



Miniature circuit breaker 400 V 10kA, 4-pole, B, 50 A

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	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"> <li>with multi-phase operation at AC rated value</li> </ul>	440 V
<ul style="list-style-type: none"> <li>operational current                             <ul style="list-style-type: none"> <li>at 30 °C rated value</li> <li>at 40 °C rated value</li> <li>at 55 °C rated value</li> </ul> </li> <li>operational current at AC rated value</li> </ul>	50 A 47.36 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"> <li>with multi-phase operation at AC maximum</li> <li>at DC rated value maximum</li> <li></li> </ul>	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"> <li>according to EN 60898 rated value</li> <li>according to IEC 60947-2 rated value</li> </ul>	10 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	4 W

<b>suitability for operation</b>	Residential buildings/infrastructure
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**Product details**

<b>product feature touch protection</b>	Yes
product component neutral conductor switching	No
<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

**Connections**

<b>connectable conductor cross-section solid</b>	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.75 mm <sup>2</sup> 25 mm <sup>2</sup>
<b>connectable conductor cross-section stranded</b>	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.75 mm <sup>2</sup> 25 mm <sup>2</sup>
<b>connectable conductor cross-section finely stranded with core end processing</b>	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.75 mm <sup>2</sup> 25 mm <sup>2</sup>
<b>tightening torque with screw-type terminals</b>	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	2.5 N·m 3 N·m

**Mechanical Design**

<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>mounting position</b>	any
<b>Net Weight</b>	642 g

**Environmental conditions**

<b>ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-25 °C 55 °C
<b>ambient temperature during storage</b>	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-40 °C 75 °C

**Approvals Certificates**

<b>Environment</b>	<b>General Product Approval</b>
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[Environmental Con-  
firmations](#)

[Environmental Con-  
firmations](#)



<b>General Product Approval</b>	<b>Test Certificates</b>	<b>other</b>
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[Confirmation](#)



[Miscellaneous](#)

[Confirmation](#)

**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=5SL4450-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SL4450-6>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SL4450-6](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL4450-6)

### CAX-Online-Generator

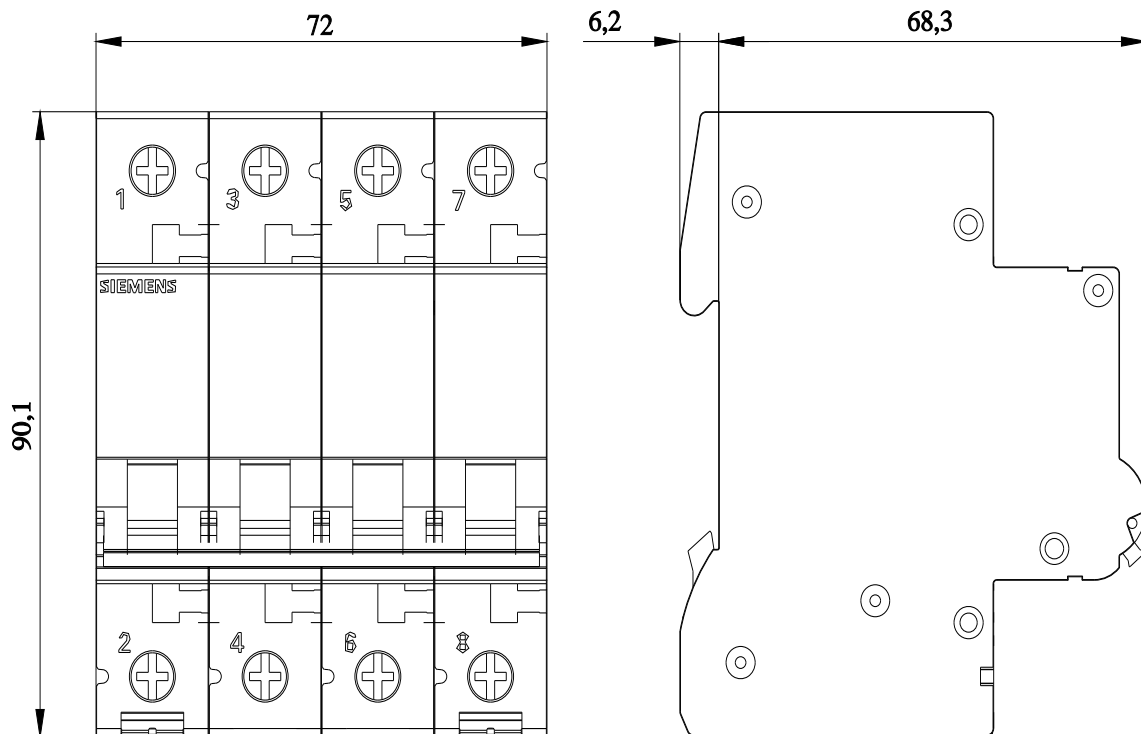
<https://www.siemens.com/cax>

### 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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