



circuit breaker 3VT1 standard breaking capacity  $I_{cu}=25\text{kA}$ , 415V AC 3-pole; starter combination trip unit TM, LIN  $I_n=80\text{A}$  rated current  $I=400\ldots800\text{A}$ , short-circuit protection without auxiliary release without auxiliary/alarm switch

| Model                                                                               |                                     |
|-------------------------------------------------------------------------------------|-------------------------------------|
| product brand name                                                                  | SENTRON                             |
| product designation                                                                 | 3VT1_5 molded case circuit breakers |
| design of the actuating element                                                     | toggle handle                       |
| type of the driving mechanism motor drive                                           | No                                  |
| design of the overcurrent release                                                   | M                                   |
| General technical data                                                              |                                     |
| number of poles                                                                     | 3                                   |
| size of the circuit-breaker                                                         | 3VT1                                |
| mechanical service life (operating cycles) typical                                  | 20 000                              |
| electrical endurance (operating cycles) typical                                     | 6 000                               |
| utilization category                                                                | A                                   |
| performance class for circuit breaker                                               | N                                   |
| operating frequency maximum                                                         | 120 1/h                             |
| Voltage                                                                             |                                     |
| surge voltage resistance rated value                                                | 8 kV                                |
| Protection class                                                                    |                                     |
| protection class IP                                                                 | IP40                                |
| protection function of the overcurrent release                                      | I                                   |
| Dissipation                                                                         |                                     |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 2.33 W                              |
| Main circuit                                                                        |                                     |
| operating frequency                                                                 |                                     |
| • 1 rated value                                                                     | 50 Hz                               |
| • 2 rated value                                                                     | 60 Hz                               |
| operational current rated value                                                     | 80 A                                |
| Auxiliary circuit                                                                   |                                     |
| number of CO contacts for auxiliary contacts                                        | 0                                   |
| number of NC contacts for auxiliary contacts                                        | 0                                   |
| number of NO contacts for auxiliary contacts                                        | 0                                   |
| Suitability                                                                         |                                     |
| suitability for use                                                                 | starter combinations                |
| suitability for use disconnecting means                                             | Yes                                 |
| Product details                                                                     |                                     |
| product component                                                                   |                                     |
| • trip indicator                                                                    | No                                  |
| • auxiliary switch                                                                  | No                                  |
| • voltage trigger                                                                   | No                                  |

|                                                                                                                                                                         |                                                                                                                         |                              |                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• undervoltage release</li></ul>                                                                                                  | No                                                                                                                      |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• undervoltage release with leading contact</li></ul>                                                                             | No                                                                                                                      |                              |                                                                                       |
| <b>product extension optional motor drive</b>                                                                                                                           | Yes                                                                                                                     |                              |                                                                                       |
| <b>Product function</b>                                                                                                                                                 |                                                                                                                         |                              |                                                                                       |
| <b>product function</b>                                                                                                                                                 |                                                                                                                         |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• grounding protection</li></ul>                                                                                                  | No                                                                                                                      |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• for neutral conductors short-circuit and overload proof</li></ul>                                                               | No                                                                                                                      |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• phase failure detection</li></ul>                                                                                               | No                                                                                                                      |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• overload protection</li></ul>                                                                                                   | No                                                                                                                      |                              |                                                                                       |
| <b>Short circuit</b>                                                                                                                                                    |                                                                                                                         |                              |                                                                                       |
| <b>operating short-circuit current breaking capacity (Ics)</b>                                                                                                          |                                                                                                                         |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• at 240 V rated value</li></ul>                                                                                                  | 20 kA                                                                                                                   |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• at 415 V rated value</li></ul>                                                                                                  | 13 kA                                                                                                                   |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• at 500 V rated value</li></ul>                                                                                                  | 6 kA                                                                                                                    |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• at 690 V rated value</li></ul>                                                                                                  | 3 kA                                                                                                                    |                              |                                                                                       |
| <b>maximum short-circuit current breaking capacity (Icu)</b>                                                                                                            |                                                                                                                         |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• at 240 V rated value</li></ul>                                                                                                  | 40 kA                                                                                                                   |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• at 415 V rated value</li></ul>                                                                                                  | 25 kA                                                                                                                   |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• at 500 V rated value</li></ul>                                                                                                  | 12 kA                                                                                                                   |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• at 690 V rated value</li></ul>                                                                                                  | 6 kA                                                                                                                    |                              |                                                                                       |
| <b>Connections</b>                                                                                                                                                      |                                                                                                                         |                              |                                                                                       |
| arrangement of electrical connectors for main current circuit                                                                                                           | front side                                                                                                              |                              |                                                                                       |
| type of electrical connection for main current circuit                                                                                                                  | box terminal                                                                                                            |                              |                                                                                       |
| <b>Mechanical Design</b>                                                                                                                                                |                                                                                                                         |                              |                                                                                       |
| <b>height</b>                                                                                                                                                           | 130 mm                                                                                                                  |                              |                                                                                       |
| <b>width</b>                                                                                                                                                            | 75 mm                                                                                                                   |                              |                                                                                       |
| <b>depth</b>                                                                                                                                                            | 80 mm                                                                                                                   |                              |                                                                                       |
| <b>fastening method</b>                                                                                                                                                 | fixed mounting                                                                                                          |                              |                                                                                       |
| <b>mounting position</b>                                                                                                                                                | with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back |                              |                                                                                       |
| <b>Net Weight</b>                                                                                                                                                       | 1.055 kg                                                                                                                |                              |                                                                                       |
| <b>Environmental conditions</b>                                                                                                                                         |                                                                                                                         |                              |                                                                                       |
| <b>ambient temperature during operation</b>                                                                                                                             |                                                                                                                         |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• minimum</li></ul>                                                                                                               | -40 °C                                                                                                                  |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• maximum</li></ul>                                                                                                               | 55 °C                                                                                                                   |                              |                                                                                       |
| <b>ambient temperature during storage</b>                                                                                                                               |                                                                                                                         |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• minimum</li></ul>                                                                                                               | -40 °C                                                                                                                  |                              |                                                                                       |
| <ul style="list-style-type: none"><li>• maximum</li></ul>                                                                                                               | 55 °C                                                                                                                   |                              |                                                                                       |
| <b>Certificates</b>                                                                                                                                                     |                                                                                                                         |                              |                                                                                       |
| <b>reference code according to EN 61346-2</b>                                                                                                                           | Q                                                                                                                       |                              |                                                                                       |
| <b>reference code according to IEC 81346-2</b>                                                                                                                          | Q                                                                                                                       |                              |                                                                                       |
| <b>Approvals Certificates</b>                                                                                                                                           |                                                                                                                         |                              |                                                                                       |
| <b>Environment</b>                                                                                                                                                      | <b>General Product Approval</b>                                                                                         | <b>Test Certificates</b>     | <b>other</b>                                                                          |
| <a href="#">Environmental Confirmations</a>                                                                                                                             |                                      | <a href="#">Confirmation</a> | <a href="#">Type Test Certificates/Test Report</a>                                    |
|                                                                                                                                                                         |                                                                                                                         | <a href="#">Confirmation</a> |  |
| <b>other</b>                                                                                                                                                            |                                                                                                                         |                              |                                                                                       |
| <a href="#">Miscellaneous</a>                                                                                                                                           |                                                                                                                         |                              |                                                                                       |
| <b>Further information</b>                                                                                                                                              |                                                                                                                         |                              |                                                                                       |
| Information on the packaging<br><a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a> |                                                                                                                         |                              |                                                                                       |

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VT1708-2DB36-0AA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3VT1708-2DB36-0AA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VT1708-2DB36-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1708-2DB36-0AA0)

CAX-Online-Generator

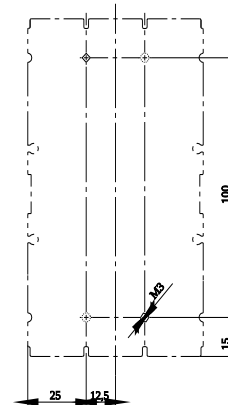
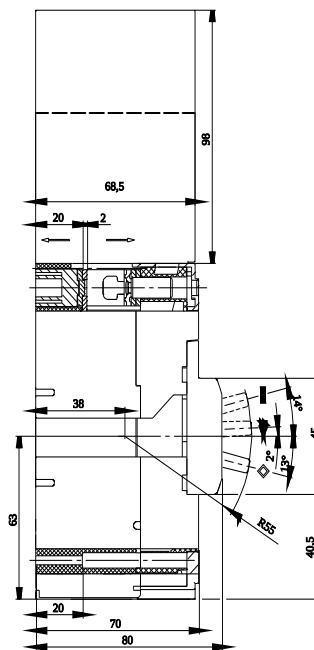
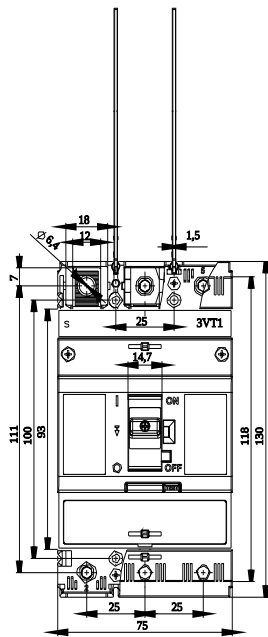
<https://www.siemens.com/cax>

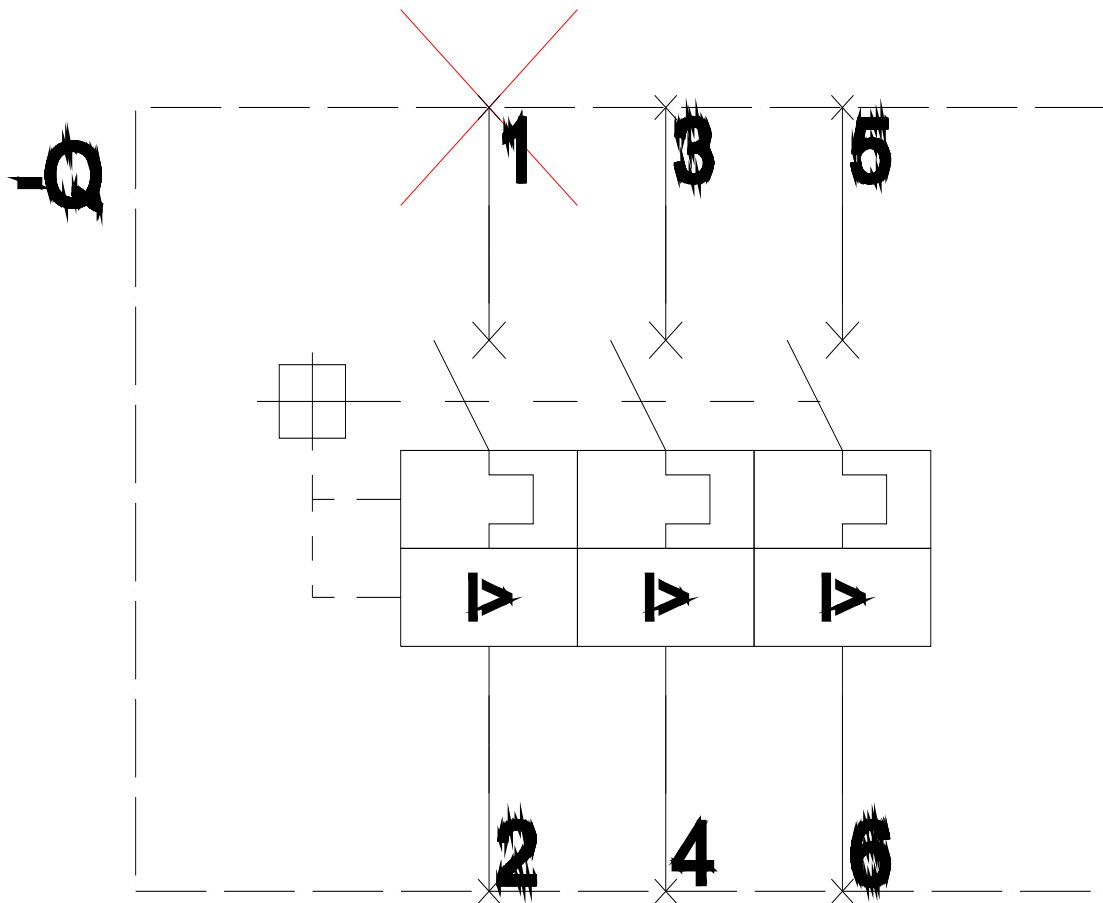
Tender specifications

<https://www.siemens.com/specifications>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP='HAUPT'></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>)





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