



Figure similar

CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 3-POLE, LINE PROTECTION TM220, ATFM, IN=40A OVERLOAD PROTECTION IR=28A ...40A 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 <sup>2</sup> t characteristic / initial value    |   | 1                           |
| Trip class / of the L-trip / with I <sup>2</sup> t 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   |   |                   |
|--|---|-------------------|
| <b>Switching capacity class of the circuit breaker</b>   |   | N                 |
| Dissipation  |   |                   |
| <b>Active power loss</b>   |   |                   |
| • maximum  | W | 10.8              |
| Electricity  |   |                   |
| <b>Continuous current / Rated value / maximum</b>  | A | 160               |
| Continuous current / Rated value   | A | 40                |
| <b>Adjustable response value current</b>   |   |                   |
| • of the current-dependent overload release / Full-scale value                                       | A | 40                |
| Main circuit   |   |                   |
| <b>Operating voltage</b>   |   |                   |
| • with AC / at 50/60 Hz / Rated value  | V | 690               |
| • for DC / Rated value   | V | 500               |
| <b>Operating current</b>   |   |                   |
| • at 40 °C / Rated value   | A | 40                |
| • at 50 °C / Rated value   | A | 40                |
| • at 55 °C / Rated value   | A | 39                |
| • at 60 °C / Rated value   | A | 39                |
| • at 65 °C / Rated value   | A | 38                |
| • at 70 °C / Rated value   | A | 37                |
| Auxiliary circuit  |   |                   |
| Number of CO contacts / for auxiliary contacts   |   | 0                 |
| Suitability  |   |                   |
| <b>Suitability for use</b>   |   | system protection |
| Adjustable parameters  |   |                   |
| <b>Adjustable response value current</b>   |   |                   |
| • of S-trip / with standard characteristic / initial value   | A | 400               |
| • of S-trip / with standard characteristic / Full-scale value  | A | 400               |
| • for N-conductor protection / initial value   | A | 0                 |
| • for N-conductor protection / Full-scale value  | A | 0                 |
| <b>Adjustable response value current / of the current-dependent overload release / initial value</b> | A | 28                |
| Product details  |   |                   |
| <b>Product component</b>   |   |                   |
| • Trip indicator   |   | No                |
| • display  |   | No                |

|  |  |     |
|--|--|-----|
| <ul style="list-style-type: none"> <li>• Voltage trigger</li> <li>• undervoltage release</li> <li>• undervoltage release with leading contact</li> </ul> |  | No  |
| <b>Product property</b>  |  |     |
| <ul style="list-style-type: none"> <li>• for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof</li> </ul>                 |  | No  |
| Product expansion / optional / motor drive   |  | Yes |

### Product function

|  |  |                       |
|--|--|-----------------------|
| <b>Product function</b>  |  |                       |
| <ul style="list-style-type: none"> <li>• Intrinsic device protection</li> <li>• communication function</li> <li>• Phase failure detection</li> <li>• other measurement function</li> </ul> |  | Yes<br>No<br>No<br>No |

### Accessories

|   |  |                                    |
|---|--|------------------------------------|
| <b>Manufacturer article number / of the supplied basic switch</b> |  | <a href="#">3VA1140-3EE36-0AA0</a> |
|---|--|------------------------------------|

### Short circuit

|  |    |                           |
|--|----|---------------------------|
| <b>Operational short-circuit current breaking capacity (Ics)</b>   |    |                           |
| <ul style="list-style-type: none"> <li>• at 240 V / Rated value</li> <li>• at 415 V / Rated value</li> <li>• at 440 V / Rated value</li> <li>• at 500 V / Rated value</li> <li>• at 690 V / Rated value</li> </ul> | kA | 36<br>25<br>16<br>8<br>5  |
| <b>Maximum short-circuit current breaking capacity (Icu)</b>   |    |                           |
| <ul style="list-style-type: none"> <li>• at 240 V / Rated value</li> <li>• at 415 V / Rated value</li> <li>• at 440 V / Rated value</li> <li>• at 500 V / Rated value</li> <li>• at 690 V / Rated value</li> </ul> | kA | 36<br>25<br>16<br>8<br>7  |
| <b>Short-circuit current making capacity (Icm)</b>   |    |                           |
| <ul style="list-style-type: none"> <li>• at 240 V / Rated value</li> <li>• at 415 V / Rated value</li> <li>• at 440 V / Rated value</li> <li>• at 690 V / Rated value</li> </ul>                                   | kA | 75.6<br>52.5<br>32<br>7.5 |

### Connections

|  |  |                                 |
|--|--|---------------------------------|
| Arrangement of electrical connectors / for main current circuit                                |  | Front terminal                  |
| Type of connectable conductor cross-section  |  |                                 |
| <ul style="list-style-type: none"> <li>• of the round conductor terminal / stranded</li> </ul> |  | 1 x (1.5 - 70 mm <sup>2</sup> ) |

|  |  |              |
|--|--|--------------|
| 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> |
|---------------------------------|------------|----------------------------------|--------------------------|--------------------------|



[other](#)



[Type Test Certificates/Test Report](#)



GL

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

[other](#)



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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/3VA11403EE360AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA11403EE360AA0/all>

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

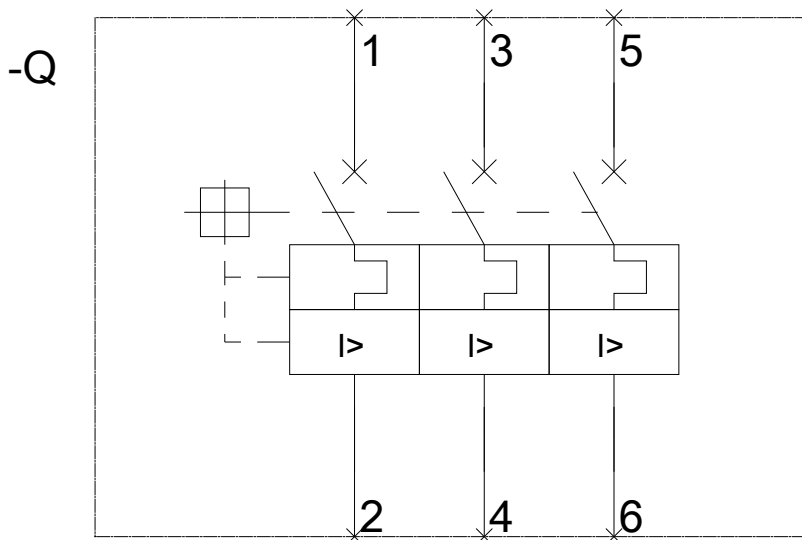
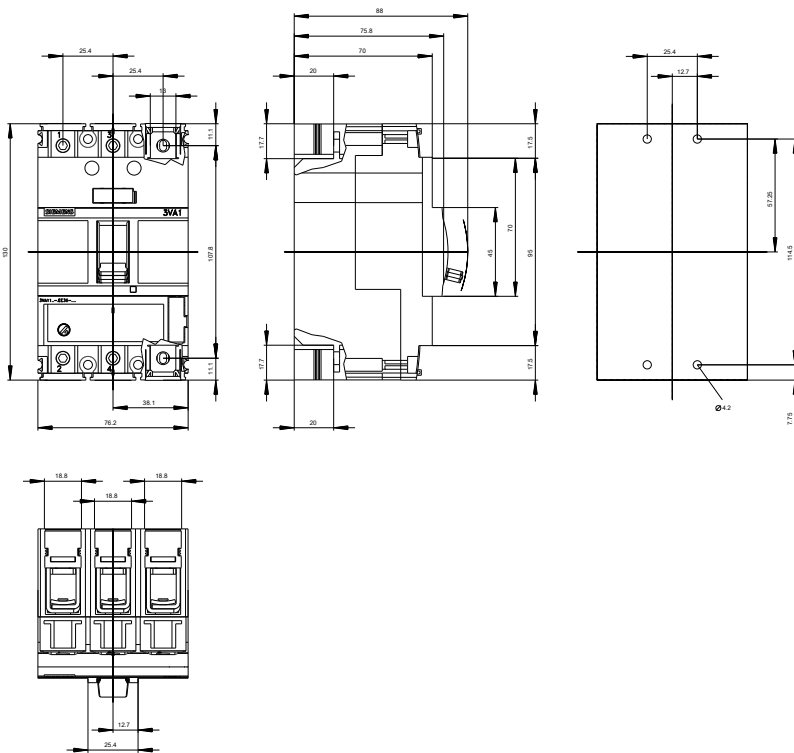
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**CAX-Online-Generator**

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

**Tender specifications**

<http://ausschreibungstexte.siemens.com/tiplv>



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