## SIEMENS

## Data sheet

## 5SY5220-7



Dvärgbrytare Allström, 440V DC, 400V AC, 10kA, 2-polig, C, 20A

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				
overvoltage category					
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				
operational current / at AC / rated value	20 A				
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				
<ul> <li>acc. to EN 60898 / rated value</li> </ul>	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	
<ul> <li>combined terminal top</li> </ul>	Yes
combined terminal bottom	Yes
product feature	
<ul> <li>properties for main switches in accordance with EN 60204-1</li> </ul>	Yes
<ul> <li>halogen-free</li> </ul>	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
	TO KA
Connections	
connectable conductor cross-section / solid	
• minimum	0.75 mm <sup>2</sup>
• maximum	35 mm²
connectable conductor cross-section / stranded	
• minimum	0.75 mm²
maximum	35 mm²
connectable conductor cross-section / finely stranded / with core end processing	
• minimum	0.75 mm²
• maximum	25 mm <sup>2</sup>
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	324 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	$\pm 1$ max. 55% to 55°C, max. 55% to 70°C, max. 55% to 75°C $\pm 1$ mm at 5 to 25Hz; 50m/s <sup>2</sup> at 25 to 150Hz
ambient temperature / during operation	
minimum	-40 °C
• maximum	70 °C
ambient temperature / during storage	
minimum	-40 °C
	-40 C 75 °C
maximum     number of test cycles / for environmental testing / acc. to     IEC 60068-2-30	6
Certificates	
reference code	
acc. to DIN EN 61346-2	F
• acc. to IEC 81346-2	F
acc. 10 12 0 1340-2	

General Product App	proval				Declaration of Conformity
	<b>SAN</b> ® UR	VDE	<u>Miscellaneous</u>	EHC	CE EG-Konf.
Test Certificates			Railway		
<u>Special Test</u> <u>Certificate</u>	Special Test Certificate	Miscellaneous	<u>Confirmation</u>	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=5SY5220-7 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SY5220-7 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY5220-7 Tender specifications http://www.siemens.com/specifications



