## SIEMENS

## Data sheet

## 5SJ4120-7HG42



Circuit breaker 10kA, 1-pole, C, 20A according to UL 489-277V

| 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  |  |
| number of poles / note   | 1P   |  |
| tripping characteristic class  | С  |  |
| mechanical service life (switching cycles) / typical   | 20 000   |  |
| installation environment regarding EMC   | Suitable for environment B (immunity to interference not applicable) |  |
| reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750             | F  |  |
| overvoltage category   | 3  |  |
| degree of pollution  | 3  |  |
| Voltage  |  |  |
| insulation voltage / at AC / rated value   | 440 V  |  |
| Supply voltage   |  |  |
| type of voltage  | AC/DC  |  |
| operational current / at AC / rated value  | 20 A   |  |
| supply voltage / at AC / rated value   | 400 V  |  |
| operating voltage  |  |  |
| <ul> <li>at AC / acc. to UL 489 and CSA C22.2 No. 5-02 /<br/>maximum</li> </ul>                  | 277 V  |  |
| <ul> <li>at DC / rated value / maximum</li> </ul>  | 60 V   |  |
| <ul> <li>at DC / single channel / acc. to UL 489 and CSA<br/>C22.2 No. 5-02 / maximum</li> </ul> | 60 V   |  |
| <ul> <li>at DC / 2-channel / acc. to UL 489 and CSA C22.2</li> <li>No. 5-02 / maximum</li> </ul> | 125 V  |  |
| supply voltage frequency   |  |  |
| <ul> <li>rated value</li> </ul>  | 50 Hz  |  |
| Protection class   |  |  |
| protection class IP  | IP20, with connected conductors, IP 40 in the handle range           |  |
| Switching capacity   |  |  |
| switching capacity current   |  |  |
| <ul> <li>acc. to EN 60898 / rated value</li> </ul>   | 10 kA  |  |
| <ul> <li>acc. to IEC 60947-2 / rated value</li> </ul>  | 15 kA  |  |
| Dissipation  |  |  |
| power loss [W] / for rated value of the current / at AC / in                                     | 2.2 W  |  |

| hot operating state / per pole  |  |                              |
|---|--|------------------------------|
| Main circuit  |  |                              |
| type of voltage supply / at AC / acc. to UL 489 and CSA<br>C22.2 No. 5-02                       | 480/277  |                              |
| suitability for operation   | Mechanical engineering / industry  |                              |
| Product details   |  |                              |
| product function / neutral conductor switching  | No   |                              |
|   | Yes  |                              |
| product feature / touch protection  | - 165  |                              |
| product component   | No   |                              |
| tunnel terminals top  | No   |                              |
| tunnel terminals bottom   | Yes  |                              |
| combined terminal top   |  |                              |
| combined terminal bottom  | Yes  |                              |
| product feature   | Vee  |                              |
| halogen-free  | 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 / acc.<br>to UL 1077 and CSA C22.2 No.235 | 10 kA  |                              |
| Connections   |  |                              |
| connectable conductor cross-section / finely stranded / with core end processing                |  |                              |
| • minimum   | 1.5 mm <sup>2</sup>  |                              |
| • maximum   | 25 mm²   |                              |
| position / of power supply cord   | Any  |                              |
| Mechanical Design   |  |                              |
| height  | 121 mm   |                              |
| width   | -<br>18 mm   |                              |
| depth   | 76 mm  |                              |
| installation depth  | 70 mm  |                              |
| number of modular width units   | 1  |                              |
| fastening method  | on standard mounting rail  |                              |
| mounting position   | any  |                              |
| net weight  | 176 g  |                              |
| Environmental conditions  |  |                              |
|   |  |                              |
| influence of the surrounding temperature  | max. 95% humidity  |                              |
| vibration resistance  | 50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec) |                              |
| vibration resistance / acc. to IEC 60068-2-6  | 50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec) |                              |
| ambient temperature   | 05 10  |                              |
| • minimum   | -25 °C   |                              |
| • maximum   | 55 °C  |                              |
| ambient temperature / during storage  | 10.10  |                              |
| • minimum   | -40 °C   |                              |
| • maximum   | 75 °C  |                              |
| Certificates  |  |                              |
| reference code  |  |                              |
| • acc. to DIN EN 61346-2  | F  |                              |
| • acc. to IEC 81346-2   | F  |                              |
| General Product Approval  |  | Declaration of<br>Conformity |











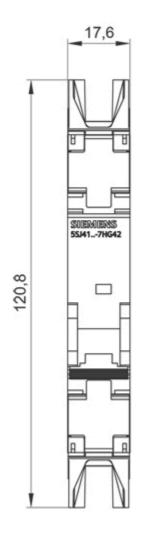


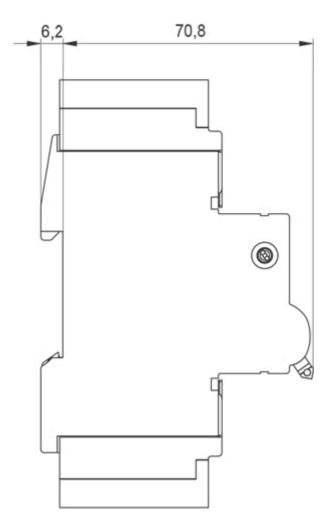
**Test Certificates** 

Special Test Certificate

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=5SJ4120-7HG42 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SJ4120-7HG42 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SJ4120-7HG42 Tender specifications http://www.siemens.com/specifications





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