

SENTRON, measuring device, 7KM PAC3200, LCD, L-L: 500 V, L-N: 289 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, ext-low volt. pwr sup. unit DC, DC 22 ... 65 V +/- 10%, screw terminals



Model	
product brand name	SENTRON
product designation	7KM PAC3200
design of the product	basic
product type designation	Measuring instrument

Measurements	
measuring procedure	
<ul style="list-style-type: none"> for voltage measurement for current measurement 	RMS TRMS
type of measured value detection	complete
voltage curve	Sinusoidal or distorted
measurable line frequency	
<ul style="list-style-type: none"> initial value full-scale value 	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"> 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

Degree of protection protection class

protection class IP on the front	IP65
operating resource protection class when installed	II

Suitability

suitability for operation	Installation in stationary control panels in closed rooms
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Product Functions

product function	
<ul style="list-style-type: none"> • voltage measurement 	Yes
<ul style="list-style-type: none"> • current measurement 	Yes
<ul style="list-style-type: none"> • active power measurement 	Yes
<ul style="list-style-type: none"> • reactive power 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
national language on the display screen is supported	ger, en, fr, spa, ita, por, tur, chi
number of keys	4

Communication

number of interfaces acc. to Fast Ethernet	1
protocol at the Ethernet interface is supported	MODBUS TCP

Fault limits

reference condition for metering accuracy	Acc. to IEC62053-22 and IEC62053-23
formula for relative total measurement inaccuracy	
<ul style="list-style-type: none"> • for measured variable voltage 	+/- 0,3 %
<ul style="list-style-type: none"> • for measured variable current 	+/- 0,2 %
<ul style="list-style-type: none"> • for measured variable output factor 	+/- 0,5 %
<ul style="list-style-type: none"> • for measured variable active energy 	Cl. 0.5 acc. to... IEC62053-22
<ul style="list-style-type: none"> • for measured variable reactive energy 	Class 2 according to IEC61557-12 and/or IEC62053-23

Inputs Outputs

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"> • at digital output with signal <0> maximum • at digital output for signal <1> maximum 	0.2 mA 27 mA
internal resistance at the digital outputs	55 Ω
standard for pulse emitter	according to IEC62053-31
pulse duration	
<ul style="list-style-type: none"> • initial value • full-scale value 	30 ms 500 ms
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

Measuring inputs

measurable supply voltage between (PE)N and L at AC maximum rated value	289 V
measurable supply voltage between (PE)N and L at AC	
<ul style="list-style-type: none"> • minimum • maximum 	40 V 346 V
measurable supply voltage between the line conductors at AC maximum rated value	500 V
measurable supply voltage between the line conductors at AC	
<ul style="list-style-type: none"> • minimum • maximum 	70 V 600 V
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"> • 1 at AC rated value • 2 at AC rated value 	1 A 5 A
relative measurable current at AC	
<ul style="list-style-type: none"> • minimum • maximum 	1 % 120 %
continuous current at AC maximum permissible	10 A
current measuring range extension with external current transformers	Yes
zero point suppression for current measurement	0,1 ... 10 %
measuring category for current measurement	CATIII

Connections

type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • at the measurement inputs for voltage solid • at the measurement inputs for voltage finely stranded with core end processing 	1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²) 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)

<ul style="list-style-type: none"> at the measurement inputs for voltage at AWG cables solid 	2x 20 to 14
<ul style="list-style-type: none"> at the measurement inputs for current solid 	1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> at the measurement inputs for current finely stranded with core end processing 	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
<ul style="list-style-type: none"> at the measurement inputs for current at AWG cables solid 	2x 20 to 14
type of electrical connection	
<ul style="list-style-type: none"> at the measurement inputs for voltage 	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	459 g
mounting position	vertical

Environmental conditions	
ambient temperature during operation	
<ul style="list-style-type: none"> minimum 	-10 °C
<ul style="list-style-type: none"> maximum 	55 °C
ambient temperature during storage	
<ul style="list-style-type: none"> minimum 	-25 °C
<ul style="list-style-type: none"> maximum 	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	
<ul style="list-style-type: none"> acc. to DIN EN 61346-2 	P

General Product Approval	Declaration of Conformity	other



[Confirmation](#)

[Manufacturer Declaration](#)

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=7KM2111-1BA00-3AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/7KM2111-1BA00-3AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KM2111-1BA00-3AA0

CAX-Online-Generator

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

Tender specifications

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



