



miniature circuit breaker 230 V, 6 kA, 1+N-pole/1 MW, N left, C20

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
design of the product	Miniature circuit breaker compact
General technical data	
design of pole	1P+N
tripping characteristic class	C
mechanical service life (operating cycles) typical	10 000
overvoltage category	3
degree of pollution	2
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (U <sub>i</sub> ) at AC rated value	250 V
<ul style="list-style-type: none"> <li>● operational current                             <ul style="list-style-type: none"> <li>— at 30 °C rated value</li> <li>— at 40 °C rated value</li> <li>— at 50 °C rated value</li> <li>— at 55 °C rated value</li> <li>— at 60 °C rated value</li> </ul> </li> <li>● operational current at AC rated value</li> </ul>	20 A 18.79 A 17.51 A 16.82 A 16.11 A 20 A
Supply voltage	
supply voltage <ul style="list-style-type: none"> <li>● at AC</li> <li>● at DC rated value</li> </ul>	230 V 60 V
value range of the supply voltage frequency	50/60 Hz
operating voltage <ul style="list-style-type: none"> <li>● minimum</li> <li>● with single-phase operation at AC maximum</li> </ul>	24 V 250 V
Protection class	
protection class IP	IP20, with connected conductors
Breaking Capacity	
switching capacity current <ul style="list-style-type: none"> <li>● according to EN 60898 rated value</li> </ul>	6 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current <ul style="list-style-type: none"> <li>● at AC in hot operating state per pole</li> </ul>	2.2 W
Suitability	

<b>suitability for operation</b>	Residential buildings/infrastructure
<b>Product details</b>	
<b>product feature touch protection</b>	Yes
<b>product component</b>	
• combined terminal top	No
• combined terminal bottom	No
• neutral conductor switching	Yes
<b>product feature properties for main switches in accordance with EN 60204-1</b>	No
<b>product feature halogen-free</b>	Yes
<b>product feature sealable</b>	Yes
<b>product feature silicon-free</b>	Yes
<b>product extension installable supplementary devices</b>	Yes
<b>Product function</b>	
<b>product function</b>	
• communication function	No
• other measurement function	No
<b>Connections</b>	
<b>connectable conductor cross-section solid</b>	
• minimum	0.75 mm <sup>2</sup>
• maximum	16 mm <sup>2</sup>
<b>connectable conductor cross-section stranded</b>	
• minimum	0.75 mm <sup>2</sup>
• maximum	16 mm <sup>2</sup>
<b>connectable conductor cross-section finely stranded with core end processing</b>	
• minimum	0.75 mm <sup>2</sup>
• maximum	10 mm <sup>2</sup>
<b>tightening torque [lbf-in] with screw-type terminals</b>	
• minimum	10.6 lbf-in
• maximum	22.1 lbf-in
<b>tightening torque with screw-type terminals</b>	
• minimum	1.2 N-m
• maximum	2.5 N-m
<b>position of power supply cord</b>	Any
<b>Mechanical Design</b>	
<b>height</b>	90 mm
<b>width</b>	18 mm
<b>depth</b>	76 mm
<b>installation depth</b>	70 mm
<b>number of modular width units</b>	1
<b>fastening method</b>	DIN rail
<b>mounting position</b>	any
<b>Net Weight</b>	118 g
<b>Environmental conditions</b>	
<b>standard</b>	IEC/EN60898-1, GB/T10963.1
<b>vibration resistance according to IEC 60068-2-6</b>	Yes
<b>ambient temperature during operation</b>	
• minimum	-25 °C
• maximum	60 °C
<b>ambient temperature during operation</b>	-25...45°C: max. 85%rF. 45...60°C: max. 43%rF
<b>ambient temperature during storage</b>	
• minimum	-40 °C
• maximum	75 °C
<b>number of test cycles for environmental testing according to IEC 60068-2-30</b>	6
<b>Environmental footprint</b>	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	11.7 kg

global warming potential [CO2 eq] during manufacturing	0.916 kg
global warming potential [CO2 eq] during operation	10.8 kg
global warming potential [CO2 eq] after end of life	-0.102 kg

### Approvals Certificates

#### General Product Approval

[Confirmation](#)



[Miscellaneous](#)



General Product Approval	Test Certificates	other	Environment
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[Miscellaneous](#)



[Confirmation](#)

[Miscellaneous](#)



#### Environment



[Environmental Confirmations](#)

[Environmental Confirmations](#)

#### 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?mlfb=5SL6020-7KL>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SL6020-7KL>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SL6020-7KL](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL6020-7KL)

CAx-Online-Generator

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

Tender specifications

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





