## SIEMENS

## Data sheet

## 5SJ4118-6HG40



Miniature circuit breaker 240 V 14kA, 1-pole, B, 15 A, 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           Ceneral technical data         1           number of poles         1           titpping characteristic class         B           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           Voltage         400 V           type of voltage (UI) / at AC / rated value         400 V           Supply voltage         at AC / rated value           e at DC / rated value         400 V           operating voltage         at DC / rated value           e at DC / rated value         50 V           cSaz 2No. 5-02 / maximum         60 V           cSaZ 22: No. 5-02 / maximum         60 V           cSaZ 22: No. 5-02 / maximum         60 V           cSaz 22: No. 5-02 / maximum         50 Hz           Protection class IP         IP20, with connected conductors, IP 40 in the handl	Model		
design of the product     Miniature circuit-breaker 5SJ4       General technical data     1       number of poles     1       tripping characteristic class     B       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       gene of the preventing according to UL 480 and CSA C22.2 No. 5-     120 V       e at CO / single channel / according to UL 489 and CSA C22.2 No. 5- </td <td>product brand name</td> <td>SENTRON</td>	product brand name	SENTRON	
General technical data         number of poles       1         tripping characteristic class       B         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 DEC 204-2 / according to EC 750       F         overvoltage category       3         degree of pollution       3         Voltage       AC/DC         insulation voltage (JU) / at AC / rated value       440 V         Supply voltage       at AC / 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         supply voltage frequency / rated value       50 Hz         Protection class IP       IP20, with connected conductors, IP 40 in the handle range         switching capacity       10 kA         e according to EI 60987-2 / rated value       10 kA         e according to EI 60988 / rated value       10 kA         e according to the current / at AC / in       2 W         Dissipation       2 W         pore loss [W] / for rate	product designation	Miniature circuit breakers	
number of poles         1           tripping characteristic class         B           mechanical service life (switching cycles) / typical         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         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         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         according to EK 60947-2 / rated value           • according to EK 60947-2 / rated value         10 kA           • according to EK 60947-2 / rated value         15 A           Overtational current         15 A	design of the product	Miniature circuit-breaker 5SJ4	
tripping characteristic class     B       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       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       e at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum     120 V       e 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 CSA C22.2 No. 5-02 / maximum     50 Hz       protection class IP     IP20, with connected conductors, IP 40 in the handle range       switching capacity     10 kA       sacording to EN 60898 / rated value     10 kA       e according to EN 60898 / rated value     10 kA       e according to EN 60898 / rated value     10 kA       e according to EN 60898 / rated value     10 kA       e according to EN 60898 / rated value     10 kA       e according to EN 60898 / rated value     10 kA       e according to EN 60898 / rated value     15 kA <td colspan="3">General technical data</td>	General technical data		
Impediantical service life (switching cycles) / typical       10 000         Installation environment regarding EMC       Suitable for environment B (immunity to interference not applicable)         reference code / according to EIC 750       F         overvoltage category       3         degree of pollution       3         Voltage          type of voltage / of the operating voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       400 V         operating voltage       400 V         operating voltage       60 V         operating voltage for a coording to UL 489 and CSA C22.2 No. 5-0 2/ maximum       60 V         et at DC / rated value / maximum       60 V         et at DC / single channel / according to UL 489 and CSA C22.2 No. 5-0 2/ maximum       50 Hz         Protection class       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       according to EC 60947-2 / rated value         eacording to EC 60947-2 / rated value       10 kA         eacording to EC 60947-2 / rated value       2 W         Dissipation       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         Operational current       15 A	number of poles	1	
installation environment regarding EMC         Suitable for environment B (immunity to interference not applicable)           reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750         3           overvoltage category         3           degree of pollution         3           Voitage         AC/DC           insulation voitage (UI) / at AC / rated value         440 V           Supply voltage         AC/DC           insulation voitage (UI) / at AC / rated value         400 V           operating voltage         according to UL 489 and CSA C22.2 No. 5- 02 / maximum           • at BC / rated value / maximum         60 V           • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum         50 Hz           Protection class IP         IP20, with connected conductors, IP 40 in the handle range           Switching capacity         10 kA           • 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           • according to IEC 60947-2 / rated value         15 KA	tripping characteristic class	В	
reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750       3         overvoltage category       3         degree of pollution       3         Vottage       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 / 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       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 W         Dissipation       2 W         operational current       15 A         • at 40 °C / rated value       15 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       400 V         operating voltage       41 AC / rated value         otat AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum       120 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       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       10 kA         • according to EIC 60947-2 / rated value       10 kA         • according to EIC 60947-2 / rated value       15 kA         Dissipation       2 W         operating state / per pole       2 W         operating state / per pole       15 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       A40 V         Supply voltage       440 V         supply voltage / at AC / rated value       440 V         operating 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       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         • according to IEC 60947-2 / rated value       15 kA         Dissipation       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         current       43 0 °C / rated value       15 A         • at 40 °C / rated value       15 A		F	
Voltage       Vpe of voltage / of the operating voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       440 V         Supply voltage / at AC / rated value       400 V         operating voltage       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       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value / maximum       60 V         • at DC / rated value / 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       2 W         operating state / per pole       15 A         • at 40 °C / rated value       15 A	overvoltage category	3	
type of voltage / of the operating voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         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 / rated value / maximum       60 V         • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum       50 Hz         Protection class       50 Hz         Protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       10 kA         • according to IEC 60947-2 / rated value       10 kA         • according to IEC 60947-2 / rated value       12 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         operational current       15 A         • at 30 °C / rated value       15 A	degree of pollution	3	
insulation voltage (Ui) / at AC / rated value     440 V       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 EC 60947-2 / rated value     10 kA       • according to EC 60947-2 / rated value     12 kA       Dissipation     2 W       power loss [W] / for rated value of the current / at AC / in hot operating state / per pole     2 W       operating loss for rated value     15 A       • at 40 °C / rated value     15 A	Voltage		
Supply voltage       400 V         operating voltage       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 / rated value / maximum       60 V         • at DC / rated value / maximum       60 V         supply voltage frequency / rated value       50 Hz         Protection class       1P20, with connected conductors, IP 40 in the handle range         Switching capacity       10 kA         • according to EN 60898 / rated value       10 kA         • according to EC 60947-2 / rated value       15 kA         Dissipation       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         current       at 30 °C / rated value       15 A         • at 40 °C / rated value       15 A	type of voltage / of the operating voltage	AC/DC	
supply voltage / at AC / rated value       400 V         operating voltage       410 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       1P20, with connected conductors, IP 40 in the handle range         switching capacity       10 kA         • according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         current       at 30 °C / rated value       15 A         • at 40 °C / rated value       15 A	insulation voltage (Ui) / at AC / rated value	440 V	
operating voltage <ul> <li>at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum</li> <li>at DC / rated value / maximum</li> <li>at DC / rated value / maximum</li> <li>60 V</li> <li>at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum</li> <li>supply voltage frequency / rated value</li> <li>50 Hz</li> </ul> <li>Protection class         <ul> <li>protection class IP</li> <li>IP20, with connected conductors, IP 40 in the handle range</li> <li>Switching capacity current</li></ul></li>	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         50 Hz           switching capacity current         10 kA           • according to IEC 60947-2 / rated value         10 kA           • according to IEC 60947-2 / rated value         15 kA           Dissipation         2 W           current         at 30 °C / rated value           • at 30 °C / rated value         15 A           • at 40 °C / rated value         15 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       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       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         current       at 30 °C / rated value       15 A         • at 40 °C / rated value       15 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       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         operational current       15 A         • at 30 °C / rated value       15 A         • at 40 °C / rated value       15 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       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current <ul> <li>according to EN 60898 / rated value</li> <li>to kA</li> <li>according to IEC 60947-2 / rated value</li> <li>to kA</li> <li>power loss [W] / for rated value of the current / at AC / in hot operating state / per pole</li> </ul> 2 W         Current <ul> <li>at 30 °C / rated value</li> <li>to A</li> <li>at 40 °C / rated value</li> <li>to A</li> <li>at 40 °C / rated value</li> </ul>	<ul> <li>at DC / rated value / maximum</li> </ul>	60 V	
Protection class       IP30, 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       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         Current       • at 30 °C / rated value       15 A         • at 40 °C / rated value       15 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       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         Current       operational current         • at 30 °C / rated value       15 A         • at 40 °C / rated value       15 A	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       2 W         Current       operational current         • at 30 °C / rated value       15 A         • at 40 °C / rated value       15 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       2 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         Current       0perational current         • at 30 °C / rated value       15 A         • at 40 °C / rated value       15 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> </ul> Dissipation           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         2 W           Current         2 W           operational current         15 A           • at 30 °C / rated value         15 A           • at 40 °C / rated value         15 A	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     15 A     e at 40 °C / rated value	switching capacity current		
Dissipation         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       2 W         Current       0perational current <ul> <li>at 30 °C / rated value</li> <li>15 A</li> <li>at 40 °C / rated value</li> <li>15 A</li> </ul>	<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     2 W       Current     0perational current • at 30 °C / rated value     15 A       • at 40 °C / rated value     15 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  15 A	Dissipation		
operational current     15 A       • at 40 °C / rated value     15 A		2 W	
• at 30 °C / rated value     15 A     15 A     15 A	Current		
• at 40 °C / rated value 15 A	operational current		
	• at 30 °C / rated value	15 A	
• at 45 °C / rated value 14.6 A	• at 40 °C / rated value	15 A	
	• at 45 °C / rated value	14.6 A	

• at 50 °C / rated value	14.1 A
• at 55 °C / rated value	13.6 A
• at 60 °C / rated value	13.2 A
at AC / rated value	15 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 (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 mm <sup>2</sup>
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	167 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	
• minimum	-40 °C
• maximum	75 °C
Certificates	
reference code	
<ul> <li>according to EN 61346-2</li> </ul>	F
according to IEC 81346-2	F
General Product Approval	Declaration of Conformity



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=5SJ4118-6HG40 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SJ4118-6HG40 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4118-6HG40 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications

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