SIEMENS

Data sheet

5SL6020-6MC



Miniature Circuit Breaker Measuring, Communication AC 230V 6kA, 1+N pole, B, 20A Please consider Radio approval! List of countries: see Certificates

Model				
product brand name	SENTRON			
design of the product	Miniature circuit breaker COM compact			
General technical data				
apparent power consumption / of the power supply	0.4 V·A			
tripping characteristic class	В			
mechanical service life (switching cycles) / typical	10 000			
electrical endurance (switching cycles) / at AC load / in the mean value	7 500			
measurable line frequency / initial value	45 Hz			
measurable line frequency / full-scale value	65 Hz			
overvoltage category				
degree of pollution	2			
frequency / with radio transmission / minimum	2 400 MHz			
frequency / with radio transmission / maximum	2 483.5 MHz			
status display / of the measured data	voltage, current, active power, apparent power, reactive power, active energy, line frequency, power factor, temperature, switching cycles, operating hours, tripping, warnings			
Voltage				
type of voltage / of the operating voltage	AC			
insulation voltage (Ui) / at AC / rated value	250 V			
Supply voltage				
supply voltage				
• at AC / rated value	230 V			
operating voltage				
• minimum	195 V			
 with single-phase operation / at AC / maximum 	253 V			
Protection class				
protection class IP	IP20, with connected conductors			
protection class IP				
• on the front	IP40			
• rear side	IP20			
Switching capacity				
switching capacity current				
acc. to EN 60898 / rated value	6 kA			
energy limitation class	3			
Dissipation				
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	3.1 W			

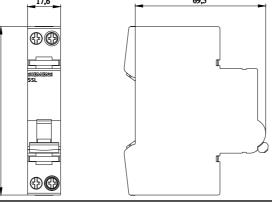
Current	
operational current	
• at 30 °C / rated value	20 A
• at 40 °C / rated value	18.83 A
• at 45 °C / rated value	18.21 A
• at 50 °C / rated value	16.92 A
• at 55 °C / rated value	17.58 A
• at 60 °C / rated value	16.23 A
at AC / rated value	20 A
measurable current / at AC	20 A
initial value	0.04 A
• full-scale value	66 A
	20 A
reference current (Iref) / 1 / at AC / rated value	20 A
Suitability	
suitability for operation	Residential buildings/infrastructure
suitability for use	
• ammeter	Yes
reactive power meter	Yes
 frequency meter 	Yes
voltmeter	Yes
• wattmeter	Yes
Product details	
product component / neutral conductor switching	Yes
product feature / touch protection	Yes
product component	
 combined terminal top 	No
 combined terminal bottom 	No
product feature	
 properties for main switches in accordance with EN 60204-1 	No
 halogen-free 	Yes
• sealable	Yes
silicon-free	Yes
product extension / installable / supplementary devices	Yes
Fault limits	
formula for relative total measurement inaccuracy	
 for measured variable active power 	+/- 1 %
 for measured variable output factor 	+/- 0,5 %
Measuring inputs	
measurable supply voltage / between (PE)N and L / at AC	
minimum	50 V
• maximum	400 V
	400 V TRMS
measuring procedure / for current measurement	TRMS
measuring procedure / for voltage measurement	
Connections	
connectable conductor cross-section / solid	0.75 3
• minimum	0.75 mm ²
• maximum	16 mm ²
connectable conductor cross-section / stranded	
• minimum	0.75 mm ²
• maximum	16 mm ²
connectable conductor cross-section / finely stranded / with core end processing	
• minimum	0.75 mm ²
• maximum	10 mm ²
tightening torque [lbf·in] / with screw-type terminals	
• minimum	10.6 lbf·in
• maximum	17.7 lbf·in
tightening torque / with screw-type terminals	
• minimum	1.2 N·m

 maximum 			2 N·m				
position / of power supply cord		Any					
Mechanical Design							
height			90 mm				
width			18 mm				
depth	depth		76 mm				
installation depth		70 mm					
number of modular width units		1					
fastening method		standard rail					
mounting position		any					
net weight	net weight		120 g	120 g			
Environmental condit	ions						
standard							
 for environmental sinusoidal oscillation check 		IEC 60068-2-6					
vibration resistance / acc. to IEC 60068-2-6		Yes					
ambient temperature	ambient temperature / during operation						
 minimum 			-25 °C				
maximum	• maximum		60 °C				
ambient temperature / during storage							
 minimum 			-40 °C	-40 °C			
• maximum			75 °C				
number of test cycles / for environmental testing / acc. to IEC 60068-2-30		28					
Certificates							
reference code							
• acc. to DIN EN 61346-2		F					
• acc. to IEC 81346-2		F					
General Product Approval	Radio Equipment Type Approval Certificate	Declaration of	Declaration of Conformity		other		
	Radio Equipment Type Approval Certi- ficate	CE EG-Konf.		<u>UK Declaration of</u> <u>Conformity</u>	<u>Miscellaneous</u>		

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=5SL6020-6MC Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/5SL6020-6MC Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL6020-6MC CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications

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