



Circuit breaker Universal current 880 V DC 400 V AC 10kA, 4-pole, B, 63A max.  
1000 V DC

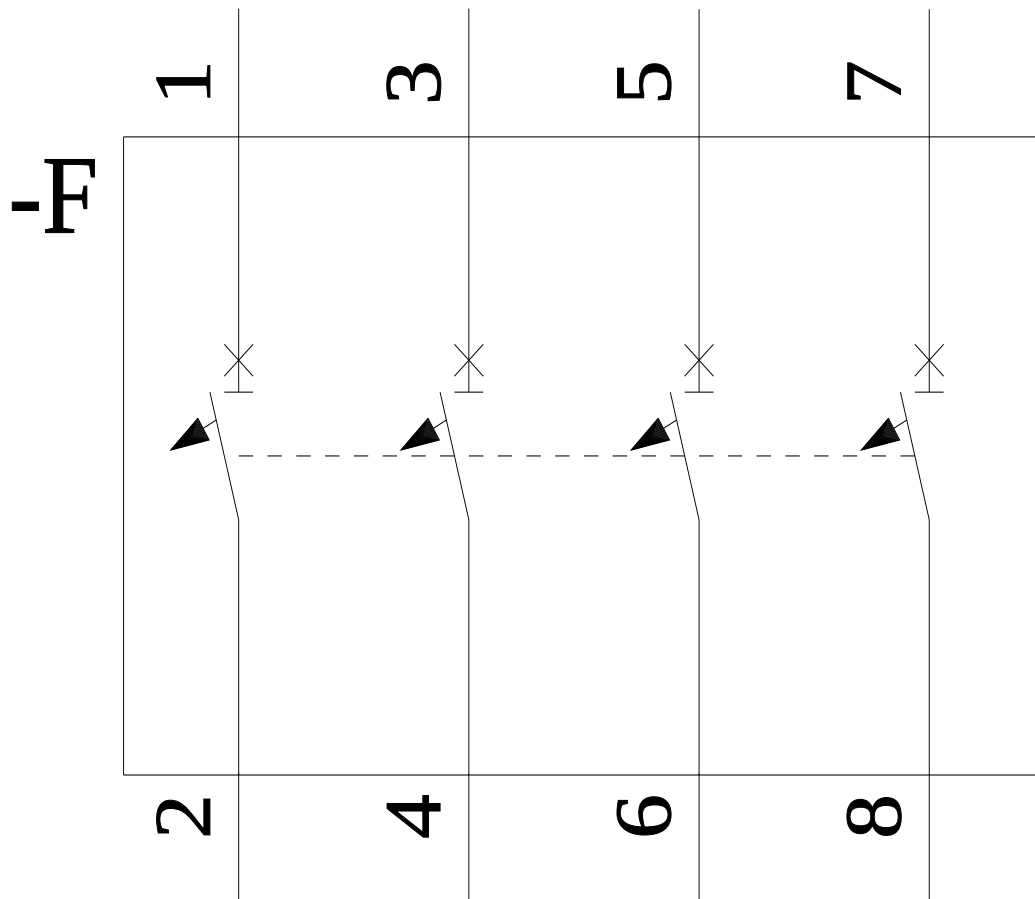
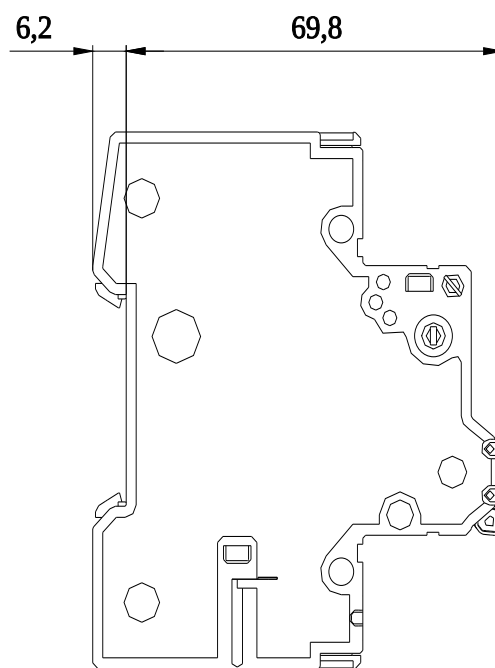
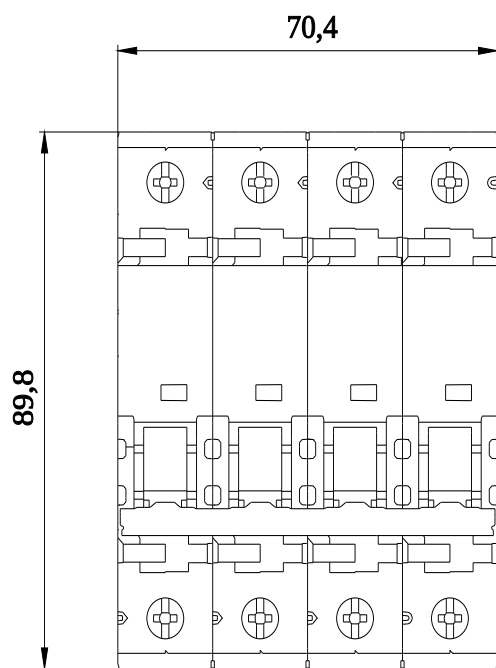
| Model                                                                               |                                 |
|-------------------------------------------------------------------------------------|---------------------------------|
| product brand name                                                                  | SENTRON                         |
| product designation                                                                 | Miniature circuit breaker       |
| General technical data                                                              |                                 |
| number of poles                                                                     | 4                               |
| design of pole                                                                      | 4P                              |
| tripping characteristic class                                                       | B                               |
| mechanical service life (operating cycles) typical                                  | 5 000                           |
| overvoltage category                                                                | 2                               |
| degree of pollution                                                                 | 2                               |
| Voltage                                                                             |                                 |
| type of voltage of the operating voltage                                            | AC/DC                           |
| insulation voltage (Ui)                                                             |                                 |
| • at DC rated value                                                                 | 250 V                           |
| • with single-phase operation at AC rated value                                     | 440 V                           |
| • with multi-phase operation at AC rated value                                      | 440 V                           |
| • operational current                                                               |                                 |
| — at 40 °C rated value                                                              | 59.98 A                         |
| — at 50 °C rated value                                                              | 56.83 A                         |
| — at 55 °C rated value                                                              | 55.12 A                         |
| — at 60 °C rated value                                                              | 53.42 A                         |
| • operational current at AC rated value                                             | 63 A                            |
| Supply voltage                                                                      |                                 |
| supply voltage                                                                      |                                 |
| • at AC                                                                             | 400 V                           |
| • at DC rated value                                                                 | 880 V                           |
| value range of the supply voltage frequency                                         | 50/60 Hz                        |
| operating voltage at DC rated value maximum                                         | 1 000 V                         |
| Protection class                                                                    |                                 |
| protection class IP                                                                 | IP20, with connected conductors |
| Breaking Capacity                                                                   |                                 |
| switching capacity current                                                          |                                 |
| • at DC according to IEC 60947-2 rated value                                        | 15 kA                           |
| • according to EN 60898 rated value                                                 | 10 kA                           |
| energy limitation class                                                             | 3                               |
| Dissipation                                                                         |                                 |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 6 W                             |

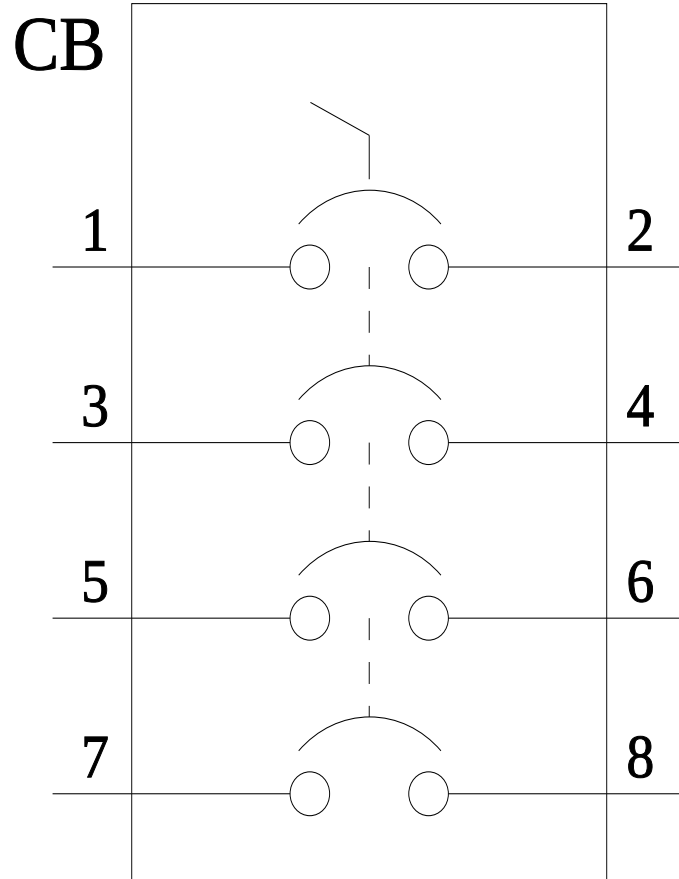
|                                                                                     |                                                                        |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>suitability for operation</b>                                                    | Infrastructure / Industry / Mobility                                   |
| <b>Product details</b>                                                              |                                                                        |
| <b>product feature touch protection</b>                                             | Yes                                                                    |
| <b>product component</b>                                                            |                                                                        |
| • combined terminal top                                                             | Yes                                                                    |
| • combined terminal bottom                                                          | Yes                                                                    |
| • neutral conductor switching                                                       | No                                                                     |
| <b>product feature properties for main switches in accordance with EN 60204-1</b>   | Yes                                                                    |
| <b>product feature halogen-free</b>                                                 | Yes                                                                    |
| <b>product feature sealable</b>                                                     | Yes                                                                    |
| <b>product feature silicon-free</b>                                                 | Yes                                                                    |
| <b>product extension installable supplementary devices</b>                          | Yes                                                                    |
| <b>Short circuit</b>                                                                |                                                                        |
| <b>short-circuit current breaking capacity (Icn)</b>                                |                                                                        |
| • at DC according to EN 60898-2                                                     | 10 kA                                                                  |
| <b>Connections</b>                                                                  |                                                                        |
| <b>connectable conductor cross-section solid</b>                                    |                                                                        |
| • minimum                                                                           | 0.75 mm <sup>2</sup>                                                   |
| • maximum                                                                           | 35 mm <sup>2</sup>                                                     |
| <b>connectable conductor cross-section stranded</b>                                 |                                                                        |
| • minimum                                                                           | 0.75 mm <sup>2</sup>                                                   |
| • maximum                                                                           | 35 mm <sup>2</sup>                                                     |
| <b>connectable conductor cross-section finely stranded with core end processing</b> |                                                                        |
| • minimum                                                                           | 0.75 mm <sup>2</sup>                                                   |
| • maximum                                                                           | 25 mm <sup>2</sup>                                                     |
| <b>AWG number as coded connectable conductor cross section</b>                      |                                                                        |
| • minimum                                                                           | 18                                                                     |
| • maximum                                                                           | 4                                                                      |
| <b>tightening torque [lbf-in] with screw-type terminals</b>                         |                                                                        |
| • minimum                                                                           | 22 lbf-in                                                              |
| • maximum                                                                           | 31 lbf-in                                                              |
| <b>tightening torque with screw-type terminals</b>                                  |                                                                        |
| • minimum                                                                           | 2.5 N·m                                                                |
| • maximum                                                                           | 3.5 N·m                                                                |
| <b>position of power supply cord</b>                                                | AC as required, observe DC polarity                                    |
| <b>Mechanical Design</b>                                                            |                                                                        |
| <b>height</b>                                                                       | 90 mm                                                                  |
| <b>width</b>                                                                        | 72 mm                                                                  |
| <b>depth</b>                                                                        | 76 mm                                                                  |
| <b>installation depth</b>                                                           | 70 mm                                                                  |
| <b>number of modular width units</b>                                                | 4                                                                      |
| <b>fastening method</b>                                                             | DIN rail                                                               |
| <b>mounting position</b>                                                            | any                                                                    |
| <b>Net Weight</b>                                                                   | 669 g                                                                  |
| <b>Environmental conditions</b>                                                     |                                                                        |
| <b>influence of the surrounding temperature</b>                                     | max. 95% RH up to 55°C, max. 55% RH up to 70°C, max. 35% RH up to 75°C |
| <b>standard</b>                                                                     | IEC / EN 60898-2, UL1077                                               |
| <b>vibration resistance according to IEC 60068-2-6</b>                              | ±1mm at 5 to 25Hz; 50m/s <sup>2</sup> at 25 to 150Hz                   |
| <b>ambient temperature during operation</b>                                         |                                                                        |
| • minimum                                                                           | -40 °C                                                                 |
| • maximum                                                                           | 70 °C                                                                  |
| <b>ambient temperature during storage</b>                                           |                                                                        |
| • minimum                                                                           | -40 °C                                                                 |
| • maximum                                                                           | 75 °C                                                                  |
| <b>number of test cycles for environmental testing according to IEC 60068-2-30</b>  | 6                                                                      |
| <b>Approvals Certificates</b>                                                       |                                                                        |

| Environment                                                                       |                                             | General Product Approval                                                            |                                                                                   |                                          |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------|
| <a href="#">Environmental Confirmations</a>                                       | <a href="#">Environmental Confirmations</a> |    |  | <a href="#">Miscellaneous</a>            |
|                                                                                   |                                             |  |                                                                                   |                                          |
| General Product Approval                                                          |                                             |                                                                                     | Test Certificates                                                                 | other                                    |
|  | <a href="#">Confirmation</a>                |    |  | <a href="#">Special Test Certificate</a> |
|                                                                                   |                                             |  |                                                                                   |                                          |
| other                                                                             | Railway                                     |                                                                                     | Dangerous goods                                                                   |                                          |
| <a href="#">Confirmation</a>                                                      | <a href="#">Special Test Certificate</a>    | <a href="#">Confirmation</a>                                                        | <a href="#">Transport Information</a>                                             |                                          |

#### 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=5SY5463-6>  
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/5SY5463-6>  
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY5463-6](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5463-6)  
**CAX-Online-Generator**  
<https://www.siemens.com/cax>  
**Tender specifications**  
<https://www.siemens.com/specifications>  
**Characteristic curves**  
[https://curves.simarisiemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simarisiemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>)





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