



Miniature circuit breaker 230 V 10kA, 1+N-pole, D, 50 A

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	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 single-phase operation at AC rated value 	250 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 46.19 A 42.05 A 39.81 A 50 A
Supply voltage	
supply voltage at AC	230 V
value range of the supply voltage frequency	50/60 Hz
operating voltage	
<ul style="list-style-type: none"> at DC rated value maximum 	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	36 mm
depth	76 mm
installation depth	70 mm
number of modular width units	2
mounting position	any
Net Weight	0.33 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?mlfb=5SL4550-8CC>
 Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/5SL4550-8CC>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL4550-8CC

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 

