



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480 V 3-pole, line protection TM210, FTFM, In=125A overload protection Ir=125A fixed short-circuit protection li=10 x In cable connection on both sides

| Model  |                             |
|--|-----------------------------|
| product brand name   | SETRON                      |
| product designation  | Molded-case circuit breaker |
| product designation / according to UL file   | CFAS                        |
| Product version  | 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  | TM210                       |
| protection function of the overcurrent release   | LI                          |
| number of poles  | 3                           |
| General technical data   |                             |
| rated insulation voltage Ui  | 800 V                       |
| Max. rated operational voltage Ue with DC  | 750 V                       |
| operating voltage / at AC / rated value  | 690 V                       |
| power loss [W] / maximum   | 23 W                        |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                             | 7.53 W                      |
| mechanical service life (switching cycles) / typical   | 20 000                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz  | 8 000                       |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz  | 4 000                       |
| electrical endurance (switching cycles) / at 480 V   | 8 000                       |
| electrical endurance (switching cycles) / at 600 V   | 4 000                       |
| Neutral conductors / upgradeable/retrofitable  | No                          |
| ground-fault monitoring version  | without                     |
| product function   |                             |
| • communication function   | No                          |
| • other measurement function   | No                          |
| Net Weight   | 2.308 kg                    |
| Current  |                             |
| marking / according to UL 489 / 100%-rated breaker   | No                          |
| operational current  |                             |
| • at 40 °C   | 125 A                       |
| • at 45 °C   | 121 A                       |
| • at 50 °C   | 116 A                       |

|            |       |
|------------|-------|
| • at 55 °C | 112 A |
| • at 60 °C | 108 A |
| • at 65 °C | 103 A |
| • at 70 °C | 99 A  |

#### Switching capacity according to IEC 60947

|  |  |
|--|--|
| switching capacity class of the circuit breaker                      | C  |
| breaking capacity maximum short-circuit current (I <sub>cu</sub> )   |  |
| • at 240 V   | 200 kA   |
| • at 415 V   | 110 kA   |
| • at 690 V   | 10 kA  |
| breaking capacity operating short-circuit current (I <sub>cs</sub> ) |  |
| • at 240 V   | 200 kA   |
| • at 415 V   | 110 kA   |
| • at 690 V   | 10 kA  |
| short-circuit current making capacity (I <sub>cm</sub> )             |  |
| • at 240 V   | 440 kA   |
| • at 415 V   | 242 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

|                           |        |
|---------------------------|--------|
| breaking capacity current |        |
| • at 240 V                | 200 kA |
| • at 480 V                | 100 kA |
| • at 600 V                | 35 kA  |

#### Adjustable parameters

|   |       |
|---|-------|
| Adjustable response value current / I <sub>g</sub> min.                 | 125 A |
| Adjustable response value current / I <sub>g</sub> min.                 | 125 A |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF | No    |

#### Mechanical Design

|             |         |
|-------------|---------|
| height [in] | 7.28 in |
| Height      | 185 mm  |
| width [in]  | 4.13 in |
| Width       | 105 mm  |
| depth [in]  | 3.27 in |
| depth       | 83 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 |
| Type of connectable conductor cross-section, round conductor terminal, stranded | 1 x (6 AWG - 350 kcmil)                   |

#### Auxiliary circuit

|  |    |
|--|----|
| product component                              |    |
| • undervoltage release                         | No |
| • voltage trigger                              | No |
| • trip indicator                               | No |
| 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       | 70 °C  |
| • during storage / minimum         | -40 °C |
| • during storage / maximum         | 80 °C  |

#### Certificates

|   |   |
|---|---|
| reference code / according to IEC 81346-2 | Q |
|---|---|



[Confirmation](#)



Declaration of Conformity

Marine / Shipping

other



[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?mfb=3VA5212-7ED36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5212-7ED36-0AA0>

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

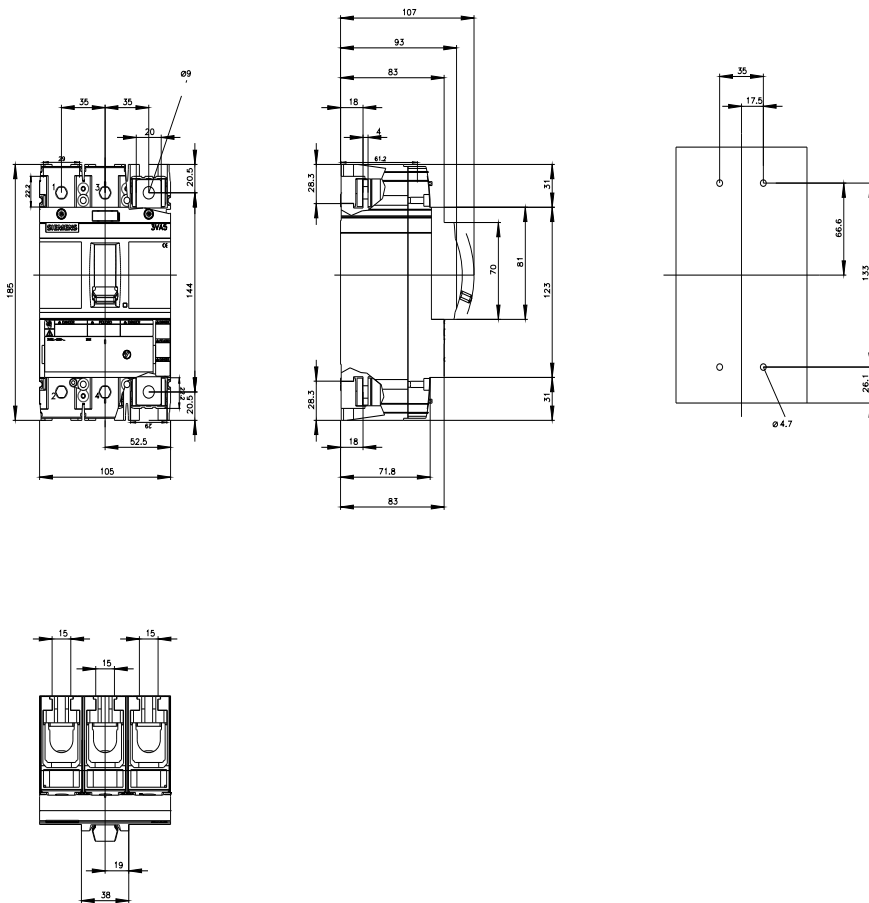
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA5212-7ED36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA5212-7ED36-0AA0)

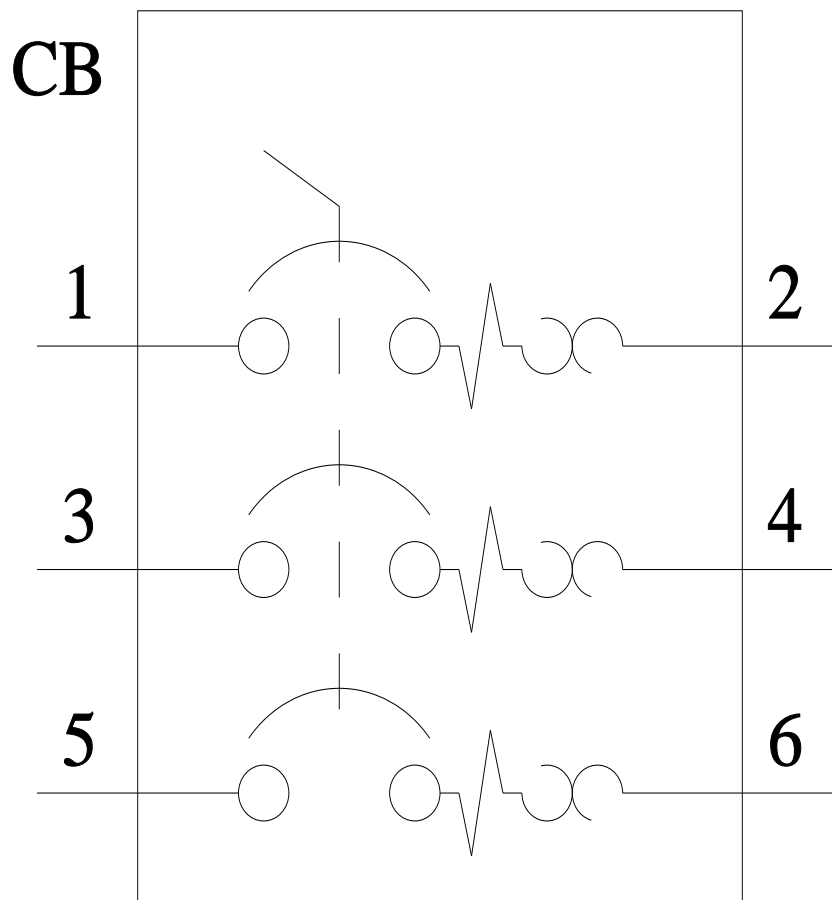
CAX-Online-Generator

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

Tender specifications

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





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