



CIRCUIT BREAKER CURR. SENS DC 220V AC  
230/400V 10KA, 1-POLE, B, 4A

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>		1
<b>Number of poles / Note</b>		1P
<b>Tripping characteristic class</b>		B
<b>circuit-breaker / Design</b>		5SY5
<b>Mechanical service life (switching cycles) / typical</b>		20 000
<b>Overtoltage category</b>		3

Voltage		
<b>Insulation voltage</b>		
<ul style="list-style-type: none"> <li>• for DC / Rated value</li> </ul>	V	250
<ul style="list-style-type: none"> <li>• with single-phase operation / with AC / Rated value</li> </ul>	V	250
<ul style="list-style-type: none"> <li>• with multi-phase operation / with AC / Rated value</li> </ul>	V	440

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

### Switching capacity current

- |  |    |    |
|--|----|----|
| • for DC / acc. to IEC 60947-2 / Rated value | kA | 15 |
| • acc. to EN 60898 / Rated value             | kA | 10 |

## Dissipation

### Active power loss

- |  |   |     |
|--|---|-----|
| • for rated value of the current / with AC / in hot operating state / per pole | W | 1.5 |
|--|---|-----|

## Electricity

- |                                 |   |   |
|---------------------------------|---|---|
| Current / with AC / Rated value | A | 4 |
|---------------------------------|---|---|

## Product details

- |                                    |  |     |
|------------------------------------|--|-----|
| Product feature / Touch protection |  | Yes |
|------------------------------------|--|-----|

### Product component

- |                            |  |     |
|----------------------------|--|-----|
| • combined terminal top    |  | Yes |
| • combined terminal bottom |  | Yes |

### Product property

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

- |  |  |     |
|--|--|-----|
| Product expansion / can be installed / supplementary devices |  | Yes |
|--|--|-----|

## Product function

- |  |  |    |
|--|--|----|
| Product function / neutral conductor switching |  | No |
|--|--|----|

## Short circuit

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

- |                               |    |    |
|-------------------------------|----|----|
| • for DC / acc. to EN 60898-2 | kA | 10 |
|-------------------------------|----|----|

## Number

- |  |  |   |
|--|--|---|
| Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 |  | 6 |
|--|--|---|

## Connections

### Connectable conductor cross-section / stranded

- |           |                 |      |
|-----------|-----------------|------|
| • minimum | mm <sup>2</sup> | 0.75 |
| • maximum | mm <sup>2</sup> | 35   |

### Connectable conductor cross-section

- |  |                 |      |
|--|-----------------|------|
| • solid                                      |                 |      |
| — minimum                                    | mm <sup>2</sup> | 0.75 |
| — maximum                                    | mm <sup>2</sup> | 35   |
| • finely stranded / with core end processing |                 |      |

— 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		
Height	mm	90
Width	mm	18
Depth	mm	76
mounting position		any
Installation depth	mm	70
Number of width units		1
Mounting type		Quick assembly system

Environmental conditions		
Influence of the surrounding temperature		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	Declaration of Conformity	Test Certificates
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CCC



GOST



VDE



EG-Konf.

[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/5SY51046>

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

<http://support.automation.siemens.com/WW/view/en/5SY51046/all>

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

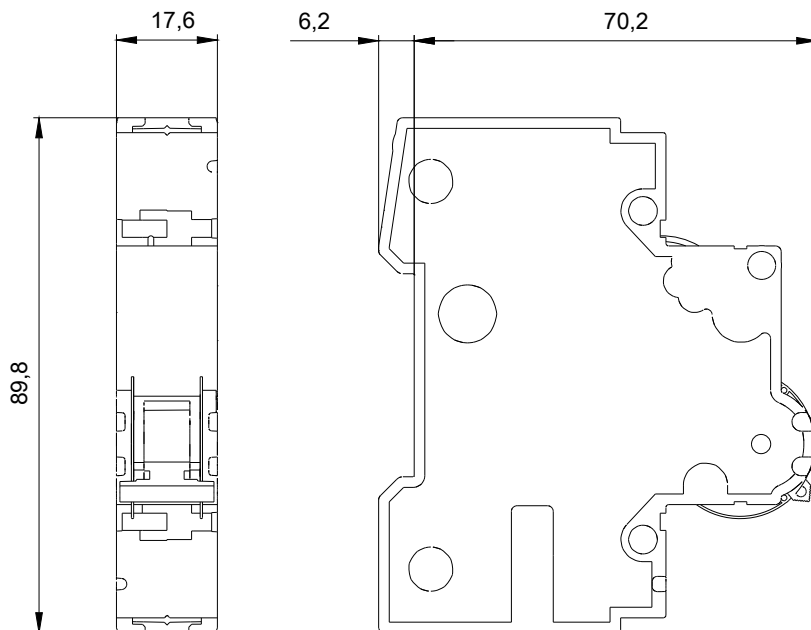
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY51046](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY51046)

**CAX-Online-Generator**

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

**Tender specifications**

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



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11.03.2015