# SIEMENS

## Data sheet

## 5SJ4135-6HG40



Miniature circuit breaker 240 V 14kA, 1-pole, B, 35 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         Immet of poles           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 DN 40719 extended         3           according to IEC 2042 / according to IEC 750         overwoldage category           overwoldage category         3           degree of pollution         3           Voltage         440 V           Supply voltage (UI) / at AC / rated value         400 V           operating voltage         120 V           e at DC / rated value / maximum         60 V           e at DC / rated value / maximum         60 V           e at DC / 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           e according to IEC 8098 / rated value	Model		
design of the product     Miniature circuit-breaker 5SJ4       Ceneral 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 (UI) / at AC / rated value     440 V       Supply voltage     at AC / rated value       • at AC / according to UL 489 and CSA C22.2 No. 5-     120 V       02 / maximum     60 V       • at CC / rated value     50 Hz       Protection class IP     IP20, with connected conductors, IP 40 in the handle range       Switching capacity current     0 kA       • according to EX 60989 / rated value     10 kA       • according to EX 60989 / rated value     10 kA       Dissipation     3.7 W       prover loss [W] / for rated value of the current / at AC / ring     3.7 W       for current     • at 30 °C / rated value     3.7 W	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 EIC 204-2 / according to IEC 750       F         overvoltage category       3         degree of polution       3         Voltage       AC/DC         insulation voltage (JU) / at AC / rated value       440 V         Supply voltage       at AC / rated value         • at AC / according to UL 489 and CSA C22.2 No. 5-       120 V         02 / according to UL 489 and CSA C22.2 No. 5-       120 V         • at DC / single channel / according to UL 489 and       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 EIC 60947-2 / rated value         • according to EIC 60947-2 / rated value       10 kA         • according to EIC 60947-2 / rated value       10 kA         • according to EIC 60947-2 / rated value       3.7 W         Dissipation       3.7 W	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 according to IEC 204-2 / according to IEC 750       Suitable for environment B (immunity to interference not applicable)         overvoitage category       3         degree of pollution       3         Votage       AC/DC         insulation voltage (U) / at AC / rated value       440 V         Supply voltage / at AC / rated value       400 V         operating voltage       acC/DC         insulation voltage (U) / 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 / 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       3.7 W         power	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 DIN 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 outgage (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 CC / 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     switching capacity       switching capacity current     0 kA       e according to EN 60898 / rated value     10 kA       power loss [W] / for rated value     10 kA       power loss [W] / for rated value     3.7 W       operating state / per pole     3.7 W	General technical data		
Impediancial service life (switching cycles) / typical       10 000         Installation environment regarding EMC       Suitable for environment B (immunity to interference not applicable)         reference code / according to EC 750       3         overvoltage category       3         degree of pollution       3         Voltage       + according to EC 750         jppe of voltage / at AC / rated value       440 V         Supply voltage / 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         et AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum       60 V         et AC / rated value / maximum       60 V         et AC / rated value / maximum       60 V         et AC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum       50 Hz         Protection class       F         protection class IP       IP20, with connected conductors, IP 40 in the handle range         Switching capacity current       -         eaccording to EC 60947-2 / rated value       10 kA         eaccording to EC 60947-2 / rated value       10 kA         operational current       -         eat 40 °C / rated value       35 A         of C / rate	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 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         according to UL 489 and CSA C22.2 No. 5-           02 / maximum         60 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         50 Hz           Protection class         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         15 kA           Dissipation         3.7 W           poreational current         according to IEC 60947-2 / rated value           • at 30 °C / rated value         3	tripping characteristic class	В	
reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750       F         overvoltage category       3         degree of pollution       3         Vottage       AC/DC         insulation voltage (U) / at AC / rated value       440 V         Supply voltage       AC/DC         insulation voltage (U) / at AC / rated value       440 V         Supply voltage       at AC / according to UL 489 and CSA C22.2 No. 5-         02 / maximum       60 V         • at BC / rated value / maximum       60 V         • at BC / rated value / maximum       60 V         • at BC / rated value / maximum       60 V         • at BC / rated value / maximum       60 V         • at BC / rated value / maximum       60 V         • at BC / rated value / maximum       60 V         • at BC / 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       saccording to EC 60947-2 / rated value         • according to EN 60898 / rated value       10 kA         • according to EC 60947-2 / rated value       3.7 W         Dissipation       3.7 W         operational current	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       400 V         supply voltage / of the operating voltage       AC/DC         insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       440 V         operating voltage       400 V         operating voltage       400 V         o 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       10 kA         • according to EIN 60898 / rated value       10 kA         • according to EIN 60898 / rated value       10 kA         • according to EIN 60898 / rated value       3.7 W         Dissipation       3.7 W         portestional current       430 °C / rated value         • at 30 °C / rated value       35 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       Ad/0 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- 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       IP         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 60947-2 / rated value       15 kA         Dissipation       3.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.7 W         current       35 A         • at 30 °C / rated value       35 A		F	
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 / 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       400 V         operating voltage / at AC / rated value       400 V         operating voltage / at AC / rated value / maximum       60 V         e at DC / rated value / 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       10 kA         • according to EIC 60947-2 / rated value       10 kA         • according to EIC 60947-2 / rated value       3.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.7 W         operational current       35 A         • at 40 °C / rated value       35 A <td>overvoltage category</td> <td>3</td>	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         50 Hz           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 EN 60898 / rated value         10 kA           • according to IEC 60947-2 / rated value         15 kA           Dissipation         3.7 W           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         35 A           operational current         35 A	degree of pollution	3	
insulation voltage (Ui) / at AC / rated value       440 V         Supply voltage       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 / 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       supply to Ire C 60947-2 / rated value         switching to EC 60947-2 / rated value       10 kA         • according to EC 60947-2 / rated value       10 kA         • according to EC 60947-2 / rated value       15 kA         Dissipation       3.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.7 W         operational current       35 A         • at 0 °C / rated value       35 A	Voltage		
Supply voltage / 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 / 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 IEC 60947-2 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       3.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.7 W         current       at 30 °C / rated value       35 A         • at 0°C / rated value       35 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       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     50 Hz       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     10 kA       • according to IEC 60947-2 / rated value     3.7 W       power loss [W] / for rated value of the current / at AC / in hot operating state / per pole     3.7 W       current     at 30 °C / rated value     35 A       • at 0 °C / rated value     35 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>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 IP</li> <li>IP20, with connected conductors, IP 40 in the handle range</li> <li>Switching capacity current         <ul> <li>according to EN 60898 / rated value</li> <li>to kA</li> <li>according to EIC 60947-2 / rated value</li> <li>to kA</li> </ul> </li> <li>prover loss [W] / for rated value of the current / at AC / in hot operating state / per pole</li> <li>Current         <ul> <li>at 30 °C / rated value</li> <li>at 40 °C / rated value</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         switching capacity current           • according to EN 60898 / rated value         10 kA           • according to IEC 60947-2 / rated value         15 kA           Dissipation         3.7 W           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         3.7 W           current         at 30 °C / rated value         35 A           • at 40 °C / rated value         35 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       3.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.7 W         current       at 30 °C / rated value       35 A         • at 40 °C / rated value       35 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 current       10 kA         • according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       3.7 W         current       • at 30 °C / rated value         • at 30 °C / rated value       35 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       according to EN 60898 / rated value         • according to EN 60898 / rated value       10 kA         • according to IEC 60947-2 / rated value       15 kA         Dissipation       3.7 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.7 W         Operational current       at 30 °C / rated value       35 A         • at 40 °C / rated value       35 A	<ul> <li>at DC / rated value / maximum</li> </ul>	60 V	
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       35 A         • at 40 °C / rated value       35 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       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       35 A         • at 40 °C / rated value       35 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         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       35 A         • at 40 °C / rated value       35 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       0         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.7 W         Current       0         operational current       35 A         • at 40 °C / rated value       35 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         <ul> <li>at 30 °C / rated value</li> <li>35 A</li> <li>at 40 °C / rated value</li> <li>35 A</li> </ul> </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     35 A     e at 40 °C / rated value     35 A	switching capacity current		
Dissipation         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       3.7 W         Current       operational current <ul> <li>at 30 °C / rated value</li> <li>35 A</li> <li>at 40 °C / rated value</li> <li>35 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     3.7 W       Current	<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       35 A         • at 40 °C / rated value       35 A	Dissipation		
operational current     35 A       • at 30 °C / rated value     35 A       • at 40 °C / rated value     35 A		3.7 W	
• at 30 °C / rated value 35 A • at 40 °C / rated value 35 A	Current		
• at 40 °C / rated value 35 A	operational current		
	• at 30 °C / rated value	35 A	
• at 45 °C / rated value 34 A	• at 40 °C / rated value	35 A	
	• at 45 °C / rated value	34 A	

	20.0 Å
• at 50 °C / rated value	32.9 A
• at 55 °C / rated value	31.8 A
• at 60 °C / rated value	30.8 A
at AC / rated value	35 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
<ul> <li>combined terminal bottom</li> </ul>	Yes
product feature	
<ul> <li>halogen-free</li> </ul>	Yes
sealable	Yes
<ul> <li>silicon-free</li> </ul>	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 /	14 kA
according to UL 1077 and CSA C22.2 No.235	
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	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	
• minimum	-40 °C
• maximum	75 °C
Certificates	
reference code	
according to EN 61346-2	F
according to IEC 81346-2	F
General Product Approval	Declaration of Conformity
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**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=5SJ4135-6HG40 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SJ4135-6HG40 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4135-6HG40 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications

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