SIEMENS

Data sheet 5SY8225-7



Miniature circuit breaker 400 V D=70 mm 25 kA according to EN 60947-2, 2P, C25

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	2
design of pole	2P
tripping characteristic class	C
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 	440 V
 with multi-phase operation at AC rated value 	440 V
supply voltage with single-phase operation at AC rated value	230 V
operational current	
• at 50 °C rated value	24.38 A
• at 55 °C rated value	23.72 A
at AC rated value	25 A
Supply voltage	
supply voltage	
• at AC	400 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 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	2.2 W
suitability for operation	Infrastructure / Industry
Product details	
product component	
 combined terminal top 	Yes
 combined terminal bottom 	Yes

• noutral conductor switching	No
neutral conductor switching	INO
 product feature properties for main switches in accordance with EN 60204-1 	Yes
• halogen-free	Yes
sealable	Yes
	Yes
silicon-free reduct extension installable cumplementary devices.	
product extension installable supplementary devices	Yes
Product function	
set values setting current (li) for I-tripping	8
reference value setting current (Ii) 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 mm ²
• maximum	35 mm²
connectable conductor cross-section stranded	
• minimum	0.75 mm²
• maximum	35 mm²
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 Environmental conditions	316 g
	may 050/ to 55°C may 550/ to 70°C m 050/ to 75°C
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	05.00
• minimum	-25 °C
• maximum	55 °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
Further information	
Information on the packaging	

Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875

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

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SY8225-7

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

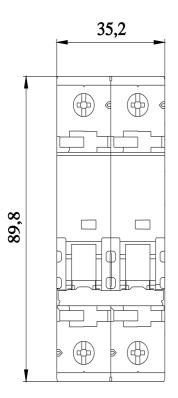
https://support.industry.siemens.com/cs/ww/en/ps/5SY8225-7

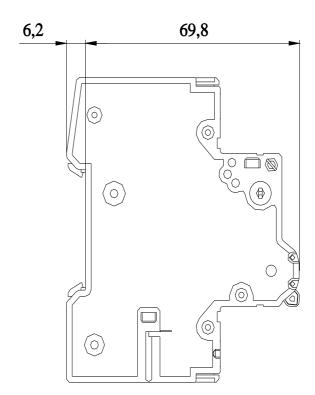
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8225-7

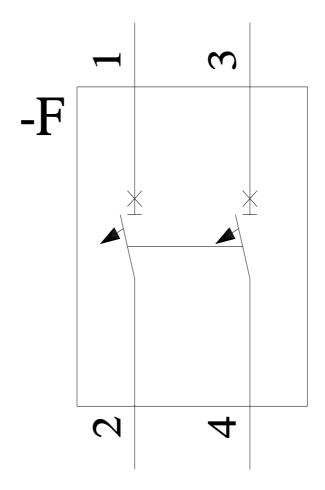
CAx-Online-Generator http://www.siemens.com/cax

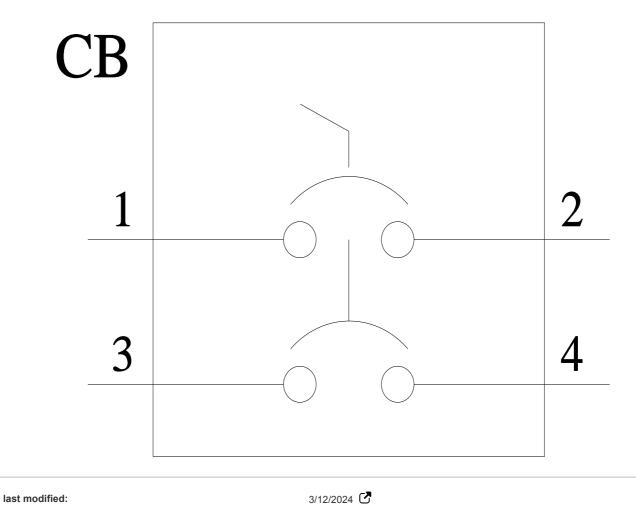
Tender specifications

http://www.siemens.com/specifications









5SY82257 Page 4/5