# Product data sheet

Specifications

Discontinued

## Circuit breaker, ComPact NSX100HB1, 75kA/690VAC, MicroLogic 6.2E trip unit 40A, 3 poles 3d

LV433311

Discontinued on: Jun 30, 2023

**Important message: This product has been switched to new ComPacT range and is no longer commercialized.**

## Main

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|---|---|
| **Range** | ComPact |
| **Product Name** | ComPact NSX |
| **Range Of Product** | ComPact NSX100...250 |
| **Device Short Name** | NSX100HB1 |
| **Product Or Component Type** | Circuit breaker |
| **Device Application** | Distribution |
| **Number Of Poles** | 3P |
| **Protected Poles Description** | 3t |
| **[In] Rated Current** | 40 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** | 85 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>80 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>75 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **Performance Level** | HB1 75 kA 690 V AC |
| **Trip Unit Name** | MicroLogic 6.2 E |
| **Trip Unit Technology** | Electronic |
| **Trip Unit Protection Functions** | LSIG |
| **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 |
| **[Ics] Rated Service Short-Circuit Breaking Capacity** | 85 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>80 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>75 kA at 660/690 V AC 50/60 Hz 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

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|---|---|
| **Mechanical Durability** | 50000 cycles |
| **Electrical Durability** | 10000 cycles at 690 V In<br>20000 cycles at 690 V In/2<br>30000 cycles at 440 V In<br>50000 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<br>G : for ground fault protection |
| **Trip Unit Rating** | 40 A at 40 °C |
| **Long-Time Pick-Up Adjustment Type Ir (Thermal Protection)** | Adjustable 9 settings |
| **[Ir] Long-Time Protection Pick-Up Adjustment Range** | 18...40 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...15 x In |
| **Short-Time Protection Delay Adjustment Type Tsd** | Adjustable 5 settings |
| **[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 |
| **Ground-Fault Protection Pick-Up Adjustment Type Ig** | Adjustable 9 settings |
| **[Ig] Ground-Fault Protection Pick-Up Adjustment Range** | 0.4...1 x In for In = 40 A<br>0.2...1 x In for In > 40 A<br>Ig enable on/off |
| **Ground-Fault Protection Time Delay Adjustment Type Tg** | Adjustable |
| **[Tg] Ground-Fault Protection Time Delay Adjustment Range** | 0…0.4 s I²t=off<br>0.1…0.4 s I²t=on |
| **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** | Energy meter |

| | |
|---|---|
| **Communication Of Data** | Demand current and power<br>Maintenance indicators<br>Instantaneous and demand values<br>Maximeters/minimeters<br>Time-stamped histories and event tables<br>Energy metering<br>Power quality<br>Protection and alarm settings |
| **Width (W)** | 105 mm |
| **Height (H)** | 161 mm |
| **Depth (D)** | 86 mm |
| **Net Weight** | 2.05 kg |

## Environment

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|---|---|
| **Standards** | EN/IEC 60947 |
| **Product Certifications** | Marine<br>CCC<br>EAC |
| **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** | 13.5 cm |
| **Package 1 Width** | 10.8 cm |
| **Package 1 Length** | 19.2 cm |
| **Package 1 Weight** | 1.89 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.

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Guide to assess a product's sustainability >

Transparency

RoHS/REACh

## Well-being performance

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|---|---|
| Mercury Free | |
| Rohs Exemption Information | Yes |

## Certifications & Standards

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|---|---|
| **Reach Regulation** | REACh Declaration |
| **Eu Rohs Directive** | Compliant with Exemptions |
| **China Rohs Regulation** | China RoHS declaration<br>Product out of China RoHS scope. Substance declaration for your information |
| **Environmental Disclosure** | Product Environmental Profile |
| **Weee** | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| **Circularity Profile** | End of Life Information |
| **California Proposition 65** | WARNING: This product can expose you to chemicals including: DINP, which is known to the State of California to cause cancer, and DIDP, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |