SIEMENS

Data sheet 5SL6506-6



Miniature circuit breaker 230 V 6kA, 1+N-pole, B, 6A

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	B
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)	
• with single-phase operation at AC rated value	250 V
• operational current	
— at 30 °C rated value	6 A
— at 40 °C rated value	5.64 A
— at 55 °C rated value	5.04 A
• operational current at AC rated value	6 A
Supply voltage	
supply voltage at AC	230 V
value range of the supply voltage frequency	50/60 Hz
operating voltage	
• 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	
• according to EN 60898 rated value	6 kA
• according to IEC 60947-2 rated value	6 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	0.9 W
suitability for operation	Residential buildings/infrastructure

Subject to change without notice
© Copyright Siemens

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 mm²
• maximum	25 mm²
connectable conductor cross-section stranded	
• minimum	0.75 mm²
• maximum	25 mm²
connectable conductor cross-section finely stranded with core end processing	
• minimum	0.75 mm²
• maximum	25 mm²
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	252 g
Environmental conditions	
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			
Environmental Con-firmations	Environmental Con-firmations	CEBEC	VDE	Miscellaneous	EAC

General Product Approval			other	
Confirmation	CE EG-Konf.	UKCA	Confirmation	产品合格 QC PASS

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=5SL6506-6
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

© Copyright Siemens

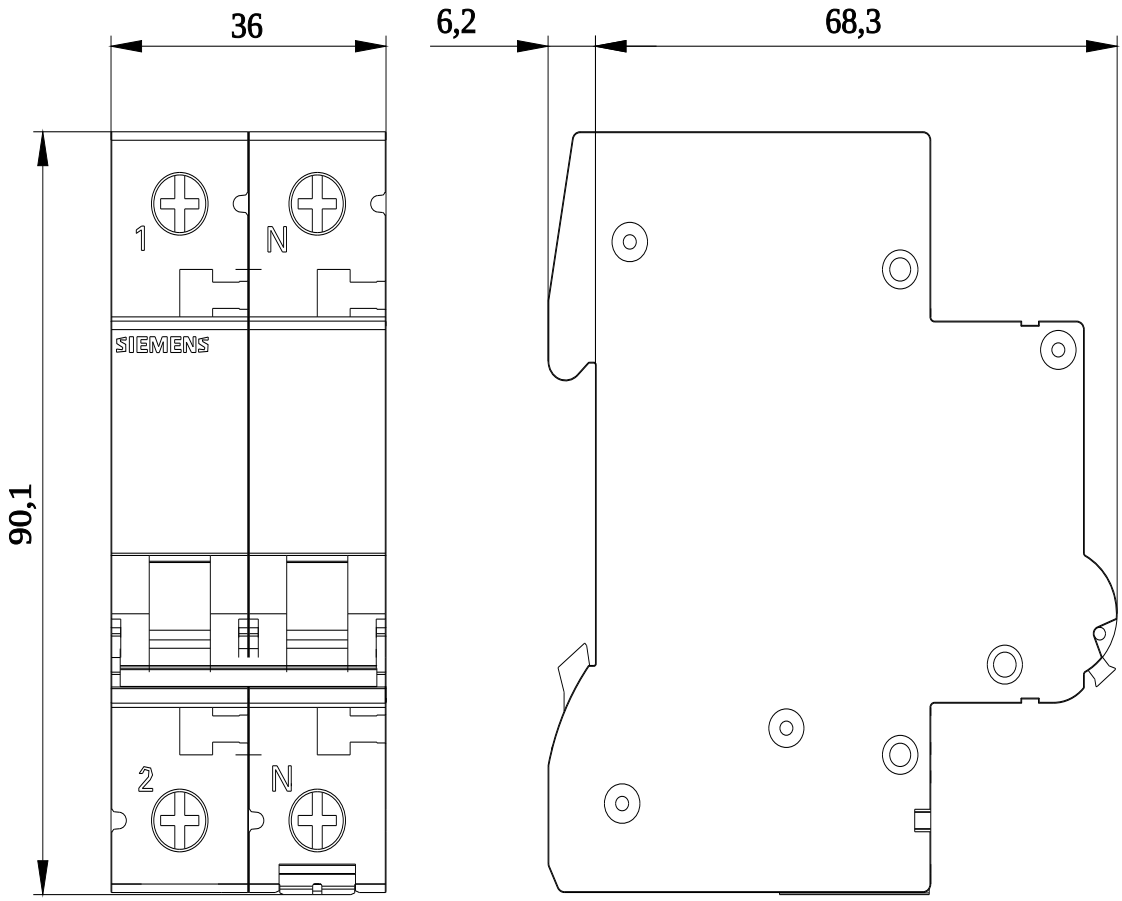
https://support.industry.siemens.com/cs/ww/en/ps/5SL6506-6

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL6506-6

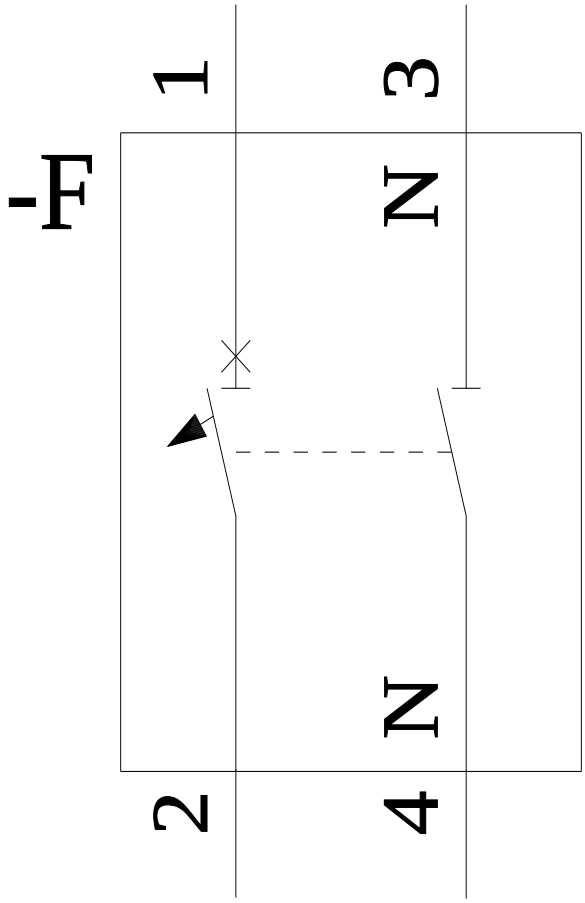
CAx-Online-Generator
https://www.siemens.com/cax

Tender specifications
https://www.siemens.com/specifications

Kennlinien
https://curves.simaris.siemens.com/curves/5SL6506-6



Subject to change without notice
© Copyright Siemens



last modified: 10/10/2025

Subject to change without notice
© Copyright Siemens

Subject to change without notice
© Copyright Siemens