



CIRCUIT BREAKER 230V 10KA, 1+N-POLE, B, 50A, 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>		B
<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	15

## Dissipation

### Active power loss

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

W	4.3
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## Electricity

rated current  $I_n$  / IEC, DIN/VDE / at 40 Cel

A	47.5
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Current / with AC / Rated value

A	50
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## Product details

Product feature / Touch protection

	Yes
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### 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
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## Product function

Product function / neutral conductor switching

	Yes
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## Short circuit

### Breaking capacity short-circuit current ( $I_{cn}$ )

- 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
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## 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

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

<ul style="list-style-type: none"> <li>• finely stranded / with core end processing <ul style="list-style-type: none"> <li>— minimum</li> <li>— maximum</li> </ul> </li> </ul>	mm <sup>2</sup>	0.75
	mm <sup>2</sup>	25
<b>AWG number / as coded connectable conductor cross section</b>		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>		14
		4
<b>Tightening torque [lbf·in] / with screw-type terminals</b>		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	lbf·in	22
	lbf·in	26
<b>Tightening torque / with screw-type terminals</b>		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	N·m	2.5
	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>		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	°C	-25
	°C	55
	°C	-40
	°C	75

### Certificates

Equipment marking / acc. to DIN EN 61346-2		F
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## General Product Approval



CCC



IMQ



GOST



UL



VDE



Declaration of  
Conformity

Test  
Certificates

Shipping Approval



EG-Konf.

[other](#)



GL



LRS

Shipping  
Approval

other

[other](#)



RINA

## 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/5SY45506>

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

<http://support.automation.siemens.com/WW/view/en/5SY45506/all>

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

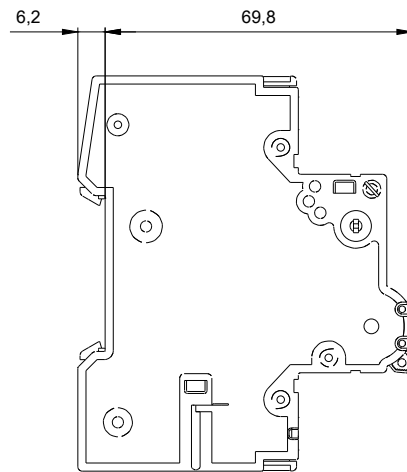
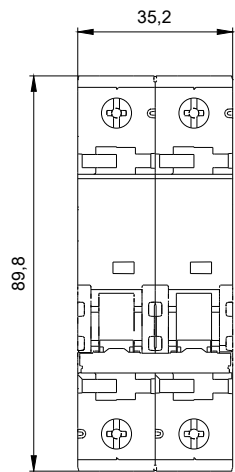
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=5SY45506](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=5SY45506)

**CAX-Online-Generator**

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

**Tender specifications**

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



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