

Miniature circuit breaker 400 V 10kA, 4-pole, D, 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	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
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 55 °C rated value operational current at AC rated value 	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"> 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 according to IEC 60947-2 rated value 	10 kA 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	No
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	
<ul style="list-style-type: none"> minimum 	0.75 mm ²

<ul style="list-style-type: none"> • maximum 	25 mm ²
connectable conductor cross-section stranded	
<ul style="list-style-type: none"> • minimum 	0.75 mm ²
<ul style="list-style-type: none"> • maximum 	25 mm ²
connectable conductor cross-section finely stranded with core end processing	
<ul style="list-style-type: none"> • minimum 	0.75 mm ²
<ul style="list-style-type: none"> • maximum 	25 mm ²
tightening torque with screw-type terminals	
<ul style="list-style-type: none"> • minimum 	2.5 N·m
<ul style="list-style-type: none"> • 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	646 g

Environmental conditions

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

Approvals Certificates

Environment	General Product Approval
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[Environmental Con-
firmations](#)

[Environmental Con-
firmations](#)



General Product Approval	Test Certificates	other
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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=5SL4450-8>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SL4450-8>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL4450-8

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 

