SIEMENS

Data sheet

5SY4550-6



Miniature circuit breaker 230 V 10kA, 1+N-pole, B, 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	В				
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)					
 with single-phase operation at AC rated value 	250 V				
supply voltage with single-phase operation at AC rated value	230 V				
operational current					
• at 40 °C rated value	47.6 A				
 at 50 °C rated value 	45.1 A				
 at 55 °C rated value 	43.75 A				
 at 60 °C rated value 	42.4 A				
 at AC rated value 	50 A				
Supply voltage					
supply voltage					
 at AC rated value 	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				
 according to EN 60898 rated value 	10 kA				
 according to IEC 60947-2 rated value 	15 kA				
energy limitation class	3				
Dissipation					
power loss [W] for rated value of the current at AC in hot operating state per pole	4.3 W				
Product details					
product component					

combined terminal top	Yes
 combined terminal bottom 	Yes
neutral conductor switching	Yes
product feature	
 properties for main switches in accordance with EN 60204-1 	Yes
halogen-free	Yes
• sealable	Yes
silicon-free	Yes
product extension installable supplementary devices	Yes
Product function	
set values setting current (li) for I-tripping	4
reference value setting current (li) for I-tripping	x In
Short circuit	
short-circuit current breaking capacity (lcn)	
 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 mm ²
connectable conductor cross-section stranded	
• minimum	0.75 mm ²
• maximum	35 mm ²
connectable conductor cross-section finely stranded with core end processing	
• minimum	0.75 mm²
• maximum	25 mm²
AWG number as coded connectable conductor cross section	
• minimum	18
• maximum	4
tightening torque [lbf-in] with screw-type terminals	
• minimum	22 lbf·in
• maximum	31 lbf-in
tightening torque with screw-type terminals	
• minimum	2.5 N·m
• maximum	3.5 N·m
position of power supply cord	Any
Mechanical Design	
height	90 mm
width	36 mm
depth	76 mm
installation depth	70 mm
number of modular width units	2
fastening method	Quick assembly system
mounting position	any
net weight	319 g
Environmental conditions	
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/s ² at 25 to 150Hz
ambient temperature during operation	
• 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	

UK CA	CCC	<u>Confirmation</u>	CE EG-Konf.		FN UR
General Product Ap	proval		EMV	Test Certificates	
UDE VDE	<u>Miscellaneous</u>	EHC	RCM	<u>Miscellaneous</u>	Special Test Certific- ate
Marine / Shipping					other
ABS	BUREAU VERITAS		Lloydis Register urs	RINA	<u>Miscellaneous</u>
other	Railway	Environment			
Confirmation	Confirmation	Environmental Con- firmations			

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=5SY4550-6

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4550-6

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

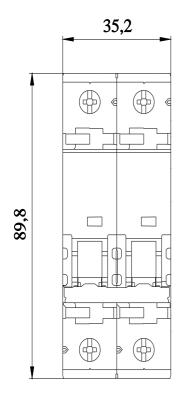
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4550-6

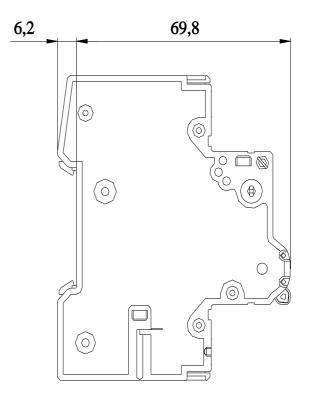
CAx-Online-Generator

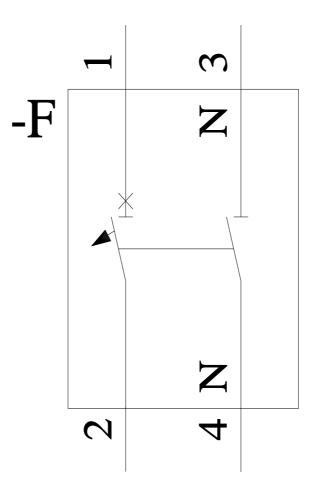
http://www.siemens.com/cax

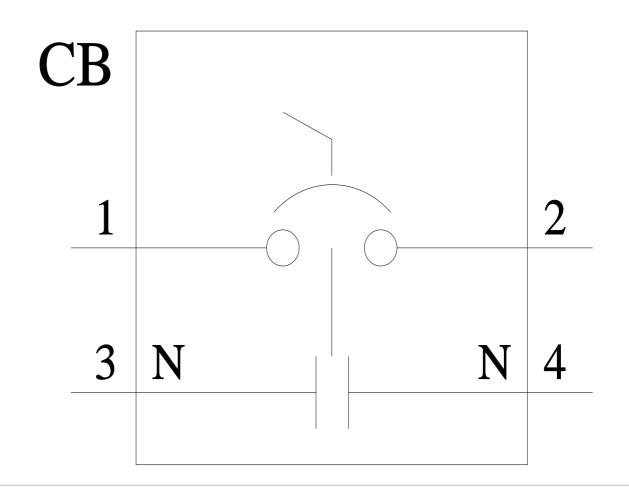
Tender specifications

http://www.siemens.com/specifications









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