

Circuit breaker Universal current 880 V DC 400 V AC 10kA, 4-pole, C, 13A max. 1000 V DC



Model	
Product brand name	SENTRON
Product designation	Miniature circuit breaker
General technical data	
Number of poles	4
Number of poles / Note	4P
Tripping characteristic class	C
circuit-breaker / Design	5SY5
Mechanical service life (switching cycles) / typical	10 000
Overtoltage category	II
Voltage	
Insulation voltage	
<ul style="list-style-type: none"> <li>• at DC / rated value</li> </ul>	250 V
<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/DC

Current / at AC / rated value	13 A
Supply voltage	
• at AC / rated value	400 V
• at DC / rated value	880 V
Operating voltage	
• at DC / rated value / maximum	1 000 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	10 kA
Energy limiting class	3

#### Dissipation

Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.4 W
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#### Current

Tripping residual / rated value / derated current / at 40 Cel	12.38 A
Suitability for operation	universal current

#### Product details

Product function / neutral conductor switching	No
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

#### Short circuit

Breaking capacity short-circuit current (I <sub>cn</sub> )	
• at DC / acc. to EN 60898-2	10 kA

#### Connections

<ul style="list-style-type: none"> <li>Connectable conductor cross-section <ul style="list-style-type: none"> <li>— solid</li> <li>— stranded</li> </ul> </li> <li>Connectable conductor cross-section / finely stranded / with core end processing</li> </ul>	0.75 ... 35 mm <sup>2</sup> 0.75 ... 35 mm <sup>2</sup> 0.75 ... 25 mm <sup>2</sup>
AWG number / as coded connectable conductor cross section	18 ... 4
Tightening torque [lbf·in] / with screw-type terminals	22 ... 31 lbf·in
Tightening torque / with screw-type terminals	2.5 ... 3.5 N·m
Position / of power supply cord	AC as required, observe DC polarity

### 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	632 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>during storage</li> </ul>	-40 ... +70 °C -40 ... +75 °C

### Certificates

Reference code <ul style="list-style-type: none"> <li>acc. to DIN EN 61346-2</li> <li>acc. to DIN EN 81346-2</li> </ul>	F F
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<b>General Product Approval</b>	<b>Declaration of Conformity</b>	<b>Railway</b>
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[Miscellaneous](#)



EG-Konf.

[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=5SY5413-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY5413-7>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY5413-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5413-7)

