SIEMENS

Data sheet 5SY5120-7



Circuit breaker Universal current 220 V DC 230/400 V AC 10kA, 1-pole, C, 20A

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	С
mechanical service life (operating cycles) typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
type of voltage of the operating voltage	AC/DC
insulation voltage (Ui)	
 at DC rated value 	250 V
 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
 at DC rated value 	220 V
value range of the supply voltage frequency	50/60 Hz
operating voltage at DC rated value maximum	250 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 EN 60898 rated value 	10 kA
energy limitation class	3
Dissipation	
power loss [W] for rated value of the current at AC in hot	1.7 W
operating state per pole	universal surrent
suitability for operation	universal current
Product details	
product component	W
combined terminal top	Yes
combined terminal bottom	Yes
 neutral conductor switching 	No

product feature • properties for main switches in accordance with EN Yes 60204-1 • halogen-free Yes • sealable Yes • silicon-free Yes product extension installable supplementary devices Yes Short circuit short-circuit current breaking capacity (Icn) • at DC according to EN 60898-2 10 kA 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 AC as required, observe DC polarity 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 167 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 60898-2, 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 -40 °C • minimum 70 °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	Declaration of Conformity	Test Certificates	Marine / Shipping	
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<u>Miscellaneous</u> <u>Special Test Certificate</u>



other		Railway		Dangerous Good	Environment
<u>Miscellaneous</u>	Confirmation	Confirmation	Vibration and Shock	Transport Informa- tion	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=5SY5120-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY5120-7

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

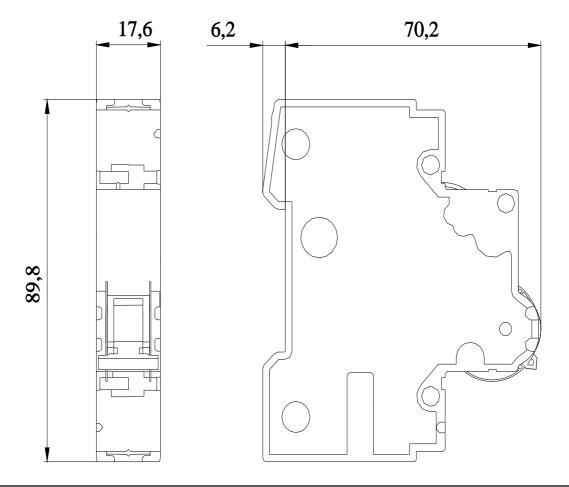
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5120-7

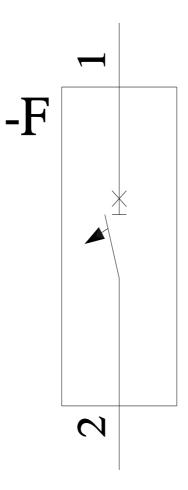
CAx-Online-Generator

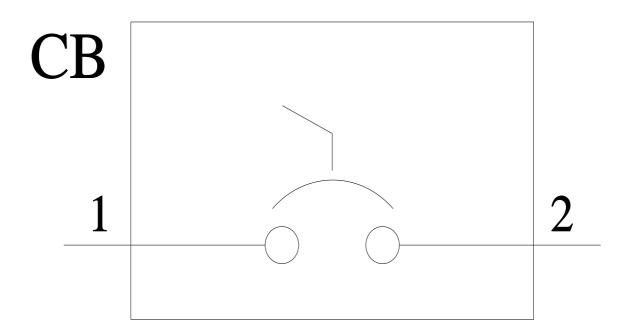
http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







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