



Figure similar

Main miniature circuit breaker (SHU), 4-pole, E 50, 400V

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
design of the product	Main miniature circuit breaker
design of the locking device	Integrated locking slide, lockable by means of a lock, wire seal and cable ties
General technical data	
number of poles	4
design of pole	4P
tripping characteristic class	E
mechanical service life (operating cycles) typical	20 000
overvoltage category	4
degree of pollution	3
Voltage	
insulation voltage (Ui) rated value	690 V
surge voltage resistance rated value	6 kV
<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 47.5 A 45 A 43.75 A 50 A
Supply voltage	
supply voltage at AC	400 V
operating voltage rated value <ul style="list-style-type: none"> ● minimum ● maximum 	110 V 440 V
supply voltage frequency rated value	50 Hz
Protection class	
protection class IP	IP40, with connected conductors
Breaking Capacity	
switching capacity current <ul style="list-style-type: none"> ● rated value ● according to EN 60898 rated value 	25 kA 25 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	8 W
suitability for operation	Residential buildings/infrastructure

Product details

product component	
<ul style="list-style-type: none"> • infeed at box terminal • saddle terminals 	Yes
product feature properties for main switches in accordance with EN 60204-1	Yes
product feature sealable	Yes

Display and operation

display version for switch position indicator	OFF = green, ON = red
---	-----------------------

Connections

connectable conductor cross-section of the box terminal	
<ul style="list-style-type: none"> • solid minimum • solid maximum • stranded minimum • stranded maximum 	2.5 mm ² 50 mm ² 2.5 mm ² 50 mm ²
connectable conductor cross-section solid	
<ul style="list-style-type: none"> • minimum • maximum 	2.5 mm ² 50 mm ²
connectable conductor cross-section stranded	
<ul style="list-style-type: none"> • minimum • maximum 	2.5 mm ² 50 mm ²
connectable conductor cross-section finely stranded with core end processing	
<ul style="list-style-type: none"> • minimum • maximum 	2.5 mm ² 50 mm ²
position of power supply cord	Any

Mechanical Design

height	128 mm
depth	76.3 mm
depth of the enclosure	76.3 mm
number of modular width units	6
fastening method	DIN rail
fastening method other	on DIN rail 35 mm acc. to EN 60715
Net Weight	1.458 kg

Environmental conditions

shock resistance	30 g, at least 3 impacts, impact duration 11 ms
vibration resistance according to IEC 60068-2-6	2 g, 20 frequency cycles 5 to 150 to 15 Hz
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 70 °C

Approvals Certificates

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

[Environmental Con-
firmations](#)

[Environmental Con-
firmations](#)



other



[Confirmation](#)

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=5SP3450-3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SP3450-3>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SP3450-3

CAX-Online-Generator

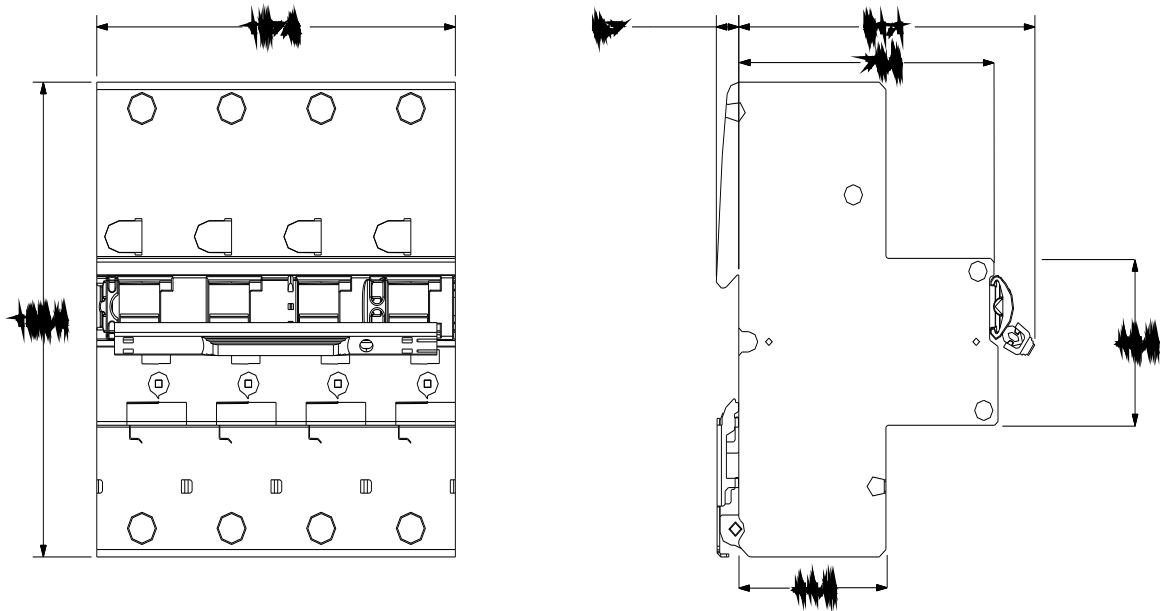
<https://www.siemens.com/cax>

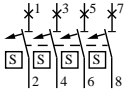
Tender specifications

<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:

7/22/2025 

