



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

Figure similar

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 (operating 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	
insulation voltage (U _i) at AC rated value	440 V
<ul style="list-style-type: none"> ● operational current <ul style="list-style-type: none"> — at 30 °C rated value — at 40 °C rated value — at 50 °C rated value — at 55 °C rated value — at 60 °C rated value ● operational current at AC rated value 	20 A 20 A 18.8 A 18.1 A 17.6 A 20 A
Supply voltage	
supply voltage <ul style="list-style-type: none"> ● at AC ● at DC rated value 	400 V 60 V
value range of the supply voltage frequency	50/60 Hz
operating voltage <ul style="list-style-type: none"> ● at AC according to UL 489 and CSA C22.2 No. 5-02 maximum ● at DC rated value maximum ● at DC 1-channel according to UL 489 and CSA C22.2 No. 5-02 maximum ● at DC 2-channel according to UL 489 and CSA C22.2 No. 5-02 maximum 	277 V 60 V 60 V 125 V
supply voltage frequency rated value	50 Hz
Protection class	

protection class IP	IP 0 in the handle range
Breaking 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
Main circuit	
type of voltage supply at AC according to UL 489 and CSA C22.2 No. 5-02	480/277
suitability for operation	Infrastructure / Industry
Product details	
product feature touch protection	Yes
product component	
• tunnel terminals top	No
• tunnel terminals bottom	No
• combined terminal top	Yes
• combined terminal bottom	Yes
• neutral conductor switching	No
product feature halogen-free	Yes
product feature sealable	Yes
product feature silicon-free	Yes
product extension installable supplementary devices	Yes
Product function	
set values setting current (Ii) for I-tripping	14
reference value setting current (Ii) for I-tripping	x In
product function note	Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in
Short circuit	
short-circuit current breaking capacity (Icn) at AC according to UL 1077 and CSA C22.2 No.235	10 kA
Connections	
connectable conductor cross-section finely stranded with core end processing	
• minimum	0.75 mm ²
• maximum	25 mm ²
tightening torque with screw-type terminals maximum	3.5 N·m
position of power supply cord	Any
Mechanical Design	
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
Environmental conditions	
standard	IEC / EN 60947-2 / UL 489
vibration resistance	50 m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec)
vibration resistance according to IEC 60068-2-6	±1 mm at 5 to 25 Hz; 50 m/s ² at 25 to 150 Hz
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during operation	max. 95% humidity
ambient temperature during storage	
• minimum	-40 °C
• maximum	75 °C
Approvals Certificates	

Environment General Product Approval

[Environmental Confirmations](#)

[Environmental Confirmations](#)



General Product Approval Test Certificates other



[Confirmation](#)



[Special Test Certificate](#)

[Confirmation](#)

other



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=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, ...)

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4120-8HG42

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=)



last modified:

1/11/2026 

