

# LV433316

circuit breaker ComPact NSX100HB1, 75 kA at 690 V AC, MicroLogic 6.2 E-M trip unit 50 A, 3 poles 3d



## Main

|  |  |
|--|--|
| Range  | ComPact  |
| Product name   | ComPact NSX  |
| Range of product                                     | ComPact NSX100...250   |
| Device short name                                    | NSX100HB1  |
| Product or component type                            | Circuit breaker  |
| Device application                                   | Motor  |
| Number of poles                                      | 3P   |
| Protected poles description                          | 3t   |
| [In] rated current                                   | 50 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 | 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-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 | 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 |
| 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  |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|   |   |
|---|---|
| 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  | 50 A at 65 °C   |
| Motor tripping class  | 10<br>5<br>20<br>30   |
| Complementary motor protection  | Stalled rotor<br>Underload<br>Phase unbalance<br>Protracted starting time   |
| Long-time pick-up adjustment type I <sub>r</sub> (thermal protection) | Adjustable 9 settings   |
| [I <sub>r</sub> ] long-time protection pick-up adjustment range       | 25...50 A   |
| Long-time protection delay adjustment type t <sub>r</sub>             | Adjustable  |
| [t <sub>r</sub> ] long-time protection delay adjustment range         | 10 S at 7.2 x I <sub>r</sub> for trip class 10<br>120 S at 1.5 x I <sub>r</sub> for trip class 5<br>20 S at 7.2 x I <sub>r</sub> for trip class 20<br>240 S at 1.5 x I <sub>r</sub> for trip class 10<br>26 S at 6 x I <sub>r</sub> for trip class 20<br>480 S at 1.5 x I <sub>r</sub> for trip class 20<br>5 S at 7.2 x I <sub>r</sub> for trip class 5<br>13.5 S at 6 x I <sub>r</sub> for trip class 10<br>6.5 S at 6 x I <sub>r</sub> for trip class 5<br>30 S at 7.2 x I <sub>r</sub> for trip class 30<br>38 S at 6 x I <sub>r</sub> for trip class 30<br>720 s at 1.5 x I <sub>r</sub> for trip class 30 |
| Thermal memory  | 20 minutes before and after tripping  |
| Short-time protection pick-up adjustment type I <sub>sd</sub>         | Adjustable  |
| [I <sub>sd</sub> ] Short-time protection pick-up adjustment range     | 5...13 x I <sub>r</sub>   |
| Short-time protection delay adjustment type t <sub>sd</sub>           | Fixed   |
| Instantaneous protection pick-up adjustment type I <sub>i</sub>       | Fixed   |
| [I <sub>i</sub> ] instantaneous protection pick-up adjustment range   | 750 A   |
| Ground-fault protection pick-up adjustment type I <sub>g</sub>        | Adjustable 9 settings   |
| [I <sub>g</sub> ] ground-fault protection pick-up adjustment range    | 0.3...1 x I <sub>n</sub><br>I <sub>g</sub> enable on/off  |
| Ground-fault protection time delay adjustment type t <sub>g</sub>     | Adjustable 5 settings   |
| [t <sub>g</sub> ] ground-fault protection time delay adjustment range | 0...0.4 s   |
| Earth-leakage protection  | Without   |
| Number of slots for electrical auxiliaries                            | 5 slot(s)   |
| Local signalling  | Flashing LED (green) for ready to operate<br>LED 95 % I <sub>th</sub> (red) for temperature over set point  |
| Display type  | LCD display   |
| Type of measurement   | Energy meter  |
| Communication of data   | Maximeters/Minimeters<br>Protection and alarm settings<br>Demand current and power<br>Maintenance indicators<br>Power quality<br>Phase sequence<br>Time-stamped histories and event tables<br>Energy metering<br>Thermal image function<br>Instantaneous and demand values  |
| Width (W)   | 105 mm  |
| Height (H)  | 161 mm  |
| Depth (D)   | 86 mm   |
| Net weight  | 2.05 kg   |

## Environment

|                                       |  |
|---------------------------------------|--|
| 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

|                  |           |
|------------------|-----------|
| Package 1 Weight | 1.890 kg  |
| Package 1 Height | 13.500 cm |
| Package 1 width  | 10.800 cm |
| Package 1 Length | 19.200 cm |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## Contractual warranty

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