



CIRCUIT BREAKER 3VA1 IEC FRAME 250 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=250A OVERLOAD PROTECTION IR=175A ...250A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL PROTECTION 1 BUSBAR CONNECTION SHUNT TRIP (STL) 110-127 V DC, AC 50/60 HZ 2 AUXILIARY SWITCH HQ 1 TRIP ALARM SWITCH HQ

| Model  |   |
|--|---|
| product brandname  | SENTRON                                     |
| Product designation  | Molded case circuit breaker                 |
| Design of the product  | Line protection                             |
| Design of the overcurrent release  | TM240                                       |
| Protective function of the overcurrent release   | LI  |
| Number of poles  | 4   |
| Design of the auxiliary release  | without auxiliary release                   |
| Design of the auxiliary switch   | 1 auxiliary switch + 1 trip alarm switch HQ |
| General technical data   |   |
| Tension assignée d'isolement Ui  | 800 V                                       |
| Max. rated operational voltage Ue with AC 50/60Hz  | 690 V                                       |
| Max. rated operational voltage Ue with DC  | 600 V                                       |
| Operating power / at AC-3 / at 400 V   | 0 W   |
| Operating power / at AC-3 / at 230 V   | 0 W   |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device | 57 W  |
| Mechanical service life (switching cycles) / typical   | 15 000                                      |

|   |         |
|---|---------|
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 8 000   |
| Neutral conductors / upgradeable/retrofitable                             | No      |
| Ground fault monitoring version   | Without |
| Product function  |         |
| • communication function  | No      |
| • Phase failure detection   | No      |
| • other measurement function  | No      |
| Net weight  | 2.2 kg  |

### Electricity

|   |         |
|---|---------|
| Max. rated operational voltage of the size of the circuit-breaker | 250 A   |
| Courant permanent assigné Iu                                      | 250 A   |
| Operating current   |         |
| • at 40 °C  | 250 A   |
| • at 45 °C  | 250 A   |
| • at 50 °C  | 250 A   |
| • at 55 °C  | 243.3 A |
| • at 60 °C  | 236.5 A |
| • at 65 °C  | 229 A   |
| • at 70 °C  | 223 A   |

### Switching capacity according to IEC 60947

|   |         |
|---|---------|
| Switching capacity class of the circuit breaker           | S       |
| Maximum short-circuit current breaking capacity (Icu)     |         |
| • at 240 V  | 55 kA   |
| • at 415 V  | 36 kA   |
| • at 440 V  | 25 kA   |
| • at 690 V  | 7 kA    |
| Operational short-circuit current breaking capacity (Ics) |         |
| • at 240 V  | 55 kA   |
| • at 415 V  | 36 kA   |
| • at 440 V  | 25 kA   |
| • at 690 V  | 5 kA    |
| Short-circuit current making capacity (Icm)               |         |
| • at 240 V  | 121 kA  |
| • at 415 V  | 75.6 kA |
| • at 690 V  | 11.9 kA |

### Adjustable parameters

|   |     |
|---|-----|
| Adjustable response value current / I <sub>g</sub> min. | 0 A |
| Adjustable response value current / I <sub>g</sub> min. | 0 A |

|   |      |
|---|------|
| Adjustable response value current / I <sub>g</sub> min. | 0 A  |
| Adjustable response value current / I <sub>g</sub> min. | 0 A  |
| Adjustable response value current / I <sub>i</sub> min. | 0 A  |
| Adjustable response value current / I <sub>i</sub> max. | 0 A  |
| Design of the N-conductor protection                    | 100% |

### Mechanical Design

|        |        |
|--------|--------|
| Height | 158 mm |
| Width  | 140 mm |
| Depth  | 70 mm  |

### Connections

|   |                |
|---|----------------|
| Arrangement of electrical connectors / for main current circuit                         | Front terminal |
| Type of electrical connection / for main current circuit                                | lug terminal   |
| Type of connectable conductor cross-section, connection screw, width x thickness , min. | 13 x 1         |
| Type of connectable conductor cross-section, connection screw, width x thickness , max. | 25 x 8         |

### Auxiliary circuit

|   |     |
|---|-----|
| Product component   |     |
| <ul style="list-style-type: none"> <li>• undervoltage release</li> </ul>                      | No  |
| <ul style="list-style-type: none"> <li>• Voltage trigger</li> </ul>                           | No  |
| <ul style="list-style-type: none"> <li>• undervoltage release with leading contact</li> </ul> | No  |
| <ul style="list-style-type: none"> <li>• Trip indicator</li> </ul>                            | Yes |
| Number of CO contacts / for auxiliary contacts  | 2   |

### Accessories

|   |                                    |
|---|------------------------------------|
| Product extension / optional / motor drive  | Yes                                |
| Manufacturer's article number   |                                    |
| <ul style="list-style-type: none"> <li>• of the supplied basic switch</li> </ul>                    | <a href="#">3VA1225-4GF42-0AA0</a> |
| <ul style="list-style-type: none"> <li>• of the integrated auxiliary switch/alarm switch</li> </ul> | <a href="#">3VA9988-0AA12</a>      |
| <ul style="list-style-type: none"> <li>• of the integrated auxiliary switch/alarm switch</li> </ul> | <a href="#">3VA9988-0AB12</a>      |
| <ul style="list-style-type: none"> <li>• of the integrated auxiliary trip</li> </ul>                | 3VA9688-0BL30                      |

### Environmental conditions

|  |        |
|--|--------|
| Protection class IP / on the front   | IP40   |
| Ambient temperature  |        |
| <ul style="list-style-type: none"> <li>• during operation / minimum</li> </ul> | -25 °C |
| <ul style="list-style-type: none"> <li>• during operation / maximum</li> </ul> | 70 °C  |
| <ul style="list-style-type: none"> <li>• during storage / minimum</li> </ul>   | -40 °C |
| <ul style="list-style-type: none"> <li>• during storage / maximum</li> </ul>   | 80 °C  |

### Certificates

|  |   |
|--|---|
| Equipment marking / acc. to DIN EN 81346-2 | Q |
|--|---|

|  |  |   |  |   |   |
|--|--|---|--|---|---|
| General Product Approval   |  |   | EMC  | Declaration of Conformity   | Test Certificates                                 |
| <br>CCC | <br>VDE |  | <br>RCM | <br>EG-Konf. | <a href="#">Typprüfbescheinigung/Werkszeugnis</a> |

|                         |  |   |   |  |   |
|-------------------------|--|---|---|--|---|
| Test Certificates       | Shipping Approval  |   |   |  |   |
| <a href="#">sonstig</a> | <br>ABS | <br>BUREAU VERITAS | <br>GL | <br>LRS | <br>RMRS |

|                         |
|-------------------------|
| other                   |
| <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/3VA1225-4GF42-0AF0>

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

<http://support.automation.siemens.com/WW/view/en/3VA1225-4GF42-0AF0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA1225-4GF42-0AF0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA1225-4GF42-0AF0)

##### CAX-Online-Generator

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

##### Tender specifications

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



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