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				
number of poles / note	1P				
tripping characteristic class	С				
mechanical service life (switching cycles) / typical	10 000				
overvoltage category	III				
degree of pollution	3				
Voltage	_				
insulation voltage					
 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	_				
type of voltage	AC/DC				
operational current / at AC / rated value	20 A				
supply voltage					
 at AC / rated value 	400 V				
 at DC / rated value 	220 V				
operating voltage / at DC / rated value / maximum	250 V				
supply voltage frequency / rated value	50/60 Hz				
Protection class					
protection class IP	IP20, with connected conductors				
Switching capacity					
switching capacity current					
 at DC / acc. to IEC 60947-2 / rated value 	15 kA				
acc. 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 operating state / per pole	1.7 W				
suitability for operation	universal current				
Product details					



product function / neutral conductor switching	No
product function / neutral conductor switching	_ No
product feature / touch protection	Yes
product component	Van
combined terminal top	Yes
combined terminal bottom	Yes
product feature	Van
 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	
breaking capacity short-circuit current (Icn)	
• at DC / acc. to EN 60898-2	10 kA
Connections	
connectable conductor cross-section / solid	0.75 1
• minimum	0.75 mm ²
maximum	35 mm²
connectable conductor cross-section / stranded	0.75 mm²
• minimum	0.75 mm ²
• maximum	35 mm²
connectable conductor cross-section / finely stranded / with core end processing	
minimum	0.75 mm²
• maximum	25 mm ²
AWG number / as coded connectable conductor cross	23 mm
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	AC as required, observe DC polarity
Mechanical Design	
height	90 mm
width	
depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	Quick assembly system
mounting position	any
net weight	167 g
Environmental conditions	
	may 0.5% to $55%$ may $55%$ to $70%$ may $25%$ to $75%$
influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
ambient temperature / during operation	40 °C
• minimum	-40 °C
maximum	70 °C
ambient temperature / during storage	10.10
• minimum	-40 °C
• maximum	_ 75 °C
number of test cycles / for environmental testing / acc. to IEC 60068-2-30	6
Certificates	
reference code	

acc. to DIN EN acc. to IEC 8134 General Product Ap	46-2	F			Declaration of Conformity
CCC	SAN UR	UDE VDE	<u>Miscellaneous</u>	EHC	CE EG-Konf.
Test Certificates			Railway		
<u>Miscellaneous</u>	Special Test Certificate	<u>Special Test</u> <u>Certificate</u>	Vibration and Shock	<u>Confirmation</u>	

Further information

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

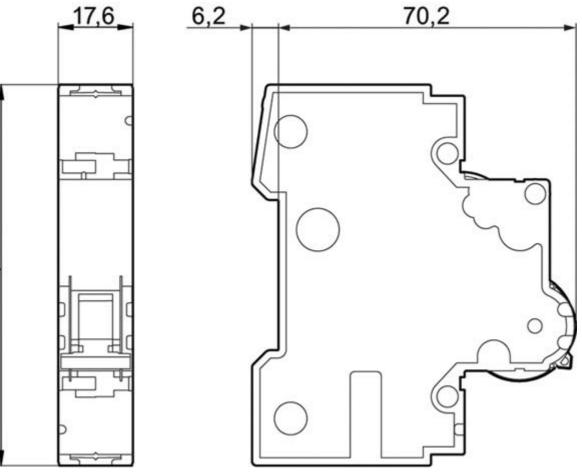
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SY5120-7

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

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

Tender specifications

http://www.siemens.com/specifications



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