



molded case switch 3VA5 UL frame 250 max. sh-circ breaking capacity 100kA @ 480V 2-pole, line protection MCS110,  $I_n=250A$  without overload protection self-protection  $I_i=10 \times I_n$  without connection

| Model                                                                                                                      |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                                         | SETRON                      |
| product designation                                                                                                        | Molded-case circuit breaker |
| product designation / according to UL file                                                                                 | CFAS                        |
| design of the product                                                                                                      | Molded case switch          |
| 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                                                                                          | MCS110                      |
| protection function of the overcurrent release                                                                             | I                           |
| number of poles                                                                                                            | 2                           |
| 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                                                                                                   | 36.26 W                     |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 18.13 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/retrofitable / short-circuit and overload proof                      | No                          |
| product function                                                                                                           |                             |
| • communication function                                                                                                   | No                          |
| • other measurement function                                                                                               | No                          |
| Net Weight                                                                                                                 | 1.9 kg                      |
| Current                                                                                                                    |                             |
| marking / according to UL 489 / 100%-rated breaker                                                                         | No                          |
| operational current                                                                                                        |                             |
| • at 40 °C                                                                                                                 | 250 A                       |
| • at 45 °C                                                                                                                 | 244 A                       |
| • at 50 °C                                                                                                                 | 239 A                       |
| • at 55 °C                                                                                                                 | 233 A                       |
| • at 60 °C                                                                                                                 | 227 A                       |

|                                                                                                                                                                                              |                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 65 °C</li> <li>• at 70 °C</li> </ul>                                                                                                             | 222 A<br>216 A                                                                                                                                                 |
| <b>Switching capacity according to IEC 60947</b>                                                                                                                                             |                                                                                                                                                                |
| 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 |
| <b>Adjustable parameters</b>                                                                                                                                                                 |                                                                                                                                                                |
| adjustable response value setting current (Ii) / for I-tripping                                                                                                                              |                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                                                                               | 2 500 A<br>2 500 A                                                                                                                                             |
| adjustable setting current (InN) / for N-tripping                                                                                                                                            |                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                                                                               | 0 A<br>0 A                                                                                                                                                     |
| product function / grounding protection                                                                                                                                                      | No                                                                                                                                                             |
| <b>Mechanical Design</b>                                                                                                                                                                     |                                                                                                                                                                |
| product component                                                                                                                                                                            |                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• trip indicator</li> </ul>                                                                | No<br>No<br>No                                                                                                                                                 |
| height [in]                                                                                                                                                                                  | 7.28 in                                                                                                                                                        |
| height                                                                                                                                                                                       | 185 mm                                                                                                                                                         |
| width [in]                                                                                                                                                                                   | 4.13 in                                                                                                                                                        |
| width                                                                                                                                                                                        | 105 mm                                                                                                                                                         |
| depth [in]                                                                                                                                                                                   | 3.27 in                                                                                                                                                        |
| depth                                                                                                                                                                                        | 83 mm                                                                                                                                                          |
| <b>Connections</b>                                                                                                                                                                           |                                                                                                                                                                |
| arrangement of electrical connectors / for main current circuit                                                                                                                              | Without connection                                                                                                                                             |
| type of electrical connection / for main current circuit                                                                                                                                     | Without                                                                                                                                                        |
| <b>Auxiliary circuit</b>                                                                                                                                                                     |                                                                                                                                                                |
| number of CO contacts / for auxiliary contacts                                                                                                                                               | 0                                                                                                                                                              |
| <b>Accessories</b>                                                                                                                                                                           |                                                                                                                                                                |
| product extension / optional / motor drive                                                                                                                                                   | Yes                                                                                                                                                            |
| <b>Environmental conditions</b>                                                                                                                                                              |                                                                                                                                                                |
| protection class IP / on the front                                                                                                                                                           | IP40                                                                                                                                                           |
| ambient temperature                                                                                                                                                                          |                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul> | -25 °C<br>70 °C<br>-40 °C<br>80 °C                                                                                                                             |
| reference code / according to IEC 81346-2                                                                                                                                                    | Q                                                                                                                                                              |
| <b>Approvals / Certificates</b>                                                                                                                                                              |                                                                                                                                                                |
| <b>General Product Approval</b>                                                                                                                                                              |                                                                                                                                                                |



[Confirmation](#)



General Product Approval

EMV

Maritime application



[Miscellaneous](#)



other

Environment

[Confirmation](#)

[Miscellaneous](#)

[Environmental Con-  
firmations](#)

## Further information

### Information on the packaging

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

### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5225-1BB61-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5225-1BB61-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5225-1BB61-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5225-1BB61-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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





