

SETRON, measuring device, 7KM PAC2200, LCD, L-L: 400 V, L-N: 230 V, 5 A, strd rail instr., 3-phase, Modbus TCP, apparent /active/reactive energy, self-powered, screw terminals



Model	
product brand name	SETRON
product designation	7KM PAC2200
design of the product	basic
product type designation	Measuring instrument
type of measured value detection	complete

General technical data	
size of Power Monitoring Device / company-specific	6MW
operating mode for measured value detection	
• automatic line frequency detection	Yes
• set at 50 Hz	No
• set to 60 Hz	No
pulse duration	
• initial value	30 ms
• full-scale value	500 ms
voltage curve	Sinusoidal or distorted
measurable line frequency / initial value	45 Hz
measurable line frequency / full-scale value	65 Hz

measuring procedure / for voltage measurement	TRMS
Supply voltage	
type of voltage / of the supply voltage	AC
Protection class	
protection class IP	
• on the front	IP40
• rear side	IP20
operating resource protection class / when installed	II
Current	
measurable current	
• 1 / at AC / rated value	1 A
• 2 / at AC / rated value	5 A
adjustable time period / minimum	10 ms
Product function	
product function	
• illuminance of display backlighting adjustable	Yes
• time-controlled reduction of the illuminance of display backlighting possible	Yes
• reactive power measurement	Yes
• display contrast adjustable	Yes
• voltage measurement	Yes
• current measurement	Yes
• active power measurement	Yes
Display and operation	
design of the display	LCD
number of keys	4
color / of the background of the display	white
Communication	
number of interfaces / acc. to Fast Ethernet	1
protocol	
• at the Ethernet interface / is supported	MODBUS TCP
• is supported	Modbus TCP
• transfer rate / 1 / for Ethernet	10 Mbit/s
• transfer rate / 2 / for Ethernet	100 Mbit/s
Fault limits	
reference condition / for metering accuracy	In accordance with IEC61557-12, IEC62053-22 and IEC62053-23
• formula for relative total measurement inaccuracy / for measured variable reactive energy	Class 2 acc. to IEC61553-23

- formula for relative total measurement inaccuracy / for measured variable reactive power
- formula for relative total measurement inaccuracy / for measured variable output factor
- formula for relative total measurement inaccuracy / for measured variable active power

+/- 1 %

+/- 0,5 %

+/- 1 %

Inputs Outputs

input voltage / at digital input	
• at DC / maximum	30 V
number of digital outputs	1
number of digital inputs	1
digital output version	switching or pulse output function
type of electrical connection	
• at the digital inputs	screw-type terminals
• at the digital outputs	screw-type terminals
input current / at digital input	
• initial value for signal<1>-recognition	2.5 mA
• full-scale value for signal<0> recognition	0.5 mA
output current	
• at digital output / with signal <0> / maximum	0.2 mA
• at digital output / for signal <1> / maximum	50 mA
• at the digital outputs / at DC / limited to 100 ms / maximum	130 mA
operating conditions for digital inputs / external voltage supply	Yes
operating voltage / as output voltage / at DC / maximum permissible	30 V
property of the output / short-circuit proof	Yes
internal resistance / at the digital outputs	30 Ω
switching frequency / at digital output / maximum	17 Hz

Measuring inputs

outer conductors and neutral conductors internal resistance / for voltage measurement	1 MΩ
measurable supply voltage	
• between (PE)N and L / at AC / minimum	46 V
• between (PE)N and L / at AC / maximum	276 V
• between (PE)N and L / at AC / maximum rated value	230 V
• between the outer conductors / at AC / minimum	34.6 V
• between the outer conductors / at AC / maximum	480 V

<ul style="list-style-type: none"> • between the outer conductors / at AC / maximum rated value 	400 V
voltage measuring range extension / with external voltage transformers	No
current measuring range extension / with external current transformers	Yes
measuring category / for voltage measurement	CATIII
supply voltage / between the outer conductors / at AC / maximum permissible	480 V
continuous current / at AC / maximum permissible	10 A
zero point suppression / for current measurement	10 mA
<ul style="list-style-type: none"> • for neutral conductor current 	45 mA
relative measurable current / at AC	
<ul style="list-style-type: none"> • minimum • maximum 	1 % 120 %
apparent power consumption / for current measurement	
<ul style="list-style-type: none"> • with measuring range 5 A / per phase 	0.5 V·A
measuring procedure / for current measurement	TRMS

Connections

type of electrical connection	
<ul style="list-style-type: none"> • at the measurement inputs for voltage • at the measurement inputs for current 	screw-type terminals screw-type terminals

Mechanical Design

height	97 mm
height / of the display	27 mm
width	108 mm
width	
<ul style="list-style-type: none"> • of the display 	45 mm
depth	71 mm
installation depth	64 mm
mounting type / panel mounting	No
mounting position	any
net weight	310 g

Environmental conditions

installation altitude / at height above sea level / maximum	2 000 m
standard	
<ul style="list-style-type: none"> • for pulse emitter 	according to IEC62053-31
relative humidity / at 25 °C / without condensation / during operation	
<ul style="list-style-type: none"> • maximum 	75 %
ambient temperature / during operation	

• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage	
• minimum	-25 °C
• maximum	70 °C

Certificates

certificate of suitability

• as approval for Canada	Yes
• as approval for USA	Yes
• approval Australia	Yes
• approval Russia	Yes

Declaration of Conformity

other



EG-Konf.

[Manufacturer Declaration](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

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>



