

# C63V36M500

circuit breaker ComPacT NSX630HB1, 75 kA  
at 690 VAC, MicroLogic 6.3 E-M trip unit 500 A,  
3 poles 3d



## Main

|                                                      |                                                                                                                                                                                      |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                               |
| Product name                                         | ComPacT NSX new generation                                                                                                                                                           |
| Device short name                                    | NSX630HB1                                                                                                                                                                            |
| Product or component type                            | Circuit breaker                                                                                                                                                                      |
| Device application                                   | Motor protection                                                                                                                                                                     |
| Poles description                                    | 3P                                                                                                                                                                                   |
| Protected poles description                          | 3D                                                                                                                                                                                   |
| [In] rated current                                   | 500 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 6.3 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                               | 15000 cycles                                                                                                                                                             |
| Electrical durability                               | 8000 Cycles at 440 V In/2<br>4000 Cycles at 440 V In<br>6000 Cycles at 690 V In/2<br>2000 cycles at 690 V In                                                             |
| Power dissipation per pole                          | 25 W                                                                                                                                                                     |
| 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 (long time)<br>So : for short time short-circuit protection<br>I : for instantaneous short-circuit protection<br>G : for ground fault protection                                                                                                                                                                                                                                                                                    |
| Trip unit rating                                          | 500 A at 65 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Motor tripping class                                      | 20<br>5<br>30<br>10                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Complementary motor protection                            | Protracted starting time<br>Stalled rotor<br>Phase unbalance<br>Underload                                                                                                                                                                                                                                                                                                                                                                                       |
| Long-time pick-up adjustment type Ir (thermal protection) | Adjustable 9 settings                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Ir] long-time protection pick-up adjustment range        | 250...500 A                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Long-time protection delay adjustment type tr             | Adjustable                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [tr] long-time protection delay adjustment range          | 120 S at 1.5 x Ir for trip class 5<br>6.5 S at 6 x Ir for trip class 5<br>5 S at 7.2 x Ir for trip class 5<br>240 S at 1.5 x Ir for trip class 10<br>13.5 S at 6 x Ir for trip class 10<br>10 S at 7.2 x Ir for trip class 10<br>480 S at 1.5 x Ir for trip class 20<br>26 S at 6 x Ir for trip class 20<br>20 S at 7.2 x Ir for trip class 20<br>720 S at 1.5 x Ir for trip class 30<br>38 S at 6 x Ir for trip class 30<br>30 s at 7.2 x Ir for trip class 30 |
| Thermal memory                                            | 20 minutes before and after tripping                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Short-time protection pick-up adjustment type Isd         | Adjustable                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [Isd] Short-time protection pick-up adjustment range      | 5...13 x Ir                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Short-time protection delay adjustment type tsd           | Fixed                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Instantaneous protection pick-up adjustment type li       | Fixed                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [li] instantaneous protection pick-up adjustment range    | 6500 A                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Ground-fault protection pick-up adjustment type Ig        | Adjustable 9 settings                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Ig] ground-fault protection pick-up adjustment range     | 0.2...1 x In<br>Ig enable on/off                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Ground-fault protection time delay adjustment type tg     | Adjustable 5 settings                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [tg] ground-fault protection time delay adjustment range  | 0...0.4 s                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Earth-leakage protection                                  | Without                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Zone selective interlocking ZSI                           | With                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Number of slots for electrical auxiliaries                | 6 slot(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Local signalling                                          | Flashing LED (green) for ready to operate<br>LED 95 % lth (red) for temperature over set point                                                                                                                                                                                                                                                                                                                                                                  |
| Display type                                              | LCD display                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Type of measurement                                       | Energy meter                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Communication of data                                     | Protection and alarm settings<br>Demand current and power<br>Power quality<br>Thermal image function<br>Energy metering<br>Time-stamped histories and event tables<br>Maximeters/Minimeters<br>Instantaneous and demand values<br>Phase sequence<br>Maintenance indicators                                                                                                                                                                                      |
| Width (W)                                                 | 140 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Height (H)                                                | 255 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Depth (D)                                                 | 110 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Net weight                                                | 6.2 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

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 15.2 cm |
| Package 1 Width              | 15.2 cm |
| Package 1 Length             | 29.2 cm |
| Package 1 Weight             | 5.81 kg |

## 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>       |
| PVC free                    | Yes                                           |
| Halogen content performance | Halogen free plastic parts product            |

## Contractual warranty

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