

SENTRON measuring device, 7KM PAC2200, L-L: 400 V, L-N: 230 V, strd rail instr., 3-phase, Modbus TCP, apparent /active/reactive energy, self-powered, screw terminals



Model	
product brand name	SENTRON
product designation	7KM PAC2200
design of the product	basic
product type designation	Measuring instrument
Measurements	
measuring procedure	
<ul style="list-style-type: none"> for voltage measurement 	TRMS
<ul style="list-style-type: none"> for current measurement 	TRMS
type of measured value detection	complete
voltage curve	Sinusoidal or distorted
measurable line frequency	
<ul style="list-style-type: none"> initial value 	45 Hz
<ul style="list-style-type: none"> full-scale value 	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

type of voltage of the supply voltage AC

Degree of protection/protection class

protection class IP on the front IP40

protection class IP of the terminal IP20

operating resource protection class when installed II

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 27 mm

width of the display 45 mm

color of the background of the display white

illuminance of display backlight adjustable Yes

time-controlled reduction of the illuminance of display backlight possible Yes

display contrast adjustable Yes

number of keys 4

Communication

number of interfaces acc. to Fast Ethernet 1

transfer rate 1 for Ethernet 10 Mbit/s

transfer rate 2 for Ethernet 100 Mbit/s

Fault limits

reference condition for metering accuracy Acc. to IEC61557-12

formula for relative total measurement inaccuracy

- for measured variable reactive energy Class 2 acc. to IEC61553-23

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

input current at digital input

- initial value for signal<1>-recognition 2.5 mA
- full-scale value for signal<0> recognition 0.5 mA

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 <ul style="list-style-type: none"> • at digital output with signal <0> maximum • at digital output for signal <1> maximum • at the digital outputs at DC limited to 100 ms maximum 	0.2 mA 50 mA 130 mA
internal resistance at the digital outputs	30 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 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 <ul style="list-style-type: none"> • minimum • maximum 	20 V 276 V
measurable supply voltage between the line conductors at AC maximum rated value	400 V
measurable supply voltage between the line conductors at AC <ul style="list-style-type: none"> • minimum • maximum 	34.6 V 480 V
voltage measuring range extension with external voltage transformers	No
line conductors and neutral conductors internal resistance for voltage measurement	1 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	10 mA
• for neutral conductor current	45 mA

Connections

type of electrical connection	
• at the measurement inputs for voltage	screw-type terminals
• at the measurement inputs for current	screw-type terminals

Mechanical Design

fastening method standard rail mounting	Yes
size of Power Monitoring Device	6MW
height	97 mm
width	108 mm
depth	71 mm
installation depth	64 mm
net weight	310 g
mounting position	any

Environmental 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

Certificates

Declaration of Conformity	other
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EG-Konf.

[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=7KM2200-2EA30-1EA1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/7KM2200-2EA30-1EA1>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KM2200-2EA30-1EA1

CAX-Online-Generator

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

Tender specifications

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



