## **SIEMENS**

Data sheet 5SY5210-7



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	С
mechanical service life (switching cycles) / typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
insulation voltage	
<ul><li>at DC / rated value</li></ul>	250 V
<ul><li>with single-phase operation / at AC / rated value</li></ul>	440 V
<ul> <li>with multi-phase operation / at AC / rated value</li> </ul>	440 V
Supply voltage	
type of voltage	AC/DC
supply voltage	
<ul><li>at AC / rated value</li></ul>	400 V
at DC / rated value	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
Switching capacity	
switching capacity current	
<ul><li>at DC / acc. to IEC 60947-2 / rated value</li></ul>	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	1.1 W
suitability for operation	universal current
Product details	
product function / neutral conductor switching	No
product feature / touch protection	Yes
product component	

- contains at the continual trans	V
combined terminal top	Yes
combined terminal bottom	Yes
product feature	V
<ul> <li>properties for main switches in accordance with EN 60204-1</li> </ul>	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	10 KA
connectable conductor cross-section / solid	0.75 mm²
• minimum	0.75 mm²
maximum	35 mm <sup>2</sup>
connectable conductor cross-section / stranded  • minimum	0.75 mm²
	0.75 mm <sup>2</sup>
maximum  connectable conductor cross section / finely stranded /	35 mm <sup>2</sup>
connectable conductor cross-section / finely stranded / with core end processing	
• minimum	0.75 mm <sup>2</sup>
• maximum	25 mm²
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
fastaning mathed	
fastening method	Quick assembly system
mounting position	Quick assembly system any
mounting position	any
mounting position net weight	any
mounting position net weight Environmental conditions	any 316 g
mounting position net weight Environmental conditions influence of the surrounding temperature	any 316 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
mounting position net weight Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6	any 316 g max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
mounting position net weight  Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6 ambient temperature / during operation	any 316 g  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
mounting position net weight  Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6 ambient temperature / during operation • minimum	any 316 g  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  -40 °C
mounting position net weight  Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6 ambient temperature / during operation  • minimum • maximum	any 316 g  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  -40 °C
mounting position net weight  Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6 ambient temperature / during operation • minimum • maximum ambient temperature / during storage	any 316 g  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  -40 °C 70 °C
mounting position net weight  Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6 ambient temperature / during operation • minimum • maximum  ambient temperature / during storage • minimum	any 316 g  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  -40 °C 70 °C
mounting position net weight  Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6 ambient temperature / during operation	any 316 g  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  -40 °C 70 °C  -40 °C 75 °C
mounting position net weight  Environmental conditions  influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6  ambient temperature / during operation  • minimum  • maximum  ambient temperature / during storage  • minimum  • maximum  number of test cycles / for environmental testing / acc. to IEC 60068-2-30	any 316 g  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  -40 °C 70 °C  -40 °C 75 °C
mounting position net weight  Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6 ambient temperature / during operation • minimum • maximum ambient temperature / during storage • minimum • maximum number of test cycles / for environmental testing / acc. to IEC 60068-2-30  Certificates	any 316 g  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  -40 °C 70 °C  -40 °C 75 °C
mounting position net weight  Environmental conditions influence of the surrounding temperature vibration resistance / acc. to IEC 60068-2-6 ambient temperature / during operation	any 316 g  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  -40 °C 70 °C  -40 °C 75 °C 6









**Miscellaneous** 





Test Certificates Railway

Special Test Certificate **Miscellaneous** 

Special Test Certificate 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

**Tender specifications** 

http://www.siemens.com/specifications





