



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
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 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 55 °C rated value operational current at AC rated value 	50 A 46.19 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 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	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 <ul style="list-style-type: none"> • minimum • maximum 	0.75 mm ² 25 mm ²
connectable conductor cross-section stranded <ul style="list-style-type: none"> • minimum • maximum 	0.75 mm ² 25 mm ²
connectable conductor cross-section finely stranded with core end processing <ul style="list-style-type: none"> • minimum • maximum 	0.75 mm ² 25 mm ²
tightening torque with screw-type terminals <ul style="list-style-type: none"> • minimum • maximum 	2.5 N·m 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	329 g

Environmental conditions

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

Approvals Certificates

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

[Environmental Con-
firmations](#)

[Environmental Con-
firmations](#)



General Product Approval	Test Certificates	other
--------------------------	-------------------	-------



[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=5SL4550-8>

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

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

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

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

CAX-Online-Generator

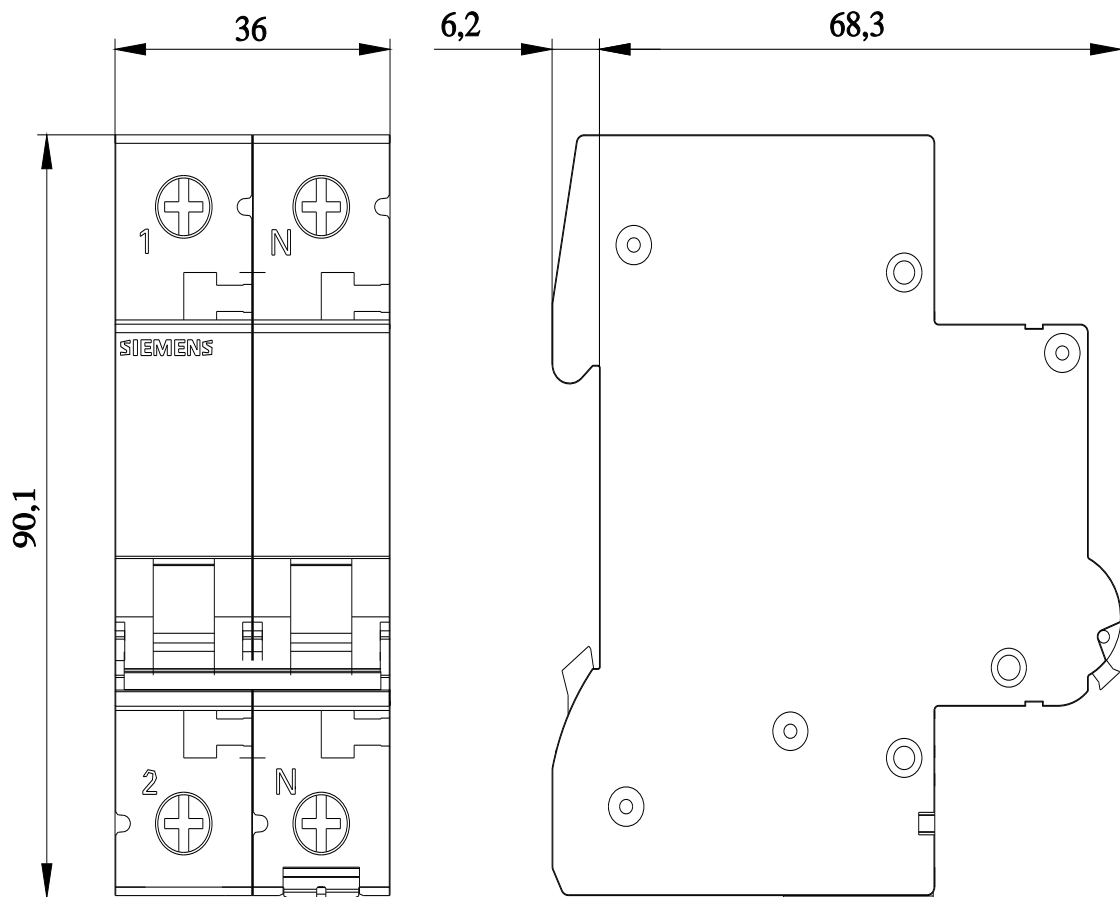
<https://www.siemens.com/cax>

Tender specifications

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





last modified:

10/10/2025 

