



Miniature circuit breaker 240 V 14kA, 1-pole, B, 45 A, D=70 mm according to UL 489, equal polarity

Figure similar

| Model | |
|--|--|
| product brand name | SENTRON |
| product designation | Miniature circuit breakers |
| design of the product | Miniature circuit-breaker 5SJ4 |
| General technical data | |
| number of poles | 1 |
| design of pole | 1P |
| tripping characteristic class | B |
| mechanical service life (operating 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 | F |
| overvoltage category | 3 |
| degree of pollution | 3 |
| Voltage | |
| insulation voltage (U _i) at AC rated value | 440 V |
| <ul style="list-style-type: none"> ● operational current <ul style="list-style-type: none"> — at 30 °C rated value — at 40 °C rated value — at 50 °C rated value — at 55 °C rated value — at 60 °C rated value ● operational current at AC rated value | 45 A 45 A 42.8 A 41.7 A 41 A 45 A |
| Supply voltage | |
| supply voltage <ul style="list-style-type: none"> ● at AC ● at DC rated value | 400 V 60 V |
| value range of the supply voltage frequency | 50/60 Hz |
| operating voltage <ul style="list-style-type: none"> ● at AC according to UL 489 and CSA C22.2 No. 5-02 maximum ● at DC rated value maximum ● at DC 1-channel according to UL 489 and CSA C22.2 No. 5-02 maximum | 120 V 60 V 60 V |
| supply voltage frequency rated value | 50 Hz |
| Protection class | |
| protection class IP | IP20, with connected conductors, IP 40 in the handle range |
| Breaking 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 | 6.1 W |
| Main circuit | |
| type of voltage supply at AC according to UL 489 and CSA C22.2 No. 5-02 | 240/120 |
| suitability for operation | Infrastructure / Industry |
| Product details | |
| product feature touch protection | Yes |
| product component | |
| • tunnel terminals top | No |
| • tunnel terminals bottom | No |
| • combined terminal top | Yes |
| • combined terminal bottom | Yes |
| • neutral conductor switching | No |
| product feature halogen-free | Yes |
| product feature sealable | Yes |
| product feature silicon-free | Yes |
| product extension installable supplementary devices | Yes |
| Product function | |
| set values setting current (Ii) for I-tripping | 4 |
| reference value setting current (Ii) for I-tripping | x In |
| product function note | Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in |
| Short circuit | |
| short-circuit current breaking capacity (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 ² |
| • maximum | 25 mm ² |
| 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 | |
| standard | IEC / EN 60947-2 / UL 489 |
| vibration resistance | 50 m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec) |
| vibration resistance according to IEC 60068-2-6 | ±1 mm at 5 to 25 Hz; 50 m/s ² at 25 to 150 Hz |
| ambient temperature during operation | |
| • minimum | -25 °C |
| • maximum | 55 °C |
| ambient temperature during operation | max. 95% humidity |
| ambient temperature during storage | |
| • minimum | -40 °C |
| • maximum | 75 °C |
| Approvals Certificates | |
| General Product Approval | |



[Confirmation](#)



EG-Konf.



UL



| General Product Approval | Test Certificates | other | Environment | | |
|---|--|---|------------------------------|---|---|
|  | Special Test Certificate |  | Confirmation | Environmental Confirmations | Environmental Confirmations |

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SJ4145-6HG40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SJ4145-6HG40>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4145-6HG40

CAX-Online-Generator

<https://www.siemens.com/cax>

Tender specifications

<https://www.siemens.com/specifications>



last modified:

7/19/2025 

