SIEMENS

Data sheet 5SY6120-7



Miniature circuit breaker 230/400 V 6kA, 1-pole, C, 20 A, D=70 mm

product brand name product designation Miniature circuit breaker General technical data number of poles design of pole 1P	Model	
Ceneral technical data number of poles 1	product brand name	SENTRON
number of poles design of pole 1P	product designation	Miniature circuit breaker
design of pole tripping characteristic class mechanical service life (operating cycles) typical overvoltage category degree of pollution Voltage Vyoltage Type of voltage of the operating voltage insulation voltage (UI) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value Supply voltage with single-phase operation at AC rated value Supply voltage • at AC rated value • at C rated value • at C rated value • at C rated value value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Switching capacity switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to IEC	General technical data	
tripping characteristic class mechanical service life (operating cycles) typical overvoltage category III degree of pollution Voltage type of voltage of the operating voltage insulation voltage (Ui) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage supply voltage supply voltage • at AC rated value • at DC rated value • at DC rated value • at DC rated value • at DC rated value • at DC rated value maximum 72 V Protection class protection class IP Switching capacity current • at DC according to IEC 60947-2 rated value • according to IEC 60947-0 rated value • according to IEC 60	number of poles	1
mechanical service life (operating cycles) typical overvoltage category dill degree of pollution 3 Voltage type of voltage of the operating voltage insulation voltage (UI) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage supply voltage supply voltage • at AC rated value	design of pole	1P
overvoltage category degree of pollution 3 Voltage type of voltage of the operating voltage insulation voltage (Ui) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value * supply voltage with single-phase operation at AC rated value * supply voltage • at AC rated value • at DC rated value maximum * 72 V **Protection class **protection class IP** **Protection class IP** **Switching capacity current • at DC according to IEC 60947-2 rated value • according to IEC 6094	tripping characteristic class	С
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type of voltage of the operating voltage insulation voltage (Ui) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage supply voltage • at AC rated value • at DC rated value • at DC rated value • at DC rated value value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • AC		III
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insulation voltage (Ui) • with single-phase operation at AC rated value • with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value supply voltage supply voltage • at AC rated value • at DC rated value maximum 72 V Protection class protection class IP Switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947	Voltage	
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with multi-phase operation at AC rated value supply voltage with single-phase operation at AC rated value Supply voltage	insulation voltage (Ui)	
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supply voltage supply voltage • at AC rated value • at DC rated value • at DC rated value value range of the supply voltage frequency 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 • according to EN 60898 rated value • according to IEC 60947-2 rated value for kA energy limitation class 3 Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Product details product component • combined terminal top • combined terminal bottom Yes		440 V
supply voltage • at AC rated value • at DC rated value value range of the supply voltage frequency operating voltage at DC rated value maximum 72 V Protection class protection class IP Switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • 15 kA energy limitation class 3 Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Mechanical engineering / industry Product details product component • combined terminal top • combined terminal bottom Yes		230 V
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protection class IP IP20, with connected conductors Switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value • 15 kA energy limitation class 3 Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Mechanical engineering / industry Product details product component • combined terminal top • combined terminal bottom Yes	 at DC rated value 	60 V
Protection class protection class IP IP20, with connected conductors Switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value 15 kA • neering limitation class 3 Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Mechanical engineering / industry Product details product component • combined terminal top • combined terminal bottom Yes Yes	value range of the supply voltage frequency	50/60 Hz
protection class IP IP20, with connected conductors Switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value 15 kA • according to IEC 60947-2 rated value 15 kA energy limitation class 3 Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Mechanical engineering / industry Product details product component • combined terminal top • combined terminal bottom Yes	operating voltage at DC rated value maximum	72 V
Switching capacity switching capacity current • at DC according to IEC 60947-2 rated value • according to EN 60898 rated value • according to IEC 60947-2 rated value • according to IEC 60947-2 rated value 15 kA energy limitation class 3 Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Mechanical engineering / industry Product details product component • combined terminal top • combined terminal bottom Yes	Protection class	
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energy limitation class Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Product details product component • combined terminal top • combined terminal bottom 3 Mechanical engineering / industry Yes	_	6 kA
Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Product details product component • combined terminal top • combined terminal bottom • combined terminal bottom • combined terminal bottom		
power loss [W] for rated value of the current at AC in hot operating state per pole suitability for operation Product details product component • combined terminal top • combined terminal bottom 1.7 W Mechanical engineering / industry Yes		3
operating state per pole suitability for operation Mechanical engineering / industry Product details product component • combined terminal top • combined terminal bottom Yes		
Product details product component • combined terminal top • combined terminal bottom Yes		1.7 W
product component	suitability for operation	Mechanical engineering / industry
 combined terminal top combined terminal bottom Yes 	Product details	
• combined terminal bottom Yes	product component	
	 combined terminal top 	Yes
neutral conductor switching No	 combined terminal bottom 	Yes
	 neutral conductor switching 	No

product feature • properties for main switches in accordance with EN Yes 60204-1 Yes • halogen-free • sealable Yes • silicon-free Yes product extension installable supplementary devices Yes Short circuit short-circuit current breaking capacity (Icn) 5 kA • at AC according to UL 1077 and CSA C22.2 No.235 connectable conductor cross-section solid 0.75 mm² • minimum maximum 35 mm² connectable conductor cross-section stranded 0.75 mm² • minimum 35 mm² connectable conductor cross-section finely stranded with core end processing 0.75 mm² minimum • maximum 25 mm² AWG number as coded connectable conductor cross section 18 • minimum • 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 18 mm width depth 76 mm installation depth 70 mm number of modular width units fastening method Quick assembly system mounting position any net weight 126 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 standard vibration resistance according to IEC 60068-2-6 ±1mm at 5 to 25Hz; 50m/s2 at 25 to 150Hz ambient temperature during operation -25 °C • minimum 55 °C maximum ambient temperature during storage -40 °C • minimum maximum 75 °C number of test cycles for environmental testing according to IEC 60068-2-30 **General Product Approval**

Confirmation









Miscellaneous

General Product Approval EMC Declaration of Conform



Miscellaneous







Test Certificates

Marine / Shipping

Miscellaneous











other

Environment

Miscellaneous

Confirmation

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=5SY6120-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY6120-7

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

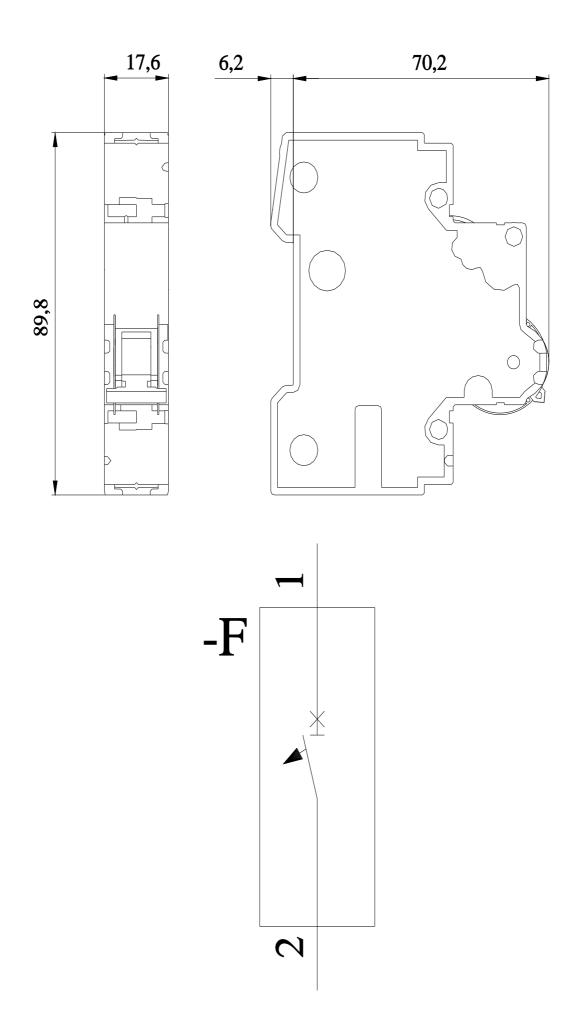
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6120-7

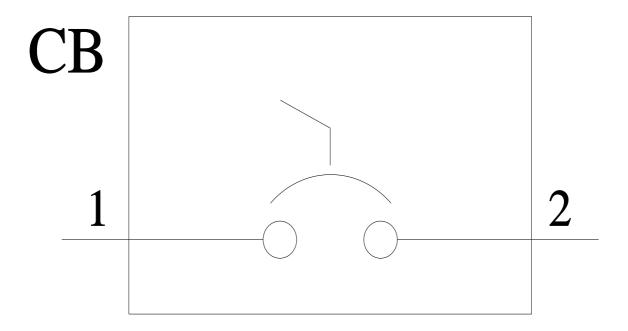
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





last modified: 2/7/2023 🖸