



Figure similar

Miniature circuit breaker 240 V 10kA, 1-pole, D, 45 A, D=70 mm according to UL 489

| 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                                                              | D                                                                    |
| 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 (Ui) at AC rated value                                                  | 440 V                                                                |
| operational current                                                                        |                                                                      |
| • at 30 °C rated value                                                                     | 45 A                                                                 |
| • at 40 °C rated value                                                                     | 45 A                                                                 |
| • at 50 °C rated value                                                                     | 42.8 A                                                               |
| • at 55 °C rated value                                                                     | 41.7 A                                                               |
| • at 60 °C rated value                                                                     | 41 A                                                                 |
| • at AC rated value                                                                        | 45 A                                                                 |
| Supply voltage                                                                             |                                                                      |
| supply voltage                                                                             |                                                                      |
| • at AC                                                                                    | 400 V                                                                |
| • at DC rated value                                                                        | 60 V                                                                 |
| value range of the supply voltage frequency                                                | 50/60 Hz                                                             |
| operating voltage                                                                          |                                                                      |
| • at AC according to UL 489 and CSA C22.2 No. 5-02 maximum                                 | 240 V                                                                |
| • at DC rated value maximum                                                                | 60 V                                                                 |
| • at DC 1-channel according to UL 489 and CSA C22.2 No. 5-02 maximum                       | 60 V                                                                 |
| • at DC 2-channel according to UL 489 and CSA C22.2 No. 5-02 maximum                       | 125 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                                                                    |
| <b>Dissipation</b>                                                                                         |                                                                          |
| power loss [W] for rated value of the current at AC in hot operating state per pole                        | 5.7 W                                                                    |
| <b>Main circuit</b>                                                                                        |                                                                          |
| type of voltage supply at AC according to UL 489 and CSA C22.2 No. 5-02                                    | 240                                                                      |
| suitability for operation                                                                                  | Infrastructure / Industry                                                |
| <b>Product details</b>                                                                                     |                                                                          |
| 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                                                                       |
| <b>product feature</b>                                                                                     |                                                                          |
| • halogen-free                                                                                             | Yes                                                                      |
| • sealable                                                                                                 | Yes                                                                      |
| • silicon-free                                                                                             | Yes                                                                      |
| product extension installable supplementary devices                                                        | Yes                                                                      |
| <b>Product function</b>                                                                                    |                                                                          |
| set values setting current (Ii) for I-tripping                                                             | 14                                                                       |
| reference value setting current (Ii) for I-tripping                                                        | x I <sub>n</sub>                                                         |
| product function note                                                                                      | Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in                |
| <b>Short circuit</b>                                                                                       |                                                                          |
| short-circuit current breaking capacity (I <sub>cn</sub> ) at AC according to UL 1077 and CSA C22.2 No.235 | 10 kA                                                                    |
| <b>Connections</b>                                                                                         |                                                                          |
| 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                                                                      |
| <b>Mechanical Design</b>                                                                                   |                                                                          |
| height                                                                                                     | 110 mm                                                                   |
| width                                                                                                      | 18 mm                                                                    |
| depth                                                                                                      | 70 mm                                                                    |
| installation depth                                                                                         | 70 mm                                                                    |
| number of modular width units                                                                              | 1                                                                        |
| <b>fastening method</b>                                                                                    | on standard mounting rail                                                |
| mounting position                                                                                          | any                                                                      |
| net weight                                                                                                 | 176 g                                                                    |
| <b>Environmental conditions</b>                                                                            |                                                                          |
| standard                                                                                                   | IEC / EN 60947-2 / UL 489                                                |
| vibration resistance                                                                                       | 50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec) |
| vibration resistance according to IEC 60068-2-6                                                            | ±1 mm at 5 to 25 Hz; 50 m/s <sup>2</sup> 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                                                                    |
| <b>Approvals Certificates</b>                                                                              |                                                                          |
| <b>General Product Approval</b>                                                                            |                                                                          |



[Confirmation](#)



| Test Certificates                        | other                         | Environment                                 |
|------------------------------------------|-------------------------------|---------------------------------------------|
| <a href="#">Special Test Certificate</a> | <a href="#">Miscellaneous</a> | <a href="#">Confirmation</a>                |
|                                          |                               | <a href="#">Environmental Confirmations</a> |

#### Further information

##### Information on the packaging

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

##### 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=5SJ4145-8HG41>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SJ4145-8HG41>

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

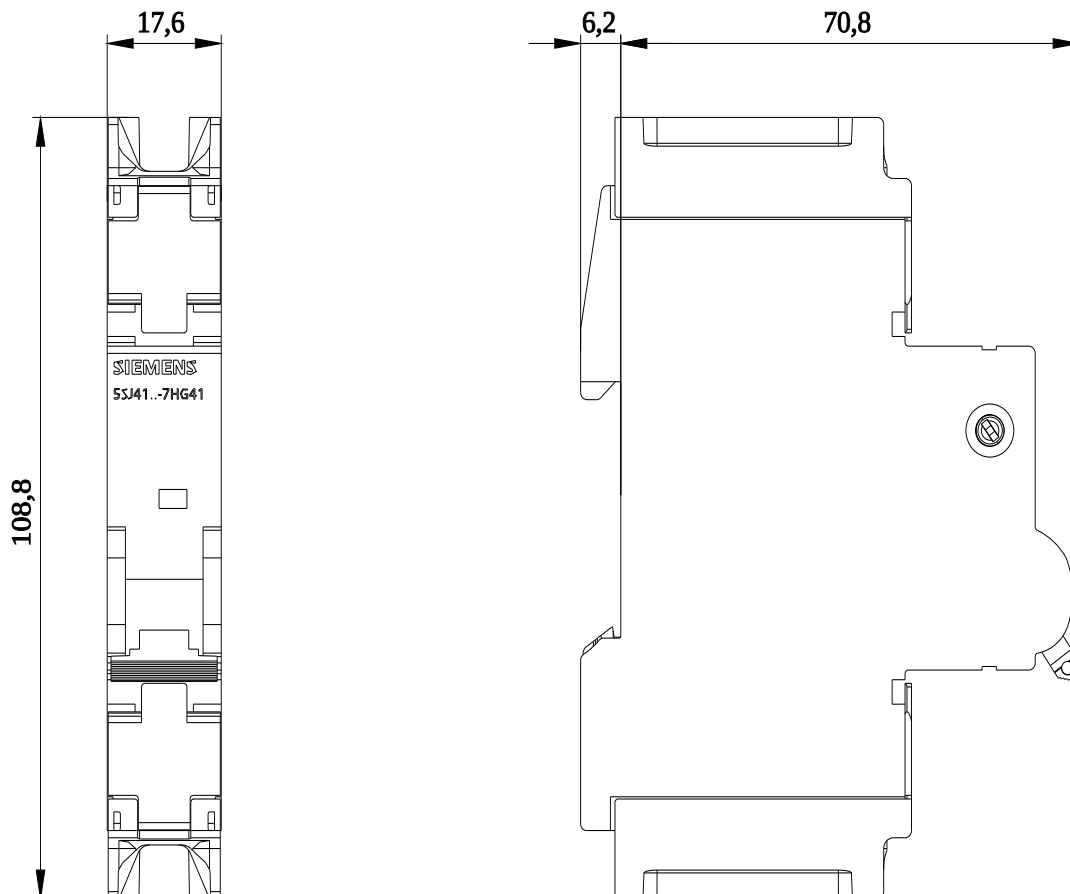
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SJ4145-8HG41](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SJ4145-8HG41)

##### CAX-Online-Generator

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

##### Tender specifications

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



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