SIEMENS

Data sheet

5SY8510-7



Miniature circuit breaker 230 V D=70 mm 25 kA according to EN 60947-2, 1P+N, C10

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		
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	
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	
Switching capacity		
switching capacity current		
 at DC according to IEC 60947-2 rated value 	15 kA	
 according to IEC 60947-2 rated value 	40 kA	
Dissipation		
power loss [W] for rated value of the current at AC in hot operating state per pole	1.1 W	
Current		
operational current		
 at 45 °C rated value 	10 A	
 at 50 °C rated value 	9.69 A	
 at 55 °C rated value 	9.37 A	
 at AC rated value 	10 A	
suitability for operation	Mechanical engineering / industry	
Product details		
product component		

- combined terminel term	Vec
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
	Yes
halogen-free	Yes
• sealable	
• silicon-free	Yes
product extension installable supplementary devices	Yes
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	
• minimum	0.75 mm ²
• maximum	35 mm ²
connectable conductor cross-section finely stranded with	
core end processing	
• minimum	0.75 mm ²
• 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	316 g
	510 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 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	
• minimum	-25 °C
minimummaximum	-25 °C 55 °C
 minimum maximum ambient temperature during storage 	55 °C
 minimum maximum ambient temperature during storage minimum 	55 °C -40 °C
 minimum maximum ambient temperature during storage minimum maximum 	55 °C -40 °C 75 °C
 minimum maximum ambient temperature during storage minimum maximum number of test cycles for environmental testing according 	55 °C -40 °C
 minimum maximum ambient temperature during storage minimum maximum number of test cycles for environmental testing according to IEC 60068-2-30 	55 °C -40 °C 75 °C 6
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 minimum maximum ambient temperature during storage minimum maximum number of test cycles for environmental testing according to IEC 60068-2-30 General Product Approval	55 °C -40 °C 75 °C 6 Declaration of Conformity
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Environment

Miscellaneous

Confirmation

Environmental Confirmations

Further information

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=5SY8510-7 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SY8510-7 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8510-7 CAx-Online-Generator http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







