## **SIEMENS**

Data sheet 5SJ4106-8HG40



Miniature circuit breaker 240 V 14kA, 1-pole, D, 6 A, D=70 mm according to UL 489, equal polarity

product brand name product designation design of the product  Miniature circuit breakers Miniature circuit-breaker SSJ4  General technical data number of poles Interpling 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 EC 750 overvoltage category degree of pollution  Voltage  Type of voltage / of the operating voltage Insulation voltage (II) / at AC / rated value  440 V  Supply voltage supply voltage / at AC / rated value  440 V  Supply voltage / at AC / rated value  440 V  Supply voltage / at AC / rated value  440 V  Supply voltage / at AC / rated value  440 V  Supply voltage / at AC / rated value  540 V  540 V  550 V  560 V  570 V  560 V  570 V	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  degree of pollution  Voltage  type of voltage / of the operating voltage  insulation voltage (II) / at AC / rated value  operating voltage  supply voltage / at AC / rated value  • at CA / 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  • at Case of the companies of the	product brand name	SENTRON	
Ceneral technical data	product designation	Miniature circuit breakers	
Itipping 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  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 DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  • at DC / single frequency / rated value  Protection class IP Switching capacity switching capacity switching capacity switching capacity 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 • at 40 °C / rated value • at 30 °C / rated value • at 40 °C / rated value	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 2042 / according to EEC 750 overvoltage category degree of pollution 3  Voltage type of voltage / of the operating voltage insulation voltage (Uii) / 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 / 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 supply voltage frequency / rated value  50 Hz  Protection class protection class IP  IP20, with connected conductors, IP 40 in the handle range  withing capacity switching capacity switching capacity switching capacity switching capacity switching capacity current a 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 operational current at 30 °C / rated value  6 A 6 A 6 A	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  **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  **Protection class IP  **Switching capacity current**  **a 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**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **port of the operating voltage of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **port of the operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current**  **power loss [W] / for rated value / for per pole	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 / of the operating voltage 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 / rated value / maximum  • at DC / rated value / 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  supply voltage frequency / rated value  **Protection class**  protection class IP  Switching capacity  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  2.7 W  bissipation  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	tripping characteristic class	D	
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  Supply 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 / 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  switching capacity current  according to IEC 60947-2 / rated value  10 kA  according to IEC 60947-2 / rated value  2.7 W  blassipation  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  6 A  ac 40 °C / rated value  6 A  6 A	mechanical service life (switching cycles) / typical	10 000	
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  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 EC 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  operational current  at 30 °C / rated value  6 A  6 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  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  Protection class  protection class IP  Protection class IP  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  2.7 W  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  • at 40 °C / rated value  • 6 A  • at 40 °C / rated value  • 6 A		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  oxide (CSA C22.2 No. 5-02 / maximum)  supply voltage frequency / rated value  protection class protection class protection class IP    IP20, with connected conductors, IP 40 in the handle range    Switching capacity current	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  400 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  50 Hz  Protection class protection class IP  IP20, with connected conductors, IP 40 in the handle range  Switching capacity switching capacity current  • 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 0°C / rated value  • at 40 °C / rated value	degree of pollution	3	
insulation voltage (Ui) / at AC / rated value  Supply voltage  supply voltage   440 V    Operating 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 / maximum   60 V    • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum   60 V    cSA C22.2 No. 5-02 / maximum   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   10 kA    • according to IEC 60947-2 / rated value   15 kA    Dissipation   2.7 W    Operational current   • at 30 °C / rated value   6 A    • at 40 °C / rate	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  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 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  operational current • at 30 °C / rated value 6 A • at 40 °C / rated value 6 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  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  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  • AC / rated value  6 A  • at 40 °C / rated value  6 A	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  Switching capacity  switching capacity current  • 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  operational current  • at 30 °C / rated value  • at 40 °C / rated value  6 A  • at 40 °C / rated value  6 A	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  Switching capacity  switching capacity current  according to EN 60898 / 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  6 A  at 40 °C / rated value  6 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  6 A • at 40 °C / rated value  6 A	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  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  6 A  6 A  6 A	•	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  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  • at 40 °C / rated value  6 A	<ul><li>at DC / rated value / maximum</li></ul>	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  6 A  • at 40 °C / rated value  6 A		60 V	
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  1P20, with connected conductors, IP 40 in the handle range  10 kA  15 kA  2.7 W  6 A  6 A	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  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 6 A	Protection class		
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  6 A	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  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  6 A  at 40 °C / rated value  6 A	Switching capacity		
<ul> <li>according to IEC 60947-2 / rated value</li> <li>Dissipation</li> <li>power loss [W] / for rated value of the current / at AC / in hot operating state / per pole</li> <li>Current</li> <li>operational current</li> <li>at 30 °C / rated value</li> <li>at 40 °C / rated value</li> <li>6 A</li> <li>at 40 °C / rated value</li> <li>6 A</li> </ul>	switching capacity current		
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  6 A	<ul> <li>according to EN 60898 / rated value</li> </ul>	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  6 A	<ul> <li>according to IEC 60947-2 / rated value</li> </ul>	15 kA	
hot operating state / per pole  Current  operational current  • at 30 °C / rated value  • at 40 °C / rated value  6 A	<b>Dissipation</b>		
operational current  • at 30 °C / rated value  • at 40 °C / rated value  6 A  6 A		2.7 W	
<ul> <li>at 30 °C / rated value</li> <li>at 40 °C / rated value</li> <li>6 A</li> <li>6 A</li> </ul>	Current		
• at 40 °C / rated value 6 A	operational current		
	• at 30 °C / rated value	6 A	
• at 45 °C / rated value 5.8 A	• at 40 °C / rated value	6 A	
	• at 45 °C / rated value	5.8 A	

<ul> <li>at 50 °C / rated value</li> </ul>	5.7 A	
<ul> <li>at 55 °C / rated value</li> </ul>	5.6 A	
<ul> <li>at 60 °C / rated value</li> </ul>	5.4 A	
at AC / rated value	6 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		
<ul> <li>tunnel terminals top</li> </ul>	No	
<ul> <li>tunnel terminals bottom</li> </ul>	No	
<ul> <li>combined terminal top</li> </ul>	Yes	
combined terminal bottom	Yes	
product feature		
<ul><li>halogen-free</li></ul>	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 (lcn) / 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 mm <sup>2</sup>	
maximum	25 mm²	
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	160 g	
Environmental conditions		
vibration resistance	50 m/s² at 25 to 150Hz and 60m/s² at 35Hz (4sec)	
ambient temperature / during operation	EE *0	
• minimum	55 °C	
maximum  ambient temperature / during storage	25 °C	
ambient temperature / during storage  • minimum	-40 °C	
maximum     maximum	-40 ℃ 75 °C	
	10.0	
Certificates		
reference code	E	
according to EN 61346-2     according to EC 81346-2	F	
according to IEC 81346-2		Declaration of
General Product Approval		Conformity

Confirmation











**Declaration of** Conformity

**Test Certificates** 

other

**Miscellaneous** 

**Special Test Certific-**<u>ate</u>

**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=5SJ4106-8HG40

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

https://support.industry.siemens.com/cs/ww/en/ps/5SJ4106-8HG40

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4106-8HG40">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4106-8HG40</a>

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications

