



MCB 5SN

| Model   |                                 |
|---|---------------------------------|
| product brand name  | SENTRON                         |
| product designation   | Miniature circuit breaker       |
| General technical data  |                                 |
| number of poles   | 4                               |
| design of pole  | 4P                              |
| tripping characteristic class   | D                               |
| mechanical service life (operating cycles) typical                                  | 10 000                          |
| overvoltage category  | 3                               |
| degree of pollution   | 2                               |
| Voltage   |                                 |
| type of voltage of the operating voltage  | AC                              |
| insulation voltage (Ui)   |                                 |
| • with single-phase operation at AC rated value                                     | 440 V                           |
| • with multi-phase operation at AC rated value                                      | 440 V                           |
| • operational current at AC rated value   | 50 A                            |
| Supply voltage  |                                 |
| supply voltage at AC  | 400 V                           |
| value range of the supply voltage frequency   | 50/60 Hz                        |
| operating voltage   |                                 |
| • with multi-phase operation at AC maximum  | 440 V                           |
| • at DC rated value maximum   | 72 V                            |
| Protection class  |                                 |
| protection class IP   | IP20, with connected conductors |
| Breaking Capacity   |                                 |
| switching capacity current  |                                 |
| • according to EN 60898 rated value   | 6 kA                            |
| • according to IEC 60947-2 rated value  | 10 kA                           |
| grid spacing  | 35 mm                           |
| Dissipation   |                                 |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 3.7 W                           |
| Product details   |                                 |
| product feature touch protection  | Yes                             |
| product component neutral conductor switching                                       | No                              |
| product feature halogen-free  | Yes                             |
| product feature sealable  | Yes                             |
| product feature silicon-free  | Yes                             |

|   |  |
|---|--|
| product extension installable supplementary devices | Yes  |
| <b>Connections</b>                                  |  |
| connectable conductor cross-section solid 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>tightening torque with screw-type terminals</b>  |  |
| • minimum   | 2.5 N·m  |
| • maximum   | 3.5 N·m  |
| <b>Mechanical Design</b>                            |  |
| height  | 90 mm  |
| width   | 72 mm  |
| depth   | 76 mm  |
| installation depth                                  | 70 mm  |
| number of modular width units                       | 4  |
| mounting position                                   | any  |
| <b>Net Weight</b>                                   | 0.624 kg   |
| <b>Environmental conditions</b>                     |  |
| influence of the surrounding temperature            | max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C |
| vibration resistance according to IEC 60068-2-6     | ±1mm at 5 to 25Hz; 50m/s <sup>2</sup> at 25 to 150Hz |
| <b>ambient temperature during operation</b>         |  |
| • minimum   | -25 °C   |
| • maximum   | 55 °C  |
| <b>ambient temperature during storage</b>           |  |
| • minimum   | -40 °C   |
| • maximum   | 75 °C  |
| <b>Approvals Certificates</b>                       |  |
| General Product Approval                            | other  |



#### 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=5SN6450-8CP>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SN6450-8CP>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SN6450-8CP](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SN6450-8CP)

##### CAX-Online-Generator

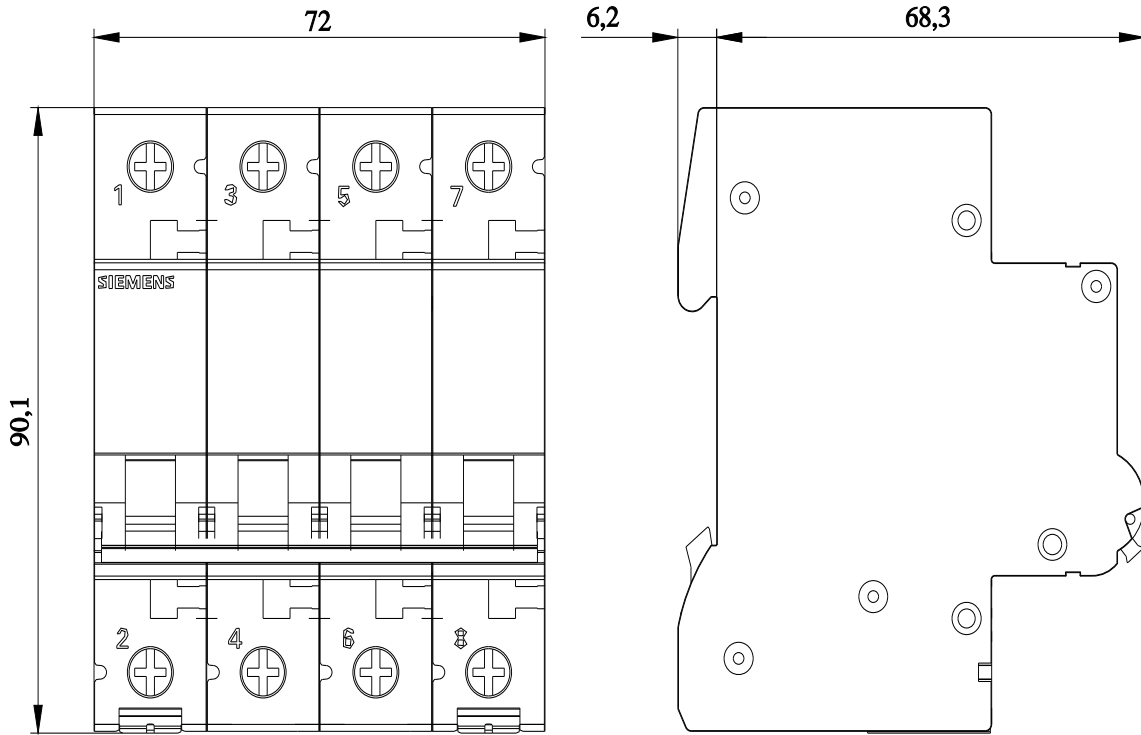
<https://www.siemens.com/cax>

##### Tender specifications

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

##### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



last modified:

9/13/2025 

