

Miniature circuit breaker 230 V 10kA, 1+N-pole, D, 1.6A, D=70 mm



| 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                         |
| circuit-breaker / Design                                           | 5SY4                      |
| 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 | 1.6 A    |
| Supply voltage                          |          |
| • at AC / rated value                   | 230 V    |
| Operating voltage                       |          |
| • at DC / rated value / maximum         | 72 V     |
| Supply voltage frequency                |          |
| • rated value                           | 50/60 Hz |

#### Protection class

|                     |                                 |
|---------------------|---------------------------------|
| Protection class IP | IP20, with connected conductors |
|---------------------|---------------------------------|

#### Switching capacity

|                                             |       |
|---------------------------------------------|-------|
| Switching capacity current                  |       |
| • 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 |

#### Dissipation

|                                                                                             |                                   |
|---------------------------------------------------------------------------------------------|-----------------------------------|
| Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 1 W                               |
| Suitability for operation                                                                   | Mechanical engineering / industry |

#### Product details

|                                                              |     |
|--------------------------------------------------------------|-----|
| Product function / neutral conductor switching               | Yes |
| 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 |

#### Short circuit

|                                                            |      |
|------------------------------------------------------------|------|
| Breaking capacity short-circuit current (I <sub>cn</sub> ) |      |
| • at AC / acc. to UL 1077 and CSA C22.2 No.235             | 5 kA |

#### Connections

|                                             |                      |
|---------------------------------------------|----------------------|
| Connectable conductor cross-section / solid |                      |
| • minimum                                   | 0.75 mm <sup>2</sup> |
| • maximum                                   | 35 mm <sup>2</sup>   |

|                                                                                  |                      |
|----------------------------------------------------------------------------------|----------------------|
| Connectable conductor cross-section / stranded                                   |                      |
| • minimum                                                                        | 0.75 mm <sup>2</sup> |
| • maximum                                                                        | 35 mm <sup>2</sup>   |
| Connectable conductor cross-section / 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                                                                        | 18                   |
| • maximum                                                                        | 4                    |
| Tightening torque [lbf·in] / with screw-type terminals                           |                      |
| • minimum                                                                        | 22 lbf·in            |
| • maximum                                                                        | 31 lbf·in            |
| Tightening torque / with screw-type terminals                                    |                      |
| • minimum                                                                        | 2.5 N·m              |
| • maximum                                                                        | 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            | 321 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                                                        |                                                      |
| • minimum                                                                  | -40 °C                                               |
| • maximum                                                                  | 70 °C                                                |
| Ambient temperature / during storage                                       |                                                      |
| • minimum                                                                  | -40 °C                                               |
| • maximum                                                                  | 75 °C                                                |
| Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 | 6                                                    |

#### Certificates

|                          |   |
|--------------------------|---|
| Reference code           |   |
| • acc. to DIN EN 61346-2 | F |
| • acc. to DIN EN 81346-2 | F |

## General Product Approval



CCC



IMQ



UR



VDE



RCM

[Miscellaneous](#)

Declaration of  
Conformity

Test Certificates

Shipping Approval



EG-Konf.

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



BUREAU  
VERITAS



LRS

Shipping Ap-  
proval

Railway



RINA

[Confirmation](#)

[Vibration and Shock](#)

## 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=5SY4515-8>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY4515-8>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY4515-8](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4515-8)

**CAX-Online-Generator**

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

**Tender specifications**

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

