

# Product data sheet

## Characteristics

# C160N320FM

Circuit breaker, ComPacT NS1600N, 50kA at 415VAC, 3P, fixed, manually operated, MicroLogic 2.0 control unit, 1600A



### Main

|  |  |
|--|--|
| Range  | ComPacT  |
| Product name   | ComPacT NS new generation  |
| Range of product                                     | ComPacT NS630b...1600 new generation   |
| Product or component type                            | Circuit breaker  |
| Device application                                   | Distribution   |
| Number of poles                                      | 3P   |
| Protected poles description                          | 3D   |
| (In) rated current up to 65 °C                       | 1600 A at 50 °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 B   |
| [Icu] rated ultimate short-circuit breaking capacity | 85 KA Icu at 220/240 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>40 KA Icu at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>30 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | N 50 kA 415 V AC   |
| Trip unit name                                       | MicroLogic 2.0   |
| Trip unit technology                                 | Electronic   |
| Trip unit protection functions                       | LI   |
| Control type   | Manually operated  |
| Mounting mode  | Fixed  |

### Complementary

|   |  |
|---|--|
| [Ui] rated insulation voltage                       | 800 V AC 50/60 Hz conforming to IEC 60947-2  |
| [Uiimp] rated impulse withstand voltage             | 8 kV conforming to IEC 60947-2   |
| [Ics] rated service short-circuit breaking capacity | 37 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>37 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>37 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>30 KA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>22 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Icw] rated short-time withstand current            | 19.2 kA 1 s conforming to IEC 60947-2  |
| Mechanical durability                               | 10000 cycles   |
| Electrical durability                               | 1000 Cycles at 690 V In<br>2000 Cycles at 690 V In/2<br>2000 Cycles at 440 V In<br>5000 cycles at 440 V In/2   |
| Power losses  | 74 W   |
| Mounting support                                    | Backplate  |

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.

|  |   |
|--|---|
| Upside connection  | Front   |
| Downside connection  | Front   |
| Connection pitch   | 70 mm   |
| Protection type  | L : for overload protection (long time)<br>I : for instantaneous short-circuit protection |
| Trip unit rating   | 1600 A at 50 °C   |
| Long-time pick-up adjustment type $I_r$ (thermal protection)   | Adjustable 9 settings   |
| [ $I_r$ ] long-time protection pick-up adjustment range        | 0.4...1 x $I_r$   |
| Long-time protection delay adjustment type $t_r$               | Adjustable 9 settings   |
| [ $t_r$ ] long-time protection delay adjustment range          | 12.5...600 S at 1.5 x $I_r$<br>0.5...24 S at 6 x $I_r$<br>0.7...16.6 s at 7.2 x $I_r$     |
| Thermal memory   | 20 mn   |
| Instantaneous protection pick-up adjustment type $I_{ii}$      | Adjustable  |
| [ $I_{ii}$ ] instantaneous protection pick-up adjustment range | 1.5...10 x $I_r$  |
| Earth-leakage protection                                       | Without   |
| Zone selective interlocking ZSI                                | Without   |
| Auxiliary contact composition                                  | 1 NO/NC   |
| Local signalling   | 4 LEDs (red) for fault indication<br>1 LED (yellow) for overload                          |
| Width (W)  | 210 mm  |
| Height (H)   | 327 mm  |
| Depth (D)  | 147 mm  |
| Net weight   | 14 kg   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | EN/IEC 60947-2   |
| Product certifications                | IECEE CB Scheme  |
| Pollution degree                      | 3 conforming to IEC 60947                                    |
| IP degree of protection               | IP40 conforming to IEC 60529                                 |
| IK degree of protection               | IK07 conforming to EN 50102                                  |
| 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             | 30.000 cm |
| Package 1 Width              | 40.000 cm |
| Package 1 Length             | 60.000 cm |
| Package 1 Weight             | 13.972 kg |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           |  <a href="#">REACH Declaration</a>             |
| EU RoHS Directive          | Compliant with Exemptions   |
| Mercury free               | Yes   |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>        |
| RoHS exemption information |  Yes   |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a> |

---

**Circularity Profile****☒ End Of Life Information****WEEE**

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

---