

Miniature circuit breaker 230 V D=70 mm 25 kA according to EN 60947-2, 1P+N, C2



| 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                                      | C                         |
| circuit-breaker / Design                                           | 5SY8                      |
| Mechanical service life (switching cycles) / typical               | 10 000                    |
| Overvoltage category                                               | III                       |
| Degree of pollution                                                | 3                         |
| Voltage                                                            |                           |
| Insulation voltage                                                 | 250 V                     |
| • with single-phase operation / at AC / rated value                |                           |
| Supply voltage / with single-phase operation / at AC / rated value | 230 V                     |
| Supply voltage                                                     |                           |

|                                                                                                                                                                                                    |                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Type of voltage                                                                                                                                                                                    | AC                                         |
| Operating current / at AC / rated value                                                                                                                                                            | 2 A                                        |
| Supply voltage <ul style="list-style-type: none"> <li>• at AC / rated value</li> </ul>                                                                                                             | 230 V                                      |
| Operating voltage <ul style="list-style-type: none"> <li>• at DC / rated value / maximum</li> </ul>                                                                                                | 72 V                                       |
| Supply voltage frequency <ul style="list-style-type: none"> <li>• rated value</li> </ul>                                                                                                           | 50/60 Hz                                   |
| <b>Protection class</b>                                                                                                                                                                            |                                            |
| Protection class IP                                                                                                                                                                                | IP20, with connected conductors            |
| <b>Switching capacity</b>                                                                                                                                                                          |                                            |
| Switching capacity current <ul style="list-style-type: none"> <li>• at DC / acc. to IEC 60947-2 / rated value</li> <li>• acc. to IEC 60947-2 / rated value</li> </ul>                              | 15 kA<br>70 kA                             |
| <b>Dissipation</b>                                                                                                                                                                                 |                                            |
| Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                                                                                        | 1.2 W                                      |
| Suitability for operation                                                                                                                                                                          | Mechanical engineering / industry          |
| <b>Product details</b>                                                                                                                                                                             |                                            |
| Product function / neutral conductor switching                                                                                                                                                     | Yes                                        |
| Product feature / Touch protection                                                                                                                                                                 | Yes                                        |
| Product component <ul style="list-style-type: none"> <li>• combined terminal top</li> <li>• combined terminal bottom</li> </ul>                                                                    | Yes<br>Yes                                 |
| Product feature <ul style="list-style-type: none"> <li>• Properties for main switches in accordance with EN 60204-1</li> <li>• halogen-free</li> <li>• sealable</li> <li>• silicon-free</li> </ul> | Yes<br>Yes<br>Yes<br>Yes                   |
| Product extension / can be installed / supplementary devices                                                                                                                                       | Yes                                        |
| <b>Short circuit</b>                                                                                                                                                                               |                                            |
| Breaking capacity short-circuit current (I <sub>cn</sub> ) <ul style="list-style-type: none"> <li>• at AC / acc. to UL 1077 and CSA C22.2 No.235</li> </ul>                                        | 5 kA                                       |
| <b>Connections</b>                                                                                                                                                                                 |                                            |
| Connectable conductor cross-section / solid <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                                         | 0.75 mm <sup>2</sup><br>35 mm <sup>2</sup> |
| Connectable conductor cross-section / stranded                                                                                                                                                     |                                            |

|                                                                                  |                                            |
|----------------------------------------------------------------------------------|--------------------------------------------|
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>   | 0.75 mm <sup>2</sup><br>35 mm <sup>2</sup> |
| Connectable conductor cross-section / finely stranded / with core end processing |                                            |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>   | 0.75 mm <sup>2</sup><br>25 mm <sup>2</sup> |
| AWG number / as coded connectable conductor cross section                        |                                            |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>   | 18<br>4                                    |
| Tightening torque [lbf·in] / with screw-type terminals                           |                                            |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>   | 22 lbf·in<br>31 lbf·in                     |
| Tightening torque / with screw-type terminals                                    |                                            |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>   | 2.5 N·m<br>3.5 N·m                         |
| Position / of power supply cord                                                  | Any                                        |

#### Mechanical Design

|                       |                       |
|-----------------------|-----------------------|
| Height                | 90 mm                 |
| Width                 | 36 mm                 |
| Depth                 | 76 mm                 |
| Installation depth    | 70 mm                 |
| Number of width units | 2                     |
| Mounting type         | Quick assembly system |
| Mounting position     | any                   |
| Net weight            | 326 g                 |

#### Environmental conditions

|                                                                                |                                                      |
|--------------------------------------------------------------------------------|------------------------------------------------------|
| Influence of the surrounding temperature                                       | max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C |
| Ambient temperature                                                            |                                                      |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | -25 °C<br>55 °C                                      |
| Ambient temperature / during storage                                           |                                                      |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | -40 °C<br>75 °C                                      |
| Number of test cycles / for environmental testing / acc. to IEC 60068-2-30     | 6                                                    |

#### Certificates

|                                                                                                              |        |
|--------------------------------------------------------------------------------------------------------------|--------|
| Reference code                                                                                               |        |
| <ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> <li>• acc. to DIN EN 81346-2</li> </ul> | F<br>F |



UR

[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=5SY8502-7>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/5SY8502-7>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY8502-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8502-7)**CAX-Online-Generator**<http://www.siemens.com/cax>**Tender specifications**<http://www.siemens.com/specifications>

