

# Product datasheet

Specifications



## circuit breaker Vigicompact NS250N - STR22SE - 250 A - 3 poles 3d - 30..10000mA

31970

! Discontinued

### Main

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product                       | Compact NS100...630                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Product or component type              | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Device short name                      | Compact NS250N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Circuit breaker name                   | Vigicompact NS250N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Device application                     | Distribution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Poles description                      | 3P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Protected poles description            | 3t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Network type                           | AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Network frequency                      | 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [In] rated current                     | 220 A at 65 °C<br>250 A at 40 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| [Ui] rated insulation voltage          | 750 V AC 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| [Uimp] rated impulse withstand voltage | 8 kV conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [Ue] rated operational voltage         | 440 V AC 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Breaking capacity code                 | N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Breaking capacity                      | 85 kA at 240 V AC 50/60 Hz conforming to NEMA AB1 HIC<br>8 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>35 kA at 480 V AC 50/60 Hz conforming to NEMA AB1 HIC<br>85 kA at 240 V AC 50/60 Hz conforming to UL 508<br>22 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>35 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>20 kA at 600 V AC 50/60 Hz conforming to NEMA AB1 HIC<br>35 kA at 480 V AC 50/60 Hz conforming to UL 508<br>30 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2<br>18 kA at 600 V AC 50/60 Hz conforming to UL 508 |
| [Ics] rated service breaking capacity  | 8 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2<br>35 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>36 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>85 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>22 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2<br>30 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                             |
| Suitability for isolation              | Yes conforming to IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Utilisation category                   | Category A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Trip unit name                         | STR22SE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Trip unit technology                   | Electronic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                  |                                                                                                                                              |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Trip unit rating                 | 225 A at 70 °C<br>237.5 A at 60 °C<br>250 A at 20 °C                                                                                         |
| Protection type                  | Instantaneous short-circuit protection<br>Short time short-circuit protection<br>Overload protection (long time)<br>Earth-leakage protection |
| Earth-leakage add-on module name | MH                                                                                                                                           |
| Earth-leakage protection         | With                                                                                                                                         |
| Pollution degree                 | 3 conforming to IEC 60947                                                                                                                    |

## Complementary

|                                                    |                                                                                                                              |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Control type                                       | Toggle                                                                                                                       |
| Mounting mode                                      | Fixed                                                                                                                        |
| Mounting support                                   | Backplate                                                                                                                    |
| Upside connection                                  | Front                                                                                                                        |
| Downside connection                                | Front                                                                                                                        |
| Mechanical durability                              | 20000 cycles                                                                                                                 |
| Electrical durability                              | 10000 cycles 440 V AC 50/60 Hz In conforming to IEC 60947-2<br>20000 cycles 440 V AC 50/60 Hz In/2 conforming to IEC 60947-2 |
| Connection pitch                                   | 35 mm                                                                                                                        |
| Local signalling                                   | Positive contact indication                                                                                                  |
| Long time pick-up adjustment type Ir               | Adjustable 48 settings                                                                                                       |
| Long time pick-up adjustment range                 | 0.4...1 x In                                                                                                                 |
| Long time delay adjustment type                    | Fixed                                                                                                                        |
| [tr] long-time delay adjustment range              | 90...180 s 1.5 x Ir<br>3.2...5 s 7.2 x Ir<br>5...7.5 s 6 x Ir                                                                |
| Short-time pick-up adjustment type Isd             | Adjustable 8 settings                                                                                                        |
| [Isd] short-time pick-up adjustment range          | 2...10 x Ir                                                                                                                  |
| Short-time delay adjustment type                   | Fixed                                                                                                                        |
| [tsd] short-time delay adjustment range            | 0.04...0.06 s                                                                                                                |
| Instantaneous pick-up adjustment type Ii           | Fixed                                                                                                                        |
| Instantaneous pick-up adjustment range             | >= 11 x In                                                                                                                   |
| Earth-leakage protection class                     | Class A                                                                                                                      |
| Residual earth-leakage sensitivity adjustment type | Adjustable                                                                                                                   |
| [IΔn] residual earth-leakage sensitive adjustment  | 0.3 A<br>1 A<br>3 A<br>0.03 A<br>10 A                                                                                        |
| Residual earth-leakage time delay adjustment type  | Adjustable                                                                                                                   |
| Display type                                       | LED                                                                                                                          |
| Height                                             | 236 mm                                                                                                                       |
| Width                                              | 105 mm                                                                                                                       |

|       |       |
|-------|-------|
| Depth | 86 mm |
|-------|-------|

## Environment

|                                       |                               |
|---------------------------------------|-------------------------------|
| Standards                             | IEC 60947-2                   |
| Product certifications                | ASEFA<br>ASTA<br>KEMA<br>LCIE |
| IP degree of protection               | IP40 conforming to IEC 60529  |
| IK degree of protection               | IK07 conforming to EN 50102   |
| Ambient air temperature for operation | -25...70 °C                   |
| Ambient air temperature for storage   | -50...85 °C                   |

## Contractual warranty

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



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Longer

| Lifetime extension |    |
|--------------------|----|
| Repair             | No |

### Use Again

| Repack and remanufacture |                                                                                                                                                                                                               |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WEEE Label               |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |