

Miniature circuit breaker 230/400 V 10kA, 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	5SY4
Mechanical service life (switching cycles) / typical	20 000
Oversvoltage category	III
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	

<ul style="list-style-type: none"> <li>• at AC / rated value</li> </ul>	400 V
Supply voltage frequency	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	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	
<ul style="list-style-type: none"> <li>• at DC / acc. to IEC 60947-2 / rated value</li> </ul>	15 kA
<ul style="list-style-type: none"> <li>• acc. to EN 60898 / rated value</li> </ul>	10 kA
<ul style="list-style-type: none"> <li>• acc. to IEC 60947-2 / rated value</li> </ul>	35 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>	
Tripping residual / rated value / derated current / at 40 Cel	1.9 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	
<ul style="list-style-type: none"> <li>• combined terminal top</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• combined terminal bottom</li> </ul>	Yes
Product feature	
<ul style="list-style-type: none"> <li>• Properties for main switches in accordance with EN 60204-1</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• halogen-free</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• sealable</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• silicon-free</li> </ul>	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> )	
<ul style="list-style-type: none"> <li>• at AC / acc. to UL 1077 and CSA C22.2 No.235</li> </ul>	5 kA
<b>Number</b>	
Number of test cycles / for environmental testing / acc. to IEC 60068-2-30	6

## Connections

Connectable conductor cross-section / stranded	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<p>0.75 mm<sup>2</sup></p> <p>35 mm<sup>2</sup></p>
<b>Connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• solid <ul style="list-style-type: none"> <li>— minimum</li> <li>— maximum</li> </ul> </li> <li>• finely stranded / with core end processing <ul style="list-style-type: none"> <li>— minimum</li> <li>— maximum</li> </ul> </li> </ul>	<p>0.75 mm<sup>2</sup></p> <p>35 mm<sup>2</sup></p> <p>0.75 mm<sup>2</sup></p> <p>25 mm<sup>2</sup></p>
AWG number / as coded connectable conductor cross section	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<p>14</p> <p>4</p>
Tightening torque [lbf·in] / with screw-type terminals	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<p>22 lbf·in</p> <p>26 lbf·in</p>
Tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<p>2.5 N·m</p> <p>3 N·m</p>
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	166 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	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	<p>-25 °C</p> <p>55 °C</p> <p>-40 °C</p> <p>75 °C</p>

## Certificates

Reference code

- acc. to DIN EN 61346-2

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General Product Approval



CCC



IMQ



UR



VDE



RCM

[Miscellaneous](#)

General Product Approval	Declaration of Conformity	Test Certificates	Shipping Approval
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[KC](#)



EG-Konf.

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Shipping Approval	Railway
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LRS



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=5SY4102-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY4102-7>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY4102-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4102-7)

**CAX-Online-Generator**

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

**Tender specifications**

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



