# Product datasheet

Specifications

Green Premium™

## Circuit breaker, ComPact NSX160N, 50kA/415VAC, MicroLogic 5.2A trip unit 100A, 3 poles 3d

LV430891

Discontinued

Discontinued on: 4 Oct 2021

## Main

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|---|---|
| **Range** | ComPact |
| **Product Name** | ComPact NSX |
| **Range Of Product** | ComPact NSX100...250 |
| **Device Short Name** | NSX160N |
| **Product Or Component Type** | Circuit breaker |
| **Device Application** | Distribution |
| **Number Of Poles** | 3P |
| **Protected Poles Description** | 3t |
| **[In] Rated Current** | 100 A at 40 °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>10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>35 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA at 480 V AC 50/60 Hz conforming to UL 508<br>36 kA Icu at 500 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>90 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 |
| **Performance Level** | N 50 kA 415 V AC |
| **Trip Unit Name** | MicroLogic 5.2 A |
| **Trip Unit Technology** | Electronic |
| **Trip Unit Protection Functions** | LSI |
| **Control Type** | Toggle |
| **Circuit Breaker Mounting Mode** | Fixed |

## Complementary

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|---|---|
| **[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

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|---|---|
| **[Ics] Rated Service Short-Circuit Breaking Capacity** | 10 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>35 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA at 500 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>90 kA at 220/240 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>S : for short time short-circuit protection<br>I : for instantaneous short-circuit protection |
| **Trip Unit Rating** | 100 A at 40 °C |
| **Long-Time Pick-Up Adjustment Type Ir (Thermal Protection)** | Adjustable |
| **[Ir] Long-Time Protection Pick-Up Adjustment Range** | 40...100 A |
| **Long-Time Protection Delay Adjustment Type Tr** | Adjustable |
| **[Tr] Long-Time Protection Delay Adjustment Range** | 15…400 s at 1.5 x Ir<br>0.35…11 s at 7.2 x Ir<br>0.5…16 s at 6 x Ir |
| **Thermal Memory** | 20 minutes before and after tripping |
| **Short-Time Protection Pick-Up Adjustment Type Isd** | Adjustable |
| **[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…0.4 s |
| **Instantaneous Protection Pick-Up Adjustment Type Ii** | Adjustable |
| **[Ii] Instantaneous Protection Pick-Up Adjustment Range** | 1.5...15 x In |
| **Earth-Leakage Protection** | Without |
| **Zone Selective Interlocking Zsi** | With |
| **Number Of Slots For Electrical Auxiliaries** | 5 slot(s) |
| **Local Signalling** | Flashing LED (green) for ready to operate<br>LED 105 % Ir (red) for overload<br>LED 90 % Ir (orange) for overload |
| **Display Type** | LCD display |
| **Type Of Measurement** | Ammeter |
| **Communication Of Data** | Time-stamped histories and event tables<br>Instantaneous and demand values<br>Protection and alarm settings<br>Demand current and power<br>Maximeters/minimeters<br>Power quality<br>Maintenance indicators<br>Energy metering |
| **Width (W)** | 105 mm |

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|---|---|
| **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** | -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** | 10 cm |
| **Package 1 Width** | 10 cm |
| **Package 1 Length** | 10.01 cm |
| **Package 1 Weight** | 2.2 kg |

## Contractual warranty

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|---|---|
| **Warranty** | 18 months |

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-$CO_2$ products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

RoHS/REACh

## Well-being performance

Mercury Free

Rohs Exemption Information — Yes

## Certifications & Standards

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|---|---|
| **Eu Rohs Directive** | Compliant<br>EU RoHS Declaration |
| **China Rohs Regulation** | China RoHS declaration<br>Product out of China RoHS scope. Substance declaration for your information |