SIEMENS

Data sheet 5SJ4102-8HG40



Miniature circuit breaker 240 V 14kA, 1-pole, D, 2A, D=70 mm according to UL 489, equal polarity

product brand name product designation diniature circuit breakers design of the product Miniature circuit breaker 5SJ4 Ceneral technical data number of poles tripping characteristic class mechanical service life (switching cycles) / typical installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 overvoltage category degree of pollution Voltage Supply voltage / of the operating voltage insulation voltage (ul) / at AC / rated value 440 V Supply voltage / at AC / rated value • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and cSA C22.2 No. 5-02 / maximum • according to EN 60898 / rated value • at 40 °C / rated value of the current / at AC / in hot operating state / per pole Current • at 30 °C / rated value • at 40 °C / rated value	Model	
design of the product General technical data number of poles tripping characteristic class mechanical service life (switching cycles) / typical installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 overvoltage category 3 degree of pollution Voltage Type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value operating voltage supply voltage supply voltage / at AC / rated value operating voltage • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / rated value / maximum • at DC / rated value / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and CSA C32.2 No. 5-02 / maximum • at DC / single channel / according to UL 489 and CSA C32.2 No. 5-02 / maximum • according to EN 60898 / rated value • according to EN 60797 / rated value • at 30 °C / rated value • at 30 °C / rated value • at 40 °C / rated value • at 40 °C / rated value	product brand name	SENTRON
Ceneral technical data	product designation	Miniature circuit breakers
rumber of poles tripping characteristic class D mechanical service life (switching cycles) / typical installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 overvoltage category degree of pollution 3 Voltage type of voltage / of the operating voltage insulation voltage (UI) / at AC / rated value operating voltage at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum at DC / single prequency / rated value Protection class protection class IP Switching capacity switching capacity switching capacity switching capacity switching capacity operational current a cacording to IEC 60947-2 / rated value 1	design of the product	Miniature circuit-breaker 5SJ4
tripping characteristic class mechanical service life (switching cycles) / typical installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 overvoltage category degree of pollution 3 Voltage type of voltage / of the operating voltage type of voltage / of the operating voltage type of voltage / at AC / rated value Supply voltage • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value Frotection class protection class IP Switching capacity switching capacity current • according to IEC 80947-2 / rated value • at 30 °C / rated value of the current / at AC / in hot operating state / per pole Current • at 30 °C / rated value • at 40 °C / rated value	General technical data	
mechanical service life (switching cycles) / typical installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 overvoltage category degree of pollution 3 Voltage type of voltage / of the operating voltage supply voltage (UI) / at AC / rated value **AC/DC** **AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum ** at DC / rated value / maximum ** at DC / rated value / maximum ** at DC / rated value / maximum ** at DC / single channel / according to UL 489 and CSA C22.2 No. 5- 02 / maximum ** at DC / single channel / according to UL 489 and CSA C22.2 No. 5- 02 / maximum ** at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum ** at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum ** at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum ** at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum ** at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / rated value ** at Cording to EN 60898 / rated value ** according to EN 60898 / rated value ** according to IEC 60947-2 / rated value ** at 30 °C / rated value of the current / at AC / in hot operating state / per pole **Current** ** operational current** ** at 30 °C / rated value ** at 40 °C / rated value	number of poles	1
installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 overvoltage category degree of pollution Voltage type of voltage (Ui) / at AC / rated value supply voltage supply voltage (Ui) / at AC / rated value 400 V Supply voltage supply voltage (at AC / rated value • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / rated value / maximum • at DC / rated value / maximum supply voltage frequency / rated value 50 Hz Protection class protection class IP Switching capacity switching capacity current • according to IEC 60947-2 / rated value 10 KA according to IEC 60947-2 / rated value 10 KA according to IEC 60947-2 / rated value 10 kA 15 kA Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 40 °C / rated value • at 40 °C / rated value 2 A 2 A	tripping characteristic class	D
reference code / according to DIN 40719 extended according to IEC 204.2 / according to IEC 204.2 / according to IEC 2750 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 / at AC / rated value 400 V operating voltage • at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum 60 V • at DC / rated value / according to UL 489 and CSA C22.2 No. 5-02 / maximum 50 V supply voltage frequency / rated value 50 Hz Protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity current • 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 Current • at 30 °C / rated value 2 A • at 40 °C / rated value 2 A	mechanical service life (switching cycles) / typical	10 000
according to IEC 204-2 / according to IEC 750 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 supply voltage / at AC / rated value 400 V operating voltage • at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum • at DC / rated value / maximum 60 V • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value 50 Hz Protection class IP Protection class IP Switching capacity switching capacity current • according to EN 60898 / rated value 15 kA Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 30 °C / rated value 2 A • at 40 °C / rated value 2 A	installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)
degree of pollution Voltage type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value 440 V Supply voltage supply voltage • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value Frotection class protection class IP Protection class IP Switching capacity switching capacity current • according to EN 60898 / rated value • according to EN 60898 / rated value 10 kA • according to IEC 60947-2 / rated value power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 30 °C / rated value • at 40 °C / rated value		F
type of voltage / of the operating voltage type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value 440 V Supply voltage supply voltage / at AC / rated value operating voltage • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / rated value / maximum • at DC / rated value / maximum 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 • according to EN 60898 / rated value 10 kA • according to EC 60947-2 / rated value 15 kA Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 30 °C / rated value • at 40 °C / rated value 2 A	overvoltage category	3
type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value 440 V Supply voltage supply voltage supply voltage / at AC / rated value • at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value Frotection class protection class IP Protection class IP Switching capacity switching capacity current • according to EN 60898 / rated value • according to IEC 60947-2 / rated value Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value	degree of pollution	3
insulation voltage (Ui) / at AC / rated value Supply voltage supply voltage supply voltage • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value 50 Hz Protection class protection class IP Switching capacity switching capacity current • according to EN 60898 / rated value 10 kA • according to IEC 60947-2 / rated value 11 kA Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value 2 A	Voltage	
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 • 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 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 Current operational current • at 30 °C / rated value 2 A • at 40 °C / rated value 2 A	type of voltage / of the operating voltage	AC/DC
supply voltage / at AC / rated value operating voltage • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value Protection class protection class IP Protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity switching capacity current • according to EN 60898 / rated value • according to EC 60947-2 / rated value 10 kA • according to EC 60947-2 / rated value 15 kA Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value	insulation voltage (Ui) / at AC / rated value	440 V
operating voltage • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value 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 • according to IEC 60947-2 / rated value Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value	Supply voltage	
at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum at DC / rated value / maximum at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value 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 according to EN 60898 / rated value baccording to IEC 60947-2 / rated value power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current at 30 °C / rated value at 40 °C / rated value 2 A at 40 °C / rated value 2 A	supply voltage / at AC / rated value	400 V
02 / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value 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 • according to IEC 60947-2 / rated value Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value	operating voltage	
at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value 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 according to IEC 60947-2 / rated value Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current at 30 °C / rated value at 40 °C / rated value at 40 °C / rated value 2 A at 40 °C / rated value	S S S S S S S S S S S S S S S S S S S	120 V
CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value 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 • according to IEC 60947-2 / rated value Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value 2 A	at DC / rated value / maximum	60 V
Protection class IP IP20, with connected conductors, IP 40 in the handle range Switching capacity switching capacity current • according to EN 60898 / rated value • according to IEC 60947-2 / 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 Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value		60 V
protection class IP Switching capacity switching capacity current • according to EN 60898 / rated value • according to IEC 60947-2 / rated value power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value 1P20, with connected conductors, IP 40 in the handle range 10 kA 15 kA 1.8 W 1.8 W	supply voltage frequency / rated value	50 Hz
Switching capacity switching capacity current • according to EN 60898 / rated value • according to IEC 60947-2 / 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 Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value	Protection class	
switching capacity current • according to EN 60898 / rated value • 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 Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value	protection class IP	IP20, with connected conductors, IP 40 in the handle range
according to EN 60898 / rated value 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 Current operational current at 30 °C / rated value at 40 °C / rated value 2 A at 40 °C / rated value 2 A	Switching capacity	
according to IEC 60947-2 / rated value Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current at 30 °C / rated value at 40 °C / rated value 2 A at 40 °C / rated value 2 A	switching capacity current	
Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A • at 40 °C / rated value	 according to EN 60898 / rated value 	10 kA
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A	 according to IEC 60947-2 / rated value 	15 kA
hot operating state / per pole Current operational current • at 30 °C / rated value • at 40 °C / rated value 2 A 2 A	Dissipation	
operational current • at 30 °C / rated value • at 40 °C / rated value 2 A 2 A		1.8 W
 at 30 °C / rated value at 40 °C / rated value 2 A 2 A 	Current	
• at 40 °C / rated value 2 A	operational current	
	 at 30 °C / rated value 	2 A
• at 45 °C / rated value 1.9 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	240/120
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 / according to UL 1077 and CSA C22.2 No.235	14 kA
Connections	
connectable conductor cross-section / finely stranded / with core end processing	
• minimum	0.75 mm²
• maximum	25 mm ²
tightening torque / with screw-type terminals / maximum	3.5 N·m
position / of power supply cord	Any
Mechanical Design	
height	90 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	163 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	
according to EN 61346-2	F
according to IEC 81346-2	F
General Product Approval	Declaration of Conformity

Confirmation











Test Certificates other

<u>Miscellaneous</u> <u>Special Test Certific-</u> <u>Miscellaneous</u>

<u>ate</u>

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=5SJ4102-8HG40

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

https://support.industry.siemens.com/cs/ww/en/ps/5SJ4102-8HG40

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4102-8HG40

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications

