



circuit breaker 3VA5 UL Frame 125 breaking capacity class H 65 kA @ 480 V 3-pole, line protection TM230, FTAM, In=100 A overload protection Ir=100 A permanently set short-circuit protection Ii=5...10 x In cable connection on two sides

| Model  |                             |
|--|-----------------------------|
| product brand name   | SENTRON                     |
| product designation  | Molded-case circuit breaker |
| product designation / according to UL file   | HEAS                        |
| design of the product  | System protection           |
| design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes                         |
| design of the load switch / according to UL 489 / High-Intensity-Discharge circuit breaker (HID Type)                      | No                          |
| design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)                                | No                          |
| design of the overcurrent release  | TM230                       |
| protection function of the overcurrent release   | LI                          |
| number of poles  | 3                           |
| General technical data   |                             |
| insulation voltage / rated value   | 800 V                       |
| operating voltage / at DC / rated value  | 500 V                       |
| operating voltage / at AC / rated value  | 690 V                       |
| power loss [W] / maximum   | 22.8 W                      |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 7.6 W                       |
| mechanical service life (operating cycles) / typical   | 20 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V   | 8 000                       |
| electrical endurance (operating cycles) / at AC-1 / at 690 V   | 4 000                       |
| electrical endurance (operating cycles) / at 480 V   | 8 000                       |
| electrical endurance (operating cycles) / at 600 V   | 4 000                       |
| product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof                     | No                          |
| product function   |                             |
| • communication function   | No                          |
| • other measurement function   | No                          |
| Net Weight   | 1.034 kg                    |
| Current  |                             |
| marking / according to UL 489 / 100%-rated breaker   | No                          |
| operational current  |                             |
| • at 40 °C   | 100 A                       |
| • at 45 °C   | 98 A                        |
| • at 50 °C   | 95 A                        |
| • at 55 °C   | 93 A                        |
| • at 60 °C   | 91 A                        |
| • at 65 °C   | 89 A                        |
| • at 70 °C   | 87 A                        |

**Switching capacity according to IEC 60947**

|  |  |
|--|--|
| switching capacity class of the circuit breaker                      | H  |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )   |  |
| • at 240 V   | 150 kA   |
| • at 415 V   | 70 kA  |
| • at 690 V   | 10 kA  |
| operating short-circuit current breaking capacity (I <sub>cs</sub> ) |  |
| • at 240 V   | 150 kA   |
| • at 415 V   | 70 kA  |
| • at 690 V   | 5 kA   |
| short-circuit current making capacity (I <sub>cm</sub> )             |  |
| • at 240 V   | 330 kA   |
| • at 415 V   | 154 kA   |
| • at 690 V   | 17 kA  |
| design of short-circuit protection                                   | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter |

**Switching capacity according to UL 489**

|                           |        |
|---------------------------|--------|
| current breaking capacity |        |
| • at 240 V                | 150 kA |
| • at 480 V                | 65 kA  |
| • at 600 Y/347 V          | 25 kA  |

**Adjustable parameters**

|   |         |
|---|---------|
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic |         |
| • minimum   | 100 A   |
| • maximum   | 100 A   |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic     |         |
| • minimum   | 1 s     |
| • maximum   | 1 s     |
| adjustable response value setting current (I <sub>i</sub> ) / for I-tripping                                      |         |
| • minimum   | 500 A   |
| • maximum   | 1 000 A |
| adjustable setting current (I <sub>nN</sub> ) / for N-tripping  |         |
| • minimum   | 0 A     |
| • maximum   | 0 A     |
| product function / grounding protection   | No      |

**Mechanical Design**

|   |                   |
|---|-------------------|
| product component   |                   |
| • undervoltage release  | No                |
| • voltage trigger   | No                |
| • trip indicator  | No                |
| height [in]   | 5.51 in           |
| height  | 140 mm            |
| width [in]  | 3 in              |
| type of connectable conductor cross-sections / of the round conductor terminal / stranded | 1 x (8 AWG - 3/0) |
| width   | 76.2 mm           |
| depth [in]  | 3.01 in           |
| depth   | 76.5 mm           |

**Connections**

|   |   |
|---|---|
| arrangement of electrical connectors / for main current circuit | Front connection                          |
| type of electrical connection / for main current circuit        | circular conductor terminal on both sides |

**Auxiliary circuit**

|  |   |
|--|---|
| number of CO contacts / for auxiliary contacts | 0 |
|--|---|

**Accessories**

|  |     |
|--|-----|
| product extension / optional / motor drive | Yes |
|--|-----|

**Environmental conditions**

|                                    |        |
|------------------------------------|--------|
| protection class IP / on the front | IP40   |
| ambient temperature                |        |
| • during operation / minimum       | -25 °C |

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

70 °C  
-40 °C  
80 °C

reference code / according to IEC 81346-2

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## Approvals / Certificates

### General Product Approval



[Confirmation](#)



### General Product Approval

### EMV

### Test Certificates

### Marine / Shipping



[Miscellaneous](#)



[Special Test Certificate](#)



### Marine / Shipping

### other

### Environment



[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### 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=3VA5110-6EC36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-6EC36-0AA0>

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

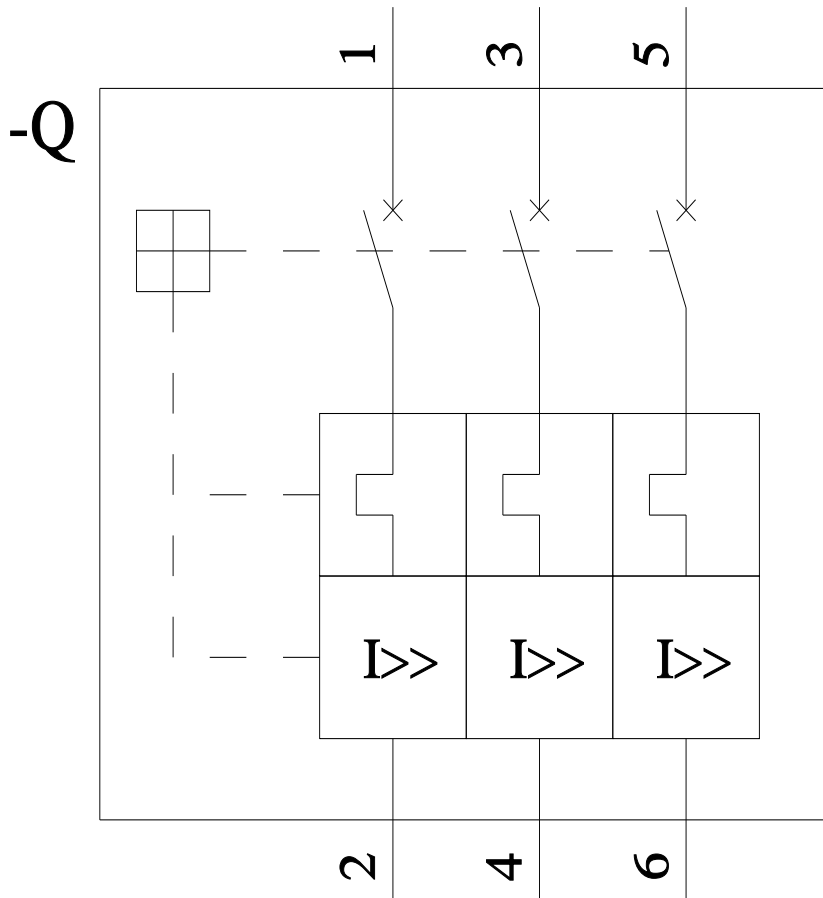
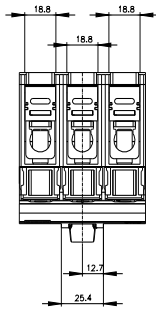
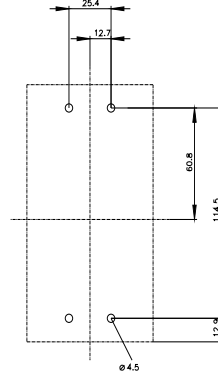
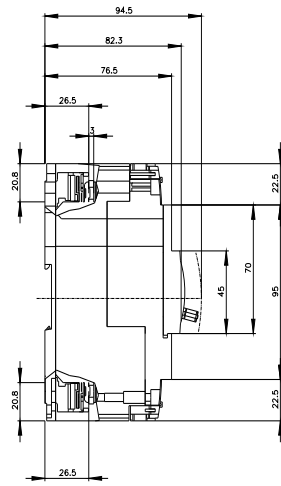
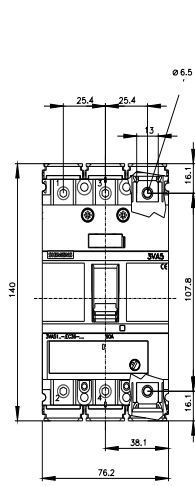
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5110-6EC36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-6EC36-0AA0)

### CAx-Online-Generator

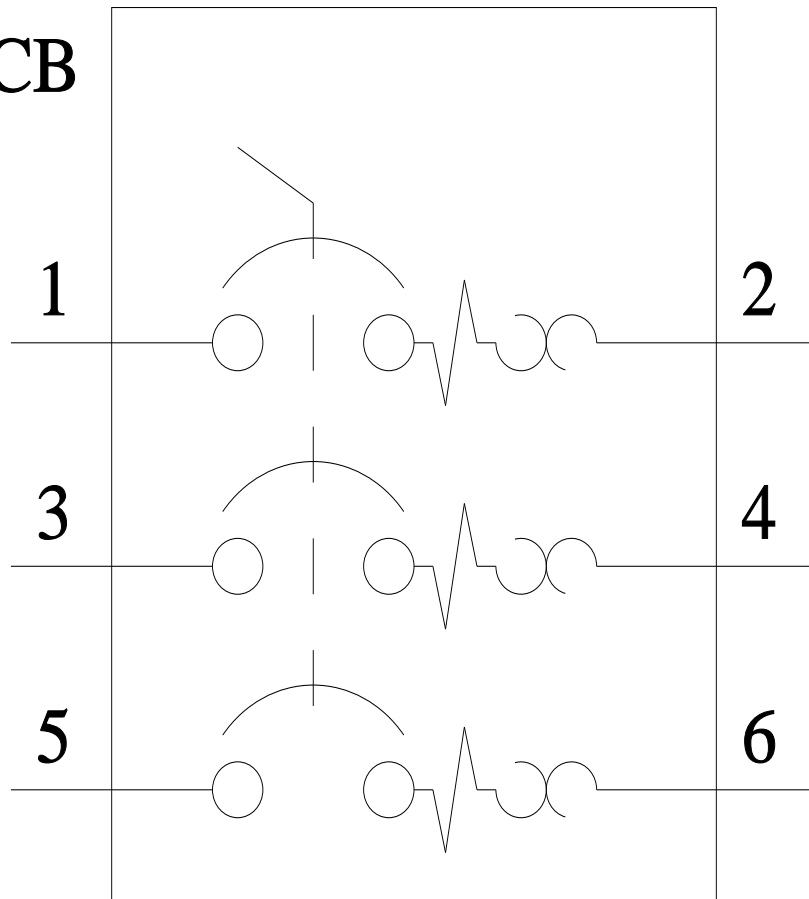
<http://www.siemens.com/cax>

### Tender specifications

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



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3/11/2024 

