SIEMENS

Data sheet 5SJ4120-7HG42

Circuit breaker 10kA, 1-pole, C, 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
tripping characteristic class	C
mechanical service life (switching cycles) / typical	10 000
installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)
reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. 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
operating voltage	
● at AC / acc. to UL 489 and CSA C22.2 No. 5-02 / maximum	277 V
● at DC / rated value / maximum	60 V
● at DC / single channel / acc. to UL 489 and CSA C22.2 No. 5-02 / maximum	60 V
● at DC / 2-channel / acc. to UL 489 and CSA C22.2 No. 5-02 / maximum	125 V
Protection class	
protection class IP	IP20, with connected conductors, IP 40 in the handle range
Switching capacity	
switching capacity current	
● acc. to EN 60898 / rated value	10 kA
● acc. 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
● at 40 °C / rated value	20 A
● at 45 °C / rated value	19.4 A

● at 50 °C / rated value	18.8 A
● at 55 °C / rated value	18.1 A
● at 60 °C / rated value	17.6 A
● at AC / rated value	20 A
Main circuit	
type of voltage supply / at AC / acc. to UL 489 and CSA C22.2 No. 5-02	480/277
suitability for operation	Mechanical engineering / industry
Product details	
product component / neutral conductor switching	No
product feature / touch protection	Yes
product component	
● tunnel terminals top	No
● tunnel terminals bottom	No
● combined terminal top	Yes
● combined terminal bottom	Yes
product feature	
● halogen-free	Yes
● sealable	Yes
● silicon-free	Yes
product extension / installable / supplementary devices	Yes
Product function	
product function / note	Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in
Short circuit	
breaking capacity short-circuit current (Icn) / at AC / acc. 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 mm²
● maximum	25 mm²
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	176 g
Environmental conditions	
vibration resistance	50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
ambient temperature / during operation	
● minimum	55 °C
● maximum	-25 °C
ambient temperature / during storage	
● minimum	-40 °C
● maximum	75 °C
Certificates	
reference code	
● acc. to DIN EN 61346-2	F
● acc. to IEC 81346-2	F

General Product Approval	Declaration of Conformity	Test Certificates

Special Test Certificate

other

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=5SJ4120-7HG42
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SJ4120-7HG42
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4120-7HG42
CAx-Online-Generator
http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications