## **SIEMENS**

## **Data sheet**

7KM3120-1BA01-1EA0



SENTRON PAC3120 LCD 96X96 mm Power Monitoring Device Controll panel instrument for electrical values protocol: Modbus RTU with graphics display U rated input: 690/400V 45-65Hz IE rated input: X/1A oder X/5A AC Power supply: 24 ... 60 V -20/+10 % DC screw connections

Model			
product brand name	SENTRON		
product designation	multimeter		
design of the product	basic		
Measurements			
measuring procedure			
<ul> <li>for voltage measurement</li> </ul>	TRMS		
<ul> <li>for current measurement</li> </ul>	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	Extra-low voltage power supply unit		
type of voltage of the supply voltage	DC		
supply voltage at DC	24 60 V		
Degree of protection protection class			
protection class IP on the front	IP65		
Suitability			
suitability for operation	Installation in stationary panels in closed rooms		
Product Functions			
product function			
<ul> <li>voltage measurement</li> </ul>	Yes		
<ul> <li>current measurement</li> </ul>	Yes		
<ul> <li>active power measurement</li> </ul>	Yes		
<ul> <li>reactive power measurement</li> </ul>	Yes		
frequency measurement	Yes		
Display and operation			
design of the display	LCD		
height of the display	54 mm		
width of the display	72 mm		
color of the background of the display	white		
illuminance of display backlight adjustable	No		
time-controlled reduction of the illuminance of display backlight possible	Yes		

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tormula for relative total measurement inaccuracy		In accordance with IEC61557 12 IEC62052 22 and IEC62052 22		
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Property of the output short-circuit proof       Yes         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         • 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 current       1 A         • 2 at AC rated value       5 A         relative measurable current at AC       1 %         • 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				
Measuring inputs         measurable supply voltage between (PE)N and L at AC       400 V         maximum rated value       11.5 V         • minimum       480 V         • 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         measurable current       • 1 at AC rated value       1 A         • 2 at AC rated value       5 A         • relative measurable current at AC       100 %         • 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				
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maximum rated value measurable supply voltage between (PE)N and L at AC  • minimum  • maximum  • maximum  measurable supply voltage between the line conductors at AC maximum rated value voltage measuring range extension with external voltage transformers line conductors and neutral conductors internal resistance for voltage measurement measuring category for voltage measurement  • 1 at AC rated value  • 2 at AC rated value  • 2 at AC rated value  • 1 maximum  • maximum  • maximum  • maximum  current measuring range extension with external current transformers zero point suppression for current measurement  connections  type of electrical connection		400 V		
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AC maximum rated value voltage measuring range extension with external voltage transformers line conductors and neutral conductors internal resistance for voltage measurement measuring category for voltage measurement measurable current				
voltage measuring range extension with external voltage transformers  line conductors and neutral conductors internal resistance for voltage measurement measuring category for voltage measurement  • 1 at AC rated value • 2 at AC rated value • 2 at AC rated value relative measurable current at AC • minimum • maximum current measuring range extension with external current transformers zero point suppression for current measurement measuring category for current measurement connections  type of electrical connection		690 V		
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measurable current  • 1 at AC rated value  • 2 at AC rated value  relative measurable current at AC  • minimum  • maximum  • maximum  current measuring range extension with external current transformers  zero point suppression for current measurement  measuring category for current measurement  Connections  type of electrical connection		1.5 ΜΩ		
1 at AC rated value     2 at AC rated value     5 A  relative measurable current at AC     minimum     maximum     maximum     current measuring range extension with external current transformers     zero point suppression for current measurement     measuring category for current measurement     Connections  type of electrical connection		CATIII		
2 at AC rated value relative measurable current at AC     • minimum     • maximum     • maximum     current measuring range extension with external current transformers zero point suppression for current measurement measuring category for current measurement  Connections  type of electrical connection  5 A  1 %  Yes  1 00 %  CATIII		1 A		
<ul> <li>minimum</li> <li>maximum</li> <li>current measuring range extension with external current transformers</li> <li>zero point suppression for current measurement measurement measuring category for current measurement</li> <li>Connections</li> <li>type of electrical connection</li> </ul>				
<ul> <li>maximum         current measuring range extension with external current         transformers         zero point suppression for current measurement         measuring category for current measurement         Connections         type of electrical connection</li> </ul>				
current measuring range extension with external current transformers zero point suppression for current measurement 0 10 % measuring category for current measurement CATIII  Connections type of electrical connection	• minimum	1 %		
transformers zero point suppression for current measurement 0 10 % measuring category for current measurement CATIII  Connections type of electrical connection	• maximum	100 %		
measuring category for current measurement  Connections  type of electrical connection		Yes		
Connections type of electrical connection	zero point suppression for current measurement	0 10 %		
type of electrical connection	measuring category for current measurement	CATIII		
	Connections			
• • • • • • • • • • • • • • • • • • • •	type of electrical connection • at the measurement inputs for voltage	screw-type terminals		

<ul> <li>at the measurement inputs for current</li> </ul>	screw-type terminals		
Mechanical 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		
Environmental conditions			
ambient temperature during operation			
• minimum	-25 °C		
<ul><li>maximum</li></ul>	55 °C		
ambient temperature during storage			
• minimum	-25 °C		
<ul><li>maximum</li></ul>	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		
Certificates			
certificate of suitability as EC Declaration of Conformity	yes		
General Product Approval		EMC	Declaration of Conformity

Declaration of Conformity

Confirmation

other

CE EG-Konf. Environmental Confirmations Miscellaneous

<u>KC</u>

## 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=7KM3120-1BA01-1EA0

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

https://support.industry.siemens.com/cs/ww/en/ps/7KM3120-1BA01-1EA0

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=7KM3120-1BA01-1EA0

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







