



Circuit breaker 400V, 6kA, 4-pole, C, 50A

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	4
design of pole	4P
tripping characteristic class	C
mechanical service life (operating cycles) typical	10 000
overvoltage category	3
degree of pollution	2
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui)	
• with multi-phase operation at AC rated value	440 V
• operational current	
— at 30 °C rated value	50 A
— at 40 °C rated value	47.15 A
• operational current at AC rated value	50 A
Supply voltage	
supply voltage at AC	400 V
value range of the supply voltage frequency	50/60 Hz
operating voltage	
• with multi-phase operation at AC maximum	440 V
• at DC rated value maximum	72 V
Protection class	
protection class IP	IP20, with connected conductors
Breaking Capacity	
switching capacity current	
• according to EN 60898 rated value	6 kA
grid spacing	35 mm
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	3.6 W
Product details	
product feature touch protection	No
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 maximum	25 mm ²	
connectable conductor cross-section stranded		
• minimum	0.75 mm ²	
• maximum	25 mm ²	
tightening torque with screw-type terminals		
• minimum	2.5 N·m	
• maximum	3.5 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	0.66 kg	
Environmental conditions		
influence of the surrounding temperature	Periodically +55°C, max. 95% humidity	
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	45 °C	
ambient temperature during storage		
• minimum	-40 °C	
• maximum	75 °C	
Approvals Certificates		
Environment	General Product Approval	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=5SN6450-7CN>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SN6450-7CN>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SN6450-7CN

CAX-Online-Generator

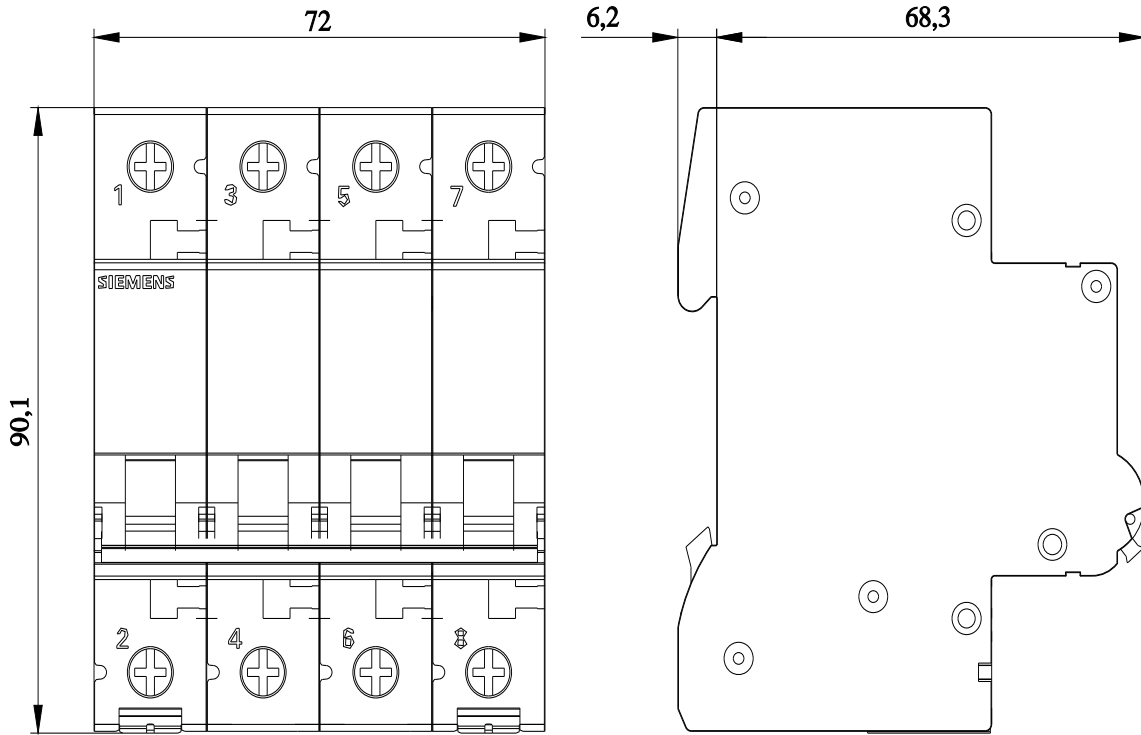
<https://www.siemens.com/cax>

Tender specifications

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

Characteristic curves

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



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