



circuit breaker 3VT1 standard breaking capacity  $I_{cu}=25\text{kA}$ , 415V AC 3-pole, motor protection trip unit TM, LI  $I_n=80\text{A}$  rated current  $I_R=63\ldots80\text{A}$  overload protection  $I_L=800\text{A}$ , short-circuit prot. without auxiliary release without auxiliary/alarm switch with front terminals

| 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                                                                                   | 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                                                    | LI                                  |
| 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                               |
| operating power at AC-3                                                                           |                                     |
| • at 230 V rated value                                                                            | 14.7 kW                             |
| 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                                                                               | system protection                   |
| suitability for use disconnecting means                                                           | Yes                                 |
| Adjustable parameters                                                                             |                                     |
| adjustable current response value current of the current-dependent overload release initial value | 63 A                                |

| Product details                                               |                          |                                                                                                                         |       |
|---------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------|-------|
| product component                                             |                          |                                                                                                                         |       |
| ● trip indicator                                              |                          | No                                                                                                                      |       |
| ● 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        |                          | screw-type terminals                                                                                                    |       |
| Mechanical Design                                             |                          |                                                                                                                         |       |
| height                                                        |                          | 130 mm                                                                                                                  |       |
| width                                                         |                          | 75 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                                                    |                          | 0.834 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                                                                                                                       |       |
| reference code according to IEC 81346-2                       |                          | Q                                                                                                                       |       |
| Approvals Certificates                                        |                          |                                                                                                                         |       |
| Environment                                                   | General Product Approval | Test Certificates                                                                                                       | other |

[Environmental Con-  
firmations](#)



[Confirmation](#)

[Type Test Certi-  
ficates/Test Report](#)

[Confirmation](#)



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=3VT1708-2DM35-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VT1708-2DM35-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VT1708-2DM35-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1708-2DM35-0AA0)

##### CAX-Online-Generator

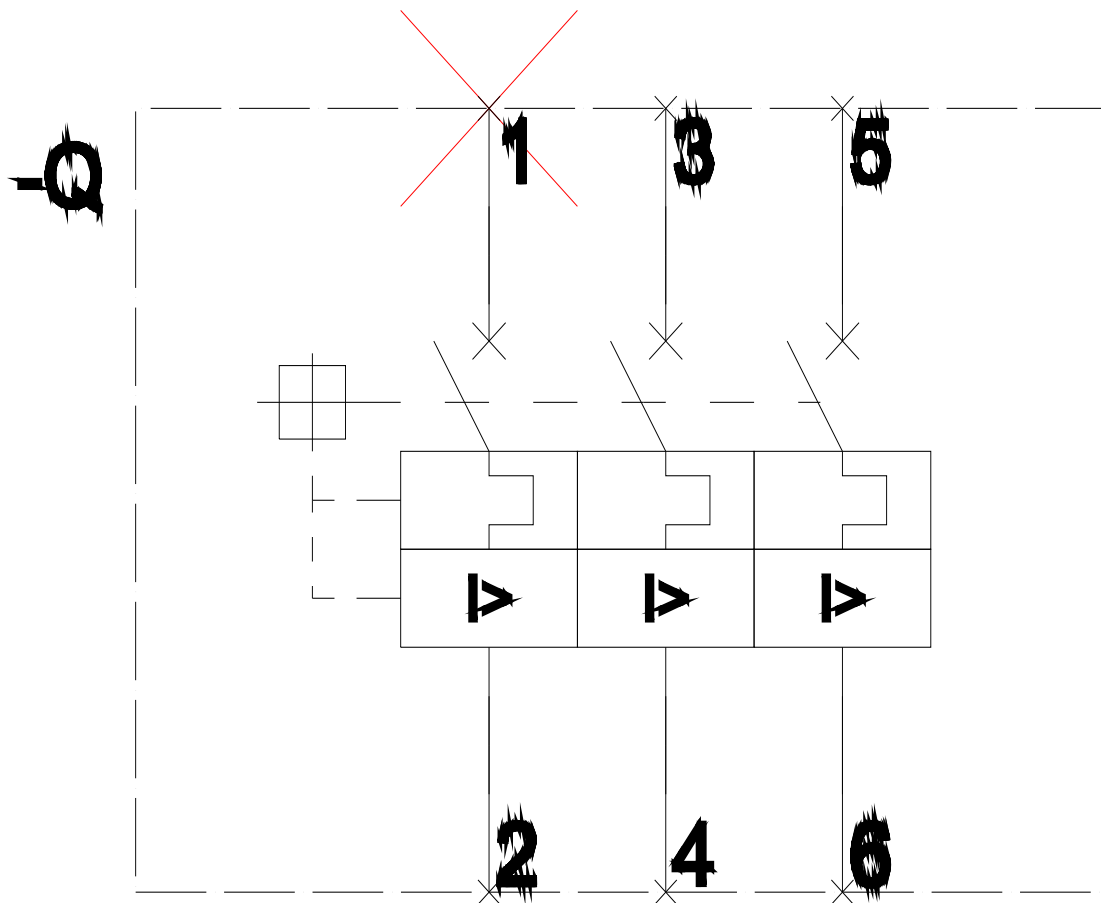
<https://www.siemens.com/cax>

##### 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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