## **Data sheet**



CIRCUIT BREAKER 3VT1 STANDARD BREAKING CAPACITY ICU=25KA, 415V AC 3-POLE, SYSTEM PROTECTION OVERCURRENT RELEASE TM, LI IN= 16A RATED CURRENT IR= 12.5... 16A OVERLOAD PROT. II= 160... 240A, SHORT-CIRCUIT PROTECTION W/O AUXILIARY TRIP UNIT W/O AUXILIARY/ALARM SWITCH WITH TERMINALS F.FRONT CONNECT.

Figure similar

| Model  |                                     |
|--|-------------------------------------|
| Product brand name                                   | SENTRON                             |
| Product designation                                  | 3VT1_5 molded case circuit breakers |
| Design of the operating mechanism                    | toggle handle                       |
| Type of the driving mechanism / motor drive          | No                                  |
| Design of the overcurrent release                    | ТМ                                  |
| General technical data                               |                                     |
| Number of poles                                      | 3                                   |
| Size of the circuit-breaker                          | 3VT1                                |
| Electrical endurance (switching cycles) / typical    | 6 000                               |
| Usage category                                       | A                                   |
| Performance class for circuit breaker                | N                                   |
| Mechanical service life (switching cycles) / typical | 20 000                              |
| 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              |
| Protective function of the overcurrent release   | Ц                 |
| Dissipation  |                   |
| Power loss [W]   |                   |
| <ul> <li>for rated value of the current / at AC / in hot<br/>operating state / per pole</li> </ul> | 1.33 W            |
| • maximum  | 4 W               |
| Electricity  |                   |
| Operating current / at 45 °C / rated value   | 15 A              |
| Continuous current / rated value   | 16 A              |
| Derating temperature / for the rated value of the continuous current                               | 40 °C             |
| Adjustable pick-up value current   |                   |
| <ul> <li>of the current-dependent overload release /<br/>Full-scale value</li> </ul>               | 16 A              |
| <ul> <li>of instantaneous short-circuit trip unit / initial value</li> </ul>                       | 160 A             |
| • of instantaneous short-circuit trip unit / Full-scale value                                      | 240 A             |
| Main circuit   |                   |
| Operating frequency  |                   |
| • 1 / rated value  | 50 Hz             |
| • 2 / rated value  | 60 Hz             |
| Operating voltage  |                   |
| • rated value / maximum  | 690 V             |
| <ul> <li>for main current circuit / at AC / at 50 Hz /<br/>maximum</li> </ul>                      | 690 V             |
| <ul> <li>for main current circuit / at AC / at 60 Hz /<br/>maximum</li> </ul>                      | 690 V             |
| • for main current circuit / at DC / maximum   | 250 V             |
| Operating current  |                   |
| ● at 40 °C / rated value   | 16 A              |
| • at 50 °C / rated value   | 15 A              |
| Suitability  |                   |
| Suitability for use  | system protection |
| Disconnecting means  | Yes               |
| Adjustable parameters  |                   |
| Adjustable pick-up value current / of the current-<br>dependent overload release / initial value   | 12.5 A            |
| Product details  |                   |

| Product component   |     |
|---|-----|
| Trip indicator  | No  |
| Auxiliary switch  | No  |
| <ul> <li>Voltage trigger</li> </ul>                           | No  |
| • undervoltage release  | No  |
| <ul> <li>undervoltage release with leading contact</li> </ul> | No  |
| Product extension / optional / motor drive                    | Yes |

| roduct function   |            |
|---|------------|
| <ul> <li>of thermal overload trip unit</li> </ul>                                 | adjustable |
| Ground fault protection   | No         |
| <ul> <li>for neutral conductors / Short-circuit and<br/>overload proof</li> </ul> | No         |
| Phase failure detection   | No         |
| Overload protection   | Yes        |

| 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
 3 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
 6 kA

# Connections

Arrangement of electrical connectors / for main current circuit

Type of electrical connection / for main current circuit

screw-type terminals

| Mechanical Design |   |
|-------------------|---|
| Height            | 130 mm  |
| Width             | 75 mm   |
| Depth             | 80 mm   |
| Mounting position | with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back |
| Mounting type     | fixed mounting  |
| Net weight        | 1.036 kg  |

#### Environmental conditions

Ambient temperature

during operation / minimum
 during operation / maximum
 55 °C
 during storage / minimum
 during storage / maximum
 55 °C

#### Certificates

#### **Equipment marking**

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

Q

Declaration of Test Certificates other
Conformity



Type Test Certificates/Test
Report

Miscellaneous

### Further information

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=3VT1701-2DC35-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VT1701-2DC35-0AA0

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VT1701-2DC35-0AA0

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications



