

Miniature circuit breaker 230/400 V 6kA, 1-pole, C, 2A, D=70 mm



Model	
Product brand name	SENTRON
Product designation	Miniature circuit breaker
General technical data	
Number of poles	1
Number of poles / Note	1P
Tripping characteristic class	C
circuit-breaker / Design	5SY6
Mechanical service life (switching cycles) / typical	20 000
Overvoltage category	3
Voltage	
Type of voltage	AC/DC
Insulation voltage	
<ul style="list-style-type: none"> <li>with single-phase operation / at AC / rated value</li> </ul>	250 V
<ul style="list-style-type: none"> <li>with multi-phase operation / at AC / rated value</li> </ul>	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	30 kA
<b>Dissipation</b>	
Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.2 W
<b>Electricity</b>	
revised current / at 40 Cel	1.88 A
Current / at AC / rated value	2 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	No
<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>
Connectable conductor cross-section / solid	
• minimum	0.75 mm <sup>2</sup>
• maximum	35 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	18 mm
Depth	76 mm
Mounting position	any
Installation depth	70 mm
Number of width units	1
Mounting type	Quick assembly system
Net weight	153 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
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## General Product Approval



CCC



IMQ



UR



VDE

Miscellaneous



RCM

General  
Product  
Approval

KC

Declaration of  
Conformity



EG-Konf.

Test  
Certificates

Miscellaneous

Shipping Approval



ABS



BUREAU  
VERITAS



LRS

## Shipping Approval



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=5SY6102-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY6102-7>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY6102-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6102-7)

**CAX-Online-Generator**

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

**Tender specifications**

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



