



Circuit breaker Universal current 220 V DC 230/400 V AC 10kA, 1-pole, C, 13A

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	C
mechanical service life (switching cycles) typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC/DC
insulation voltage (Ui)	
• at DC rated value	250 V
• with single-phase operation at AC rated value	440 V
• with multi-phase operation at AC rated value	440 V
supply voltage with single-phase operation at AC rated value	230 V
Supply voltage	
supply voltage	
• at AC rated value	400 V
• at DC rated value	220 V
value range of the supply voltage frequency	50/60 Hz
operating voltage at DC rated value maximum	250 V
Protection class	
protection class IP	IP20, with connected conductors
Switching capacity	
switching capacity current	
• at DC according to IEC 60947-2 rated value	15 kA
• according to EN 60898 rated value	10 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	1.4 W
Current	
operational current	
• at 35 °C rated value	13 A
• at 40 °C rated value	12.38 A
• at 45 °C rated value	12.05 A
• at 50 °C rated value	11.73 A

<ul style="list-style-type: none"> <li>• at 55 °C rated value</li> <li>• at 60 °C rated value</li> <li>• at AC rated value</li> </ul>	11.38 A 11.02 A 13 A
suitability for operation	universal current
<b>Product details</b>	
product component	
<ul style="list-style-type: none"> <li>• combined terminal top</li> <li>• combined terminal bottom</li> <li>• neutral conductor switching</li> </ul>	Yes Yes No
product feature	
<ul style="list-style-type: none"> <li>• properties for main switches in accordance with EN 60204-1</li> <li>• halogen-free</li> <li>• sealable</li> <li>• silicon-free</li> </ul>	Yes Yes Yes Yes
product extension installable supplementary devices	Yes
<b>Short circuit</b>	
breaking capacity short-circuit current (I <sub>cn</sub> )	
<ul style="list-style-type: none"> <li>• at DC according to EN 60898-2</li> </ul>	10 kA
<b>Connections</b>	
connectable conductor cross-section solid	
<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 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	AC as required, observe DC polarity
<b>Mechanical Design</b>	
height	90 mm
width	18 mm
depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	Quick assembly system
mounting position	any
net weight	169 g
<b>Environmental conditions</b>	
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
standard	IEC / EN 60898-2, UL1077
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s <sup>2</sup> at 25 to 150Hz
ambient temperature during operation	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-40 °C 70 °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 according to IEC 60068-2-30	6
<b>Certificates</b>	

reference code

- according to EN 61346-2
- according to IEC 81346-2

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#### General Product Approval

[Confirmation](#)



[Miscellaneous](#)



General Product  
Approval

Declaration of Conformity

Test Certificates

Marine / Shipping

[Miscellaneous](#)



EG-Konf.

[Special Test Certificate](#)

[Miscellaneous](#)



LRS

other

Railway

Dangerous Good

[Miscellaneous](#)

[Environmental Confirmations](#)

[Confirmation](#)

[Vibration and Shock](#)

[Transport Information](#)

#### 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=5SY5113-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY5113-7>

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

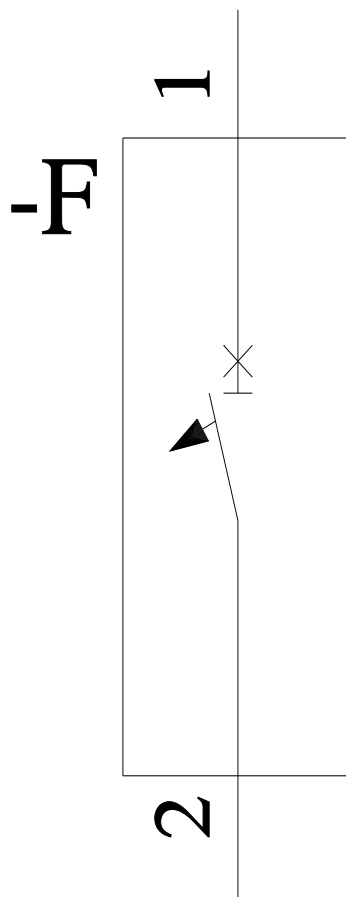
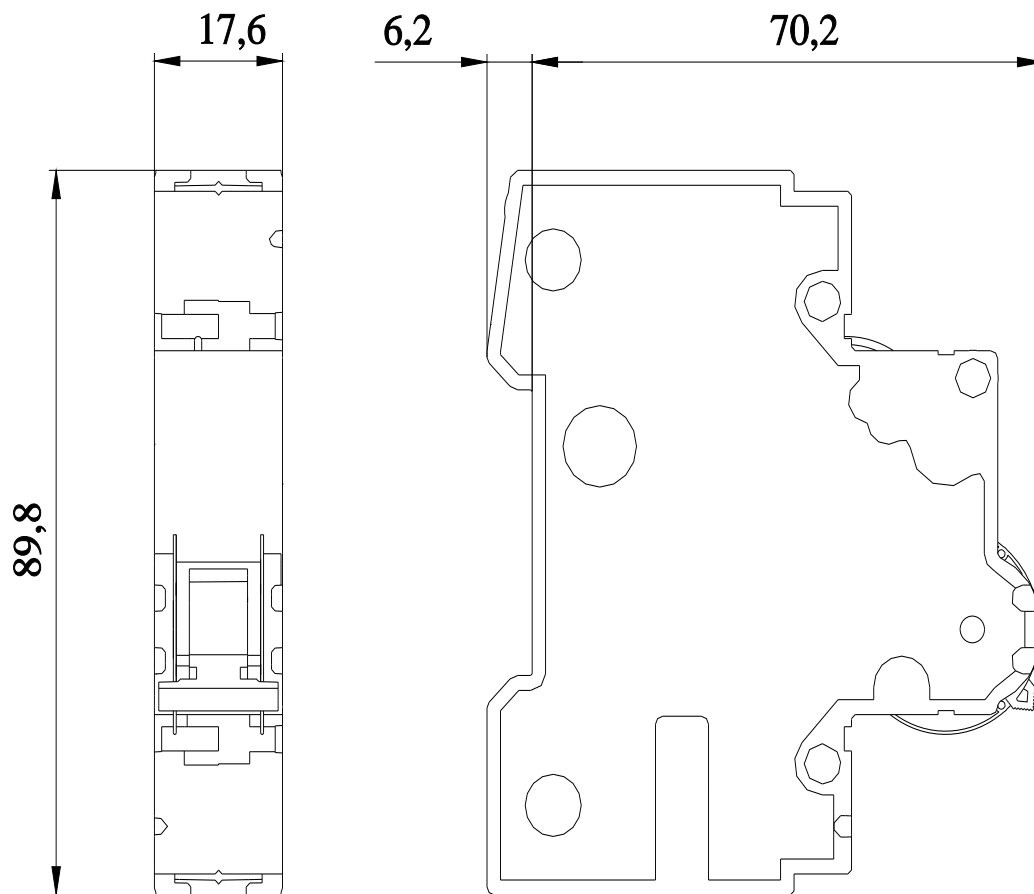
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY5113-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5113-7)

CAX-Online-Generator

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

Tender specifications

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



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