SIEMENS

Data sheet 5SY4105-7



Miniature circuit breaker 230/400 V 10kA, 1-pole, C, 0.5A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
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
Supply voltage	
supply voltage	
at AC rated value	400 V
value range of the supply voltage frequency	50/60 Hz
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 EN 60898 rated value 	10 kA
 according to IEC 60947-2 rated value 	35 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	0.8 W
suitability for operation	Mechanical engineering / industry
Product details	
product component	
 combined terminal top 	Yes
 combined terminal bottom 	Yes
 neutral conductor switching 	No
product feature	
 properties for main switches in accordance with EN 60204-1 	Yes

 sealable silicon-free product extension installable supplementary devices Yes Yes Yes		
short-circuit current breaking capacity (Icn) at AZ according to UL 1077 and CSA C22.2 No 235 connectable conductor cross-section solid a minimum a maximum a maximum a maximum a maximum a maximum a maximum bightening torque with screw-type terminals a minimum a maximum bightening torque with screw-type terminals a minimum bightening torque with screw-type terminals a minimum bightening torque with screw-type terminals bightening torque with screw-type terminals a minimum bightening torque with screw-type terminals bightening torque with screw	halogen-free	Yes
Short-circuit current breaking capacity (Icn) • at AC according to UI. 1077 and CSA C22.2 No 235 Connectable conductor cross-section solid • minimum • maximum connectable conductor cross-section stranded • minimum • maximum connectable conductor cross-section stranded • minimum • maximum connectable conductor cross-section finely stranded with core end processing • minimum • maximum AWG number as coded connectable conductor cross section • minimum • maximum • max	• sealable	
Short circuit current breaking capacity (Ion)	• silicon-free	Yes
short-circuit current breaking capacity (fcn) at AC according to UL 1077 and CSA C22.2 No.235 connectable conductor cross-section solid iminimum maximum depth fastenia method mounting position mumber of modular width units fastenia method mounting position mumber of modular width units fastenia method mounting position mumber of modular width units fastenia method mounting position mumber of modular width units fastenia method mounting position mumber of modular width units fastenia method mounting position maximum	product extension installable supplementary devices	Yes
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Connectable conductor cross-section solid	short-circuit current breaking capacity (Icn)	
connectable conductor cross-section solid	 at AC according to UL 1077 and CSA C22.2 No.235 	5 kA
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maximum connectable conductor cross-section stranded minimum maximum connectable conductor cross-section finely stranded with core end processing minimum maximum maximum maximum maximum maximum maximum maximum maximum fightening torque [lbf-in] with screw-type terminals minimum maximum maxim	connectable conductor cross-section solid	
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connectable conductor cross-section finely stranded with core end processing	• minimum	0.75 mm ²
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section • minimum • maximum tightening torque [lbf-in] with screw-type terminals • minimum • maximum tightening torque with screw-type terminals • minimum • maximum tightening torque with screw-type terminals • minimum • maximum height width 18 mm depth installation depth number of modular width units fastening method mounting position net weight influence of the surrounding temperature standard tightening temperature during operation • minimum • maximum • maximum • maximum • maximum • maximum number of test cycles for environmental testing according to IEC 60068-2-30	• maximum	25 mm²
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tightening torque [lbf-in] with screw-type terminals Inimimum Inimimimum Inimimimimimimimimimimimimimimimimimimim	• minimum	18
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tightening torque with screw-type terminals • minimum • maximum 9 mosition of power supply cord Any Mechanical Design height width depth 76 mm installation depth number of modular width units fastening method mounting position net weight Influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • maximum	• minimum	22 lbf·in
 minimum maximum maximum s.5 N·m Any Mechanical Design height y0 mm width depth installation depth number of modular width units fastening method mounting position net weight influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation minimum maximum maximum maximum maximum maximum maximum maximum minimum maximum minimum mi	maximum	31 lbf·in
maximum position of power supply cord Any Mechanical Design height width	tightening torque with screw-type terminals	
position of power supply cord Mechanical Design height width depth installation depth 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	• minimum	2.5 N·m
height width 18 mm depth 76 mm installation depth 70 mm number of modular width units 1 fastening method Quick assembly system mounting position any net weight 166 g Environmental conditions influence of the surrounding temperature standard IEC / EN 60898-1, IEC / EN 608947-2 / 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 40 °C • maximum 70 °C ambient temperature during storage • minimum • maximum 75 °C number of test cycles for environmental testing according to IEC 60068-2-30	maximum	3.5 N·m
height width 18 mm depth 76 mm installation depth 70 mm number of modular width units 1 fastening method Quick assembly system mounting position any net weight 166 g Environmental conditions influence of the surrounding temperature standard IEC / EN 60898-1, IEC / EN 60898-1, 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 -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	position of power supply cord	Any
width depth 76 mm installation depth 70 mm 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 ambien of test cycles for environmental testing according to IEC 60068-2-30 installation depth 70 mm number of test cycles for environmental testing according to IEC 60068-2-30 10 mm	Mechanical Design	
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installation depth number of modular width units fastening method mounting position net weight Influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation Influence of temperature during storage Image: Image: Image: Influence of the surrounding temperature IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 IEC / EN	width	18 mm
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 net weight 166 g Environmental conditions influence of the surrounding temperature max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 * ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz * d ° C * maximum * To ° C * minimum * A0 ° C * maximum * maximum * To ° C * minimum * To ° C * mi	depth	76 mm
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 • minimum • maximum • max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C IEC / EN 60898-1, IEC / EN 60947-2 / UL1077 ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz -40 °C 70 °C ambient temperature during storage • minimum -40 °C 75 °C number of test cycles for environmental testing according to IEC 60068-2-30	installation depth	70 mm
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 ambient temperature during storage • minimum • maximum • maximu	number of modular width units	1
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 ambient temperature during storage • minimum • maximum ambient temperature during storage • minimum • maximum 6 C 70 °C number of test cycles for environmental testing according to IEC 60068-2-30	fastening method	Quick assembly system
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 ambient temperature during storage • minimum • maximum ambient temperature during storage • minimum • maximum 6 C 70 °C number of test cycles for environmental testing according to IEC 60068-2-30	mounting position	any
influence of the surrounding temperature standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum • maximu		166 g
standard vibration resistance according to IEC 60068-2-6 ambient temperature during operation • minimum • maximum • minimum • minimum • minimum • minimum • minimum • maximum •	Environmental conditions	
vibration resistance according to IEC 60068-2-6 ambient temperature during operation minimum maximum minimum	influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
ambient temperature during operation • minimum • maximum 70 °C ambient temperature during storage • minimum • maximum • maximum 10 °C 75 °C number of test cycles for environmental testing according to IEC 60068-2-30	standard	IEC / EN 60898-1, IEC / EN 60947-2 / UL1077
 minimum maximum monormal control or con	vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
 maximum ambient temperature during storage minimum maximum maximum mumber of test cycles for environmental testing according to IEC 60068-2-30 70 °C C 6 	ambient temperature during operation	
ambient temperature during storage • minimum • maximum 75 °C number of test cycles for environmental testing according to IEC 60068-2-30	• minimum	-40 °C
 minimum maximum number of test cycles for environmental testing according to IEC 60068-2-30 -40 °C 75 °C 6 	• maximum	70 °C
• maximum 75 °C number of test cycles for environmental testing according to IEC 60068-2-30 75 °C 6	ambient temperature during storage	
number of test cycles for environmental testing according to IEC 60068-2-30	• minimum	-40 °C
to IEC 60068-2-30	• maximum	75 °C
General Product Approval		
	General Product Approval	





Confirmation







Miscellaneous

General Product Approval EMC Declaration of Conformity
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Miscellaneous







Test Certificates

Marine / Shipping

Miscellaneous

Special Test Certificate









Marine / Shipping

other

Railway

Environment



Confirmation

Miscellaneous

Confirmation

Vibration and Shock

Environmental Confirmations

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=5SY4105-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4105-7

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

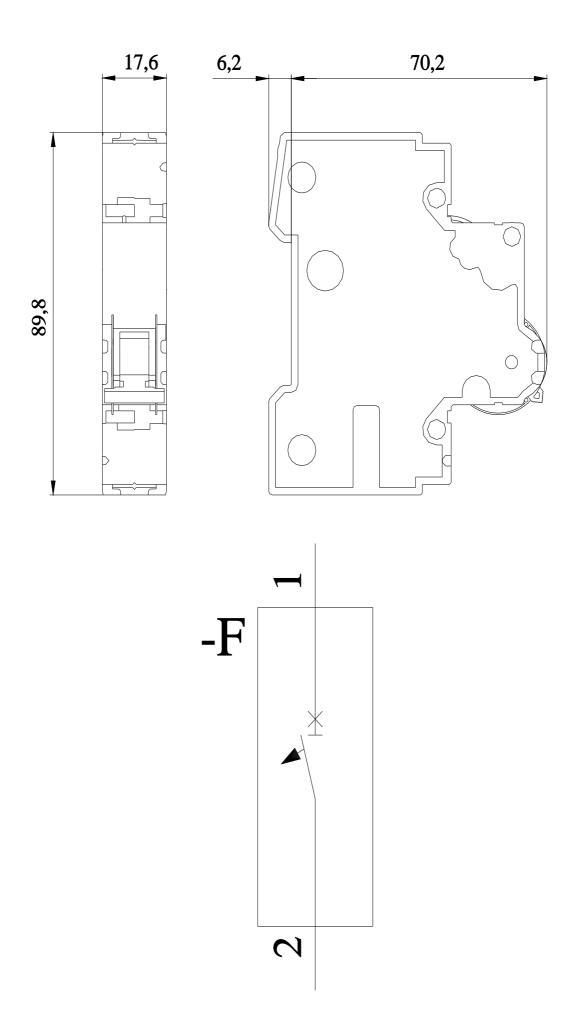
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4105-7

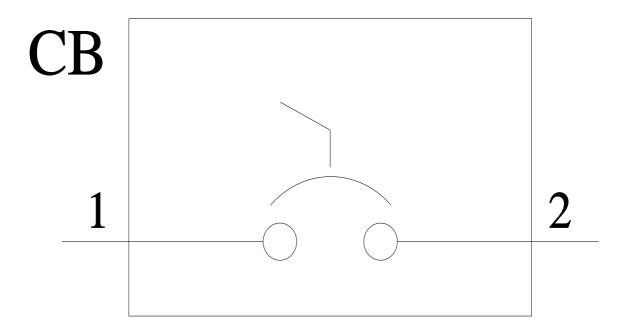
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





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