## Data sheet

molded case switch 3VA5 UL frame 125 max. sh-circ breaking capacity 65kA @ 480V 2-pole, line protection MCS110, In=100A without overload protection self-protection li=16 x In without connection



| Model   |                             |
|---|-----------------------------|
| Product brand name                                    | SENTRON                     |
| Product designation                                   | Molded-case circuit breaker |
| Product designation / according to UL-File            | HEAS                        |
| Product version                                       | Molded case switch          |
| Design of the load switch / acc. to UL 489 / Heating, | Yes                         |
| Air Conditioning, and Refrigeration circuit breaker   |                             |
| (HACR Type)   |                             |
| Design of the overcurrent release                     | MCS110                      |
| Protective function of the overcurrent release        | 1                           |
| Number of poles                                       | 2                           |

| General technical data                                  |        |
|---|--------|
| Rated insulation voltage Ui                             | 600 V  |
| Max. rated operational voltage Ue with AC 50/60Hz       | 415 V  |
| Max. rated operational voltage Ue with DC               | 250 V  |
| Power loss [W] / maximum                                | 12.8 W |
| Active power loss / for rated value of the current / at | 6.4 W  |
| AC / in hot operating state / per pole                  |        |
| Latching - endurance                                    | 15 000 |

| 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 / at 50/60 Hz          | 8 000   |  |  |
| Electrical endurance (switching cycles) / at 600 V / at 50/60 Hz          | 4 000   |  |  |
| Neutral conductors / upgradeable/retrofittable                            | No  |  |  |
| Ground fault monitoring version   | Without   |  |  |
| Product function  |   |  |  |
| • communication function  | No  |  |  |
| • other measurement function  | No  |  |  |
| Electricity   |   |  |  |
| Marking / acc. to UL 489 / 100%-rated breaker                             | No  |  |  |
| Max. rated operational voltage of the size of the circuit-breaker         | 125 A   |  |  |
| Rated continuous current lu   | 100 A   |  |  |
| Operating current   |   |  |  |
| ● at 40 °C  | 100 A   |  |  |
| ● at 45 °C  | 100 A   |  |  |
| ● at 50 °C  | 100 A   |  |  |
| ● at 55 °C  | 100 A   |  |  |
| ● at 60 °C  | 100 A   |  |  |
| ● at 65 °C  | 97 A  |  |  |
| ● at 70 °C  | 94 A  |  |  |
| Switching capacity according to IEC 60947                                 |   |  |  |
| Design of short-circuit protection  | For breaking capacity values in DC networks, see the 3VA Molded Case Circuit Breaker Manual; link available under Service & Support in the last chapter |  |  |
| Adjustable parameters   |   |  |  |
| Ground fault protection / tripping switchable / I2t=ON/OFF                | No  |  |  |
| Mechanical Design   |   |  |  |
| Height [in]   | 5.5 in  |  |  |
| Height  | 140 mm  |  |  |
| Width [in]  | 2 in  |  |  |
| Width   | 50.8 mm   |  |  |
| Depth [in]  | 3 in  |  |  |
| Depth   | 76.5 mm   |  |  |
| Connections   |   |  |  |

| Arrangement of electrical connect current circuit                                      | tors / for main      | Without connection | on      |  |
|--|----------------------|--------------------|---------|--|
| Type of electrical connection / for  | main current circuit | Without            | Without |  |
| Auxiliary circuit  |                      |                    |         |  |
| Number of CO contacts / for aux  | liary contacts       | 0                  |         |  |
| Accessories  |                      |                    |         |  |
| Product extension / optional / mo  | tor drive            | No                 |         |  |
| Environmental conditions   |                      |                    |         |  |
| Protection class IP / on the front   |                      | IP40               |         |  |
| Ambient temperature  |                      |                    |         |  |
| <ul><li>during operation / minimum</li></ul>   | 1                    | -25 °C             |         |  |
| <ul><li>during operation / maximur</li></ul>   | n                    | 70 °C              |         |  |
| <ul><li>during storage / minimum</li></ul>   |                      | -40 °C             |         |  |
| • during storage / maximum   |                      | 80 °C              | 80 °C   |  |
| Certificates   |                      |                    |         |  |
| Reference code / acc. to DIN EN  | 81346-2              | Q                  |         |  |
| Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB |                      | Yes                |         |  |
| General Product EMC  |                      | Shipping Approval  | other   |  |

EAC

**Approval** 





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?mlfb=3VA5110-1BB21-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-1BB21-0AA0

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

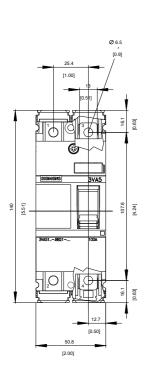
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5110-1BB21-0AA0

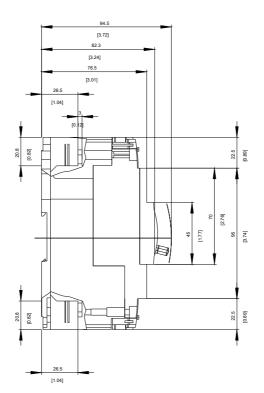
CAx-Online-Generator

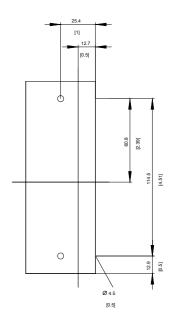
http://www.siemens.com/cax

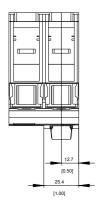
Tender specifications

http://www.siemens.com/specifications









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