

CIRCUIT BREAKER 230/400V 10KA, 1-POLE, B, 2A, D=70MM



| Model   |                           |
|---|---------------------------|
| Product brand name  | SENTRON                   |
| Product designation   | Miniature circuit breaker |
| General technical data  |                           |
| Number of poles   | 1                         |
| Number of poles / Note  | 1P                        |
| Tripping characteristic class   | B                         |
| circuit-breaker / Design  | 5SY4                      |
| Mechanical service life (switching cycles) / typical  | 20 000                    |
| Overtoltage 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                     |
| <ul style="list-style-type: none"> <li>with multi-phase operation / at AC / rated value</li> </ul>  | 440 V                     |
| Supply voltage  |                           |
| Supply voltage / at AC / rated value  | 400 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 EN 60898 / rated value  | 10 kA                             |
| • acc. to IEC 60947-2 / rated value   | 35 kA                             |
| <b>Dissipation</b>  |                                   |
| <b>Power loss [W]</b>   |                                   |
| • for rated value of the current / at AC / in hot operating state / per pole      | 1.5 W                             |
| • maximum   | 1.5 W                             |
| <b>Electricity</b>  |                                   |
| Current / at AC / rated value   | 2 A                               |
| <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                                    | No                                |
| <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>   |                                   |
| <b>Number of test cycles / for environmental testing / acc. to IEC 60068-2-30</b> | 6                                 |

## Connections

|  |                      |
|--|----------------------|
| <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                  |





## Mechanical Design




|                              |                       |
|------------------------------|-----------------------|
| <b>Mounting position</b>     | any                   |
| <b>Installation depth</b>    | 70 mm                 |
| <b>Number of width units</b> | 1                     |
| <b>Mounting type</b>         | Quick assembly system |
| <b>Net weight</b>            | 170 g                 |

## Environmental conditions

|   |   |
|---|---|
| <b>Degree of pollution</b>                      | 3   |
| <b>Influence of the surrounding temperature</b> | 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

| General Product Approval   |  |  | Declaration of Conformity   | Test Certificates             |
|--|--|--|---|-------------------------------|
| <br>CCC | <br>VDE | <br>RCM | <br>EG-Konf. | <a href="#">Miscellaneous</a> |

| Shipping Approval  |   |  |
|--|---|--|
| <br>ABS | <br>BUREAU VERITAS | <br>LRS |

### 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=5SY4102-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY4102-6>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY4102-6](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4102-6)

**CAX-Online-Generator**

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

**Tender specifications**

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

