



Circuit breaker Universal current 880 V DC 400 V AC 10kA, 4-pole, B, 10 A 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 | 10 000 |
| overvoltage category | 2 |
| degree of pollution | 2 |
| Voltage | |
| type of voltage of the operating voltage | AC/DC |
| insulation voltage (Ui) | |
| <ul style="list-style-type: none"> • at DC rated value • with single-phase operation at AC rated value • with multi-phase operation at AC rated value | 250 V 440 V 440 V |
| <ul style="list-style-type: none"> • operational current <ul style="list-style-type: none"> — at 40 °C rated value — at 50 °C rated value — at 55 °C rated value — at 60 °C rated value • operational current at AC rated value | 9.52 A 9.02 A 8.75 A 8.48 A 10 A |
| Supply voltage | |
| supply voltage | |
| <ul style="list-style-type: none"> • at AC • at DC rated value | 400 V 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 | |
| <ul style="list-style-type: none"> • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value | 15 kA 10 kA |
| energy limitation class | 3 |
| Dissipation | |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 1.3 W |

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|---|--|
| suitability for operation | Infrastructure / Industry / Mobility |
| Product details | |
| product feature touch protection | Yes |
| product component | |
| • combined terminal top | Yes |
| • combined terminal bottom | Yes |
| • neutral conductor switching | No |
| product feature properties for main switches in accordance with EN 60204-1 | Yes |
| product feature halogen-free | Yes |
| product feature sealable | Yes |
| product feature silicon-free | Yes |
| product extension installable supplementary devices | Yes |
| Short circuit | |
| short-circuit current breaking capacity (Icn) | |
| • at DC according to EN 60898-2 | 10 kA |
| Connections | |
| connectable conductor cross-section solid | |
| • minimum | 0.75 mm ² |
| • maximum | 35 mm ² |
| connectable conductor cross-section stranded | |
| • minimum | 0.75 mm ² |
| • maximum | 35 mm ² |
| connectable conductor cross-section finely stranded with core end processing | |
| • minimum | 0.75 mm ² |
| • maximum | 25 mm ² |
| 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 | AC as required, observe DC polarity |
| Mechanical Design | |
| height | 90 mm |
| width | 72 mm |
| depth | 76 mm |
| installation depth | 70 mm |
| number of modular width units | 4 |
| fastening method | DIN rail |
| mounting position | any |
| Net Weight | 634 g |
| Environmental conditions | |
| influence of the surrounding temperature | max. 95% RH up to 55°C, max. 55% RH up to 70°C, max. 35% RH up to 75°C |
| standard | IEC / EN 60898-2, UL1077 |
| vibration resistance according to IEC 60068-2-6 | ±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz |
| ambient temperature during operation | |
| • minimum | -40 °C |
| • maximum | 70 °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 |
| Approvals Certificates | |

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

[Environmental Confirmations](#)

[Environmental Confirmations](#)



[Miscellaneous](#)



| | | |
|--------------------------|-------------------|-------|
| General Product Approval | Test Certificates | other |
|--------------------------|-------------------|-------|



[Confirmation](#)



[Special Test Certificate](#)



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|-------|---------|-----------------|--|
| other | Railway | Dangerous goods | |
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[Confirmation](#)

[Special Test Certificate](#)

[Confirmation](#)

[Transport Information](#)

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=5SY5410-6>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/5SY5410-6>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5410-6
- 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=)



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