# Product data sheet
## Characteristics

# C25N34V160
Circuit breaker, ComPacT NSX250N, 50kA/415VAC, 3 poles, MicroLogic Vigi 4.2 trip unit 160A



## Main

| | |
|---|---|
| Range | ComPacT |
| Product name | ComPacT NSX |
| Device short name | NSX250N |
| Product or component type | Earth leakage circuit breaker |
| Device application | Distribution |
| Poles description | 3P |
| Protected poles description | 3D |
| [In] rated current | 160 A at 40 °C |
| [Ue] rated operational voltage | 440 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 |
| Breaking capacity | 90 KA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>36 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<br>85 KA Icu at 240 V AC 50/60 Hz conforming to UL 60947-4-1<br>50 KA Icu at 480 V AC 50/60 Hz conforming to UL 60947-4-1<br>15 KA Icu at 600 V AC 50/60 Hz conforming to UL 60947-4-1 |
| Breaking capacity code | N 50 kA 415 V AC |
| Trip unit name | MicroLogic 4.2 |
| Trip unit technology | Electronic |
| Trip unit protection functions | LSoIR |
| Control type | Toggle |
| Mounting mode | Fixed |

## Complementary

| | |
|---|---|
| [Ui] rated insulation voltage | 500 V AC 50/60 Hz |
| [Uimp] rated impulse withstand voltage | 8 KV |
| [Ics] rated service breaking capacity | 90 KA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>50 KA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>36 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 | 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 | 25 W N<br>25 W L1 and L3<br>20.6 W L2 |
| 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>So : for short time short-circuit protection with fixed delay<br>I : for instantaneous short-circuit protection<br>R : for earth-leakage protection |
| Trip unit rating | 160 A at 40 °C |
| Long time pick-up adjustment type Ir | Adjustable 9 settings |
| Long time pick-up adjustment range | 63...160 A |
| Long time delay adjustment type | Fixed |

| | |
|---|---|
| [tr] long-time delay adjustment range | 400 S at 1.5 x Ir<br>16 S at 6 x Ir<br>11 S at 7.2 x Ir |
| Thermal memory | 20 minutes before and after tripping |
| Short-time pick-up adjustment type Isd | Adjustable |
| [Isd] short-time pick-up adjustment range | 1.5...10 x Ir |
| Short-time delay adjustment type | Fixed |
| Instantaneous pick-up adjustment type Ii | Fixed |
| Instantaneous pick-up adjustment range | 2400 A |
| Earth-leakage protection | Integrated |
| Earth-leakage protection class | Class A |
| Residual earth-leakage sensitity adjustment type | Adjustable |
| [IΔn] residual earth-leakage sensitive adjustment | 30 MA<br>100 MA<br>300 MA<br>500 MA<br>1 A<br>3 A<br>5 A |
| Operating mode | OFF using the IΔn rotary switch |
| Residual earth-leakage time delay adjustment type | Adjustable |
| [Δt] residual earth-leakage time delay adjustment | 0 Ms<br>60 Ms<br>150 Ms<br>500 Ms<br>1 S |
| Zone selective interlocking ZSI | Without |
| Number of slots | 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 |
| Width | 105 Mm |
| Height | 161 Mm |
| Depth | 86 Mm |
| Net weight | 2.4 Kg |

## Environment

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|---|---|
| Standards | EN/IEC 60947-2 |
| Overvoltage category | IV |
| Electrical shock protection class | Class II on front face |
| 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

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|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 14.000 Cm |
| Package 1 Width | 11.500 Cm |
| Package 1 Length | 19.000 Cm |
| Package 1 Weight | 2.380 Kg |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 6 |
| Package 2 Height | 30.000 Cm |
| Package 2 Width | 30.000 Cm |

| | |
|---|---|
| Package 2 Length | 40.000 Cm |
| Package 2 Weight | 13.282 Kg |

## Offer Sustainability

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|---|---|
| Recyclability potential, in % | 55 |
| Total lifecycle Carbon footprint | 181 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 20.16921582733813 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 20 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.31122352517985613 |
| Carbon footprint of the distribution phase [A4] | 0.3 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.20158086330935251 |
| Carbon footprint of the installation phase [A5] | 0.2 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 155.79549392592602 |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 156 kg CO2 eq. |
| Mercury free | Yes |
| Sustainable packaging | Yes |
| Carbon footprint of the end-of-life phase [C1 to C4] | 4.198388489208633 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 4 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Total lifecycle Carbon footprint | 181 |
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| SCIP Number | 1cc6e020-e2e4-4d89-9339-61a460082111 |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant By Exemption |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which |
| Halogen-free status | Product contains halogen above thresholds |
| PVC free | Yes |
| Silicone-free | No |
| Updatability | No |
| End of life manual availability | End Of Life Information |
| Take-back | No |
| WEEE Label | The product must be disposed on European Union markets following specific waste collection and |

## Contractual warranty

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|---|---|
| Warranty (in months) | 18 |

Product Life Status : Commercialised