## SIEMENS

## Data sheet

## 5SY5220-6



Circuit breaker Universal current 440 V DC 400 V AC 10kA, 2-pole, B, 20A

Model					
product brand name	SENTRON				
product designation	Miniature circuit breaker				
General technical data					
number of poles	2				
design of pole	2P				
tripping characteristic class	В				
mechanical service life (operating cycles) typical	10 000				
overvoltage category	Ш				
degree of pollution	3				
Voltage					
type of voltage of the operating voltage	AC/DC				
insulation voltage (Ui)					
• at DC rated value	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					
supply voltage					
<ul> <li>at AC rated value</li> </ul>	400 V				
at DC rated value	440 V				
value range of the supply voltage frequency	50/60 Hz				
operating voltage at DC rated value maximum	500 V				
Protection class					
protection class IP	IP20, with connected conductors				
Switching capacity					
switching capacity current					
<ul> <li>at DC according to IEC 60947-2 rated value</li> </ul>	15 kA				
<ul> <li>according 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	2.2 W				
suitability for operation	universal current				
Product details					
product component					
<ul> <li>combined terminal top</li> </ul>	Yes				
<ul> <li>combined terminal bottom</li> </ul>	Yes				
<ul> <li>neutral conductor switching</li> </ul>	No				
product feature					
<ul> <li>properties for main switches in accordance with EN</li> </ul>	Yes				

60204-1					
halogen-free	Yes				
• sealable	Yes				
silicon-free	Yes				
product extension installable supplementary devices	Yes				
Short circuit					
short-circuit current breaking capacity (lcn)					
at DC according to EN 60898-2	10 kA				
Connections					
connectable conductor cross-section solid					
minimum	0.75 mm²				
• maximum	35 mm <sup>2</sup>				
connectable conductor cross-section stranded					
minimum	0.75 mm²				
• maximum	35 mm <sup>2</sup>				
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 Ibf·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	328 g				
Environmental conditions					
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to	o 75°C			
standard	IEC / EN 60898-2, UL1077	IEC / EN 60898-2, UL1077			
vibration resistance according to IEC 60068-2-6	±1mm 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				
• maximum	75 °C				
number of test cycles for environmental testing according to IEC 60068-2-30	6				
General Product Approval					
		EHC			
General Product Approval Declaration of Conformity	Test Certificates	Marine / Shipping			

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<u>Miscellaneous</u>	CE EG-Konf.	UK CA	<u>Miscellaneous</u>	<u>Special Test Certific-</u> <u>ate</u>	Llovd's Register us			
other		Railway		Dangerous Good	Environment			
<u>Confirmation</u>	<u>Miscellaneous</u>	<u>Confirmation</u>	Vibration and Shock	Transport Information	Environmental Con- firmations			
Further information								
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business								
Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875								
Information- and Dowr http://www.siemens.com	nloadcenter (Catalogs, n/lowvoltage/catalogs	Brochures,)						

Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SY5220-6

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

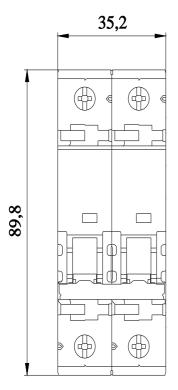
https://support.industry.siemens.com/cs/ww/en/ps/5SY5220-6

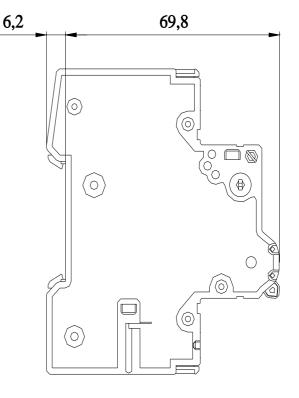
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY5220-6

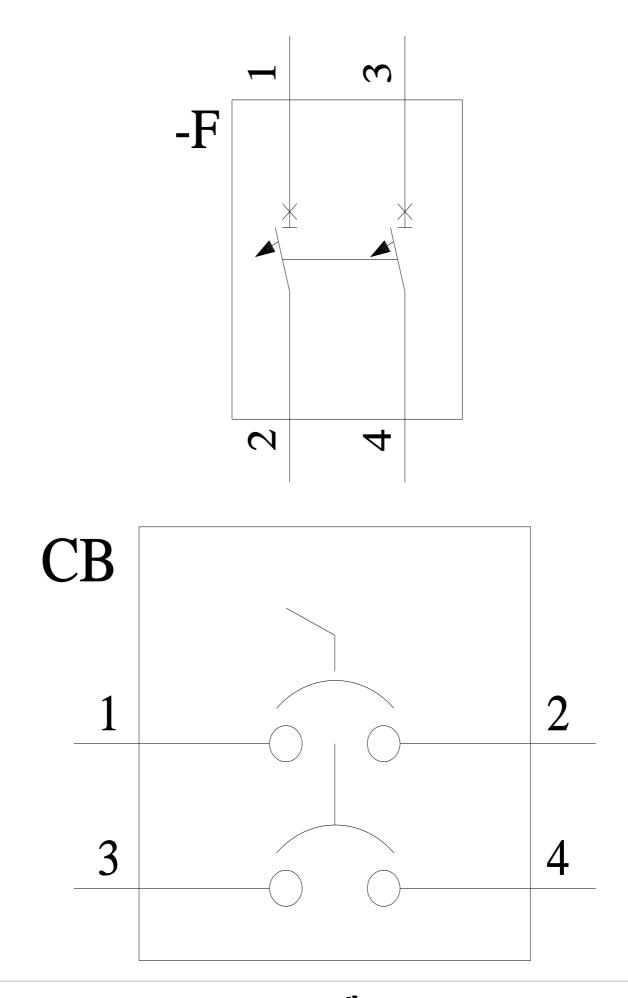
CAx-Online-Generator http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







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