



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	C
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 feature / touch protection	Yes
product component	
• combined terminal top	Yes
• combined terminal bottom	Yes
product feature	
• 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 (I _{cn})	
• at DC / acc. to EN 60898-2	10 kA
Connections	
connectable conductor cross-section / solid	
• minimum	0.75 mm ²
• maximum	35 mm ²
connectable conductor cross-section / stranded	
• minimum	0.75 mm ²
• maximum	35 mm ²
connectable conductor cross-section / finely stranded / with core end processing	
• minimum	0.75 mm ²
• maximum	25 mm ²
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	AC as required, observe DC polarity
Mechanical Design	
height	90 mm
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	167 g
Environmental conditions	
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
vibration resistance / acc. to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s ² 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 / acc. to IEC 60068-2-30	6
Certificates	
reference code	

- acc. to DIN EN 61346-2
- acc. to IEC 81346-2

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General Product Approval

Declaration of
Conformity



[Miscellaneous](#)



Test Certificates

Railway

[Miscellaneous](#)

[Special Test
Certificate](#)

[Special Test
Certificate](#)

[Vibration and Shock](#)

[Confirmation](#)

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?mfb=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?mfb=5SY5120-7

Tender specifications

<http://www.siemens.com/specifications>



