SIEMENS

Data sheet 5SJ4110-7HG42

Circuit breaker 10kA, 1-pole, C, 10 A 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
Number of poles / Note	1P
Tripping characteristic class	С
Installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)
circuit-breaker / Design	5SJ4
Mechanical service life (switching cycles) / typical	20 000
Reference code / acc. to DIN 40719 extended	F
according to IEC 204-2 / acc. to IEC 750	
Overvoltage category	3
Voltage	
Type of voltage	AC/DC
Insulation voltage / at AC / rated value	440 V

Supply voltage	400.17
Supply voltage / at AC / rated value	400 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	
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	1.4 W
/ in hot operating state / per pole	
Electricity	
Tripping residual / rated value / derated current / at	10 A
40 Cel	
Current / at AC / rated value	10 A
Main circuit	
Type of voltage supply / at AC / acc. to UL 489 and CSA C22.2 No. 5-02	480/277
Operating voltage	
• minimum	24 V
• at AC / acc. to UL 489 and CSA C22.2 No. 5-02 / maximum	277 V
 at DC / 1-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
at DC / rated value / maximum	60 V
Suitability for operation	Mechanical engineering / 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
Product feature	
• halogen-free	Yes
• sealable	Yes
• silicon-free	Yes

Product function Product function Product function Note neutral conductor switching Product function No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No Short circuit Breaking capacity short-circuit current (lcn) / at AC / acc. to UL 1077 and CSA C22.2 No.235 Number Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 Connections Connectable conductor cross-section / finely stranded / with core end processing ninimum maximum 1.5 mm² maximum 25 mm² Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position Installation depth Number of width units 1 mo Number of width units 1 mounting type on standard mounting rail Net weight		
Product function Note Note Iterminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No No No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in No Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in	Product extension / can be installed / supplementary devices	Yes
Note • neutral conductor switching Short circuit Breaking capacity short-circuit current (Icn) / at AC / acc. to UL 1077 and CSA C22.2 No.235 Number Number of test cycles / for environmental testing / acc. to IEC 60068-2-80 Connectable conductor cross-section / finely stranded / with core end processing • minimum • maximum 1.5 mm² • maximum 25 mm² Position / of power supply cord Morthing position Depth 76 mm Mounting position Installation depth Number of width units Mumber of width units 11 mm Nounting type Net weight Influence of the surrounding temperature • minimum 1.5 mm² 25 mm² 121 mm Mounting position any Installation depth 70 mm Number of width units 1 mm Nounting type on standard mounting rail Influence of the surrounding temperature Finding storage / minimum • 25 ° C Somis' at 25 to 150Hz and 60m/s' at 35Hz (4sec) Som m's' at 25 to 150Hz and 60m/s' at 35Hz (4sec) For continuations Position resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • during storage / minimum • during storage / maximum	Product function	
• neutral conductor switching Preaking capacity short-circuit current (Icn) / at AC / acc. to IL 1077 and CSA G22.2 No.235 Number	Product function	
Breaking capacity short-circuit current (Icn) / at AC / acc. to UL 1077 and CSA C22.2 No.235 Number Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 Connectable conductor cross-section / finely stranded / with core end processing • minimum • maximum Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position Installation depth Number of width units 1 Mounting type on standard mounting rail Net weight To max. 95% humidity Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • aximum • 25° °C Certificates Reference code	• Note	Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in
Breaking capacity short-circuit current (lcn) / at AC / acc. to IU. 1077 and CSA C22.2 No.235 Number Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 Connectable conductor cross-section / finely stranded / with core end processing • minimum • maximum Position / of power supply cord Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position Installation depth 70 mm Number of width units 1 mounting type Net weight Net weight To ge on standard mounting rail Net weight Net weight To max. 95% humidity Vibration resistance / acc. to IEC 60068-2-6 So m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • during storage / maximum • during storage / maximum • during storage / minimum • during storage / minimum • during storage / maximum • during storage / maximum • during storage / maximum • during storage / minimum • during storage / maximum • during storage / minimum	• neutral conductor switching	No
Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 Connections Connectable conductor cross-section / finely stranded / with core end processing • minimum • maximum 25 mm² Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position Installation depth Number of width units 1 finely Stranded / with core end processing • minimum 1.5 mm² 4 may Mechanical Design Height 121 mm Width 18 mm Depth 70 mm Number of width units 1 finely Mounting type on standard mounting rail Net weight 172 g Position of the surrounding temperature max. 95% humidity Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • minimum • 1.5 mm² • during storage / minimum • during storage / minimum • during storage / maximum • during storage / minimum • during storage / maximum	Short circuit	
Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 Connectable conductor cross-section / finely stranded / with core end processing • minimum • maximum Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position Installation depth Number of width units 1 munum New weight 172 g Convironmental conditions Degree of pollution Influence of the surrounding temperature Vibration resistance • minimum • maximum • during storage / minimum • during storage / minimum • during storage / minimum • during storage / maximum	Breaking capacity short-circuit current (lcn) / at AC /	10 kA
Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 Connectable conductor cross-section / finely stranded / with core end processing	acc. to UL 1077 and CSA C22.2 No.235	
acc. to IEC 60068-2-30 Connectable conductor cross-section / finely stranded / with core end processing • minimum • maximum Position / of power supply cord Moderanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position any Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Environmental conditions Degree of pollution 3 Influence of the surrounding temperature Wibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum -25 °C Ambient temperature • minimum -25 °C envirolation storage / minimum -40 °C -5 °C Certificates Reference code	Number	
Connectable conductor cross-section / finely stranded / with core end processing • minimum • maximum 25 mm² Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Influence of the surrounding temperature Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • during storage / minimum • during storage / maximum • during storage / maximum • during storage / maximum Certificates Reference code	-	6
Connectable conductor cross-section / finely stranded / with core end processing Inimimum maximum Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position Installation depth Number of width units 1 my Net weight 172 g Initiation Degree of pollution Influence of the surrounding temperature Vibration resistance Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature Initiation Influence of maximum - 25 °C Initiation Influence of maximum - 40 °C during storage / maximum To maximum - 40 °C Certificates Reference code	acc. to IEC 60068-2-30	
stranded / with core end processing minimum maximum 25 mm² 25 mm² Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Position / of the surrounding temperature Vibration resistance Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature minimum - 25 °C - during storage / maximum - 40 °C - during storage / maximum - 75 °C Petrificates Reference code	Connections	
• minimum • maximum 25 mm² 25 mm² Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position any Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Environmental conditions Degree of pollution 3 Influence of the surrounding temperature with a surrounding temperature Fibration resistance Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • during storage / minimum • during storage / maximum 75 °C Certificates Reference code	•	
Position / of power supply cord Any Mechanical Design Height 121 mm Width 18 mm Depth 76 mm Mounting position any Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Environmental conditions Degree of pollution 3 Influence of the surrounding temperature max. 95% humidity Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature ● minimum ● during storage / minimum ● during storage / maximum 75 °C Certificates Reference code	·	
Position / of power supply cord Mechanical Design Height	• minimum	
Height	• maximum	25 mm ²
Height 121 mm Width 18 mm Depth 76 mm Mounting position any Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Environmental conditions Degree of pollution 3 Influence of the surrounding temperature max. 95% humidity Vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature • minimum -25 °C • during storage / minimum -40 °C • during storage / maximum • during storage / maximum Certificates Reference code	Position / of power supply cord	Any
Width 18 mm Depth 76 mm Mounting position any Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Environmental conditions Degree of pollution 3 Influence of the surrounding temperature max. 95% humidity Vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature • minimum -25 °C • maximum 55 °C • during storage / minimum -40 °C • during storage / maximum 75 °C	Mechanical Design	
Depth 76 mm Mounting position any Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Environmental conditions Degree of pollution 3 Influence of the surrounding temperature max. 95% humidity Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature • minimum • minimum -25 °C • maximum • during storage / minimum • during storage / maximum 75 °C Certificates Reference code	Height	121 mm
Mounting position Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Environmental conditions Degree of pollution 3 Influence of the surrounding temperature max. 95% humidity Vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature minimum -25 °C maximum during storage / minimum during storage / maximum 75 °C Certificates Reference code	Width	18 mm
Installation depth 70 mm Number of width units 1 Mounting type on standard mounting rail Net weight 172 g Environmental conditions Degree of pollution 3 Influence of the surrounding temperature max. 95% humidity Vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature • minimum -25 °C • maximum 55 °C • during storage / minimum -40 °C • during storage / maximum 75 °C	Depth	76 mm
Number of width units Mounting type on standard mounting rail 172 g Environmental conditions Degree of pollution Influence of the surrounding temperature Vibration resistance Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • during storage / minimum • during storage / maximum Teleference code 172 g and standard mounting rail no standard mounting rail no standard mounting rail no standard mounting rail 172 g and standard mounting rail 172 g	Mounting position	any
Mounting type On standard mounting rail 172 g Environmental conditions Degree of pollution Influence of the surrounding temperature Vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • minimum • 25 °C • during storage / minimum -40 °C • during storage / maximum 75 °C Certificates Reference code	Installation depth	70 mm
Influence of the surrounding temperature Possible 172 g Influence of the surrounding temperature Possible 172 g Influence of the surrounding temperature Influence of the surrounding temperature	Number of width units	1
Degree of pollution Influence of the surrounding temperature Vibration resistance Vibration resistance / acc. to IEC 60068-2-6 Ambient temperature • minimum • maximum • during storage / maximum To compare the surrounding temperature Provided in the surrounding temperature 100 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)	Mounting type	on standard mounting rail
Degree of pollution Influence of the surrounding temperature max. 95% humidity Vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature minimum -25 °C maximum during storage / minimum during storage / maximum 75 °C Certificates Reference code	Net weight	172 g
Influence of the surrounding temperature wax. 95% humidity Vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature max. 95% humidity 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) -25 °C maximum 55 °C -40 °C -40 °C -40 °C -55 °C -40 °C -40 °C -40 °C -40 °C	Environmental conditions	
Vibration resistance 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature • minimum -25 °C • maximum 55 °C • during storage / minimum -40 °C 75 °C Certificates Reference code	Degree of pollution	3
Vibration resistance / acc. to IEC 60068-2-6 50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec) Ambient temperature • minimum -25 °C • maximum • during storage / minimum -40 °C • during storage / maximum 75 °C Certificates Reference code	Influence of the surrounding temperature	max. 95% humidity
Ambient temperature • minimum • maximum • during storage / minimum • during storage / maximum Certificates Reference code	Vibration resistance	50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
 minimum -25 °C maximum 55 °C during storage / minimum -40 °C during storage / maximum 75 °C Certificates Reference code	Vibration resistance / acc. to IEC 60068-2-6	50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)
 maximum during storage / minimum during storage / maximum Certificates Reference code 55 °C 75 °C	Ambient temperature	
during storage / minimum during storage / maximum 75 °C Certificates Reference code	• minimum	-25 °C
• during storage / maximum 75 °C Certificates Reference code	• maximum	55 °C
Certificates Reference code	during storage / minimum	-40 °C
Reference code	 during storage / maximum 	75 °C
Reference code	Certificates	
	• acc. to DIN EN 61346-2	F

F

General Product Approval

Declaration of Conformity

Test Certificates









Special Test Certificate

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=5SJ4110-7HG42

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

https://support.industry.siemens.com/cs/ww/en/ps/5SJ4110-7HG42

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4110-7HG42

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications



