



Miniature circuit breaker 400 V 10kA, 3+N-pole, D, 50 A Circuit breaker 400 V 10kA, 3+N-pole, D, 50 A

| Model | |
|--|---|
| product brand name | SENTRON |
| product designation | Miniature circuit breaker |
| General technical data | |
| number of poles | 4 |
| design of pole | 3P+N |
| tripping characteristic class | D |
| overvoltage category | 3 |
| degree of pollution | 2 |
| Voltage | |
| type of voltage of the operating voltage | AC |
| type of voltage | Use only in alternating current or direct current circuits. Mixed use is not permitted. |
| insulation voltage (Ui) | |
| <ul style="list-style-type: none"> with multi-phase operation at AC rated value | 440 V |
| <ul style="list-style-type: none"> operational current <ul style="list-style-type: none"> at 30 °C rated value at 40 °C rated value at 50 °C rated value at 55 °C rated value operational current at AC rated value | 50 A 47.36 A 44.56 A 43.09 A 50 A |
| Supply voltage | |
| supply voltage at AC | 400 V |
| value range of the supply voltage frequency | 50/60 Hz |
| operating voltage | |
| <ul style="list-style-type: none"> with multi-phase operation at AC maximum at DC rated value maximum | 440 V 62.5 V The operational voltage 62,5V DC/pole takes into account a battery charging voltage with peak value of 72V |
| Protection class | |
| protection class IP | IP20, with connected conductors |
| Breaking Capacity | |
| switching capacity current | |
| <ul style="list-style-type: none"> according to EN 60898 rated value | 10 kA |
| Dissipation | |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 3.6 W |
| suitability for operation | Residential buildings/infrastructure |

| Product details | |
|--|-------------------------------------|
| product feature touch protection | Yes |
| product component neutral conductor switching | 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 ² |
| • maximum | 25 mm ² |
| connectable conductor cross-section stranded | |
| • minimum | 0.75 mm ² |
| • maximum | 25 mm ² |
| connectable conductor cross-section finely stranded with core end processing | |
| • minimum | 0.75 mm ² |
| • maximum | 25 mm ² |
| tightening torque with screw-type terminals | |
| • minimum | 2.5 N·m |
| • maximum | 3 N·m |
| Mechanical Design | |
| height | 90 mm |
| width | 72 mm |
| depth | 76 mm |
| installation depth | 70 mm |
| number of modular width units | 4 |
| mounting position | any |
| Net Weight | 0.66 kg |
| Environmental conditions | |
| vibration resistance according to IEC 60068-2-6 | 50 m/s ² at 25 to 150 Hz |
| ambient temperature during operation | |
| • minimum | -25 °C |
| • maximum | 55 °C |
| ambient temperature during storage | |
| • minimum | -40 °C |
| • maximum | 75 °C |
| Approvals Certificates | |
| General Product Approval | EMV |



[Confirmation](#)



| Test Certificates | other | Environment |
|-------------------|-------|-------------|
|-------------------|-------|-------------|

[Miscellaneous](#)



[Confirmation](#)

[Environmental Con-
firmations](#)

[Environmental Con-
firmations](#)

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?mfb=5SL4650-8CC>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SL4650-8CC>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL4650-8CC

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>





last modified:

10/10/2025

