SIEMENS

Data sheet

5SY5250-7



Circuit breaker Universal current 440 V DC 400 V AC 10kA, 2-pole, C, 50 A

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	2
number of poles / note	2P
tripping characteristic class	С
mechanical service life (switching cycles) / typical	5 000
overvoltage category	III
degree of pollution	3
Voltage	
insulation voltage	
 at DC / rated value 	250 V
 with single-phase operation / at AC / rated value 	440 V
 with multi-phase operation / at AC / rated value 	440 V
Supply voltage	-
type of voltage	AC/DC
supply voltage	
 at AC / rated value 	400 V
 at DC / rated value 	440 V
operating voltage / at DC / rated value / maximum	500 V
supply voltage frequency / rated value	50/60 Hz
Protection class	-
protection class IP	IP20, with connected conductors
Switching capacity	
switching capacity current	
 at DC / acc. to IEC 60947-2 / rated value 	15 kA
 acc. to EN 60898 / rated value 	10 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
Current	
operational current	
• at 35 °C / rated value	50 A
• at 40 °C / rated value	47.6 A
• at 45 °C / rated value	46.35 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
suitability for operation	universal current
Product details	
product function / neutral conductor switching	No
product feature / touch protection	Yes
product component	
 combined terminal top 	Yes
combined terminal bottom	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
Short circuit	
breaking capacity short-circuit current (Icn)	
• at DC / acc. to EN 60898-2	10 kA
Connections	
connectable conductor cross-section / solid	
minimum	0.75 mm²
• maximum	35 mm ²
connectable conductor cross-section / stranded	35 mm
	0.75 mm²
• 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 mm ²
AWG number / as coded connectable conductor cross	23 11111
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	AC as required, observe DC polarity
Mechanical Design	Ao as required, observe Do polarity
	00 mm
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	337 g
Environmental conditions	
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
vibration resistance / acc. 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

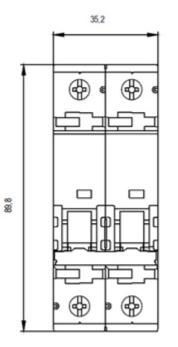
ambient temperature	e / during storage				
 minimum 		-4	0 °C		
 maximum 		75	5 °C		
number of test cycle IEC 60068-2-30	s / for environmental test	ing / acc. to 6			
Certificates					
reference code					
 acc. to DIN Ef 	N 61346-2	F			
 acc. to IEC 81 	346-2	F			
General Product A	opproval				Declaration of Conformity
	UR		<u>Miscellaneous</u>	EAC	CE EG-Konf.
Test Certificates		Railway			
<u>Miscellaneous</u>	<u>Special Test Certific-</u> <u>ate</u>	<u>Confirmation</u>	Vibration and Shock		
Further information	ownloadcenter (Catalog	as Brochures)			
	.com/lowvoltage/catalogs				
	ne ordering system) siemens.com/mall/en/en/	Catalog/product?ml	fb=5SY5250-7		
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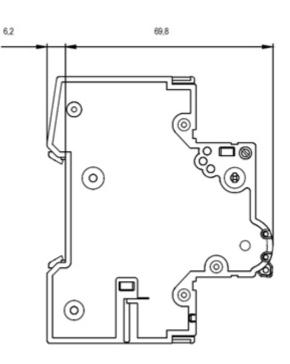
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SY5250-7 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5250-7

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

Tender specifications

http://www.siemens.com/specifications





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