

Siemens  
EcoTech



Miniature Circuit Breaker Measuring, Communication AC 230V 6kA, 1+N pole, B, 2A Please consider Radio approval! List of countries: see Certificates



| Model                                                                |                                                                                                                                                                                 |
|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| product brand name                                                   | SENTRON                                                                                                                                                                         |
| product designation                                                  | Miniature circuit breaker                                                                                                                                                       |
| design of the product                                                | Miniature circuit breaker COM compact                                                                                                                                           |
| type of measured value detection                                     | completely                                                                                                                                                                      |
| General technical data                                               |                                                                                                                                                                                 |
| design of pole                                                       | 1P+N                                                                                                                                                                            |
| apparent power consumption of the power supply                       | 0.4 VA                                                                                                                                                                          |
| tripping characteristic class                                        | B                                                                                                                                                                               |
| mechanical service life (operating cycles) typical                   | 10 000                                                                                                                                                                          |
| electrical endurance (operating cycles) at AC load in the mean value | 7 500                                                                                                                                                                           |
| measurable line frequency initial value                              | 45 Hz                                                                                                                                                                           |
| measurable line frequency full-scale value                           | 65 Hz                                                                                                                                                                           |
| overvoltage category                                                 | III                                                                                                                                                                             |
| degree of pollution                                                  | 2                                                                                                                                                                               |
| frequency with radio transmission minimum                            | 2 400 MHz                                                                                                                                                                       |
| frequency with radio transmission maximum                            | 2 483.5 MHz                                                                                                                                                                     |
| status display of the measured data                                  | voltage, current, active power, apparent power, reactive power, active energy, line frequency, power factor, temperature, switching cycles, operating hours, tripping, warnings |
| Voltage                                                              |                                                                                                                                                                                 |
| type of voltage of the operating voltage                             | AC                                                                                                                                                                              |
| insulation voltage (Ui) at AC rated value                            | 250 V                                                                                                                                                                           |
| operational current                                                  |                                                                                                                                                                                 |
| • at 30 °C rated value                                               | 2 A                                                                                                                                                                             |
| • at 40 °C rated value                                               | 1.88 A                                                                                                                                                                          |
| • at 50 °C rated value                                               | 1.69 A                                                                                                                                                                          |
| • at 55 °C rated value                                               | 1.76 A                                                                                                                                                                          |
| • at 60 °C rated value                                               | 1.62 A                                                                                                                                                                          |
| • at AC rated value                                                  | 2 A                                                                                                                                                                             |
| measurable current at AC                                             |                                                                                                                                                                                 |
| • initial value                                                      | 0.04 A                                                                                                                                                                          |
| • full-scale value                                                   | 8 A                                                                                                                                                                             |
| reference current (Iref) 1 at AC rated value                         | 2 A                                                                                                                                                                             |
| Supply voltage                                                       |                                                                                                                                                                                 |
| supply voltage                                                       |                                                                                                                                                                                 |
| • at AC                                                              | 230 V                                                                                                                                                                           |

|                                                                                     |                                                    |
|-------------------------------------------------------------------------------------|----------------------------------------------------|
| <b>value range of the supply voltage frequency</b>                                  | 50/60 Hz                                           |
| <b>operating voltage</b>                                                            |                                                    |
| • minimum                                                                           | 100 V                                              |
| • with single-phase operation at AC maximum                                         | 250 V                                              |
| <b>Protection class</b>                                                             |                                                    |
| <b>protection class IP</b>                                                          | IP20, with connected conductors                    |
| <b>protection class IP</b>                                                          |                                                    |
| • on the front                                                                      | IP40                                               |
| • rear side                                                                         | IP20                                               |
| <b>Breaking Capacity</b>                                                            |                                                    |
| switching capacity current                                                          |                                                    |
| • according to EN 60898 rated value                                                 | 6 kA                                               |
| <b>energy limitation class</b>                                                      | 3                                                  |
| <b>Dissipation</b>                                                                  |                                                    |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 1.5 W                                              |
| <b>Suitability</b>                                                                  |                                                    |
| <b>suitability for operation</b>                                                    | Residential buildings/infrastructure               |
| <b>suitability for use ammeter</b>                                                  | Yes                                                |
| <b>suitability for use reactive power meter</b>                                     | Yes                                                |
| <b>suitability for use frequency meter</b>                                          | Yes                                                |
| <b>suitability for use voltmeter</b>                                                | Yes                                                |
| <b>suitability for use wattmeter</b>                                                | Yes                                                |
| <b>Product details</b>                                                              |                                                    |
| <b>product feature touch protection</b>                                             | Yes                                                |
| product component                                                                   |                                                    |
| • combined terminal top                                                             | No                                                 |
| • combined terminal bottom                                                          | No                                                 |
| • neutral conductor switching                                                       | Yes                                                |
| <b>product feature</b>                                                              |                                                    |
| • properties for main switches in accordance with EN 60204-1                        | No                                                 |
| • halogen-free                                                                      | Yes                                                |
| • sealable                                                                          | Yes                                                |
| • silicon-free                                                                      | Yes                                                |
| product extension installable supplementary devices                                 | Yes                                                |
| <b>Communication</b>                                                                |                                                    |
| <b>guideline via radio-controlled system</b>                                        | 2014/53/EU                                         |
| protocol is supported                                                               | Wireless protocol                                  |
| <b>Fault limits</b>                                                                 |                                                    |
| <b>standards for error limits</b>                                                   | based on IEC61557-12, IEC62053-22, IEC62053-23     |
| <b>reference condition for metering accuracy</b>                                    | according IEC61557-12, IEC62053-22 and IEC62053-23 |
| <b>relative symmetrical measurement uncertainty [%]</b>                             |                                                    |
| • for measured variable current                                                     | 0.5 %                                              |
| • for measured variable voltage                                                     | 0.5 %                                              |
| • for measured variable electrical energy                                           | 1 %                                                |
| • for measured variable reactive power                                              | 1 %                                                |
| • for measured variable apparent power                                              | 1 %                                                |
| • for measured variable active power                                                | 1 %                                                |
| <b>Measuring inputs</b>                                                             |                                                    |
| measurable supply voltage between (PE)N and L at AC                                 |                                                    |
| • minimum                                                                           | 95 V                                               |
| • maximum                                                                           | 255 V                                              |
| measuring category for voltage measurement                                          | CATIII according IEC 61010-2-030                   |
| measuring procedure for current measurement                                         | TRMS                                               |
| measuring procedure for voltage measurement                                         | TRMS                                               |
| <b>Connections</b>                                                                  |                                                    |
| <b>connectable conductor cross-section solid</b>                                    |                                                    |
| • minimum                                                                           | 0.75 mm <sup>2</sup>                               |
| • maximum                                                                           | 16 mm <sup>2</sup>                                 |
| <b>connectable conductor cross-section stranded</b>                                 |                                                    |

|                                                                                                                                                                    |                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                                                     | 0.75 mm <sup>2</sup><br>16 mm <sup>2</sup> |
| <b>connectable conductor cross-section finely stranded with core end processing</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | 0.75 mm <sup>2</sup><br>10 mm <sup>2</sup> |
| <b>tightening torque [lbf-in] with screw-type terminals</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                         | 10.6 lbf-in<br>17.7 lbf-in                 |
| <b>tightening torque with screw-type terminals</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                  | 1.2 N·m<br>2 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              | DIN rail |
| mounting position             | any      |
| net weight                    | 135 g    |

#### Environmental conditions

|                                                                                                                            |                                               |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| standard                                                                                                                   | IEC/EN60898-1, GB/T10963.1                    |
| <ul style="list-style-type: none"> <li>• for shocks</li> <li>• for environmental sinusoidal oscillation check</li> </ul>   | IEC 61373<br>IEC 60068-2-6                    |
| vibration resistance according to IEC 60068-2-6                                                                            | Yes                                           |
| <b>ambient temperature during operation</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | -25 °C<br>60 °C                               |
| <b>ambient temperature during operation</b>                                                                                | -25...45°C: max. 85%rF. 45...60°C: max. 43%rF |
| <b>ambient temperature during storage</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>   | -40 °C<br>75 °C                               |
| <b>number of test cycles for environmental testing according to IEC 60068-2-30</b>                                         | 28                                            |

#### Environmental footprint

|                                                        |                 |
|--------------------------------------------------------|-----------------|
| Global Warming Potential [CO2 eq] total                | 11.7 kg         |
| Global Warming Potential [CO2 eq] during manufacturing | 0.916 kg        |
| Global Warming Potential [CO2 eq] during operation     | 10.8 kg         |
| Global Warming Potential [CO2 eq] after end of life    | -0.102 kg       |
| Siemens Eco Profile (SEP)                              | Siemens EcoTech |

#### Approvals Certificates

|                          |
|--------------------------|
| General Product Approval |
|--------------------------|



[Confirmation](#)



|                          |                                           |                   |       |         |
|--------------------------|-------------------------------------------|-------------------|-------|---------|
| General Product Approval | Radio Equipment Type Approval Certificate | Test Certificates | other | Railway |
|--------------------------|-------------------------------------------|-------------------|-------|---------|



[Miscellaneous](#)

[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

[Special Test Certificate](#)

|         |             |
|---------|-------------|
| Railway | Environment |
|---------|-------------|



#### 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=5SL6002-6MC>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SL6002-6MC>

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

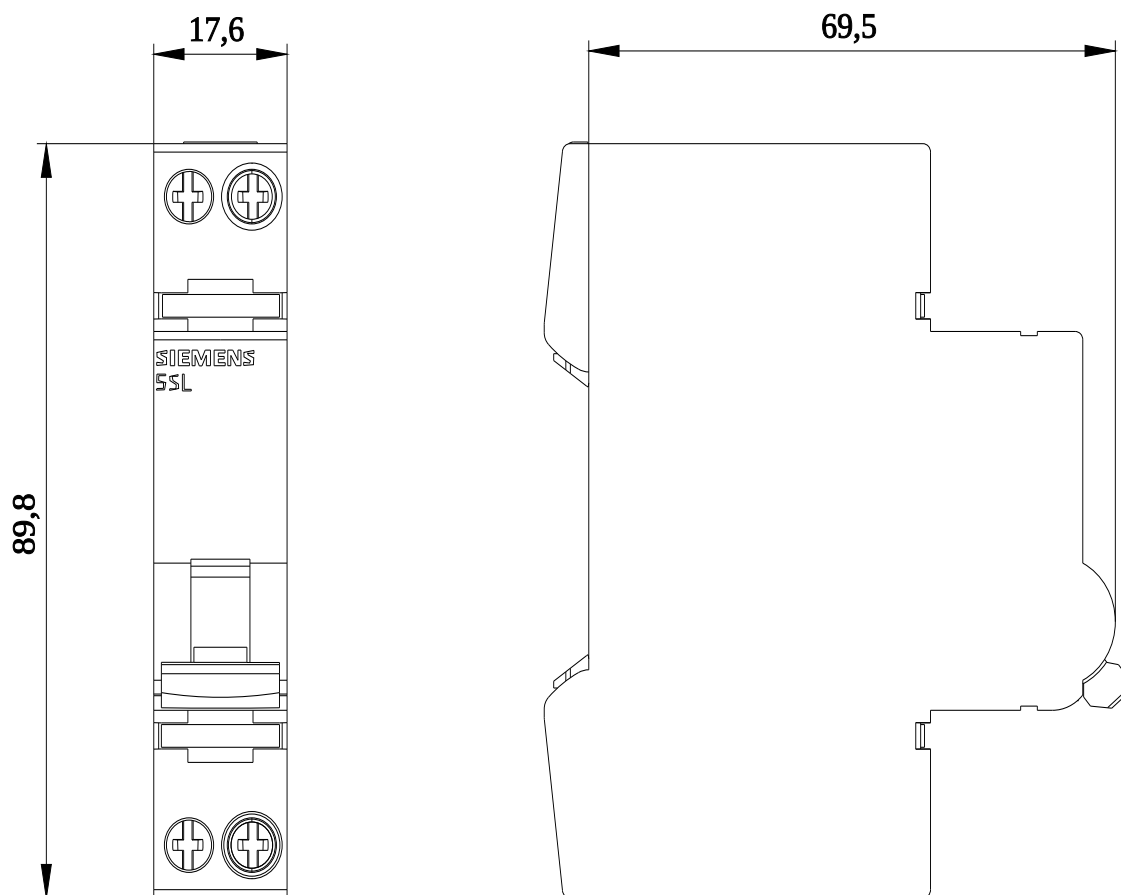
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SL6002-6MC](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL6002-6MC)

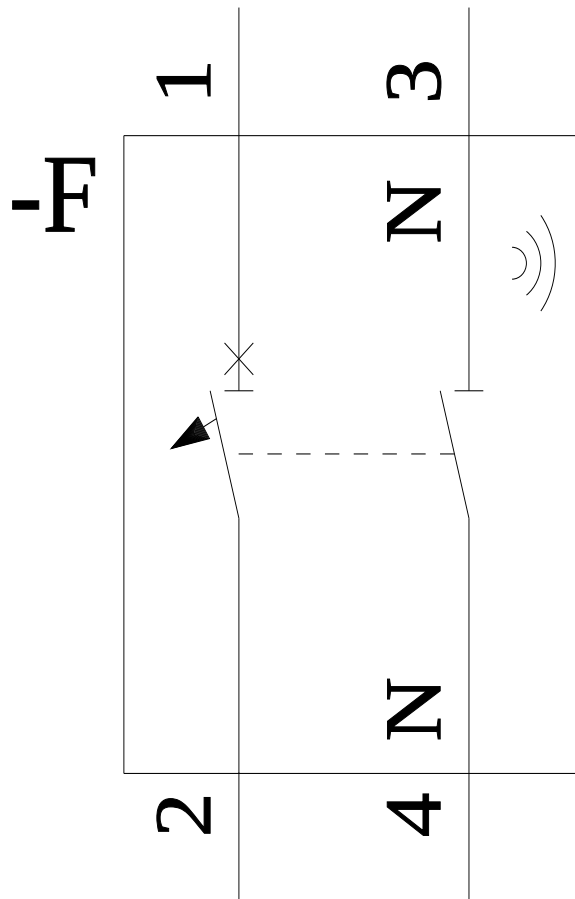
##### CAX-Online-Generator

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

##### Tender specifications

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





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