

# C25R36E160

Circuit breaker, ComPacT NSX250R,  
200kA/415VAC, 3 poles, MicroLogic 6.2E trip  
unit 160A



## Main

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                                | ComPacT new generation                                                                                                                                                                                                                                                                                                                                                              |
| Product name                                         | ComPacT NSX new generation                                                                                                                                                                                                                                                                                                                                                          |
| Device short name                                    | NSX250R                                                                                                                                                                                                                                                                                                                                                                             |
| Product or component type                            | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                     |
| Device application                                   | Distribution                                                                                                                                                                                                                                                                                                                                                                        |
| Poles description                                    | 3P                                                                                                                                                                                                                                                                                                                                                                                  |
| Protected poles description                          | 3D                                                                                                                                                                                                                                                                                                                                                                                  |
| [In] rated current                                   | 160 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 | 200 KA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>200 KA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>200 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>80 KA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>65 KA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>45 KA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Performance level                                    | R 200 kA 415 V AC                                                                                                                                                                                                                                                                                                                                                                   |
| Trip unit name                                       | MicroLogic 6.2 E                                                                                                                                                                                                                                                                                                                                                                    |
| 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 | 200 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>200 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>200 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>80 KA at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>65 KA at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>45 KA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| Mechanical durability                               | 20000 cycles                                                                                                                                                                                                                                                                                                                                                |
| Electrical durability                               | 20000 Cycles at 440 V In/2<br>10000 Cycles at 440 V In<br>10000 Cycles at 690 V In/2<br>5000 cycles at 690 V In                                                                                                                                                                                                                                             |
| Power dissipation per pole                          | 7.17 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 (long time)<br>S : for short time short-circuit protection<br>I : for instantaneous short-circuit protection<br>G : for ground fault protection                                                    |
| Trip unit rating                                          | 160 A at 40 °C                                                                                                                                                                                                                 |
| Long-time pick-up adjustment type Ir (thermal protection) | Adjustable 9 settings                                                                                                                                                                                                          |
| [Ir] long-time protection pick-up adjustment range        | 63...160 A                                                                                                                                                                                                                     |
| Long-time protection delay adjustment type tr             | Adjustable                                                                                                                                                                                                                     |
| [tr] long-time protection delay adjustment range          | 15...400 S at 1.5 x Ir<br>0.5...16 S at 6 x Ir<br>0.35...11 s at 7.2 x Ir                                                                                                                                                      |
| 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      | 1.5...10 x Ir                                                                                                                                                                                                                  |
| Short-time protection delay adjustment type tsd           | Adjustable 5 settings                                                                                                                                                                                                          |
| [tsd] Short-time protection delay adjustment range        | 0...0.4 S I <sup>2</sup> t=off<br>0.1...0.4 s I <sup>2</sup> t=on                                                                                                                                                              |
| Instantaneous protection pick-up adjustment type Ii       | Adjustable                                                                                                                                                                                                                     |
| [Ii] instantaneous protection pick-up adjustment range    | 1.5...15 x In                                                                                                                                                                                                                  |
| Ground-fault protection pick-up adjustment type Ig        | Adjustable 9 settings                                                                                                                                                                                                          |
| [Ig] ground-fault protection pick-up adjustment range     | 0.4...1 x In for In = 40 A<br>0.2...1 x In for In > 40 A<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 I <sup>2</sup> t=off<br>0.1...0.4 s I <sup>2</sup> t=on                                                                                                                                                              |
| Earth-leakage protection                                  | Without                                                                                                                                                                                                                        |
| Zone selective interlocking ZSI                           | With                                                                                                                                                                                                                           |
| Number of slots for electrical auxiliaries                | 5 slot(s)                                                                                                                                                                                                                      |
| Local signalling                                          | Flashing LED (green) for ready to operate<br>LED 105 % Ir (red) for overload<br>LED 90 % Ir (orange) for overload                                                                                                              |
| Display type                                              | LCD display                                                                                                                                                                                                                    |
| Type of measurement                                       | Energy meter                                                                                                                                                                                                                   |
| Communication of data                                     | Power quality<br>Demand current and power<br>Energy metering<br>Instantaneous and demand values<br>Protection and alarm settings<br>Maintenance indicators<br>Maximeters/Minimeters<br>Time-stamped histories and event tables |
| Width (W)                                                 | 105 mm                                                                                                                                                                                                                         |
| Height (H)                                                | 161 mm                                                                                                                                                                                                                         |
| Depth (D)                                                 | 86 mm                                                                                                                                                                                                                          |
| Net weight                                                | 2.4 kg                                                                                                                                                                                                                         |

## Environment

|                                   |                              |
|-----------------------------------|------------------------------|
| Standards                         | EN/IEC 60947                 |
| Product certifications            | Marine[RETURN]EAC[RETURN]CCC |
| 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             | 11.0 cm |
| Package 1 Width              | 14.0 cm |
| Package 1 Length             | 20.0 cm |
| Package 1 Weight             | 2.11 kg |
| Unit Type of Package 2       | S03     |
| Number of Units in Package 2 | 4       |
| Package 2 Height             | 30.0 cm |
| Package 2 Width              | 30.0 cm |
| Package 2 Length             | 40.0 cm |
| Package 2 Weight             | 8.44 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        | <a href="#"> End Of Life Information</a>       |