

CIRCUIT BREAKER 3VT5 HIGH BREAKING CAPACITY ICU=55KA,  
415V AC 3-POLE; CIRCUIT BREAKER W/O OVERCURRENT  
RELEASE W/O AUXILIARY TRIP UNIT W/O AUXILIARY/ALARM  
SWITCH WITHDRAWABLE VERSION



| Model                                                |                                     |
|------------------------------------------------------|-------------------------------------|
| product brandname                                    | SENTRON                             |
| Product designation                                  | 3VT1_5 molded case circuit breakers |
| Design of the operating mechanism                    | toggle handle                       |
| Type of the driving mechanism / motor drive          | No                                  |
| General technical data                               |                                     |
| Number of poles                                      | 3                                   |
| Size of the circuit-breaker                          | 3VT5                                |
| Electrical endurance (switching cycles) / typical    | 4 000                               |
| Usage category                                       | A                                   |
| Performance class for circuit breaker                | H                                   |
| Mechanical service life (switching cycles) / typical | 10 000                              |
| Operating frequency / maximum                        | 120 1/h                             |
| Voltage                                              |                                     |
| Insulation voltage / rated value                     | 690 V                               |
| Surge voltage resistance / rated value               | 8 kV                                |
| Protection class                                     |                                     |
| Protection class IP                                  | IP40                                |

| Dissipation                                                                  |                              |
|------------------------------------------------------------------------------|------------------------------|
| <b>Power loss [W]</b>                                                        |                              |
| • for rated value of the current / at AC / in hot operating state / per pole | 40 W                         |
| • maximum                                                                    | 120 W                        |
| Electricity                                                                  |                              |
| Continuous current / rated value                                             | 1 600 A                      |
| Derating temperature / for the rated value of the continuous current         | 50 °C                        |
| Main circuit                                                                 |                              |
| <b>Operating frequency</b>                                                   |                              |
| • 1 / rated value                                                            | 50 Hz                        |
| • 2 / rated value                                                            | 60 Hz                        |
| <b>Operating voltage</b>                                                     |                              |
| • rated value / maximum                                                      | 690 V                        |
| • for main current circuit / at AC / at 50 Hz / maximum                      | 690 V                        |
| • for main current circuit / at AC / at 60 Hz / maximum                      | 690 V                        |
| • for main current circuit / at DC / maximum                                 | 440 V                        |
| <b>Operating current</b>                                                     |                              |
| • at 40 °C / rated value                                                     | 1 600 A                      |
| • at 50 °C / rated value                                                     | 1 600 A                      |
| • at 55 °C / rated value                                                     | 1 460 A                      |
| • at 60 °C / rated value                                                     | 1 460 A                      |
| • at 65 °C / rated value                                                     | 1 320 A                      |
| • at 70 °C / rated value                                                     | 1 320 A                      |
| Suitability                                                                  |                              |
| <b>Suitability for use</b>                                                   | Contact unit without release |
| • Disconnecting means                                                        | Yes                          |
| Product details                                                              |                              |
| <b>Product component</b>                                                     |                              |
| • 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                                                             |                              |
| <b>Product function</b>                                                      |                              |

- Ground fault protection
- for neutral conductors / Short-circuit and overload proof
- Phase failure detection
- Overload protection

No  
No  
No  
No

## Short circuit

### Operational short-circuit current breaking capacity (Ics)

- at 240 V / rated value
- at 415 V / rated value
- at 500 V / rated value
- at 690 V / rated value

45 kA  
36 kA  
30 kA  
20 kA

### Maximum short-circuit current breaking capacity (Icu)

- at 240 V / rated value
- at 415 V / rated value
- at 500 V / rated value
- at 690 V / rated value

85 kA  
55 kA  
45 kA  
20 kA

## Connections

Arrangement of electrical connectors / for main current circuit

front side

Type of electrical connection / for main current circuit

busbar connection

## Mechanical Design

Height

494 mm

Width

210 mm

Depth

157 mm

Mounting position

with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back

Mounting type

drawer unit

Net weight

23 kg

## Environmental conditions

### Ambient temperature

- during operation / minimum
- during operation / maximum
- during storage / minimum
- during storage / maximum

-40 °C  
70 °C  
-40 °C  
70 °C

## Certificates

### Equipment marking

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2

Q  
Q

| General Product Approval                                                                 | Declaration of Conformity                                                                | Test Certificates                                                                             | other                                             |                                   |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------|
| <br>CCC | <br>EAC | <br>EG-Konf. | <a href="#">Typprüfbescheinigung/Werkszeugnis</a> | <a href="#">Umweltbestätigung</a> |
|                                                                                          |                                                                                          |                                                                                               |                                                   | <a href="#">sonstig</a>           |

#### Further information

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

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

##### Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VT5716-3AA38-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VT5716-3AA38-0AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VT5716-3AA38-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT5716-3AA38-0AA0)

##### CAX-Online-Generator

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

##### Tender specifications

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



