



CIRCUIT BREAKER 230V 10KA, 1+N-POLE, C, 80A, D=70MM

| Model                        |  |                                |
|------------------------------|--|--------------------------------|
| product brand name           |  | SENTRON                        |
| Product designation          |  | 5SY miniature circuit breaker  |
| <b>Design of the product</b> |  | 5SY miniature circuit breakers |

| General technical data                                      |  |        |
|---|--|--------|
| <b>Number of poles</b>                                      |  | 2      |
| <b>Number of poles / Note</b>                               |  | 1P+N   |
| <b>Tripping characteristic class</b>                        |  | C      |
| <b>circuit-breaker / Design</b>                             |  | 5SY4   |
| <b>Mechanical service life (switching cycles) / typical</b> |  | 20 000 |
| <b>Overvoltage category</b>                                 |  | 3      |

| Voltage   |   |     |
|---|---|-----|
| <b>Insulation voltage</b>   |   |     |
| <ul style="list-style-type: none"> <li>with single-phase operation / with AC / Rated value</li> </ul> | V | 250 |

| Supply voltage                         |    |    |
|--|----|----|
| Supply voltage frequency / Rated value | Hz | 50 |

| Protection class             |  |                                 |
|------------------------------|--|---------------------------------|
| <b>Protection class IP</b>   |  | IP20, with connected conductors |
| <b>Energy limiting class</b> |  | 3                               |

| Switching capacity   |    |    |
|--|----|----|
| <b>Switching capacity current</b>  |    |    |
| <ul style="list-style-type: none"> <li>for DC / acc. to IEC 60947-2 / Rated value</li> </ul> | kA | 15 |

- acc. to EN 60898 / Rated value
- acc. to IEC 60947-2 / Rated value

|    |    |
|----|----|
| kA | 10 |
| kA | 10 |

### Dissipation

#### Active power loss

- for rated value of the current / with AC / in hot operating state / per pole

|   |     |
|---|-----|
| W | 6.7 |
|---|-----|

### Electricity

Current / with AC / Rated value

|   |    |
|---|----|
| A | 80 |
|---|----|

### Product details

Product feature / Touch protection

|  |     |
|--|-----|
|  | Yes |
|--|-----|

#### Product component

- combined terminal top
- combined terminal bottom

|  |     |
|--|-----|
|  | Yes |
|  | Yes |

#### Product property

- Properties for main switches in accordance with EN 60204-1
- halogen-free
- sealable
- silicon-free

|  |     |
|--|-----|
|  | Yes |
|  | Yes |
|  | Yes |
|  | Yes |

Product expansion / can be installed / supplementary devices

|  |     |
|--|-----|
|  | Yes |
|--|-----|

### Product function

Product function / neutral conductor switching

|  |     |
|--|-----|
|  | Yes |
|--|-----|

### Short circuit

#### Breaking capacity short-circuit current (I<sub>cn</sub>)

- with AC / acc. to UL 1077 and CSA C22.2 No.235
- for DC / acc. to EN 60898-2

|    |    |
|----|----|
| kA | 5  |
| kA | 10 |

### Number

Number of test cycles / for environmental testing / acc. to IEC 60068-2-30

|  |   |
|--|---|
|  | 6 |
|--|---|

### Connections

#### Connectable conductor cross-section / stranded

- minimum
- maximum

|                 |      |
|-----------------|------|
| mm <sup>2</sup> | 0.75 |
| mm <sup>2</sup> | 35   |

#### Connectable conductor cross-section

- solid
  - minimum
  - maximum
- finely stranded / with core end processing

|                 |      |
|-----------------|------|
| mm <sup>2</sup> | 0.75 |
| mm <sup>2</sup> | 35   |

|  |                 |      |
|--|-----------------|------|
| — minimum  | mm <sup>2</sup> | 0.75 |
| — maximum  | mm <sup>2</sup> | 25   |
| <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  | lbf·in          | 22   |
| • maximum  | lbf·in          | 26   |
| <b>Tightening torque / with screw-type terminals</b>             |                 |      |
| • minimum  | N·m             | 2.5  |
| • maximum  | N·m             | 3    |
| Position / of power supply cord                                  |                 | Any  |

### Mechanical Design

|                              |    |                       |
|------------------------------|----|-----------------------|
| <b>Height</b>                | mm | 90                    |
| <b>Width</b>                 | mm | 36                    |
| <b>Depth</b>                 | mm | 76                    |
| <b>mounting position</b>     |    | any                   |
| <b>Installation depth</b>    | mm | 70                    |
| <b>Number of width units</b> |    | 2                     |
| <b>Mounting type</b>         |    | Quick assembly system |

### Environmental conditions

|   |    |   |
|---|----|---|
| <b>Influence of the surrounding temperature</b> |    | Max. 95% humidity   |
| Shock resistance / acc. to IEC 60068-2-27       |    | 150m/s <sup>2</sup> at 11ms half-sine                                   |
| 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                                       | °C | -25   |
| • maximum                                       | °C | 55  |
| • during storage / minimum                      | °C | -40   |
| • during storage / maximum                      | °C | 75  |

### Certificates

|  |  |   |
|--|--|---|
| Equipment marking / acc. to DIN EN 61346-2 |  | F |
|--|--|---|

| General Product Approval | Test Certificates | Shipping Approval | other |
|--------------------------|-------------------|-------------------|-------|
|--------------------------|-------------------|-------------------|-------|



[other](#)



[other](#)

### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/lowvoltage/catalogs>

**Industry Mall (Online ordering system)**

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/5SY45807>

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

<http://support.automation.siemens.com/WW/view/en/5SY45807/all>

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

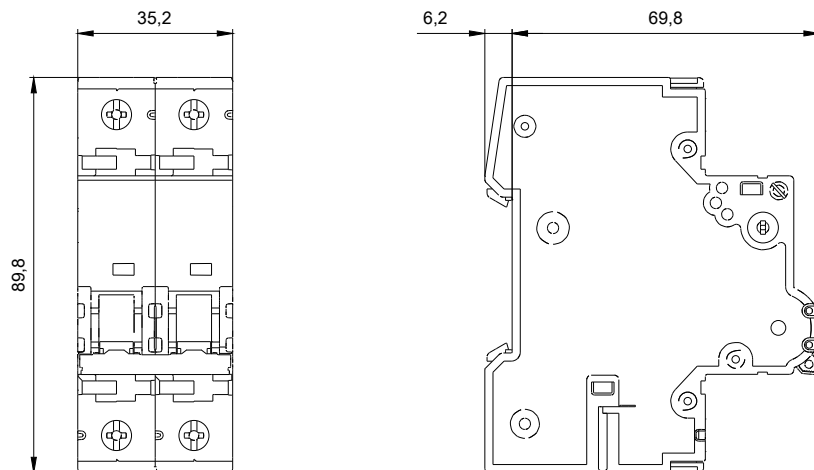
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=5SY45807](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=5SY45807)

**CAX-Online-Generator**

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

**Tender specifications**

<http://ausschreibungstexte.siemens.com/tiplv>



**last modified:**

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