

# C63F3TM500D

Circuit breaker, ComPacT NSX630F DC,  
36kA/750VDC, 3 poles, TM-DC trip unit 500A



## Main

|                                                      |                                                                                                                                                                                                                                                                 |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                          |
| Product name                                         | ComPacT NSX DC new generation                                                                                                                                                                                                                                   |
| Device short name                                    | NSX630F DC                                                                                                                                                                                                                                                      |
| Product or component type                            | Circuit breaker                                                                                                                                                                                                                                                 |
| Device application                                   | Distribution                                                                                                                                                                                                                                                    |
| Poles description                                    | 3P                                                                                                                                                                                                                                                              |
| Protected poles description                          | 3D                                                                                                                                                                                                                                                              |
| [In] rated current                                   | 500 A at 40 °C                                                                                                                                                                                                                                                  |
| [Ue] rated operational voltage                       | 750 V DC                                                                                                                                                                                                                                                        |
| Network type                                         | DC                                                                                                                                                                                                                                                              |
| Suitability for isolation                            | Yes conforming to EN/IEC 60947-2                                                                                                                                                                                                                                |
| Utilisation category                                 | Category A                                                                                                                                                                                                                                                      |
| [Icu] rated ultimate short-circuit breaking capacity | 36 KA Icu at 24...125 V DC 1 pole conforming to IEC 60947-2<br>36 KA Icu at 250 V DC 1 pole conforming to IEC 60947-2<br>36 KA Icu at 500 V DC 2 poles in series conforming to IEC 60947-2<br>36 KA Icu at 750 V DC 3 poles in series conforming to IEC 60947-2 |
| Performance level                                    | F 36 kA 750 V DC                                                                                                                                                                                                                                                |
| Trip unit name                                       | TM-DC                                                                                                                                                                                                                                                           |
| Trip unit technology                                 | Thermal-magnetic                                                                                                                                                                                                                                                |
| Trip unit protection functions                       | LI                                                                                                                                                                                                                                                              |
| Control type                                         | Toggle                                                                                                                                                                                                                                                          |
| Circuit breaker mounting mode                        | Fixed                                                                                                                                                                                                                                                           |

## Complementary

|                                                     |                                                                                                                                                                                               |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage                       | 750 V DC conforming to IEC 60947-2                                                                                                                                                            |
| [Uimp] rated impulse withstand voltage              | 8 kV conforming to IEC 60947-2                                                                                                                                                                |
| [Ics] rated service short-circuit breaking capacity | 36 KA at 24...125 V DC conforming to IEC 60947-2<br>36 KA at 250 V DC conforming to IEC 60947-2<br>36 KA at 500 V DC conforming to IEC 60947-2<br>36 KA at 750 V DC conforming to IEC 60947-2 |
| Mechanical durability                               | 5000 cycles                                                                                                                                                                                   |
| Electrical durability                               | 2000 Cycles at 750 V In/2<br>1000 cycles at 750 V In                                                                                                                                          |
| Mounting support                                    | Backplate                                                                                                                                                                                     |
| Mounting position                                   | Horizontal and vertical<br>Flat on the back                                                                                                                                                   |
| Upside connection                                   | Front                                                                                                                                                                                         |
| Downside connection                                 | Front                                                                                                                                                                                         |
| Connection pitch                                    | 45 mm                                                                                                                                                                                         |
| Protection type                                     | L : for overload protection (thermal)<br>I : for short-circuit protection (magnetic)                                                                                                          |
| Trip unit rating                                    | 500 A at 40 °C                                                                                                                                                                                |

|                                                           |              |
|-----------------------------------------------------------|--------------|
| Long-time pick-up adjustment type Ir (thermal protection) | Adjustable   |
| [Ir] long-time protection pick-up adjustment range        | 0.7...1 x In |
| Long-time protection delay adjustment type tr             | Fixed        |
| Instantaneous protection pick-up adjustment type li       | Adjustable   |
| [li] instantaneous protection pick-up adjustment range    | 2.5...5 x In |
| Earth-leakage protection                                  | Without      |
| Number of slots for electrical auxiliaries                | 6 slot(s)    |
| Width (W)                                                 | 140 mm       |
| Height (H)                                                | 255 mm       |
| Depth (D)                                                 | 110 mm       |
| Net weight                                                | 8.0 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             | 14.7 cm |
| Package 1 Width              | 20.0 cm |
| Package 1 Length             | 29.1 cm |
| Package 1 Weight             | 5.35 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  |  <a href="#">Yes</a>                           |
| Environmental Disclosure    |  <a href="#">Product Environmental Profile</a> |
| Circularity Profile         | No need of specific recycling operations                                                                                          |
| Halogen content performance | Halogen free plastic parts product                                                                                                |