SIEMENS

Data sheet

7KM1020-0BA01-1DA0



SENTRON PAC1020 96X96 mm Power Monitoring Device Panel mount type for measurement of electr. values Protocol: Modbus RTU With graphical display Un max: 400/230V 45-65Hz Input current 5A AC Power Supply 85V - 276V AC Terminal blocks

Model		
product brand name	SENTRON	
design of the product	basic	
product type designation	Measuring instrument	
Measurements		
measuring procedure		
 for voltage measurement 	TRMS	
for current measurement	TRMS	
type of measured value detection	complete	
voltage curve	Sinusoidal or distorted	
measurable line frequency		
initial value	45 Hz	
full-scale value	65 Hz	
operating mode for measured value detection automatic line frequency detection	Yes	
operating mode for measured value detection		
● set at 50 Hz	No	
• set to 60 Hz	No	
Supply voltage		
design of the power supply	Wide-range power supply	
type of voltage of the supply voltage	AC/DC	
Degree of protection protection class		
protection class IP on the front	IP40	
Suitability		
suitability for operation	Installation in stationary control panels in closed rooms	
Product Functions		
product function		
 voltage measurement 	Yes	
 current measurement 	Yes	
 active power measurement 	Yes	
 reactive power measurement 	Yes	
Display and operation		
design of the display	LCD	
height of the display	56 mm	
width of the display	74 mm	
color of the background of the display	white	
illuminance of display backlight adjustable	Yes	



display as whose to allow to be	Vac
display contrast adjustable	Yes
number of keys	4
Communication	
number of interfaces acc. to Fast Ethernet	1
Fault limits	
formula for relative total measurement inaccuracy	
for measured variable current	+/- 0,5 %
Inputs Outputs	
number of digital inputs	1
type of electrical connection at the digital inputs	screw-type terminals
operating conditions for digital inputs external voltage supply	Yes
input voltage at digital input at DC maximum	30 V
number of digital outputs	1
digital output version	switching or pulse output function
operating voltage as output voltage at DC maximum permissible	30 V
type of electrical connection at the digital outputs	screw-type terminals
output current	
 at the digital outputs at DC limited to 100 ms maximum 	130 mA
internal resistance at the digital outputs	55 Ω
standard for pulse emitter	according to IEC62053-31
pulse duration	
initial value	500 ms
• full-scale value	30 ms
adjustable time period minimum	10 ms
switching frequency at digital output maximum	17 Hz
property of the output short-circuit proof	Yes
Measuring inputs	
measurable supply voltage between (PE)N and L at AC maximum rated value	230 V
measurable supply voltage between (PE)N and L at AC	
• minimum	11.5 V
• maximum	280 V
measurable supply voltage between the line conductors at AC maximum rated value	400 V
line conductors and neutral conductors internal resistance for voltage measurement	1.5 ΜΩ
measuring category for voltage measurement	CATIII
measurable current	
• 1 at AC rated value	1 A
• 2 at AC rated value	5 A
relative measurable current at AC	
• minimum	10 %
maximum	120 %
maximum zero point suppression for current measurement	120 % 0 10 %
zero point suppression for current measurement	0 10 %
zero point suppression for current measurement measuring category for current measurement	0 10 %
zero point suppression for current measurement measuring category for current measurement Connections	0 10 %
zero point suppression for current measurement measuring category for current measurement Connections type of electrical connection	0 10 % CATIII
zero point suppression for current measurement measuring category for current measurement Connections type of electrical connection • at the measurement inputs for voltage	0 10 % CATIII screw-type terminals
zero point suppression for current measurement measuring category for current measurement Connections type of electrical connection • at the measurement inputs for voltage • at the measurement inputs for current	0 10 % CATIII screw-type terminals
zero point suppression for current measurement measuring category for current measurement Connections type of electrical connection	0 10 % CATIII screw-type terminals screw-type terminals
zero point suppression for current measurement measuring category for current measurement Connections type of electrical connection • at the measurement inputs for voltage • at the measurement inputs for current Mechanical Design size of Power Monitoring Device	0 10 % CATIII screw-type terminals screw-type terminals size 96
zero point suppression for current measurement measuring category for current measurement Connections type of electrical connection • at the measurement inputs for voltage • at the measurement inputs for current Mechanical Design size of Power Monitoring Device height	0 10 % CATIII screw-type terminals screw-type terminals size 96 96 mm
zero point suppression for current measurement measuring category for current measurement Connections type of electrical connection • at the measurement inputs for voltage • at the measurement inputs for current Mechanical Design size of Power Monitoring Device height width	0 10 % CATIII screw-type terminals screw-type terminals size 96 96 mm 96 mm
zero point suppression for current measurement measuring category for current measurement Connections type of electrical connection	0 10 % CATIII screw-type terminals screw-type terminals size 96 96 mm 96 mm 42 mm





mounting position		vertical
Environmental condit	ions	
ambient temperature during operation		
• minimum		-10 °C
• maximum		55 °C
ambient temperature during storage		
• minimum		-25 °C
• maximum		70 °C
relative humidity at 25 °C without condensation during operation maximum		75 %
installation altitude at height above sea level maximum		2 000 m
degree of pollution		2
General Product Approval	Declaration of Conformity	



















