



Circuit breaker 10kA, 1-pole, D, 20A according to UL 489-277V

Model	
product brand name	SENTRON
product designation	Miniature circuit breakers
design of the product	Miniature circuit-breaker 5SJ4
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	D
mechanical service life (switching cycles) typical	10 000
installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	F
overvoltage category	3
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC/DC
insulation voltage (Ui) at AC rated value	440 V
Supply voltage	
supply voltage at AC rated value	400 V
value range of the supply voltage frequency	50/60 Hz
operating voltage	
• at AC according to UL 489 and CSA C22.2 No. 5-02 maximum	277 V
• at DC rated value maximum	60 V
• at DC single channel according to UL 489 and CSA C22.2 No. 5-02 maximum	60 V
• at DC 2-channel according to UL 489 and CSA C22.2 No. 5-02 maximum	125 V
supply voltage frequency rated value	50 Hz
Protection class	
protection class IP	IP20, with connected conductors, IP 40 in the handle range
Switching capacity	
switching capacity current	
• according to EN 60898 rated value	10 kA
• according to IEC 60947-2 rated value	15 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	2.4 W
Current	
operational current	
• at 30 °C rated value	20 A

<ul style="list-style-type: none"> <li>• at 40 °C rated value</li> <li>• at 45 °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> <li>• at AC rated value</li> </ul>	20 A 19.4 A 18.8 A 18.1 A 17.6 A 20 A
<b>Main circuit</b>	
type of voltage supply at AC according to UL 489 and CSA C22.2 No. 5-02	480/277
suitability for operation	Mechanical engineering / industry
<b>Product details</b>	
product component	
<ul style="list-style-type: none"> <li>• tunnel terminals top</li> <li>• tunnel terminals bottom</li> <li>• combined terminal top</li> <li>• combined terminal bottom</li> <li>• neutral conductor switching</li> </ul>	No No Yes Yes No
product feature	
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• sealable</li> <li>• silicon-free</li> </ul>	Yes Yes Yes
product extension installable supplementary devices	Yes
<b>Product function</b>	
product function note	Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in
<b>Short circuit</b>	
breaking capacity short-circuit current (I <sub>cn</sub> ) at AC according to UL 1077 and CSA C22.2 No.235	10 kA
<b>Connections</b>	
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>
tightening torque with screw-type terminals maximum	3.5 N·m
position of power supply cord	Any
<b>Mechanical Design</b>	
height	121 mm
width	18 mm
depth	70 mm
installation depth	70 mm
number of modular width units	1
fastening method	on standard mounting rail
mounting position	any
net weight	174 g
<b>Environmental conditions</b>	
vibration resistance	50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec)
vibration resistance according to IEC 60068-2-6	±1 mm at 5 to 25 Hz; 50 m/s <sup>2</sup> at 25 to 150 Hz
ambient temperature during operation	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	55 °C -25 °C
ambient temperature during operation	max. 95% humidity
ambient temperature during storage	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-40 °C 75 °C
<b>Certificates</b>	
reference code	
<ul style="list-style-type: none"> <li>• according to EN 61346-2</li> <li>• according to IEC 81346-2</li> </ul>	F F
<b>General Product Approval</b>	
<b>Declaration of Conformity</b>	

[Confirmation](#)



Test Certificates

other

[Special Test Certificate](#)

[Environmental Confirmations](#)

[Miscellaneous](#)

#### 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=5SJ4120-8HG42>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SJ4120-8HG42>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SJ4120-8HG42](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4120-8HG42)

CAX-Online-Generator

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

Tender specifications

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



