## **SIEMENS**

Data sheet 5SY4550-7



Miniature circuit breaker 230 V 10kA, 1+N-pole, C, 50 A, D=70 mm

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	С
mechanical service life (operating cycles) typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC
insulation voltage (Ui)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	250 V
supply voltage with single-phase operation at AC rated value	230 V
operational current	
<ul> <li>at 40 °C rated value</li> </ul>	47.6 A
• at 50 °C rated value	45.1 A
• at 55 °C rated value	43.75 A
<ul> <li>at 60 °C rated value</li> </ul>	42.4 A
<ul> <li>at AC rated value</li> </ul>	50 A
Supply voltage	
supply voltage	
<ul> <li>at AC rated value</li> </ul>	230 V
at DC rated value	60 V
value range of the supply voltage frequency	50/60 Hz
operating voltage at DC rated value maximum	72 V
Protection class	
protection class IP	IP20, with connected conductors
Breaking Capacity	
switching capacity current	
• at DC according to IEC 60947-2 rated value	15 kA
<ul> <li>according to EN 60898 rated value</li> </ul>	10 kA
<ul> <li>according to IEC 60947-2 rated value</li> </ul>	15 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	3.8 W
Product details	
product component	

<ul> <li>combined terminal top</li> </ul>	Yes
<ul> <li>combined terminal bottom</li> </ul>	Yes
neutral conductor switching	Yes
product feature	
<ul> <li>properties for main switches in accordance with EN 60204-1</li> </ul>	Yes
<ul> <li>halogen-free</li> </ul>	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Product function	
set values setting current (li) for I-tripping	6,5
reference value setting current (li) for I-tripping	x In
Short circuit	
short-circuit current breaking capacity (Icn)	
at AC according to UL 1077 and CSA C22.2 No.235	5 kA
Connections	
connectable conductor cross-section solid	
minimum	0.75 mm²
• maximum	35 mm²
connectable conductor cross-section stranded	OO HIIII
minimum	0.75 mm²
	35 mm <sup>2</sup>
maximum  connectable conductor cross-section finely stranded with core end processing	33 1111117
minimum	0.75 mm²
• maximum	25 mm <sup>2</sup>
AWG number as coded connectable conductor cross section	23 (1111)
minimum	18
• maximum	4
tightening torque [lbf-in] with screw-type terminals	7
minimum	22 lbf in
• maximum	31 lbf·in
tightening torque with screw-type terminals	OT IDI III
minimum	2.5 N·m
• maximum	3.5 N·m
position of power supply cord	Any
Mechanical Design	Zuly
height	90 mm
width	36 mm
depth	76 mm
<u> </u>	70 mm
installation depth	2
number of modular width units	
fastening method	Quick assembly system
mounting position	any
net weight	331 g
Environmental conditions	050/ b 5500 mm 550/ t 7000 050/ t 7000
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
standard	IEC / EN 60898-1, IEC / EN 60947-2 / UL1077
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
ambient temperature during operation	40.00
• minimum	-40 °C
• maximum	70 °C
ambient temperature during storage	
• minimum	-40 °C
• maximum	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	6
Approvals Certificates	
General Product Approval	





Confirmation







**General Product Approval** 

**EMV** 

**Test Certificates** 



**Miscellaneous** 

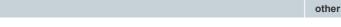




Special Test Certificate

Miscellaneous

Marine / Shipping













Confirmation

other

Railway

Environment

**Miscellaneous** 

Confirmation

Environmental Confirmations

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SY4550-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4550-7

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

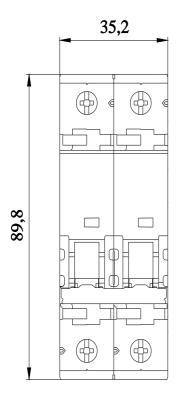
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY4550-7

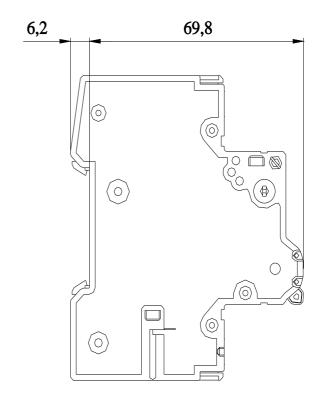
**CAx-Online-Generator** 

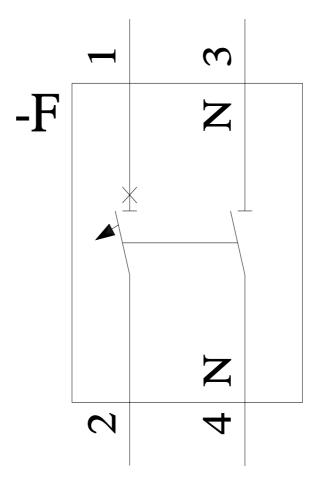
http://www.siemens.com/cax

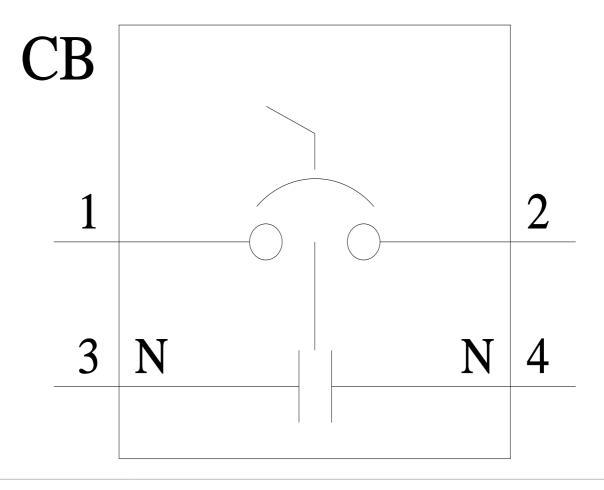
Tender specifications

http://www.siemens.com/specifications









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