## **SIEMENS**

Data sheet 5SJ4135-8HG40



Miniature circuit breaker 240 V 10kA, 1-pole, D, 35 A, D=70 mm according to UL 489, equal polarity

product brand name product designation design of the product  General technical data number of poles mechanical service life (switching cycles) / typical installation environment regarding EMC reference code / according to Din 40719 extended according to IEC 2042 / according to IEC 750 overvoltage category degree of pollution  Voltage type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value  at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  at DC / rated value / maximum  protection class IP  IP20, with connected conductors, IP 40 in the handle range  Switching capacity switching capacity switching capacity switching capacity switching state / per pole  Current  operational current  at 30 °C / rated value  at 40 °C / rated value  at 40 °C / rated value  at 30 °C / rated value  at 40 °C / rated value  at 40 °C / rated value  at 40 °C / rated value  35 A  at 40 °C / rated value  at 40 °C / rated value  at 40 °C / rated value  35 A  at 40 °C / rated value	Model	
design of the product  General technical data  number of poles  tripping characteristic class  mechanical service life (switching cycles) / typical  installation environment regarding EMC  reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750  overvoltage category  degree of pollution  Voltage  type of voltage / of the operating voltage  insulation voltage (II) / at AC / rated value  operating voltage  supply voltage / at AC / rated value  e at CA / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  e at DC / rated value / maximum  e at DC / rated value / maximum  e at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  protection class IP  Front in the handle range  Switching capacity  switching capacity  switching capacity  switching capacity  switching capacity current  e according to IE 60947-2 / rated value  for the operating voltage in the handle of the current / at AC / in hot operating state / per pole  Current  e at 30 °C / rated value  e at 30 °C / rated value  e at 30 °C / rated value  for current  e at 30 °C / rated value  e at 40 °C / rated value  35 A  35 A	product brand name	SENTRON
Ceneral technical data   1	product designation	Miniature circuit breakers
Itipping characteristic class D mechanical service life (switching cycles) / typical Installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 overvoltage category degree of pollution  Voltage type of voltage / of the operating voltage insulation voltage (UI) / at AC / rated value operating voltage • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  • at DC / single frequency / rated value  Protection class IP Switching capacity switching capacity switching capacity switching capacity power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current • at 30 °C / rated value • at 40 °C / rated value • at 40 °C / rated value • at 30 °C / rated value • at 40 °C / rated value	design of the product	Miniature circuit-breaker 5SJ4
tripping characteristic class mechanical service life (switching cycles) / typical installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 2042 / according to EEC 750 overvoltage category degree of pollution 3  Voltage type of voltage / of the operating voltage insulation voltage (Uii) / at AC / rated value  Supply voltage supply voltage supply voltage at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum supply voltage frequency / rated value  50 Hz  Protection class protection class IP  IP20, with connected conductors, IP 40 in the handle range  withing capacity switching capacity switching capacity switching capacity switching capacity current according to EN 60898 / rated value 10 kA according to EN 60898 / rated value 10 kA 15 kA  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current operational current at 30 °C / rated value 35 A 40 °C / rated value 35 A	General technical data	
mechanical service life (switching cycles) / typical installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 overvoltage category degree of pollution 3  Voltage type of voltage / of the operating voltage supply voltage (ui) / at AC / rated value  **Operating voltage  **at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum **at DC / rated value / maximum **ot AC C2.2 No. 5-02 / maximum supply voltage frequency / rated value  **Protection class IP  **Switching capacity current **a cacording to IEC 60947-2 / rated value  **Dissipation **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value **at 30 °C / rated value **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  **Current **power loss [W] / for rated value / at AC / rated value / at AC / C / rated value / at	number of poles	1
installation environment regarding EMC reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750  overvoltage category degree of pollution  Voltage type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value  Supply voltage supply voltage  supply voltage  • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum • at DC / rated value / maximum • at DC / rated value / maximum  • at DC / rated value / maximum  • at DC / rated value / maximum  • at DC / rated value / maximum  • at DC / rated value / maximum  • at DC / rated value / maximum  • at DC / single channel / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  supply voltage frequency / rated value  **Protection class**  protection class IP  Switching capacity  switching capacity  switching capacity current  • according to EN 60898 / rated value  10 kA  • according to IEC 60947-2 / rated value  10 kA  • according to IEC 60947-2 / rated value  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  • at 30 °C / rated value  • at 40 °C / rated value  35 A  • at 40 °C / rated value  • at 40 °C / rated value  35 A	tripping characteristic class	D
reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750  overvoltage category  degree of pollution  3  Voltage  type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value  Supply voltage  supply voltage  supply voltage  at AC / rated value  operating voltage  at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  at DC / rated value / maximum  be at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  50 Hz  Protection class  protection class IP  Switching capacity  switching capacity  switching capacity current  according to EN 60898 / rated value  10 kA  according to IEC 60947-2 / rated value  10 kA  15 kA  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  at 30 °C / rated value  35 A  at 40 °C / rated value  35 A	mechanical service life (switching cycles) / typical	10 000
according to IEC 204-2 / according to IEC 750 overvoltage category degree of pollution  3  Voltage  type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value  Supply voltage  supply voltage  supply voltage  at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  at DC / rated value / maximum  at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  50 Hz  Protection class  protection class IP  Switching capacity  switching capacity current  according to EN 60898 / rated value  10 kA  according to EC 60947-2 / rated value  10 kA  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	installation environment regarding EMC	Suitable for environment B (immunity to interference not applicable)
degree of pollution  Voltage  type of voltage / of the operating voltage  insulation voltage (Ui) / at AC / rated value  Supply voltage  supply voltage  supply voltage  • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  • at DC / rated value / maximum  • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  Protection class  protection class IP  Protection class IP  Switching capacity current  • according to EN 60898 / rated value  • according to IEC 60947-2 / rated value  10 kA  • according to IEC 60947-2 / rated value  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  • at 40 °C / rated value  35 A  • at 40 °C / rated value  35 A		F
type of voltage / of the operating voltage type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value  440 V  Supply voltage supply voltage / at AC / rated value  operating voltage  • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  • at DC / rated value / maximum  • at DC / rated value / maximum  supply voltage frequency / rated value  Protection class 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 EN 60898 / rated value    10 KA   according to EC 60947-2 / rated value   15 kA    Dissipation     power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  • at 40 °C / rated value  35 A  • at 40 °C / rated value  35 A	overvoltage category	3
type of voltage / of the operating voltage insulation voltage (Ui) / at AC / rated value  440 V  Supply voltage supply voltage supply voltage / at AC / rated value  400 V  operating voltage  • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  • at DC / rated value / maximum  • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  50 Hz  Protection class protection class IP  IP20, with connected conductors, IP 40 in the handle range  Switching capacity switching capacity current  • according to IEC 60947-2 / rated value  10 KA • according to IEC 60947-2 / rated value  15 kA  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  35 A  • at 40 °C / rated value  35 A	degree of pollution	3
insulation voltage (Ui) / at AC / rated value  Supply voltage  supply voltage   440 V    operating voltage   • at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum   • at DC / rated value / maximum   • at DC / single channel / according to UL 489 and   CSA C22.2 No. 5-02 / maximum    supply voltage frequency / rated value    Protection class IP   Protection class IP   Switching capacity    switching capacity current   • according to EN 60898 / rated value   • according to EC 60947-2 / rated value    Dissipation    power loss [W] / for rated value of the current / at AC / in hot operating state / per pole    Current   • at 30 °C / rated value   • at 40 °	Voltage	
supply voltage supply voltage / at AC / rated value 400 V operating voltage  • at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum • at DC / rated value / maximum 60 V • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value 50 Hz  Protection class  protection class IP IP20, with connected conductors, IP 40 in the handle range  Switching capacity switching capacity current • according to EN 60898 / rated value 10 kA • according to EN 60898 / rated value 15 kA  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current • at 30 °C / rated value 35 A • at 40 °C / rated value 35 A	type of voltage / of the operating voltage	AC/DC
supply voltage / at AC / rated value  operating voltage  • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  • at DC / rated value / maximum  • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  Protection class  protection class IP  IP20, with connected conductors, IP 40 in the handle range  Switching capacity  switching capacity current  • according to EN 60898 / rated value  • according to EC 60947-2 / rated value  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  • at 40 °C / rated value  • at 40 °C / rated value  35 A  • at 40 °C / rated value	insulation voltage (Ui) / at AC / rated value	440 V
operating voltage  • at AC / according to UL 489 and CSA C22.2 No. 5- 02 / maximum  • at DC / rated value / maximum  • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  Protection class  protection class IP  Switching capacity  switching capacity current  • according to EN 60898 / rated value  10 kA  • according to EC 60947-2 / rated value  15 kA  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  • at 40 °C / rated value  35 A  • at 40 °C / rated value  35 A	Supply voltage	
at AC / according to UL 489 and CSA C22.2 No. 5-02 / maximum  at DC / rated value / maximum  at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  protection class  protection class IP  Switching capacity  switching capacity current  according to EN 60898 / rated value  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  at 30 °C / rated value  at 40 °C / rated value  35 A  at 40 °C / rated value  35 A	supply voltage / at AC / rated value	400 V
02 / maximum  • at DC / rated value / maximum  • at DC / single channel / according to UL 489 and CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  Protection class  protection class IP  IP20, with connected conductors, IP 40 in the handle range  Switching capacity  switching capacity current  • according to EN 60898 / rated value • according to IEC 60947-2 / rated value  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current • at 30 °C / rated value • at 40 °C / rated value 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  supply voltage frequency / rated value  Protection class  protection class IP  IP20, with connected conductors, IP 40 in the handle range  Switching capacity  switching capacity current  according to EN 60898 / rated value  according to IEC 60947-2 / rated value  10 kA  according to IEC 60947-2 / rated value  15 kA  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  at 30 °C / rated value  35 A  at 40 °C / rated value  35 A	•	120 V
CSA C22.2 No. 5-02 / maximum  supply voltage frequency / rated value  Protection class  protection class IP  IP20, with connected conductors, IP 40 in the handle range  Switching capacity  switching capacity current  • according to EN 60898 / rated value  • according to IEC 60947-2 / rated value  10 kA  • according to IEC 60947-2 / rated value  15 kA  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  35 A  • at 40 °C / rated value  35 A	<ul><li>at DC / rated value / maximum</li></ul>	60 V
Protection class IP IP20, with connected conductors, IP 40 in the handle range  Switching capacity  switching capacity current  • according to EN 60898 / rated value • according to IEC 60947-2 / rated value  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current • at 30 °C / rated value • at 40 °C / rated value  35 A  • at 40 °C / rated value  35 A		60 V
protection class IP  Switching capacity  switching capacity current  • according to EN 60898 / rated value • according to IEC 60947-2 / rated value  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current • at 30 °C / rated value • at 40 °C / rated value  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  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current • at 30 °C / rated value • at 40 °C / rated value  35 A • at 40 °C / rated value	Protection class	
switching capacity current  • according to EN 60898 / rated value  • according to IEC 60947-2 / rated value  15 kA  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  • at 40 °C / rated value  35 A	protection class IP	IP20, with connected conductors, IP 40 in the handle range
according to EN 60898 / rated value according to IEC 60947-2 / rated value  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current at 30 °C / rated value at 40 °C / rated value 35 A at 40 °C / rated value 35 A	Switching capacity	
according to IEC 60947-2 / rated value  Dissipation  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  at 30 °C / rated value  at 40 °C / rated value  35 A  at 40 °C / rated value  35 A	switching capacity current	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  • at 40 °C / rated value  35 A	<ul> <li>according to EN 60898 / rated value</li> </ul>	10 kA
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  operational current  • at 30 °C / rated value  • at 40 °C / rated value  35 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  35 A  35 A	Dissipation	
operational current  • at 30 °C / rated value  • at 40 °C / rated value  35 A  35 A		3.4 W
<ul> <li>at 30 °C / rated value</li> <li>at 40 °C / rated value</li> <li>35 A</li> <li>35 A</li> </ul>	Current	
• at 40 °C / rated value 35 A	operational current	
	• at 30 °C / rated value	35 A
• at 45 °C / rated value 34 A	<ul> <li>at 40 °C / rated value</li> </ul>	35 A
	• at 45 °C / rated value	34 A

<ul> <li>at 50 °C / rated value</li> </ul>	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
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	10 kA
Connections	
connectable conductor cross-section / finely stranded / with core end processing	
• minimum	0.75 mm²
• 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	170 g
Environmental conditions	
vibration resistance	50 m/s² at 25 to 150Hz and 60m/s² 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
<ul><li>according to IEC 81346-2</li></ul>	F
General Product Approval	Declaration of Conformity



Confirmation









Test Certificates other

<u>Miscellaneous</u> <u>Special Test Certific-</u> <u>Miscellaneous</u>

<u>ate</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=5SJ4135-8HG40

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

https://support.industry.siemens.com/cs/ww/en/ps/5SJ4135-8HG40

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4135-8HG40

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications

