



circuit breaker 3VT1 standard breaking capacity  $I_{cu}=25\text{kA}$ , 415V AC 4-pole, line protection trip unit TM, LI  $I_n=40\text{A}$  rated current  $I_R=32\ldots40\text{A}$  overload protection  $I_L=200\ldots400\text{A}$ , short-circuit protection N conductor unprotected 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  | LI                                  |
| Dissipation   |                                     |
| power loss [W] for rated value of the current at AC in hot operating state per pole               | 1.33 W                              |
| Main circuit  |                                     |
| operating frequency   | 50 Hz<br>60 Hz                      |
| • 1 rated value   |                                     |
| • 2 rated value   |                                     |
| operational current rated value   | 40 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                   |
| • disconnecting means   | Yes                                 |
| Adjustable parameters   |                                     |
| adjustable current response value current of the current-dependent overload release initial value | 32 A                                |
| Product details   |                                     |
| product component   | No                                  |
| • trip indicator  |                                     |

|   |     |
|---|-----|
| • auxiliary switch                          | No  |
| • voltage trigger                           | No  |
| • undervoltage release                      | No  |
| • undervoltage release with leading contact | No  |
| product extension optional motor drive      | Yes |

#### Product function

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

#### Short circuit

|   |       |
|---|-------|
| operating short-circuit current breaking capacity (Ics) |       |
| • 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  |
| maximum short-circuit current breaking capacity (Icu)   |       |
| • 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

|                   |   |
|-------------------|---|
| height            | 130 mm  |
| width             | 100 mm  |
| depth             | 80 mm   |
| fastening method  | fixed mounting  |
| mounting position | with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back |
| net weight        | 1.336 kg  |

#### Environmental conditions

|                                      |        |
|--------------------------------------|--------|
| ambient temperature during operation |        |
| • minimum                            | -40 °C |
| • maximum                            | 55 °C  |
| ambient temperature during storage   |        |
| • minimum                            | -40 °C |
| • maximum                            | 55 °C  |

#### Certificates

|                            |   |
|----------------------------|---|
| reference code             |   |
| • according to EN 61346-2  | Q |
| • according to IEC 81346-2 | Q |

#### Approvals Certificates

|                          |                   |
|--------------------------|-------------------|
| General Product Approval | Test Certificates |
|--------------------------|-------------------|



[Confirmation](#)



[Type Test Certificates/Test Report](#)

|       |             |
|-------|-------------|
| other | Environment |
|-------|-------------|

[Confirmation](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

## Further information

### Information on the packaging

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

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

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

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VT1704-2EC46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VT1704-2EC46-0AA0>

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

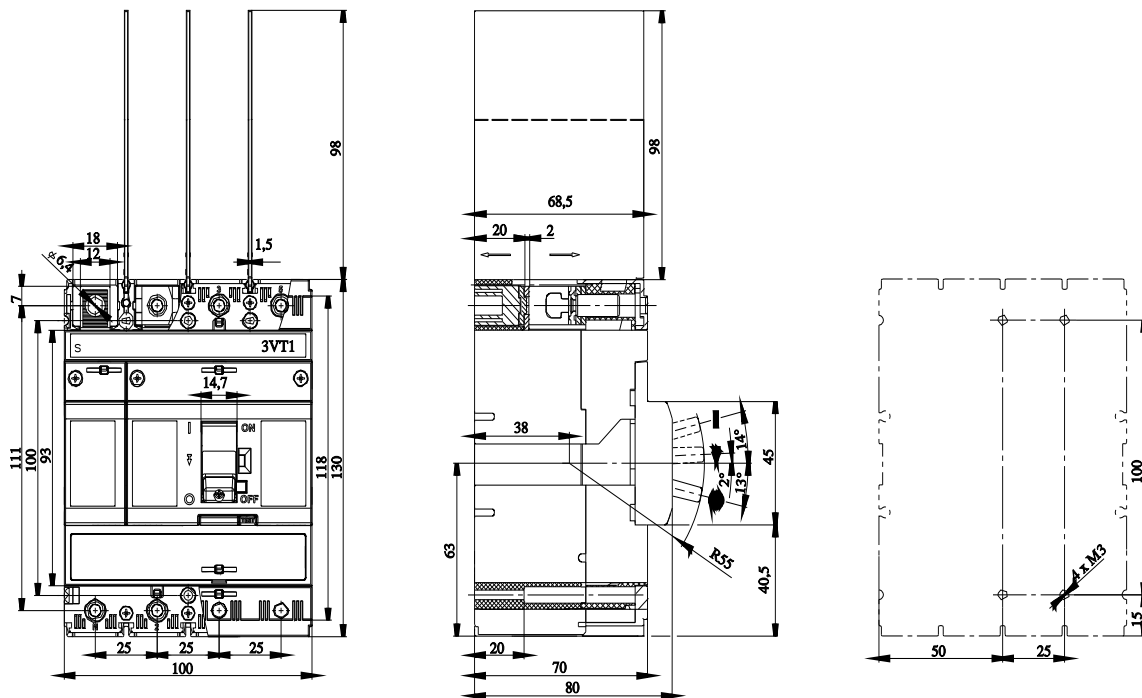
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VT1704-2EC46-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1704-2EC46-0AA0)

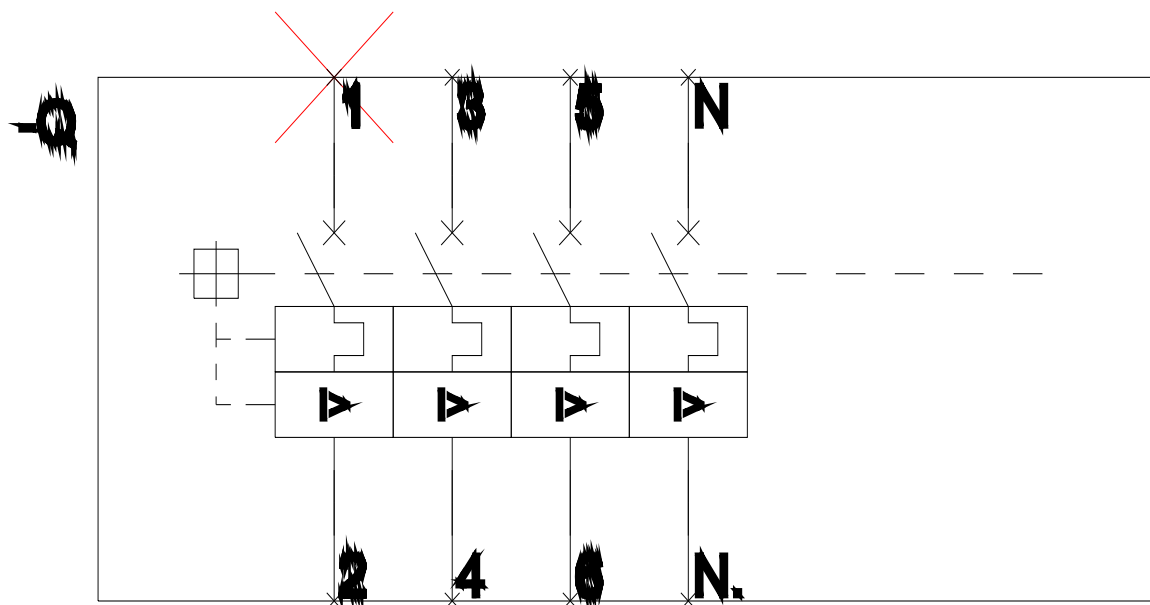
### CAX-Online-Generator

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

### Tender specifications

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





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