## SIEMENS

## Data sheet

## 5SJ4101-7HG40



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

product brand name         SENTRON           product designation         Miniature circuit breakers           design of the product         Miniature circuit-breaker SSI4           General technical data         1           number of poles         1           titpping 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         3           according to EC 204.2 / according to DIN 40719 extended         3           degree of pollution         3           Votage         AC/DC           insulation voltage (UI) / at AC / rated value         440 V           Supply voltage         at AC/DC           insulation voltage (UI) / at AC / rated value         400 V           Operating voltage         at AC / according to UL 489 and CSA C22.2 No.5-C           02 / maximum         60 V           cSA / according to UL 489 and CSA C22.2 No.5-C         120 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 EX	Model	
design of the product     Miniature circuit-breaker 5SJ4       General technical data     1       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 / according to DIN 40719 extended     F       according to IEC 204-27 according to IEC 750     3       overvoltage category     3       degree of pollution     3       Voltage     AC/DC       insulation voltage (U) / at AC / rated value     440 V       Supply voltage / at AC / rated value     440 V       Supply voltage / at AC / rated value     400 V       operating voltage     120 V       e at AC / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / maximum     60 V       e at CC / single channel / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / maximum     60 V       e at CC / single channel / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / maximum     60 V       e at CC / single channel / according to UL 489 and CSA C22.2 No. 5-     120 V       generational cording to EC 60947-2 / rated value     50 Hz       Protection class IP     IP20, with connected conductors, IP 40 in the handl	product brand name	SENTRON
General technical data       1         Itripping 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 DIX 40719 extended according to IEC 204-2 / according to IEC 750       F         overvoltage category       3         degree of pollution       3         Voltage       AC/DC         insulation voltage (JU) / at AC / rated value       440 V         Supply voltage       according to UL 489 and CSA C22.2 No. 5-         02 / maximum       60 V         e at AC / according to UL 489 and CSA C22.2 No. 5-       120 V         02 / maximum       60 V         e at DC / single channel / according to UL 489 and       60 V         e at DC / single channel / according to UL 489 and       60 V         e at DC / single channel / according to UL 489 and       60 V         switching capacity       file (Complete Complete	product designation	Miniature circuit breakers
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 / according to DIN 40719 extended         Suitable for environment B (immunity to interference not applicable)           overvoitage category         3           degree of pollution         3           Voltage         AC/DC           insulation voltage (UI) / at AC / rated value         440 V           Supply voltage / at AC / rated value         400 V           operating voltage         AC/DC           insulation voltage (UI) / at AC / rated value         400 V           operating voltage         at AC / according to UL 489 and CSA C22.2 No. 5-           02 / maximum         60 V           e at DC / single channel / according to UL 489 and         60 V           Supply voltage frequency / rated value         50 Hz           Protection class IP         IP20, with connected conductors, IP 40 in the handle range           Switching capacity current         eaccording to EN 60987 / rated value           e according to EN 60987 / rated value         10 kA           e according to EN 60987 / rated value         1.7 W	design of the product	Miniature circuit-breaker 5SJ4
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 DIX 40719 extended according to IEC 204-2 / according to IEC 750       Suitable for environment B (immunity to interference not applicable)         overvoltage category       3         degree of pollution       3         Vottage       AC/DC         insultation voltage (Ui) / at AC / rated value       440 V         Supply voltage       440 V         operating voltage       400 V         operating voltage       400 V         operating voltage       60 V         e at C / rated value / maximum       60 V         e CX / according to UL 489 and CSA C22.2 No. 5-02 / maximum       60 V         supply voltage frequency / rated value       50 Hz         Protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current <ul> <li>according to EN 60898 / rated value</li> <li>10 kA</li> <li>according to EN 60898</li></ul>	General technical data	
In Solution       10 000         Installation environment regarding EMC       Suitable for environment B (immunity to interference not applicable)         reference code / according to EIC 204-2 / according to EIC 750       F         overvoltage category       3         degree of pollution       3         Voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage / at AC / rated value       400 V         operating voltage       60 V         e at DC / rated value / maximum       60 V         e at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum       50 Hz         Protection class       IP20, with connected conductors, IP 40 in the handle range         Supply voltage frequency / rated value       50 Hz         Protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       0 kA         eaccording to EN 60898 / rated value       10 kA         eaccording to EN 60898 / r	number of poles	1
Installation environment regarding EMC       Suitable for environment B (immunity to interference not applicable)         reference code / according to DIN 40719 extended       F         according to EC 204-2 / according to IEC 750       3         overvoltage category       3         degree of pollution       3         Voltage       AC/DC         Insulation voltage (UI) / at AC / rated value       440 V         Supply voltage       AC/DC         insulation voltage (UI) / at AC / rated value       400 V         operating voltage       400 V         operating voltage       120 V         • at AC / according to UL 489 and CSA C22.2 No. 5-       120 V         02 / maximum       60 V         • at DC / rated value / maximum       60 V         • at DC / rated value / maximum       60 V         • at DC / rated value       50 Hz         Protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       10 kA         • according to IEC 60947-2 / rated value       10 kA         Dissipation       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         operational current       1 A       40 °C / rated value <td>tripping characteristic class</td> <td>С</td>	tripping characteristic class	С
reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750       F         overvoltage category       3         degree of pollution       3         Votage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       according to UL 489 and CSA C22.2 No. 5-         02 / maximum       60 V         • at AC / cated value / maximum       60 V         • at DC / rated value / maximum       60 V         • at DC / rated value / maximum       60 V         • at DC / rated value / maximum       60 V         • at DC / rated value / maximum       60 V         • at DC / rated value       50 Hz         Protection class       IP20, with connected conductors, IP 40 in the handle range         switching capacity current       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         operational current       1 A         • at 30 °C / rated value       1 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       AC/DC         insulation voltage (UI) / at AC / rated value       440 V         Supply voltage / at AC / rated value       440 V         Supply voltage / at AC / rated value       400 V         operating voltage at AC / rated value       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value       60 V         • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / 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       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       10 kA         • according to EIC 60947-2 / rated value       15 kA         Dissipation       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1 A         • at 30 °C / rated value       1 A	installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)
degree of pollution       3         Voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       440 V         Supply voltage       440 V         supply voltage       440 V         operating voltage       400 V         operating voltage       60 V         csa C22.2 No. 5-02 / maximum       60 V         supply voltage frequency / rated value       50 Hz         Protection class       P         protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       0 kA         • according to EN 60898 / rated value       10 kA         • according to EN 60898 / rated value       10 kA		F
Voltage       Voltage         type of voltage / of the operating voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       440 V         supply voltage       400 V         operating voltage       400 V         • at AC / according to UL 489 and CSA C22.2 No. 5-       120 V         02 / maximum       60 V         • at DC / rated value / 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         supply voltage frequency / rated value       50 Hz         Protection class       Protection class IP         growtching capacity       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       10 kA         • according to EN 60898 / rated value       10 kA         • according to EC 60947-2 / rated value       15 kA         Dissipation       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         operational current       1 A         • at 30 °C / rated value       1 A	overvoltage category	3
type of voltage / of the operating voltage         AC/DC           insulation voltage (Ui) / at AC / rated value         440 V           Supply voltage         440 V           supply voltage         400 V           operating voltage         400 V           • at AC / rated value         400 V           • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum         120 V           • at DC / rated value / 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           supply voltage frequency / rated value         50 Hz           Protection class IP         IP20, with connected conductors, IP 40 in the handle range           Switching capacity         switching capacity           switching capacity current         10 kA           • according to IEC 60947-2 / rated value         10 kA           • according to IEC 60947-2 / rated value         1.7 W           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         1.7 W           operational current         1 A           • at 30 °C / rated value         1 A	degree of pollution	3
insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       supply voltage         supply voltage       400 V         operating voltage       400 V         • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum       120 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         supply voltage frequency / rated value       50 Hz         Protection class       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       10 kA         • according to EN 60898 / rated value       10 kA         • according to EC 60947-2 / rated value       15 kA         Dissipation       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         operational current       1 A         • at 30 °C / rated value       1 A	Voltage	
Supply voltage       400 V         operating voltage       400 V         operating voltage       400 V         operating voltage       120 V         02 / maximum       60 V         e at DC / rated value / maximum       60 V         e 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         protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       10 kA         • according to EN 60898 / rated value       10 kA         • according to EC 60947-2 / rated value       15 kA         Dissiplation       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         current       operational current       1 A         • at 30 °C / rated value       1 A	type of voltage / of the operating voltage	AC/DC
supply voltage / at AC / rated value       400 V         operating voltage       400 V         operating voltage       120 V         • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum       120 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         supply voltage frequency / rated value       50 Hz         Protection class       protection class         protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       • according to EN 60898 / rated value         • according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         operational current       1 A         • at 30 °C / rated value       1 A	insulation voltage (Ui) / at AC / rated value	440 V
operating voltage       it AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum       120 V         it at DC / rated value / maximum       60 V         it 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         protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       10 kA         i according to EN 60898 / rated value       10 kA         i according to IEC 60947-2 / rated value       15 kA         Dissipation       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         current       i at 30 °C / rated value       1 A         i at 40 °C / rated value       1 A	Supply voltage	
• at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum         120 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           supply voltage frequency / rated value         50 Hz           Protection class         Frotection 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         10 kA           • according to IEC 60947-2 / rated value         15 kA           Dissipation         1.7 W           corrent         at 30 °C / rated value         1 A           • at 40 °C / rated value         1 A	supply voltage / at AC / rated value	400 V
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         supply voltage frequency / rated value       50 Hz         Protection class       Frotection 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       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       at 30 °C / rated value       1 A         • at 40 °C / rated value       1 A	operating voltage	
• 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       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       10 kA         • according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       Intervent / at AC / in hot operating state / per pole         Current       1.7 W         operational current       1 A         • at 30 °C / rated value       1 A		120 V
CSA C22.2 No. 5-02 / maximum       50 Hz         supply voltage frequency / rated value       50 Hz         Protection class       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       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       1.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         Operational current       1 A         • at 30 °C / rated value       1 A         • at 40 °C / rated value       1 A	<ul> <li>at DC / rated value / maximum</li> </ul>	60 V
Protection class       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       • according to EN 60898 / rated value         • according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       n         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         Current       • at 30 °C / rated value       1 A         • at 40 °C / rated value       1 A		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       10 kA         • according to IEC 60947-2 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation	supply voltage frequency / rated value	50 Hz
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       1.7 W         Current       operational current         • at 30 °C / rated value       1 A         • at 40 °C / rated value       1 A	Protection class	
switching capacity current       10 kA         • according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       15 kA         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         Current       operational current         • at 30 °C / rated value       1 A         • at 40 °C / rated value       1 A	protection class IP	IP20, with connected conductors, IP 40 in the handle range
<ul> <li>according to EN 60898 / rated value</li> <li>according to IEC 60947-2 / rated value</li> <li>10 kA</li> <li>according to IEC 60947-2 / rated value</li> <li>15 kA</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>1 A</li> <li>at 40 °C / rated value</li> </ul>	Switching capacity	
e 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     e at 30 °C / rated value     1 A     e at 40 °C / rated value     1 A	switching capacity current	
Dissipation         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.7 W         Current         operational current • at 30 °C / rated value       1 A         • at 40 °C / rated value       1 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       1.7 W         hot operating state / per pole       1.7 W         Current       operational current         • at 30 °C / rated value       1 A         • at 40 °C / rated value       1 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  1 A  • at 40 °C / rated value  1 A	Dissipation	
operational current     1 A       • at 30 °C / rated value     1 A       • at 40 °C / rated value     1 A		1.7 W
• at 30 °C / rated value 1 A     • at 40 °C / rated value 1 A	Current	
• at 40 °C / rated value 1 A	operational current	
	• at 30 °C / rated value	1 A
• at 45 °C / rated value 0.96 A	• at 40 °C / rated value	1 A
	• at 45 °C / rated value	0.96 A

a at E0 °C / rated value	0.0.4	
• at 50 °C / rated value	0.9 A	
• at 55 °C / rated value	0.9 A	
• at 60 °C / rated value	0.84 A	
at AC / rated value	1 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	
<ul> <li>combined terminal top</li> </ul>	Yes	
<ul> <li>combined terminal bottom</li> </ul>	Yes	
product feature		
halogen-free	Yes	
• sealable	Yes	
sellable     silicon-free	Yes	
product extension / installable / supplementary devices	Yes	
Product function	100	
	Terminal tightening termus for Our CO/75%Or 2 5Nm	
product function / note	Terminal tightening torque for Cu, 60/75°C; 3.5Nm/	311D.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 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	 164 g	
Environmental conditions		
vibration resistance	50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec)	
ambient temperature / during operation		
minimum	55 °C	
• maximum	-25 °C	
ambient temperature / during storage	-20 0	
minimum	-40 °C	
• manimum • maximum	-40 C 75 °C	
Certificates		
reference code	_	
according to EN 61346-2	F	
according to IEC 81346-2	F	
General Product Approval		Declaration of Conformity

CCC	<u>Confirmation</u>		DE VDE	EHC	
Declaration of Conformity	Test Certificates		other		
CE EG-Konf.	<u>Miscellaneous</u>	<u>Special Test Certific-</u> <u>ate</u>	<u>Miscellaneous</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=5SJ4101-7HG40 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SJ4101-7HG40 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4101-7HG40 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications

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