



Circuit breaker Universal current 440 V DC 400 V AC 10kA, 2-pole, C, 13A

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	2
design of pole	2P
tripping characteristic class	C
mechanical service life (operating cycles) typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC/DC
insulation voltage (U <sub>i</sub> )	
• 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	
supply voltage	
• at AC rated value	400 V
• at DC rated value	440 V
value range of the supply voltage frequency	50/60 Hz
operating voltage at DC rated value maximum	500 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
• at 55 °C rated value	11.38 A
• at 60 °C rated value	11.02 A

<ul style="list-style-type: none"> <li>at AC rated value</li> </ul>	13 A
suitability for operation	universal current
<b>Product details</b>	
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
<ul style="list-style-type: none"> <li>neutral conductor switching</li> </ul>	No
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 installable supplementary devices	Yes
<b>Short circuit</b>	
short-circuit current breaking capacity (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> </ul>	0.75 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>maximum</li> </ul>	35 mm <sup>2</sup>
connectable conductor cross-section stranded	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	0.75 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>maximum</li> </ul>	35 mm <sup>2</sup>
connectable conductor cross-section finely stranded with core end processing	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	0.75 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>maximum</li> </ul>	25 mm <sup>2</sup>
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	18
<ul style="list-style-type: none"> <li>maximum</li> </ul>	4
tightening torque [lbf-in] with screw-type terminals	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	22 lbf-in
<ul style="list-style-type: none"> <li>maximum</li> </ul>	31 lbf-in
tightening torque with screw-type terminals	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	2.5 N-m
<ul style="list-style-type: none"> <li>maximum</li> </ul>	3.5 N-m
position of power supply cord	AC as required, observe DC polarity
<b>Mechanical Design</b>	
height	90 mm
width	36 mm
depth	76 mm
installation depth	70 mm
number of modular width units	2
fastening method	Quick assembly system
mounting position	any
net weight	321 g
<b>Environmental conditions</b>	
influence of the surrounding temperature standard	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C 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> </ul>	-40 °C
<ul style="list-style-type: none"> <li>maximum</li> </ul>	70 °C
ambient temperature during storage	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>maximum</li> </ul>	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	6
<b>General Product Approval</b>	

[Confirmation](#)



[Miscellaneous](#)



<b>General Product Approval</b>	<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>
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[Miscellaneous](#)



EG-Konf.

[Special Test Certificate](#)

[Miscellaneous](#)



LRS

<b>other</b>	<b>Railway</b>	<b>Dangerous Good</b>	<b>Environment</b>
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[Transport Information](#)

[Environmental Confirmations](#)

**Further information**

**Information on the packaging**

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

**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=5SY5213-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY5213-7>

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

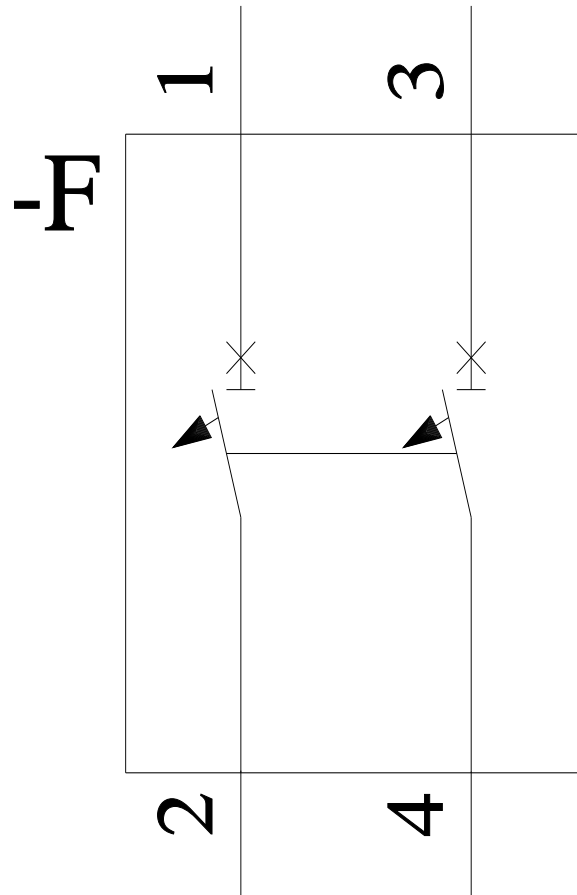
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY5213-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5213-7)

**CAX-Online-Generator**

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

**Tender specifications**

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



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