# SIEMENS

### Data sheet

## 5SJ4125-6HG40



Miniature circuit breaker 240 V 14kA, 1-pole, B, 25A, 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         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           according to DIN 40719 extended         F           according to DIN 40719 extended         3           ververollage category         3           degree of pollution         3           Votage         f           supply vottage (UI) / at AC / rated value         440 V           Supply vottage         at AC / rated value           • at DC / according to UL 489 and CSA C22.2 No.5-0         120 V           02 / maximum         60 V           cSA C / according to UL 489 and CSA C22.2 No.5-0         120 V           supply voltage frequency / rated value         50 Hz           Protection class         protection class	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 / rated value       supply voltage / of the operating 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 C / rated value       • at CC / rated value / maximum     60 V       • at CC / rated value / maximum     60 V       • at CC / rated value / maximum     60 V       • at CC / rated value / maximum     50 Hz       Protection class     P       protection class IP     IP20, with connected conductors, IP 40 in the handle range       Switching capacity     switching capacity       switching capacity current     10 kA       • according to EC 60947-2 / rated value<	product brand name	SENTRON	
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 DEX 2042 / 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       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         e according to EN 60898 / rated value       50 Hz         Protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity       saccording to EN 60898 / rated value         e according to EN 60898 / rated value       10 kA         e according to EN 60898 / rat	product designation	Miniature circuit breakers	
number of poles         1           tripping characteristic class         B           mechanical service life (switching cycles) / typical         0 000           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         S           overvoitage category         3           degree of pollution         3           Voltage         AC/DC           insulation voltage (UI) / at AC / rated value         440 V           Supply voltage / of the operating voltage insulation voltage (UI) / at AC / rated value         400 V           Supply voltage / at AC / rated value         400 V           operating voltage / according to UL 489 and CSA C22.2 No. 5- 02 / maximum         120 V           • at DC / single channel / 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 IP         IP20, with connected conductors, IP 40 in the handle range           Switching capacity current         • • according to EN 60987 / rated value         10 kA           • according to EC 60947-2 / rated value         10 kA         15 kA	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     440 V       Supply voltage     400 V       operating voltage     400 V       supply voltage     400 V       operating voltage     60 V       e at C/ according to UL 489 and CSA C22.2 No. 5- 02 / maximum     60 V       e at C / rated value / maximum     60 V       e at C / 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       saccording 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 <tr< td=""><td colspan="3">General technical data</td></tr<>	General technical data		
In Solution       10 000         Installation environment regarding EMC       Suitable for environment B (immunity to interference not applicable)         reference code / according to DIN 40719 extended       according to EC 204-2 / according to EC 750         overvoltage category       3         degree of pollution       3         Voltage       total according to EC 700         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage / at AC / rated value       400 V         operating voltage       60 V         c 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 curent       according to EN 60898 / rated value </td <td>number of poles</td> <td>1</td>	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       440 V         Supply voltage / at AC / rated value       400 V         operating voltage       acc / according to UL 489 and CSA C22.2 No. 5-         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       according to IEC 60947-2 / rated value         • according to IEC 60947-2 / rated value       10 kA         • according to IEC 60947-2 / rated value       3.1 W         Dissipation       3.1 W         operating state / per pole       25 A         • at 30 °C / rated value       25 A	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         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       3.1 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.1 W         corrent       25 A       25 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         • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum       120 V         • at DC / single channel / 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       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 current       10 kA         • according to EIC 60947-2 / rated value       10 kA         • according to EIC comet value of the current / at AC / in hot operating state / per pole       3.1 W         <	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         cst 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 IEC 60947-		F	
Voltage       Voltage         type of voltage / of the operating voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       400 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         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 IEC 60947-2 / rated value       15 kA         Dissipation       3.1 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.1 W         operational current       e at 30 °C / rated value       25 A         • at 40 °C / rated value       25 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           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         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 current           • according to IEC 60947-2 / rated value         10 kA           • according to IEC 60947-2 / rated value         15 kA           Dissipation         3.1 W           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         3.1 W           operational current         25 A           • at 40 °C / rated value         25 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     15 kA       Dissipation     3.1 W       power loss [W] / for rated value of the current / at AC / in hot operating state / per pole     3.1 W       operational current     act 30 °C / rated value     25 A       • at 40 °C / rated value     25 A	Voltage		
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       1P20, 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       3.1 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.1 W         current       at 30 °C / rated value       25 A         • at 40 °C / rated value       25 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       3.1 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.1 W         current       at 30 °C / rated value       25 A         • at 40 °C / rated value       25 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         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         3.1 W           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         3.1 W           current         • at 30 °C / rated value         25 A           • at 40 °C / rated value         25 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       3.1 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.1 W         current       e at 30 °C / rated value       25 A         e at 40 °C / rated value       25 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       protection class IP         protecting 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       gover loss [W] / for rated value of the current / at AC / in hot operating state / per pole         Current       • at 30 °C / rated value       25 A         • at 40 °C / rated value       25 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> 3.1 W         Current <ul> <li>at 30 °C / rated value</li> <li>at 30 °C / rated value</li> <li>to at 40 °C / rated value</li> <li>to at 40 °C / rated value</li> </ul>	<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       power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         Current       • at 30 °C / rated value         • at 30 °C / rated value       25 A         • at 40 °C / rated value       25 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       3.1 W         Current       operational current         • at 30 °C / rated value       25 A         • at 40 °C / rated value       25 A	Protection class		
switching capacity current       according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       5 kA         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.1 W         Current       operational current         • at 30 °C / rated value       25 A         • at 40 °C / rated value       25 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         3.1 W             Current         0           operational current         25 A           • at 40 °C / rated value         25 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     25 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       3.1 W         Current         operational current • at 30 °C / rated value       25 A         • at 40 °C / rated value       25 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       3.1 W         hot operating state / per pole       3.1 W         Current       operational current         • at 30 °C / rated value       25 A         • at 40 °C / rated value       25 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  25 A	Dissipation		
operational current     25 A       • at 40 °C / rated value     25 A		3.1 W	
• at 30 °C / rated value 25 A     • at 40 °C / rated value 25 A	Current		
• at 40 °C / rated value 25 A	operational current		
	• at 30 °C / rated value	25 A	
• at 45 °C / rated value 24.25 A	• at 40 °C / rated value	25 A	
	• at 45 °C / rated value	24.25 A	

• at 50 °C / rated value	23.5 A
• at 55 °C / rated value	22.7 A
• at 60 °C / rated value	22 A
at AC / rated value	25 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	166 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



**Confirmation** 

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#### Test Certificates

Miscellaneous

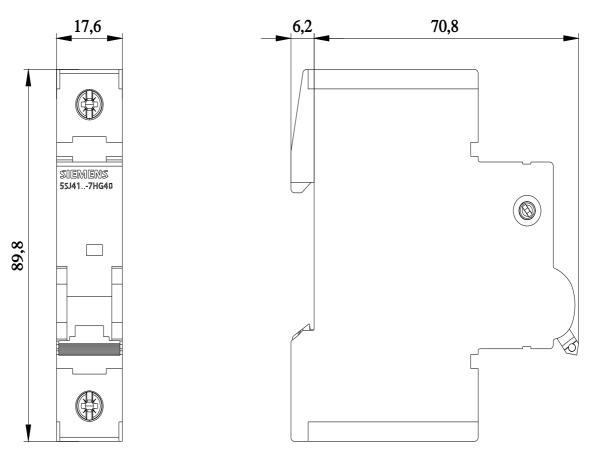
Special Test Certific- Miscellaneous

other

#### 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=5SJ4125-6HG40 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SJ4125-6HG40 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4125-6HG40 CAx-Online-Generator http://www.siemens.com/cax Tender specifications

http://www.siemens.com/specifications



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