

Circuit breaker Universal current 440 V DC 400 V AC 10kA, 2-pole, C, 10 A



Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	2
number of poles / note	2P
tripping characteristic class	C
mechanical service life (switching cycles) / typical	10 000
circuit-breaker / Design	5SY5
overvoltage category	III
degree of pollution	3
Voltage	
insulation voltage	
• at DC / rated value	
• with single-phase operation / at AC / rated value	
• with multi-phase operation / at AC / rated value	
Supply voltage	

type of voltage	AC/DC
operational current / at AC / rated value	10 A
• supply voltage / at AC / rated value • supply voltage / at DC / rated value	400 V 440 V
operating voltage	
• at DC / rated value / maximum	500 V
supply voltage frequency	
• rated value	50/60 Hz

Protection class

protection class IP	IP20, with connected conductors
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Switching capacity

switching capacity current	
• at DC / acc. to IEC 60947-2 / rated value • acc. to EN 60898 / rated value	15 kA 10 kA
energy limitation class	3

Dissipation

power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.1 W
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Current

Tripping residual / rated value / derated current / at 40 Cel	9.39 A
suitability for operation	universal current

Product details

product function / neutral conductor switching	No
product feature / touch protection	Yes
product component	
• combined terminal top • combined terminal bottom	Yes Yes
product feature	
• properties for main switches in accordance with EN 60204-1 • halogen-free • sealable • silicon-free	Yes Yes Yes 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	
• 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	36 mm
depth	76 mm
installation depth	70 mm
number of modular width units	2
fastening method	Quick assembly system
mounting position	any
net weight	316 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	
• 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

Test Certific- ates



[Miscellaneous](#)



[Miscellaneous](#)

Test Certific- ates

Railway

[Special Test Certi-
ficate](#)

[Confirmation](#)

[Vibration and Shock](#)

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=5SY5210-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY5210-7>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5210-7

CAX-Online-Generator

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

Tender specifications

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

