

# Product data sheet

Specifications



## circuit breaker Vigicompact NS250N - TMD - 80 A - 4 poles 3d +N/2

31965

❗ 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                      | 4P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Protected Poles Description            | 3t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Neutral Position                       | Left                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Network Type                           | AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Network Frequency                      | 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [In] Rated Current                     | 220 A at 65 °C<br>250 A at 40 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| [Uij] 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                         | TM-D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Trip Unit Technology                   | Thermal-magnetic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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                 | 80 A at 40 °C                                                                                                                     |
| Protection Type                  | Short-circuit protection (magnetic)<br>Overload protection (thermal)<br>Protection of the fourth pole<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                                                                                                  |
| Neutral Protection Setting                                     | No protection                                                                                                                |
| Long Time Pick-Up Adjustment Type Ir                           | Adjustable                                                                                                                   |
| Long Time Pick-Up Adjustment Range                             | 0.8...1 x In                                                                                                                 |
| Instantaneous Pick-Up Adjustment Type Ii                       | Fixed                                                                                                                        |
| Instantaneous Pick-Up Adjustment Range                         | 1000 A                                                                                                                       |
| Earth-Leakage Protection Class                                 | Class A                                                                                                                      |
| Residual Earth-Leakage Sensitivity Adjustment Type             | Adjustable                                                                                                                   |
| [I <sub>Δn</sub> ] 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                                                                                                                   |
| Height                                                         | 236 mm                                                                                                                       |
| Width                                                          | 105 mm                                                                                                                       |
| Depth                                                          | 86 mm                                                                                                                        |

## Environment

|                         |                               |
|-------------------------|-------------------------------|
| Standards               | IEC 60947-2                   |
| Product Certifications  | ASEFA<br>LCIE<br>KEMA<br>ASTA |
| 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 | 18 months |
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