



Miniature circuit breaker 230 V 6kA, 1+N-pole, C, 8A

| Model   |                                 |
|---|---------------------------------|
| product brand name  | SENTRON                         |
| product designation   | Miniature circuit breaker       |
| General technical data  |                                 |
| number of poles   | 2                               |
| design of pole  | 1P+N                            |
| tripping characteristic class   | C                               |
| mechanical service life (operating cycles) typical                                  | 10 000                          |
| overvoltage category  | 3                               |
| degree of pollution   | 3                               |
| Voltage   |                                 |
| type of voltage of the operating voltage  | AC                              |
| insulation voltage (U <sub>i</sub> )  |                                 |
| • with single-phase operation at AC rated value                                     | 250 V                           |
| supply voltage with single-phase operation at AC rated value                        | 230 V                           |
|   |                                 |
| • operational current   |                                 |
| — at 40 °C rated value  | 7.35 A                          |
| — at 50 °C rated value  | 6.63 A                          |
| — at 55 °C rated value  | 6.25 A                          |
| • operational current at AC rated value   | 8 A                             |
| Supply voltage  |                                 |
| supply voltage  |                                 |
| • at AC   | 230 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 |
| Breaking Capacity   |                                 |
| switching capacity current  |                                 |
| • according to EN 60898 rated value   | 6 kA                            |
| energy limitation class   | 3                               |
| Dissipation   |                                 |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 0.9 W                           |
| suitability for operation   | Infrastructure / Industry       |
| Product details   |                                 |

|  |     |
|--|-----|
| product feature touch protection   | Yes |
| product component  |     |
| • combined terminal top  | Yes |
| • combined terminal bottom   | Yes |
| • neutral conductor switching  | Yes |
| 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 |

#### Connections

|  |                      |
|--|----------------------|
| connectable conductor cross-section solid                                    |                      |
| • minimum  | 0.75 mm <sup>2</sup> |
| • maximum  | 35 mm <sup>2</sup>   |
| connectable conductor cross-section stranded                                 |                      |
| • minimum  | 0.75 mm <sup>2</sup> |
| • maximum  | 35 mm <sup>2</sup>   |
| connectable conductor cross-section finely stranded with core end processing |                      |
| • minimum  | 0.75 mm <sup>2</sup> |
| • maximum  | 25 mm <sup>2</sup>   |
| 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                         | 36 mm    |
| depth                         | 76 mm    |
| installation depth            | 70 mm    |
| number of modular width units | 2        |
| fastening method              | DIN rail |
| mounting position             | any      |
| Net Weight                    | 0.32 kg  |

#### Environmental conditions

|   |  |
|---|--|
| influence of the surrounding temperature                                    | max. 95% RH up to 55°C   |
| standard  | IEC / EN 60898-1   |
| vibration resistance according to IEC 60068-2-6                             | ±1mm at 5 to 25 Hz; 50 m/s <sup>2</sup> at 25 to 150 Hz and 60 m/s <sup>2</sup> at 35 Hz (4 sec) |
| 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 | 28   |

#### Approvals Certificates

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

[Environmental Confirmations](#)



[Environmental Confirmations](#)

[Miscellaneous](#)



[Confirmation](#)

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



[Confirmation](#)

#### 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=5SY6508-7CC>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY6508-7CC>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY6508-7CC](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6508-7CC)

**CAx-Online-Generator**

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

**Tender specifications**

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

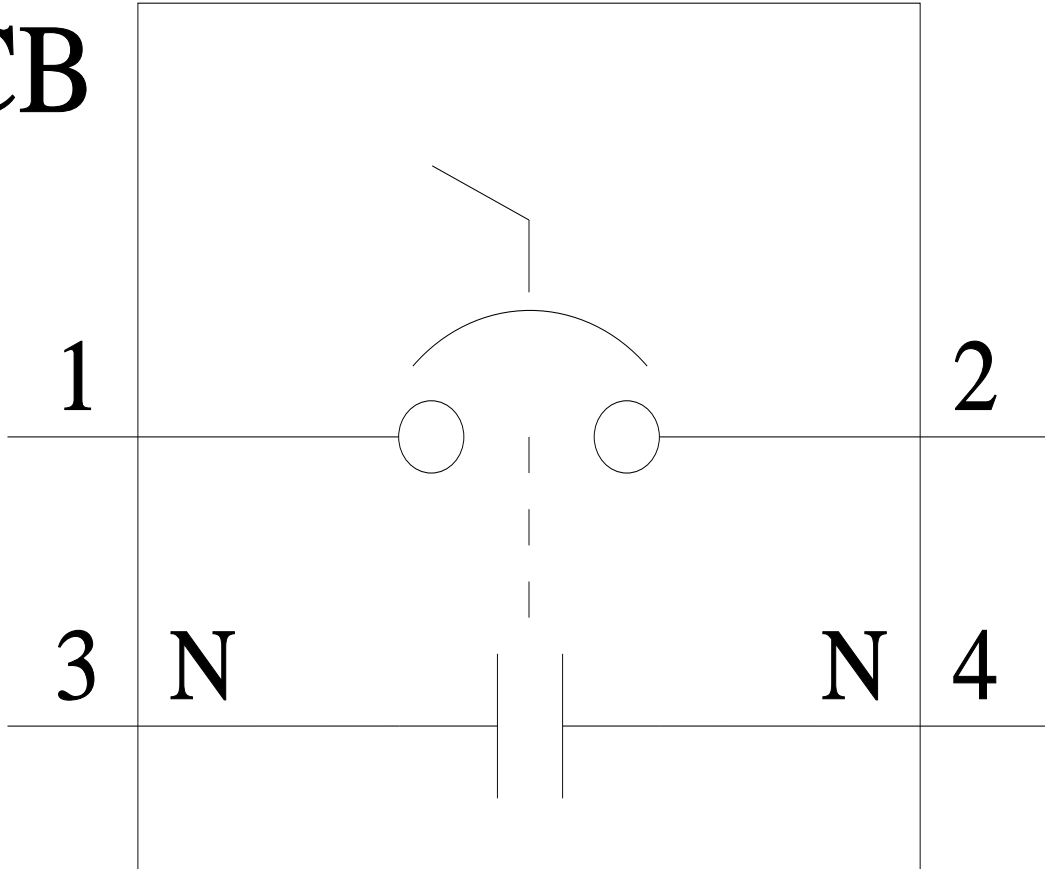
**Characteristic curves**

[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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