



Figure similar

CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM220, ATFM, IN=125A OVERLOAD PROTECTION IR=87,5A ...125A SHORT CIRCUIT PROTECTION II=10 X IN CABLE CONNECTION

| Model                                                                               |   |                             |
|-------------------------------------------------------------------------------------|---|-----------------------------|
| product brand name                                                                  |   | SENTRON                     |
| Product designation                                                                 |   | Molded case circuit breaker |
| Design of the product                                                               |   | Line protection             |
| Product variations                                                                  |   | General Applications        |
| Ground fault monitoring version                                                     |   | Without                     |
| Design of the auxiliary release                                                     |   | Without auxiliary release   |
| Design of the auxiliary switch                                                      |   | Without                     |
| Design of the operating mechanism                                                   |   | toggle handle               |
| Type of the driving mechanism / motor drive                                         |   | No                          |
| Design of the overcurrent release                                                   |   | TM220                       |
| General technical data                                                              |   |                             |
| Number of poles                                                                     |   | 3                           |
| Trip class / of the L-trip / with I <sub>2t</sub> characteristic / initial value    |   | 1                           |
| Trip class / of the L-trip / with I <sub>2t</sub> characteristic / Full-scale value |   | 1                           |
| Mechanical service life (switching cycles) / typical                                |   | 15 000                      |
| Voltage                                                                             |   |                             |
| Insulation voltage / Rated value                                                    | V | 800                         |
| Protection class                                                                    |   |                             |
| Protection class IP                                                                 |   | IP40                        |
| Protection class IP / on the front                                                  |   | IP40                        |
| Protective function of the overcurrent release                                      |   | LI                          |

|                                                                                               |   |                   |
|-----------------------------------------------------------------------------------------------|---|-------------------|
| Switching capacity                                                                            |   |                   |
| Switching capacity class of the circuit breaker                                               |   | S                 |
| Dissipation                                                                                   |   |                   |
| Active power loss                                                                             |   |                   |
| • maximum                                                                                     | W | 23.2              |
| Electricity                                                                                   |   |                   |
| Continuous current / Rated value / maximum                                                    | A | 160               |
| Continuous current / Rated value                                                              | A | 125               |
| Adjustable response value current                                                             |   |                   |
| • of the current-dependent overload release / Full-scale value                                | A | 125               |
| Main circuit                                                                                  |   |                   |
| Operating voltage                                                                             |   |                   |
| • with AC / at 50/60 Hz / Rated value                                                         | V | 690               |
| • for DC / Rated value                                                                        | V | 500               |
| Operating current                                                                             |   |                   |
| • at 40 °C / Rated value                                                                      | A | 125               |
| • at 50 °C / Rated value                                                                      | A | 125               |
| • at 55 °C / Rated value                                                                      | A | 122               |
| • at 60 °C / Rated value                                                                      | A | 120               |
| • at 65 °C / Rated value                                                                      | A | 117               |
| • at 70 °C / Rated value                                                                      | A | 114               |
| Auxiliary circuit                                                                             |   |                   |
| Number of CO contacts / for auxiliary contacts                                                |   | 0                 |
| Suitability                                                                                   |   |                   |
| Suitability for use                                                                           |   | system protection |
| Adjustable parameters                                                                         |   |                   |
| Adjustable response value current                                                             |   |                   |
| • of S-trip / with standard characteristic / initial value                                    | A | 1 250             |
| • of S-trip / with standard characteristic / Full-scale value                                 | A | 1 250             |
| • for N-conductor protection / initial value                                                  | A | 0                 |
| • for N-conductor protection / Full-scale value                                               | A | 0                 |
| Adjustable response value current / of the current-dependent overload release / initial value | A | 88                |
| Product details                                                                               |   |                   |
| Product component                                                                             |   |                   |
| • Trip indicator                                                                              |   | No                |
| • display                                                                                     |   | No                |

|                                                                                              |  |     |
|----------------------------------------------------------------------------------------------|--|-----|
| • Voltage trigger                                                                            |  | No  |
| • undervoltage release                                                                       |  | No  |
| • undervoltage release with leading contact                                                  |  | No  |
| <b>Product property</b>                                                                      |  |     |
| • for neutral conductors /<br>upgradeable/retrofitable / Short-circuit and<br>overload proof |  | No  |
| Product expansion / optional / motor drive                                                   |  | Yes |

#### Product function

|                               |  |     |
|-------------------------------|--|-----|
| <b>Product function</b>       |  |     |
| • Intrinsic device protection |  | Yes |
| • communication function      |  | No  |
| • Phase failure detection     |  | No  |
| • other measurement function  |  | No  |

#### Accessories

|                                                                   |  |                                    |
|-------------------------------------------------------------------|--|------------------------------------|
| <b>Manufacturer article number / of the supplied basic switch</b> |  | <a href="#">3VA1112-4EE36-0AA0</a> |
|-------------------------------------------------------------------|--|------------------------------------|

#### Short circuit

|                                                                  |    |      |
|------------------------------------------------------------------|----|------|
| <b>Operational short-circuit current breaking capacity (Ics)</b> |    |      |
| • at 240 V / Rated value                                         | kA | 55   |
| • at 415 V / Rated value                                         | kA | 36   |
| • at 440 V / Rated value                                         | kA | 25   |
| • at 500 V / Rated value                                         | kA | 15   |
| • at 690 V / Rated value                                         | kA | 5    |
| <b>Maximum short-circuit current breaking capacity (Icu)</b>     |    |      |
| • at 240 V / Rated value                                         | kA | 55   |
| • at 415 V / Rated value                                         | kA | 36   |
| • at 440 V / Rated value                                         | kA | 25   |
| • at 500 V / Rated value                                         | kA | 16   |
| • at 690 V / Rated value                                         | kA | 7    |
| <b>Short-circuit current making capacity (Icm)</b>               |    |      |
| • at 240 V / Rated value                                         | kA | 121  |
| • at 415 V / Rated value                                         | kA | 75.6 |
| • at 440 V / Rated value                                         | kA | 52.5 |
| • at 690 V / Rated value                                         | kA | 7.5  |

#### Connections

|                                                                 |  |                    |
|-----------------------------------------------------------------|--|--------------------|
| Arrangement of electrical connectors / for main current circuit |  | Front terminal     |
| Type of connectable conductor cross-section                     |  |                    |
| • of the round conductor terminal / stranded                    |  | 1 x (1.5 - 70 mm²) |

|                                                          |  |              |
|----------------------------------------------------------|--|--------------|
| Type of electrical connection / for main current circuit |  | Box terminal |
|----------------------------------------------------------|--|--------------|

#### Mechanical Design

|               |    |                |
|---------------|----|----------------|
| Height        | mm | 130            |
| Width         | mm | 76.2           |
| Depth         | mm | 70             |
| Mounting type |    | fixed mounting |
| Net weight    | g  | 900            |

#### Environmental conditions

|                              |    |     |
|------------------------------|----|-----|
| <b>Ambient temperature</b>   |    |     |
| • during operation / minimum | °C | -25 |
| • during operation / maximum | °C | 70  |
| • during storage / minimum   | °C | -40 |
| • during storage / maximum   | °C | 80  |

#### Certificates

|                          |  |   |
|--------------------------|--|---|
| <b>Equipment marking</b> |  |   |
| • acc. to DIN EN 61346-2 |  | Q |
| • acc. to DIN EN 81346-2 |  | Q |

|                                 |            |                                  |                          |                          |
|---------------------------------|------------|----------------------------------|--------------------------|--------------------------|
| <b>General Product Approval</b> | <b>EMC</b> | <b>Declaration of Conformity</b> | <b>Test Certificates</b> | <b>Shipping Approval</b> |
|---------------------------------|------------|----------------------------------|--------------------------|--------------------------|



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[Type Test Certificates/Test Report](#)



GL

|                          |              |
|--------------------------|--------------|
| <b>Shipping Approval</b> | <b>other</b> |
|--------------------------|--------------|

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#### 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/3VA11124EE360AA0>

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

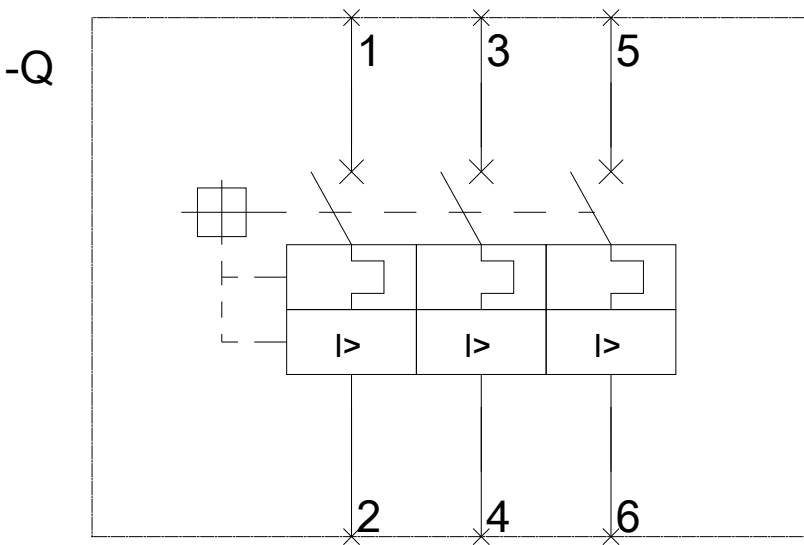
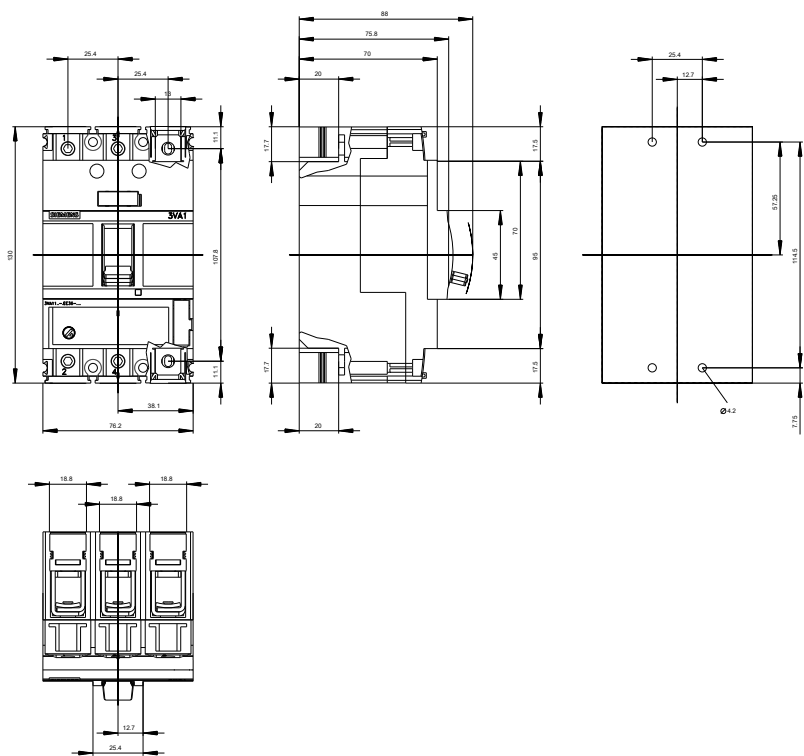
<http://support.automation.siemens.com/WW/view/en/3VA11124EE360AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA11124EE360AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11124EE360AA0)

**CAX-Online-Generator**

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



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