

Miniature circuit breaker 400 V 6kA, 3+N-pole C, 10A, D=70 mm



| Model                                                |                           |
|------------------------------------------------------|---------------------------|
| Product brand name                                   | SENTRON                   |
| Product designation                                  | Miniature circuit breaker |
| General technical data                               |                           |
| Number of poles                                      | 4                         |
| Number of poles / Note                               | 3P+N                      |
| Tripping characteristic class                        | C                         |
| circuit-breaker / Design                             | 5SY6                      |
| Mechanical service life (switching cycles) / typical | 20 000                    |
| Overvoltage category                                 | III                       |
| Voltage                                              |                           |
| Type of voltage                                      | AC/DC                     |
| Insulation voltage                                   |                           |
| • with multi-phase operation / at AC / rated value   | 440 V                     |
| Supply voltage                                       |                           |
| Supply voltage                                       |                           |
| • at AC / rated value                                | 400 V                     |
| Supply voltage frequency                             |                           |

|                                                                                             |                                   |
|---------------------------------------------------------------------------------------------|-----------------------------------|
| • rated value                                                                               | 50/60 Hz                          |
| <b>Protection class</b>                                                                     |                                   |
| Protection class IP                                                                         | IP20, with connected conductors   |
| Energy limiting class                                                                       | 3                                 |
| <b>Switching capacity</b>                                                                   |                                   |
| Switching capacity current                                                                  |                                   |
| • at DC / acc. to IEC 60947-2 / rated value                                                 | 15 kA                             |
| • acc. to EN 60898 / rated value                                                            | 6 kA                              |
| • acc. to IEC 60947-2 / rated value                                                         | 15 kA                             |
| <b>Dissipation</b>                                                                          |                                   |
| Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 1.1 W                             |
| <b>Electricity</b>                                                                          |                                   |
| Current / at AC / rated value                                                               | 10 A                              |
| Suitability for operation                                                                   | Mechanical engineering / industry |
| <b>Product details</b>                                                                      |                                   |
| Product feature / Touch protection                                                          | Yes                               |
| Product component                                                                           |                                   |
| • combined terminal top                                                                     | Yes                               |
| • combined terminal bottom                                                                  | Yes                               |
| Product feature                                                                             |                                   |
| • 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>                                                                        |                                   |
| Breaking capacity short-circuit current (I <sub>cn</sub> )                                  |                                   |
| • 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>                                                                          |                                   |
| Connectable conductor cross-section / stranded                                              |                                   |
| • 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>   |
| AWG number / as coded connectable conductor cross section |                      |
| • minimum                                                 | 14                   |
| • maximum                                                 | 4                    |
| Tightening torque [lbf·in] / with screw-type terminals    |                      |
| • minimum                                                 | 22 lbf·in            |
| • maximum                                                 | 26 lbf·in            |
| Tightening torque / with screw-type terminals             |                      |
| • minimum                                                 | 2.5 N·m              |
| • maximum                                                 | 3 N·m                |
| Position / of power supply cord                           | Any                  |

### Mechanical Design

|                       |                       |
|-----------------------|-----------------------|
| Height                | 90 mm                 |
| Width                 | 72 mm                 |
| Depth                 | 76 mm                 |
| Mounting position     | any                   |
| Installation depth    | 70 mm                 |
| Number of width units | 4                     |
| Mounting type         | Quick assembly system |
| Net weight            | 582 g                 |

### Environmental conditions

|                                              |                                                                         |
|----------------------------------------------|-------------------------------------------------------------------------|
| 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) |
| Ambient temperature                          |                                                                         |
| • minimum                                    | -25 °C                                                                  |
| • maximum                                    | 55 °C                                                                   |
| • during storage / minimum                   | -40 °C                                                                  |
| • during storage / maximum                   | 75 °C                                                                   |

### Certificates

|                          |   |
|--------------------------|---|
| Reference code           |   |
| • acc. to DIN EN 61346-2 | F |

## General Product Approval



CCC



IMQ



UR



VDE

[Miscellaneous](#)



RCM

Declaration of  
Conformity

Test Certific-  
ates

Shipping Approval



EG-Konf.

[Miscellaneous](#)



ABS



BUREAU  
VERITAS



LRS



RINA

## 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=5SY6610-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY6610-7>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY6610-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6610-7)

**CAX-Online-Generator**

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

**Tender specifications**

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





