SIEMENS

Data sheet

7KM3220-0BA01-1DA0



SENTRON PAC3220 LCD 96X96 mm Power Monitoring Device Controll panel instrument for electrical values protocol: Modbus TCP with graphics display U rated input: 690/400V 45-65Hz IE rated input: X/1A oder X/5A AC Power supply: 100 ... 250 V +-10 % AC/DC screw connections

Model			
product brand name	SENTRON		
product designation	7KM PAC3220		
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	IP65		
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		
 frequency measurement 	Yes		
Display and operation			
design of the display	LCD		
height of the display	54 mm		
width of the display	72 mm		

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pulse duration30 ms• initial value30 ms• full-scale value500 msadjustable time period minimum10 msswitching frequency at digital output maximum17 Hzproperty of the output short-circuit proofYesMeasuring inputs400 Vmeasurable supply voltage between (PE)N and L at AC maximum rated value400 Vmeasurable supply voltage between (PE)N and L at AC • minimum11.5 V• maximum480 Vmeasurable supply voltage between the line conductors at AC maximum rated value690 VVoltage measuring range extension with external voltage transformersYesline conductors and neutral conductors internal resistance for voltage measurement1.5 MΩmeasuring category for voltage measurementCATIII		according to IEC62053-31		
• initial value30 ms• full-scale value500 msadjustable time period minimum10 msswitching frequency at digital output maximum17 Hzproperty of the output short-circuit proofYesMeasuring inputsmeasurable supply voltage between (PE)N and L at AC maximum rated value400 Vmeasurable supply voltage between (PE)N and L at AC maximum rated value400 Vmeasurable supply voltage between (PE)N and L at AC maximum11.5 V• minimum measurable supply voltage between the line conductors at AC maximum rated value690 VVoltage measuring range extension with external voltage for voltage measurementYesIne conductors and neutral conductors internal resistance for voltage measurement1.5 MΩMeasuring category for voltage measurementCATIII				
adjustable time period minimum10 msswitching frequency at digital output maximum17 Hzproperty of the output short-circuit proofYesMeasuring inputs400 Vmeasurable supply voltage between (PE)N and L at AC maximum rated value400 Vmeasurable supply voltage between (PE)N and L at AC • minimum11.5 V• maximum480 Vmeasurable supply voltage between the line conductors at AC maximum rated value690 Vvoltage measuring range extension with external voltage transformersYesline conductors and neutral conductors internal resistance for voltage measurement1.5 MΩmeasuring category for voltage measurementCATIII		30 ms		
adjustable time period minimum10 msswitching frequency at digital output maximum17 Hzproperty of the output short-circuit proofYesMeasuring inputs400 Vmeasurable supply voltage between (PE)N and L at AC maximum rated value400 Vmeasurable supply voltage between (PE)N and L at AC • minimum11.5 V• maximum480 Vmeasurable supply voltage between the line conductors at AC maximum rated value690 Vvoltage measuring range extension with external voltage transformersYesline conductors and neutral conductors internal resistance for voltage measurement1.5 MΩmeasuring category for voltage measurementCATIII	• full-scale value	500 ms		
switching frequency at digital output maximum 17 Hz property of the output short-circuit proof Yes Measuring inputs Yes measurable supply voltage between (PE)N and L at AC maximum rated value 400 V measurable supply voltage between (PE)N and L at AC 400 V • minimum 11.5 V • maximum 480 V measurable supply voltage between the line conductors at AC maximum rated value 690 V voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII	adjustable time period minimum	10 ms		
property of the output short-circuit proof Yes Measuring inputs Yes measurable supply voltage between (PE)N and L at AC 400 V measurable supply voltage between (PE)N and L at AC 400 V measurable supply voltage between (PE)N and L at AC 400 V measurable supply voltage between (PE)N and L at AC 11.5 V emaximum 480 V measurable supply voltage between the line conductors at AC maximum rated value 690 V voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII				
Measuring inputs measurable supply voltage between (PE)N and L at AC maximum rated value 400 V measurable supply voltage between (PE)N and L at AC 11.5 V • minimum 480 V measurable supply voltage between the line conductors at AC maximum rated value 690 V voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII				
measurable supply voltage between (PE)N and L at AC 400 V measurable supply voltage between (PE)N and L at AC 400 V • minimum 11.5 V • maximum 480 V measurable supply voltage between the line conductors at AC maximum rated value 690 V voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII				
measurable supply voltage between (PE)N and L at AC 11.5 V • minimum 480 V measurable supply voltage between the line conductors at AC maximum rated value 690 V voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII	measurable supply voltage between (PE)N and L at AC	400 V		
• minimum 11.5 V • maximum 480 V measurable supply voltage between the line conductors at AC maximum rated value 690 V voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII				
• maximum 480 V measurable supply voltage between the line conductors at AC maximum rated value 690 V voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII		11.5 V		
measurable supply voltage between the line conductors at AC maximum rated value 690 V voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII				
voltage measuring range extension with external voltage transformers Yes line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII	measurable supply voltage between the line conductors at			
line conductors and neutral conductors internal resistance for voltage measurement 1.5 MΩ measuring category for voltage measurement CATIII	voltage measuring range extension with external voltage	Yes		
measuring category for voltage measurement CATIII	line conductors and neutral conductors internal resistance	1.5 ΜΩ		
		CATIII		

 1 at AC rated value 	1 A		
• 2 at AC rated value	5 A		
relative measurable current at AC			
• minimum	1 %		
• maximum	100 %		
current measuring range extension with external current transformers	Yes		
zero point suppression for current measurement	0 10 %		
measuring category for current measurement	CATIII		
Connections			
type of electrical connection			
 at the measurement inputs for voltage 	screw-type terminals		
 at the measurement inputs for current 	screw-type terminals		
lechanical Design			
fastening method standard rail mounting	No		
size of Power Monitoring Device	size 96		
height	96 mm		
width	96 mm		
depth	56 mm		
installation depth	51 mm		
net weight	325 g		
mounting position	vertical		
invironmental conditions			
ambient temperature during operation			
• minimum	-25 °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	EMC	Declaration of Conformity	other

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<u>KC</u>





CE EG-Konf. Manufacturer Declaration

other

Miscellaneous

PROFINET-Certification

 Further information

 Information- and Downloadcenter (catalogues, leaflets,...)

 http://www.siemens.com/energy-automation

 Industry Mall (Online ordering system)

 https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=7KM3220-0BA01-1DA0

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

 https://support.industry.siemens.com/cs/ww/en/ps/7KM3220-0BA01-1DA0

 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KM3220-0BA01-1DA0

 CAx-Online-Generator

 http://www.siemens.com/cax







