Length** | 60.000 cm |
| **Package 2 Weight** | 24.580 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 | **77 kg CO2 eq.** |
| Environmental Disclosure | **Product Environmental Profile** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **15 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.6 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0.2 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **58 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **3 kg CO2 eq.** |

## Use Better

### Materials and Packaging

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **No** |
| SCIP Number | **811c5f45-220d-4e22-b512-f9d771b72680** |
| EU RoHS Directive | **Compliant By Exemption** |
| Halogen-free status | **Product contains halogen above thresholds** |
| PVC free | **Yes** |
| Silicone-free | **No** |

## Use Longer

### Lifetime extension

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

## 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** |