SIEMENS

Data sheet

5SY8513-8



Miniature circuit breaker 230 V D=70 mm 25 kA according to EN 60947-2, 1P+N, D13

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	D
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
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 	30 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	1.4 W
suitability for operation	Mechanical engineering / industry
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
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 mm ²
• maximum	35 mm²
connectable conductor cross-section stranded	
• minimum	0.75 mm ²
• maximum	35 mm²
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 donth	
installation depth	70 mm
number of modular width units	2
number of modular width units fastening method	2 Quick assembly system
number of modular width units fastening method mounting position	2 Quick assembly system any
number of modular width units fastening method mounting position net weight	2 Quick assembly system
number of modular width units fastening method mounting position net weight Environmental conditions	2 Quick assembly system any 305 g
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum number of test cycles for environmental testing according to IEC	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum number of test cycles for environmental testing according to IEC 60068-2-30	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C 6 Declaration of Conformity
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum number of test cycles for environmental testing according to IEC 60068-2-30	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C 6 Declaration of Conformity
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum number of test cycles for environmental testing according to IEC 60068-2-30 General Product Approval Confirmation	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C 6 Declaration of Conformity
number of modular width units fastening method mounting position net weight Environmental conditions influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum number of test cycles for environmental testing according to IEC 60068-2-30 General Product Approval Confirmation Miscellaneo	2 Quick assembly system any 305 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s ² at 25 to 150Hz -25 °C 55 °C -40 °C 75 °C 6 Declaration of Conformity US EFRE EG-Konf.

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=5SY8513-8 Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/5SY8513-8

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

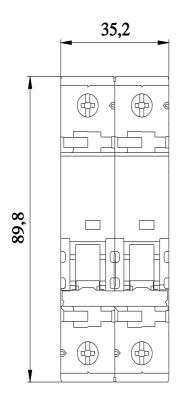
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8513-8

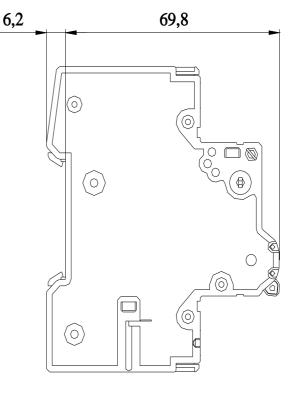
CAx-Online-Generator

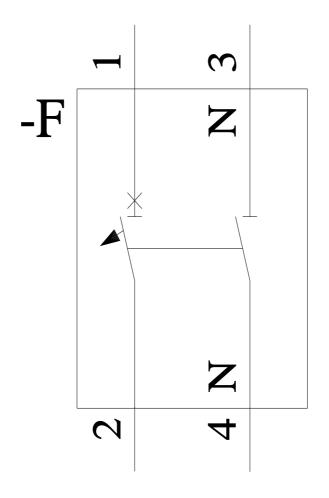
http://www.siemens.com/cax

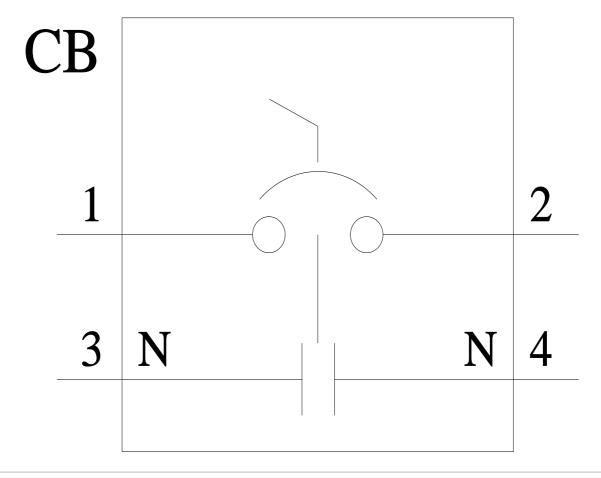
Tender specifications

http://www.siemens.com/specifications









last modified:

2/7/2023 🖸

6/20/2023