



SETRON, measuring device, 7KM PAC3200, LCD, L-L: 690 V, L-N: 400 V, 5 A, 3-phase, Modbus TCP, optional Modbus RTU / PROFINET / PROFIBUS, apparent/ active/reactive energy, class 0.5 acc. to IEC61557-12 or class 0.5s acc. to IEC62053-22, wide-range pwr sup. unit AC/DC, screw terminals

Model	
product brand name	SETRON
product designation	7KM PAC3200
design of the product	basic
product type designation	Measuring instrument
Measurements	
measuring procedure	RMS
<ul style="list-style-type: none"> <li>for voltage measurement</li> <li>for current measurement</li> </ul>	TRMS
type of measured value detection	complete
voltage curve	Sinusoidal or distorted
measurable line frequency	
<ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>	45 Hz
	65 Hz
operating mode for measured value detection automatic line frequency detection	Yes
operating mode for measured value detection	
<ul style="list-style-type: none"> <li>set at 50 Hz</li> <li>set to 60 Hz</li> </ul>	No
	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
operating resource protection class when installed	safety class II
Suitability	
suitability for operation	Installation in stationary control panels in closed rooms
Product Functions	
product function	
<ul style="list-style-type: none"> <li>voltage measurement</li> <li>current measurement</li> <li>active power measurement</li> <li>reactive power measurement</li> <li>frequency measurement</li> </ul>	Yes
	Yes
	Yes
	Yes
	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

national language on the display screen is supported	ger, en, fr, spa, ita, por, tur, chi
number of keys	4
<b>Communication</b>	
number of interfaces according to Fast Ethernet	1
type of electrical connection of the fast Ethernet interface	RJ45 (8P8C)
protocol at the Ethernet interface is supported	MODBUS TCP
<b>Fault limits</b>	
reference condition for metering accuracy	Acc. to IEC62053-22 and IEC62053-23
formula for relative total measurement inaccuracy	
<ul style="list-style-type: none"> <li>• for measured variable voltage</li> <li>• for measured variable current</li> <li>• for measured variable output factor</li> <li>• for measured variable active energy</li> <li>• for measured variable reactive energy</li> </ul>	<ul style="list-style-type: none"> <li>+/- 0,3 %</li> <li>+/- 0,2 %</li> <li>+/- 0,5 %</li> <li>Cl. 0.5 acc. to... IEC62053-22</li> <li>Class 2 according to IEC61557-12 and/or IEC62053-23</li> </ul>
<b>Inputs Outputs</b>	
number of digital inputs	1
number of digital outputs	1
digital output version	switching or pulse output function
operating voltage as output voltage at DC maximum permissible	30 V
output current	
<ul style="list-style-type: none"> <li>• at digital output with signal &lt;0&gt; maximum</li> <li>• at digital output for signal &lt;1&gt; maximum</li> </ul>	<ul style="list-style-type: none"> <li>0.2 mA</li> <li>27 mA</li> </ul>
internal resistance at the digital outputs	55 Ω
standard for pulse emitter	according to IEC62053-31
pulse duration	
<ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	<ul style="list-style-type: none"> <li>30 ms</li> <li>500 ms</li> </ul>
adjustable time period minimum	10 ms
switching frequency at digital output maximum	17 Hz
property of the output short-circuit proof	Yes
measuring category for digital signals	CATII
<b>Measuring inputs</b>	
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	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<ul style="list-style-type: none"> <li>40 V</li> <li>480 V</li> </ul>
measurable supply voltage between the line conductors at AC maximum rated value	690 V
measurable supply voltage between the line conductors at AC	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<ul style="list-style-type: none"> <li>70 V</li> <li>831 V</li> </ul>
voltage measuring range extension with external voltage transformers	yes
line conductors and neutral conductors internal resistance for voltage measurement	1.05 MΩ
measuring category for voltage measurement	CATIII
measurable current	
<ul style="list-style-type: none"> <li>• 1 at AC rated value</li> <li>• 2 at AC rated value</li> </ul>	<ul style="list-style-type: none"> <li>1 A</li> <li>5 A</li> </ul>
relative measurable current at AC	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<ul style="list-style-type: none"> <li>1 %</li> <li>120 %</li> </ul>
current measuring range extension with external current transformers	yes
zero point suppression for current measurement	0,1 ... 10 %
measuring category for current measurement	CATIII
<b>Connections</b>	
type of connectable conductor cross-sections	

<ul style="list-style-type: none"> <li>• at the measurement inputs for voltage solid</li> <li>• at the measurement inputs for voltage finely stranded with core end processing</li> <li>• at the measurement inputs for voltage at AWG cables solid</li> <li>• at the measurement inputs for current solid</li> <li>• at the measurement inputs for current finely stranded with core end processing</li> <li>• at the measurement inputs for current at AWG cables solid</li> </ul>	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> ) 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )  2x 20 to 14  1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> ) 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )  2x 20 to 14
type of electrical connection <ul style="list-style-type: none"> <li>• at the measurement inputs for voltage</li> </ul>	screw-type terminals

### Mechanical Design

size of Power Monitoring Device	size 96
height	96 mm
width	96 mm
depth	56 mm
installation depth	51 mm
net weight	451 g
mounting position	vertical

### Environmental conditions

ambient temperature during operation <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-10 °C 55 °C
ambient temperature during storage <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-25 °C 70 °C
relative humidity at 25 °C without condensation during operation maximum	95 %
installation altitude at height above sea level maximum	2 000 m

### Certificates

certificate of suitability as EC Declaration of Conformity	IEC 61010-1: 2001 (2nd Ed.) with Corr. 1, EN 61010-1: 2001 (2nd Ed.) and DIN EN 61010-1:2002 with "Berichtigung 1"
reference code according to EN 61346-2	P

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>	<b>Test Certificates</b>
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[Confirmation](#)



[Type Test Certificates/Test Report](#)

other

[Miscellaneous](#)

[Confirmation](#)

### 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=7KM2112-0BA00-3AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/7KM2112-0BA00-3AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=7KM2112-0BA00-3AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KM2112-0BA00-3AA0)

**CAx-Online-Generator**

<http://www.siemens.com/cax>

**Tender specifications**

<http://www.siemens.com/specifications>





