

# C10H4TM050

Circuit breaker, ComPacT NSX100H,  
70kA/415VAC, 4 poles 4D (neutral fully  
protected), TMD trip unit 50A



## Main

|  |   |
|--|---|
| Range  | ComPacT new generation  |
| Product name   | ComPacT NSX new generation  |
| Device short name                                    | NSX100H   |
| Product or component type                            | Circuit breaker   |
| Device application                                   | Distribution  |
| Poles description                                    | 4P  |
| Protected poles description                          | 4D  |
| Neutral position                                     | Left  |
| [In] rated current                                   | 50 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 | 100 KA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>70 KA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>65 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA Icu at 500 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>10 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | H 70 kA 415 V AC  |
| Trip unit name                                       | TM-D  |
| Trip unit technology                                 | Thermal-magnetic  |
| Trip unit protection functions                       | LI  |
| 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 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>70 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>65 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA at 500 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>10 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Mechanical durability                               | 50000 cycles  |
| Electrical durability                               | 50000 Cycles at 440 V In/2<br>30000 Cycles at 440 V In<br>20000 Cycles at 690 V In/2<br>10000 cycles at 690 V In  |

|   |  |
|---|--|
| Power dissipation per pole  | 4.11 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 (thermal)<br>I : for short-circuit protection (magnetic) |
| Trip unit rating  | 50 A at 40 °C  |
| Long-time pick-up adjustment type I <sub>r</sub> (thermal protection) | Adjustable   |
| [I <sub>r</sub> ] long-time protection pick-up adjustment range       | 0.7...1 x I <sub>n</sub>   |
| Long-time protection delay adjustment type t <sub>r</sub>             | Fixed  |
| [t <sub>r</sub> ] long-time protection delay adjustment range         | 120...400 S at 1.5 x I <sub>n</sub><br>15 s at 6 x I <sub>r</sub>                    |
| Neutral protection settings   | 1 x I <sub>r</sub> (4D)  |
| Instantaneous protection pick-up adjustment type I <sub>i</sub>       | Fixed  |
| [I <sub>i</sub> ] instantaneous protection pick-up adjustment range   | 500 A  |
| Earth-leakage protection  | Without  |
| Number of slots for electrical auxiliaries                            | 5 slot(s)  |
| Width (W)   | 140 mm   |
| Height (H)  | 161 mm   |
| Depth (D)   | 86 mm  |
| Net weight  | 2.4 kg   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | EN/IEC 60947   |
| Product certifications                | CCC[RETURN]EAC[RETURN]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   | -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             | 15.0 cm  |
| Package 1 Width              | 17.0 cm  |
| Package 1 Length             | 19.0 cm  |
| Package 1 Weight             | 2.432 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      | <a href="#">End Of Life Information</a>       |
| PVC free                 | Yes   |