

Miniature circuit breaker 400 V 6kA, 3+N-pole C, 20 A, D=70 mm



Model	
product brand name	SENTRON
Product designation	Miniature circuit breaker
General technical data	
number of poles	4
Number of poles / Note	3P+N
Tripping characteristic class	C
circuit-breaker / Design	5SY6
Mechanical service life (switching cycles) / typical	10 000
overvoltage category	III
Degree of pollution	3
Voltage	
Insulation voltage	
<ul style="list-style-type: none"> <li>with single-phase operation / at AC / rated value</li> </ul>	440 V
<ul style="list-style-type: none"> <li>with multi-phase operation / at AC / rated value</li> </ul>	440 V
Supply voltage	
type of voltage	AC

Operating current / at AC / rated value	20 A
Supply voltage	
• at AC / rated value	400 V
Operating voltage	
• at DC / rated value / maximum	72 V
Supply voltage frequency	
• rated value	50/60 Hz

#### Protection class

Protection class IP	IP20, with connected conductors
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#### Switching capacity

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	15 kA
Energy limiting class	3

#### Dissipation

Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.7 W
Suitability for operation	Mechanical engineering / industry

#### Product details

Product function / neutral conductor switching	Yes
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
• product feature / halogen-free	Yes
• Product feature / sealable	Yes
• product feature / silicon-free	Yes
Product extension / can be installed / supplementary devices	Yes

#### Short circuit

Breaking capacity short-circuit current (I <sub>cn</sub> )	
• at AC / acc. to UL 1077 and CSA C22.2 No.235	5 kA

#### Connections

connectable conductor cross-section / solid	
• minimum	0.75 mm <sup>2</sup>
• maximum	35 mm <sup>2</sup>
Connectable conductor cross-section / stranded	

<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.75 mm <sup>2</sup> 35 mm <sup>2</sup>
connectable conductor cross-section / finely stranded / with core end processing	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.75 mm <sup>2</sup> 25 mm <sup>2</sup>
AWG number / as coded connectable conductor cross section	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	18 4
Tightening torque [lbf·in] / with screw-type terminals	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	22 lbf·in 31 lbf·in
Tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	2.5 N·m 3.5 N·m
Position / of power supply cord	Any

### Mechanical Design

Height	90 mm
Width	72 mm
Depth	76 mm
installation depth	70 mm
number of width units	4
Mounting type	Quick assembly system
mounting position	any
net weight	621 g

### Environmental conditions

influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
Ambient temperature	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-25 °C 55 °C
Ambient temperature / during storage	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-40 °C 75 °C
Number of test cycles / for environmental testing / acc. to IEC 60068-2-30	6

### Certificates

<ul style="list-style-type: none"> <li>• reference code / acc. to DIN EN 61346-2</li> <li>• Reference code / acc. to DIN EN 81346-2</li> </ul>	F F
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## General Product Approval



CCC



IMQ



UR



VDE



CB

[Miscellaneous](#)

General  
Product Ap-  
proval

Declaration of  
Conformity

Test Certific-  
ates

Shipping Approval



RCM



EG-Konf.

[Miscellaneous](#)



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=5SY6620-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY6620-7>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY6620-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6620-7)

**CAX-Online-Generator**

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

**Tender specifications**

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





