

# Product datasheet

Specifications



Circuit breaker ComPacT  
NSX100HB2. 100kA at 690VAC.  
MicroLogic 6.2 E-M trip unit 80A. 3  
poles 3d

C10W36M080

Price: 20,354.14 ZAR

## Main

|                                                      |                                                                                                                                                                                         |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                  |
| Product Name                                         | ComPacT NSX new generation                                                                                                                                                              |
| Device Short Name                                    | NSX100HB2                                                                                                                                                                               |
| Product Or Component Type                            | Circuit breaker                                                                                                                                                                         |
| Device Application                                   | Motor protection                                                                                                                                                                        |
| Poles Description                                    | 3P                                                                                                                                                                                      |
| Protected Poles Description                          | 3D                                                                                                                                                                                      |
| [In] Rated Current                                   | 80 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 | 100 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance Level                                    | HB2 100 kA 690 V AC                                                                                                                                                                     |
| Trip Unit Name                                       | MicroLogic 6.2 E-M                                                                                                                                                                      |
| Trip Unit Technology                                 | Electronic                                                                                                                                                                              |
| Trip Unit Protection Functions                       | LSIG                                                                                                                                                                                    |
| 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                                                                                                                                                                        |
| [Ics] Rated Service Short-Circuit Breaking Capacity | 100 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>100 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Mechanical Durability                               | 20000 cycles                                                                                                                                                                |
| Electrical Durability                               | 20000 cycles at 440 V In/2<br>10000 cycles at 440 V In<br>10000 cycles at 690 V In/2<br>5000 cycles at 690 V In                                                             |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Dissipation Per Pole                                | 3.01 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 (long time)<br>So : for short time short-circuit protection<br>I : for instantaneous short-circuit protection<br>G : for ground fault protection                                                                                                                                                                                                                                                                                    |
| Trip Unit Rating                                          | 80 A at 65 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Motor Tripping Class                                      | 30<br>10<br>5<br>20                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Complementary Motor Protection                            | Protracted starting time<br>Underload<br>Stalled rotor<br>Phase unbalance                                                                                                                                                                                                                                                                                                                                                                                       |
| Long-Time Pick-Up Adjustment Type Ir (Thermal Protection) | Adjustable 9 settings                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Ir] Long-Time Protection Pick-Up Adjustment Range        | 35...80 A                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Long-Time Protection Delay Adjustment Type Tr             | Adjustable                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [Tr] Long-Time Protection Delay Adjustment Range          | 120 s at 1.5 x Ir for trip class 5<br>6.5 s at 6 x Ir for trip class 5<br>5 s at 7.2 x Ir for trip class 5<br>240 s at 1.5 x Ir for trip class 10<br>13.5 s at 6 x Ir for trip class 10<br>10 s at 7.2 x Ir for trip class 10<br>480 s at 1.5 x Ir for trip class 20<br>26 s at 6 x Ir for trip class 20<br>20 s at 7.2 x Ir for trip class 20<br>720 s at 1.5 x Ir for trip class 30<br>38 s at 6 x Ir for trip class 30<br>30 s at 7.2 x Ir for trip class 30 |
| 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      | 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    | 1200 A                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Ground-Fault Protection Pick-Up Adjustment Type Ig        | Adjustable 9 settings                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Ig] Ground-Fault Protection Pick-Up Adjustment Range     | 0.6...1 x In for In = 25 A<br>0.3...1 x In for In = 50 A<br>0.2...1 x In for In > 50 A<br>Ig enable on/off                                                                                                                                                                                                                                                                                                                                                      |
| Ground-Fault Protection Time Delay Adjustment Type Tg     | Adjustable 5 settings                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Tg] Ground-Fault Protection Time Delay Adjustment Range  | 0...0.4 s                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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 95 % lth (red) for temperature over set point                                                                                                                                                                             |
| Display Type          | LCD display                                                                                                                                                                                                                                                                |
| Type Of Measurement   | Energy meter                                                                                                                                                                                                                                                               |
| Communication Of Data | Maximeters/minimeters<br>Phase sequence<br>Time-stamped histories and event tables<br>Protection and alarm settings<br>Power quality<br>Instantaneous and demand values<br>Thermal image function<br>Maintenance indicators<br>Demand current and power<br>Energy metering |
| Width (W)             | 105 mm                                                                                                                                                                                                                                                                     |
| Height (H)            | 161 mm                                                                                                                                                                                                                                                                     |
| Depth (D)             | 86 mm                                                                                                                                                                                                                                                                      |
| Net Weight            | 2.05 kg                                                                                                                                                                                                                                                                    |

## Environment

|                                       |                                                              |
|---------------------------------------|--------------------------------------------------------------|
| Standards                             | EN/IEC 60947                                                 |
| Product Certifications                | EAC<br>Marine<br>CCC                                         |
| 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

|                              |         |
|------------------------------|---------|
| Unit Type Of Package 1       | PCE     |
| Number Of Units In Package 1 | 1       |
| Package 1 Height             | 14.0 cm |
| Package 1 Width              | 11.0 cm |
| Package 1 Length             | 20.0 cm |
| Package 1 Weight             | 1.89 kg |
| Unit Type Of Package 2       | S03     |
| Number Of Units In Package 2 | 4       |
| Package 2 Height             | 30.0 cm |
| Package 2 Width              | 30.0 cm |
| Package 2 Length             | 40.0 cm |

Package 2 Weight

7.56 kg

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<sub>2</sub> 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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Transparency   RoHS/REACH

## Well-being performance

 Mercury Free

 RoHS Exemption Information   [Yes](#)

## Certifications & Standards

|                          |                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Reach Regulation         | <a href="#">REACH Declaration</a>                                                                                     |
| Eu Rohs Directive        | Compliant with Exemptions                                                                                             |
| China Rohs Regulation    | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information |
| Environmental Disclosure | <a href="#">Product Environmental Profile</a>                                                                         |
| Circularity Profile      | <a href="#">End of Life Information</a>                                                                               |