

# C63S3TM600D

Circuit breaker, ComPacT NSX630S DC,  
100kA/750VDC, 3 poles, TM-DC trip unit 600A



## Main

|                                                      |                                                                                                                                                                                                                                                                     |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                              |
| Product name                                         | ComPacT NSX DC new generation                                                                                                                                                                                                                                       |
| Device short name                                    | NSX630S DC                                                                                                                                                                                                                                                          |
| Product or component type                            | Circuit breaker                                                                                                                                                                                                                                                     |
| Device application                                   | Distribution                                                                                                                                                                                                                                                        |
| Poles description                                    | 3P                                                                                                                                                                                                                                                                  |
| Protected poles description                          | 3D                                                                                                                                                                                                                                                                  |
| [In] rated current                                   | 600 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 | 100 KA Icu at 24...125 V DC 1 pole conforming to IEC 60947-2<br>100 KA Icu at 250 V DC 1 pole conforming to IEC 60947-2<br>100 KA Icu at 500 V DC 2 poles in series conforming to IEC 60947-2<br>100 kA Icu at 750 V DC 3 poles in series conforming to IEC 60947-2 |
| Performance level                                    | S 100 KA 500 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 | 100 KA at 24...125 V DC conforming to IEC 60947-2<br>100 KA at 250 V DC conforming to IEC 60947-2<br>100 KA at 500 V DC conforming to IEC 60947-2<br>100 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                                    | 600 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             | 15.000 cm  |
| Package 1 Width              | 15.500 cm  |
| Package 1 Length             | 29.500 cm  |
| Package 1 Weight             | 5.500 kg   |
| Unit Type of Package 2       | S04        |
| Number of Units in Package 2 | 2          |
| Package 2 Height             | 30.000 cm  |
| Package 2 Width              | 40.000 cm  |
| Package 2 Length             | 60.000 cm  |
| Package 2 Weight             | 11.703 kg  |
| Unit Type of Package 3       | P12        |
| Number of Units in Package 3 | 8          |
| Package 3 Height             | 45.000 cm  |
| Package 3 Width              | 80.000 cm  |
| Package 3 Length             | 120.000 cm |
| Package 3 Weight             | 58.812 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         | No need of specific recycling operations                                                                                       |
| Halogen content performance | Halogen free plastic parts product                                                                                             |