

CIRCUIT BREAKER 230V 25KA, 1+N-POLE, D, 3A, D=70M



| Model                                                                                                                |                           |
|----------------------------------------------------------------------------------------------------------------------|---------------------------|
| Product brand name                                                                                                   | SENTRON                   |
| Product designation                                                                                                  | Miniature circuit breaker |
| General technical data                                                                                               |                           |
| Number of poles                                                                                                      | 2                         |
| Number of poles / Note                                                                                               | 1P+N                      |
| Tripping characteristic class                                                                                        | D                         |
| characteristic / Let-through current characteristic                                                                  | DS_5SY_D_3                |
| circuit-breaker / Design                                                                                             | 5SY8                      |
| Mechanical service life (switching cycles) / typical                                                                 | 20 000                    |
| Overvoltage category                                                                                                 | 3                         |
| Voltage                                                                                                              |                           |
| Type of voltage                                                                                                      | AC/DC                     |
| Insulation voltage <ul style="list-style-type: none"><li>with single-phase operation / at AC / rated value</li></ul> | 250 V                     |
| Supply voltage                                                                                                       |                           |
| Supply voltage / at AC / rated value                                                                                 | 230 V                     |

|                                                                              |                                   |
|------------------------------------------------------------------------------|-----------------------------------|
| <b>Supply voltage frequency</b>                                              |                                   |
| • rated value                                                                | 50/60 Hz                          |
| <b>Protection class</b>                                                      |                                   |
| <b>Protection class IP</b>                                                   | IP20, with connected conductors   |
| <b>Energy limiting class</b>                                                 | 3                                 |
| <b>Switching capacity</b>                                                    |                                   |
| <b>Switching capacity current</b>                                            |                                   |
| • at DC / acc. to IEC 60947-2 / rated value                                  | 15 kA                             |
| • acc. to IEC 60947-2 / rated value                                          | 50 kA                             |
| <b>Dissipation</b>                                                           |                                   |
| <b>Power loss [W]</b>                                                        |                                   |
| • for rated value of the current / at AC / in hot operating state / per pole | 1.2 W                             |
| • maximum                                                                    | 2.4 W                             |
| <b>Electricity</b>                                                           |                                   |
| rated current I <sub>n</sub> / IEC, DIN/VDE / at 40 °C                       | 2.73 A                            |
| Current / at AC / rated value                                                | 3 A                               |
| <b>Current limitation characteristic, no. / Let-through energy</b>           | DE_5SY_D_3                        |
| <b>Suitability for operation</b>                                             | Mechanical engineering / industry |
| <b>Product details</b>                                                       |                                   |
| Product feature / Touch protection                                           | Yes                               |
| <b>Product component</b>                                                     |                                   |
| • combined terminal top                                                      | Yes                               |
| • combined terminal bottom                                                   | Yes                               |
| <b>Product feature</b>                                                       |                                   |
| • Properties for main switches in accordance with EN 60204-1                 | Yes                               |
| • halogen-free                                                               | Yes                               |
| • sealable                                                                   | Yes                               |
| • silicon-free                                                               | Yes                               |
| Product extension / can be installed / supplementary devices                 | Yes                               |
| <b>Product function</b>                                                      |                                   |
| Product function / neutral conductor switching                               | Yes                               |
| <b>Short circuit</b>                                                         |                                   |
| <b>Breaking capacity short-circuit current (I<sub>cn</sub>)</b>              |                                   |
| • at AC / acc. to UL 1077 and CSA C22.2 No.235                               | 5 kA                              |
| <b>Number</b>                                                                |                                   |

|                                                                            |                                                                         |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 | 6                                                                       |
| <b>Connections</b>                                                         |                                                                         |
| <b>Connectable conductor cross-section / stranded</b>                      |                                                                         |
| • minimum                                                                  | 0.75 mm <sup>2</sup>                                                    |
| • maximum                                                                  | 35 mm <sup>2</sup>                                                      |
| <b>Connectable conductor cross-section</b>                                 |                                                                         |
| • solid                                                                    |                                                                         |
| — minimum                                                                  | 0.75 mm <sup>2</sup>                                                    |
| — maximum                                                                  | 35 mm <sup>2</sup>                                                      |
| • finely stranded / with core end processing                               |                                                                         |
| — minimum                                                                  | 0.75 mm <sup>2</sup>                                                    |
| — maximum                                                                  | 25 mm <sup>2</sup>                                                      |
| <b>AWG number / as coded connectable conductor cross section</b>           |                                                                         |
| • minimum                                                                  | 14                                                                      |
| • maximum                                                                  | 4                                                                       |
| <b>Tightening torque [lbf·in] / with screw-type terminals</b>              |                                                                         |
| • minimum                                                                  | 22 lbf·in                                                               |
| • maximum                                                                  | 26 lbf·in                                                               |
| <b>Tightening torque / with screw-type terminals</b>                       |                                                                         |
| • minimum                                                                  | 2.5 N·m                                                                 |
| • maximum                                                                  | 3 N·m                                                                   |
| Position / of power supply cord                                            | Any                                                                     |
| <b>Mechanical Design</b>                                                   |                                                                         |
| Height                                                                     | 90 mm                                                                   |
| Width                                                                      | 36 mm                                                                   |
| Depth                                                                      | 76 mm                                                                   |
| Mounting position                                                          | any                                                                     |
| Installation depth                                                         | 70 mm                                                                   |
| Number of width units                                                      | 2                                                                       |
| Mounting type                                                              | Quick assembly system                                                   |
| Net weight                                                                 | 318 g                                                                   |
| <b>Environmental conditions</b>                                            |                                                                         |
| Degree of pollution                                                        | 3                                                                       |
| Influence of the surrounding temperature                                   | Max. 95% humidity                                                       |
| Vibration resistance / acc. to IEC 60068-2-6                               | 50m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec) |
| <b>Ambient temperature</b>                                                 |                                                                         |
| • minimum                                                                  | -25 °C                                                                  |
| • maximum                                                                  | 55 °C                                                                   |
| • during storage / minimum                                                 | -40 °C                                                                  |

- during storage / maximum

75 °C

## Certificates

Equipment marking / acc. to DIN EN 61346-2

F

### General Product Approval

### Declaration of Conformity



UL

[Miscellaneous](#)



EG-Konf.

## 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=5SY8503-8>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY8503-8>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY8503-8](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8503-8)

**CAX-Online-Generator**

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

**Tender specifications**

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



