



Miniature circuit-breaker 440 V DC 10kA, 2-pole, C, 80 A

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	3
degree of pollution	3
Voltage	
type of voltage of the operating voltage	DC
insulation voltage (U <sub>i</sub> )	
• at DC rated value	250 V
• operational current	
— at 40 °C rated value	80 A
— at 50 °C rated value	72.34 A
Protection class	
protection class IP	IP20, with connected conductors
Breaking Capacity	
switching capacity current	
• at DC according to IEC 60947-2 rated value	10 kA
energy limitation class	3
suitability for operation	Infrastructure / Industry
Product details	
product feature touch protection	Yes
product component	
• tunnel terminals top	Yes
• tunnel terminals 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 installable supplementary devices	Yes
Connections	
connectable conductor cross-section solid	
• minimum	10 mm <sup>2</sup>

<ul style="list-style-type: none"> <li>• maximum</li> </ul>	50 mm <sup>2</sup>
<b>connectable conductor cross-section stranded</b>	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	10 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	50 mm <sup>2</sup>
<b>connectable conductor cross-section finely stranded with core end processing</b>	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	10 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	35 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	6
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2
<b>tightening torque [lbf-in] with screw-type terminals</b>	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	22.1 lbf-in
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	31 lbf-in
<b>tightening torque with screw-type terminals</b>	
<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
<b>position of power supply cord</b>	not arbitrary

#### Mechanical Design

<b>height</b>	90 mm
<b>width</b>	54 mm
<b>depth</b>	70 mm
<b>installation depth</b>	70 mm
<b>number of modular width units</b>	3
<b>fastening method</b>	DIN rail
<b>mounting position</b>	any
<b>Net Weight</b>	534 g

#### Environmental conditions

<b>influence of the surrounding temperature</b>	Periodically +55°C, max. 95% humidity
shock resistance according to IEC 60068-2-27	150m/s <sup>2</sup> at 11ms half-sine
<b>vibration resistance according to IEC 60068-2-6</b>	50m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec)
<b>ambient temperature during storage</b>	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	75 °C

#### Approvals Certificates

<b>Environment</b>	<b>General Product Approval</b>	<b>other</b>
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[Environmental Confirmations](#)

[Environmental Confirmations](#)



<b>other</b>	<b>Dangerous goods</b>
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[Confirmation](#)

[Transport Information](#)

#### Further information

##### Information on the packaging

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

##### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

##### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mifb=5SP5280-7CC>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SP5280-7CC>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SP5280-7CC](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SP5280-7CC)

**CAx-Online-Generator**

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

**Tender specifications**

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

**Characteristic curves**

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)

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