



circuit breaker 3VT1 standard breaking capacity  $I_{cu}=25\text{kA}$ , 415V AC 4-pole, line protection trip unit TM, LIN  $I_n=125\text{A}$  rated current  $I_R=100\dots125\text{A}$  overload prot.  $I_l=625\dots1250\text{A}$ , short-circuit protection N conductor protected 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   | TM                                  |
| General technical data  |                                     |
| number of poles   | 4                                   |
| 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  | LIN                                 |
| Dissipation   |                                     |
| power loss [W] for rated value of the current at AC in hot operating state per pole               | 5 W                                 |
| Main circuit  |                                     |
| operating frequency   |                                     |
| • 1 rated value   | 50 Hz                               |
| • 2 rated value   | 60 Hz                               |
| operational current rated value   | 125 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   | system protection                   |
| suitability for use disconnecting means   | Yes                                 |
| Adjustable parameters   |                                     |
| adjustable current response value current of the current-dependent overload release initial value | 100 A                               |
| Product details   |                                     |
| product component   |                                     |

|   |     |
|---|-----|
| • trip indicator                              | No  |
| • auxiliary switch                            | No  |
| • voltage trigger                             | No  |
| • undervoltage release                        | No  |
| • undervoltage release with leading contact   | No  |
| <b>product extension optional motor drive</b> | Yes |

### Product function

|   |            |
|---|------------|
| <b>product function</b>                                   |            |
| • of thermal overload trip unit                           | adjustable |
| • grounding protection                                    | No         |
| • for neutral conductors short-circuit and overload proof | Yes        |
| • phase failure detection                                 | No         |
| • overload protection                                     | Yes        |

### Short circuit

|  |       |
|--|-------|
| <b>operating short-circuit current breaking capacity (Ics)</b> |       |
| • at 240 V rated value   | 20 kA |
| • at 415 V rated value   | 13 kA |
| • at 500 V rated value   | 6 kA  |
| • at 690 V rated value   | 3 kA  |
| <b>maximum short-circuit current breaking capacity (Icu)</b>   |       |
| • at 240 V rated value   | 40 kA |
| • at 415 V rated value   | 25 kA |
| • at 500 V rated value   | 12 kA |
| • at 690 V rated value   | 6 kA  |

### Connections

|   |              |
|---|--------------|
| arrangement of electrical connectors for main current circuit | front side   |
| type of electrical connection for main current circuit        | box terminal |

### Mechanical Design

|                          |   |
|--------------------------|---|
| <b>height</b>            | 130 mm  |
| <b>width</b>             | 100 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> | 1.363 kg |
|-------------------|----------|



### Environmental conditions

|   |        |
|---|--------|
| <b>ambient temperature during operation</b> |        |
| • minimum                                   | -40 °C |
| • maximum                                   | 55 °C  |
| <b>ambient temperature during storage</b>   |        |
| • minimum                                   | -40 °C |
| • maximum                                   | 55 °C  |

### Certificates

|  |   |
|--|---|
| <b>reference code according to EN 61346-2</b>  | Q |
| <b>reference code according to IEC 81346-2</b> | Q |

### Approvals Certificates

| Environment                                 | General Product Approval  | Test Certificates                                  | other   |
|---|---|--|---|
| <a href="#">Environmental Confirmations</a> |  | <a href="#">Confirmation</a>                       |  |
|   |   | <a href="#">Type Test Certificates/Test Report</a> | <a href="#">Confirmation</a>  |

### other



[Miscellaneous](#)

## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### 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=3VT1712-2EJ46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VT1712-2EJ46-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VT1712-2EJ46-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1712-2EJ46-0AA0)

### CAX-Online-Generator

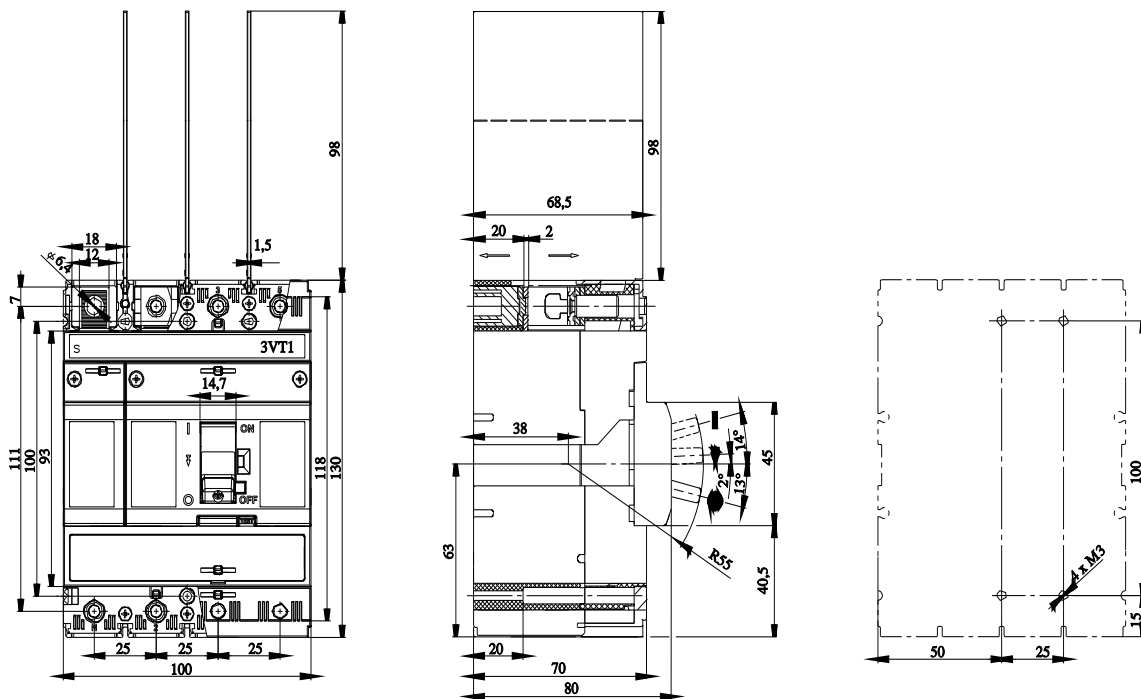
<https://www.siemens.com/cax>

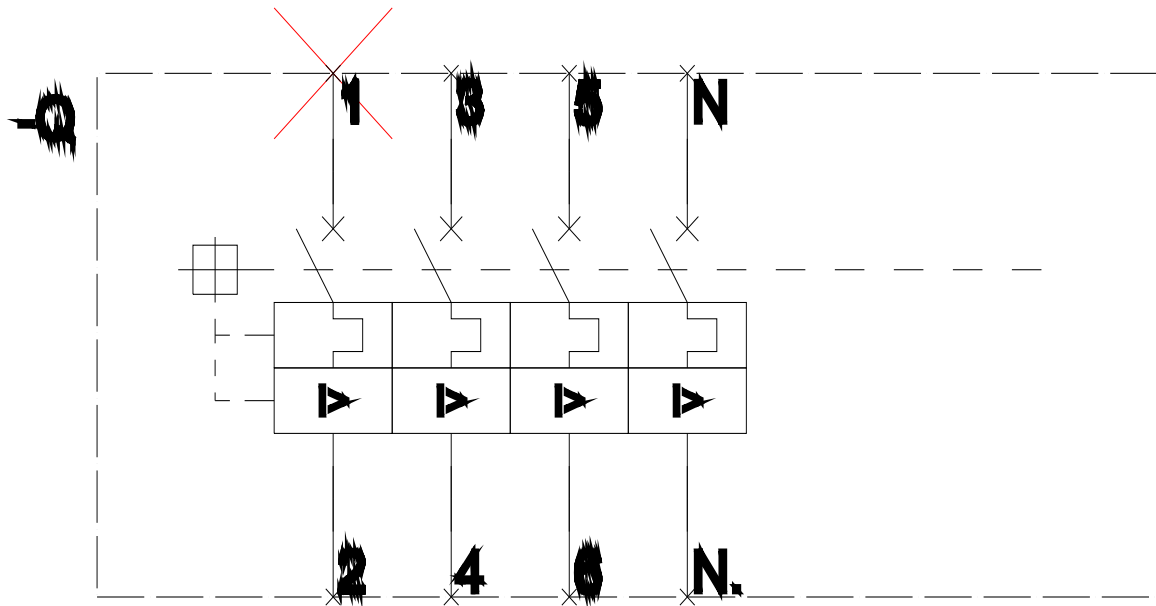
### Tender specifications

<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=)





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