SIEMENS

Data sheet 5SJ4102-7HG42

Circuit breaker 10kA, 1-pole, C, 2A 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	C
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
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	1.8 W
Current	
operational current	
● at 30 °C rated value	2 A
● at 40 °C rated value	2 A

● at 45 °C rated value	1.9 A
● at 50 °C rated value	1.9 A
● at 55 °C rated value	1.8 A
● at 60 °C rated value	1.8 A
● at AC rated value	2 A
Main circuit	
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
Product details	
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
● 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 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 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	179 g
Environmental conditions	
vibration resistance	50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
vibration resistance according to IEC 60068-2-6	±1 mm at 5 to 25 Hz; 50 m/s² at 25 to 150 Hz
ambient temperature during operation	
● minimum	55 °C
● maximum	-25 °C
ambient temperature during operation	max. 95% humidity
ambient temperature during storage	
● minimum	-40 °C
● maximum	75 °C
Certificates	
reference code	
● according to EN 61346-2	F
● according to IEC 81346-2	F

General Product Approval	**Declaration of Conformity**

Confirmation

Declaration of Conformity	Test Certificates	other	
UKCA	Special Test Certific-ate	Miscellaneous	Environmental Con-firmations

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=5SJ4102-7HG42
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SJ4102-7HG42
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4102-7HG42
CAx-Online-Generator
http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications