## SIEMENS

## Data sheet

## 5SY6111-7



Miniature circuit breaker 230/400 V 6kA, 1-pole, C, 5 A

| Model  |                                 |  |  |
|--|---------------------------------|--|--|
| product brand name   | SENTRON                         |  |  |
| product designation  | Miniature circuit breaker       |  |  |
| General technical data   |                                 |  |  |
| number of poles  | 1                               |  |  |
| design of pole   | 1P                              |  |  |
| tripping characteristic class  | С                               |  |  |
| mechanical service life (operating cycles) typical                                     | 10 000                          |  |  |
| overvoltage category   | Ш                               |  |  |
| degree of pollution  | 3                               |  |  |
| Voltage  |                                 |  |  |
| type of voltage of the operating voltage   | AC                              |  |  |
| insulation voltage (Ui)  |                                 |  |  |
| <ul> <li>with single-phase operation at AC rated value</li> </ul>                      | 440 V                           |  |  |
| <ul> <li>with multi-phase operation at AC rated value</li> </ul>                       | 440 V                           |  |  |
| supply voltage with single-phase operation at AC rated value                           | 230 V                           |  |  |
| Supply voltage   |                                 |  |  |
| supply voltage   |                                 |  |  |
| at AC rated value  | 400 V                           |  |  |
| at DC rated value  | 60 V                            |  |  |
| value range of the supply voltage frequency  | 50/60 Hz                        |  |  |
| operating voltage at DC rated value maximum  | 72 V                            |  |  |
| Protection class   |                                 |  |  |
| protection class IP  | IP20, with connected conductors |  |  |
| Switching capacity   |                                 |  |  |
| switching capacity current   |                                 |  |  |
| <ul> <li>at DC according to IEC 60947-2 rated value</li> </ul>                         | 30 kA                           |  |  |
| <ul> <li>according to EN 60898 rated value</li> </ul>                                  | 6 kA                            |  |  |
| <ul> <li>according to IEC 60947-2 rated value</li> </ul>                               | 30 kA                           |  |  |
| energy limitation class  | 3                               |  |  |
| Dissipation  |                                 |  |  |
| power loss [W] for rated value of the current at AC in hot<br>operating state per pole | 2.2 W                           |  |  |
| Product details  |                                 |  |  |
| product component  |                                 |  |  |
| <ul> <li>combined terminal top</li> </ul>  | Yes                             |  |  |
| <ul> <li>combined terminal bottom</li> </ul>   | Yes                             |  |  |
| <ul> <li>neutral conductor switching</li> </ul>  | No                              |  |  |
| product feature  |                                 |  |  |
| <ul> <li>properties for main switches in accordance with EN</li> </ul>                 | Yes                             |  |  |



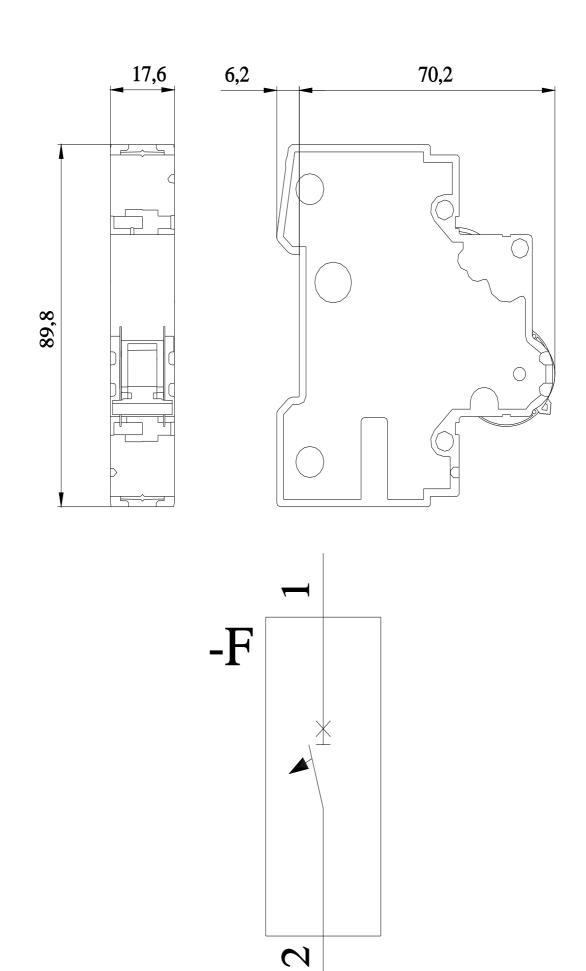
| 00004.4  |  |
|--|--|
| 60204-1  |  |
| halogen-free   | Yes  |
| • sealable   | Yes  |
| • silicon-free   | Yes  |
| product extension installable supplementary devices                          | Yes  |
| Product function   |  |
| set values setting current (li) for I-tripping                               | 6,5  |
| reference value setting current (li) for I-tripping                          | x In   |
| Short circuit  |  |
| short-circuit current breaking capacity (Icn)                                |  |
| at AC according to UL 1077 and CSA C22.2 No.235                              | 5 kA   |
| Connections  |  |
| connectable conductor cross-section solid                                    |  |
| • minimum  | 0.75 mm <sup>2</sup>                                 |
| • maximum  | 35 mm²   |
| connectable conductor cross-section stranded                                 |  |
| • minimum  | 0.75 mm²   |
| ● maximum  | 35 mm²   |
| connectable conductor cross-section finely stranded with core end processing |  |
| • minimum  | 0.75 mm <sup>2</sup>                                 |
| • maximum  | 25 mm²   |
| AWG number as coded connectable conductor cross section                      |  |
| • minimum  | 18   |
| • maximum  | 4  |
| tightening torque [lbf-in] with screw-type terminals                         |  |
| • minimum  | 22 lbf·in  |
| • maximum  | 31 lbf·in  |
| tightening torque with screw-type terminals                                  |  |
| • minimum  | 2.5 N·m  |
| • maximum  | 3.5 N·m  |
| position of power supply cord  | Any  |
| Mechanical Design  |  |
| height   | 90 mm  |
| width  | 18 mm  |
| depth  | 76 mm  |
| installation depth   | 70 mm  |
| number of modular width units  | 1  |
| fastening method   | Quick assembly system                                |
| mounting position  | any  |
| net weight   | 149 g  |
| Environmental conditions   |  |
| influence of the surrounding temperature                                     | max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C |
| standard   | IEC / EN 60898-1, IEC / EN 60947-2 / UL1077          |
| vibration resistance according to IEC 60068-2-6                              | ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz             |
| ambient temperature during operation   |  |
| • minimum  | -25 °C   |
| • maximum  | 55 °C  |
| ambient temperature during storage   |  |
| • minimum  | -40 °C   |
| • maximum  | 75 °C  |
| number of test cycles for environmental testing according to IEC 60068-2-30  | 6  |
| Environmental footprint  |  |
| Environmental Product Declaration(EPD)                                       | Yes  |
| Global Warming Potential [CO2 eq] total                                      | 8.5 kg   |
| Global Warming Potential [CO2 eq] during manufacturing                       | 0.683 kg   |
| Global Warming Potential [CO2 eq] during operation                           | 7.83 kg  |
| global warming potential [CO2 eq] after end of life                          | -0.0048 kg   |
|  |  |
| Approvals Certificates   |  |



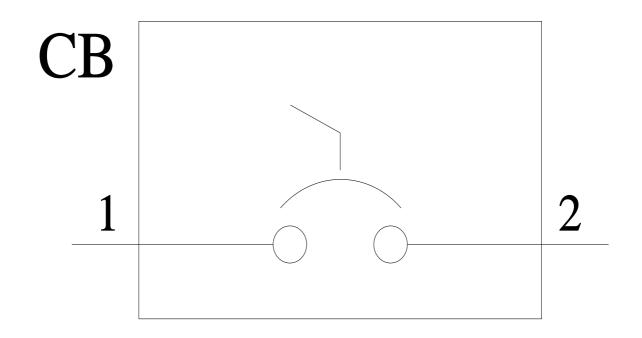
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| <u>Confirmation</u>   |  | <b>SAN</b><br>UR  | DE  | <u>Miscellaneous</u> | EHC                              |
|---|--|---|---|----------------------|----------------------------------|
| General Product Approval  | EMC  | Declaration of Confo  | rmity   | Test Certificates    | Marine / Shipping                |
| <u>Miscellaneous</u>  | RCM  | UK<br>CA  | CE<br>EG-Konf.  | <u>Miscellaneous</u> | ABS                              |
| Marine / Shipping   |  |   | other   |                      | Environment                      |
| BUREAU<br>VERITAS   | Lloyds<br>Register<br>us   | DNV-GL<br>DNV-GL  | <u>Miscellaneous</u>  | <u>Confirmation</u>  | Environmental Con-<br>firmations |
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