SIEMENS

Product data sheet 7KM2112-0BA00-2AA0

Similar to image

SENTRON PAC3200;
LCD;
96X96MM POWER MONITORING DEVICE PANEL MOUNT TYPE FOR MEASUREMENT OF ELECTR. VALUES VAUX: 110-340VDC / 95-240VAC VIN: MAX.690/400V;
45-65HZ AMPIN: X/1A OR X/5A AC RING LUG TERMINALS

General technical data:		
Product designation		multimeter
product brand name		SENTRON
Product type designation		PAC3200
Size of Power Monitoring Device / company-specific		size 96
Design of the product		basic
Product function		
• voltage measurement		Yes
• Current measurement		Yes
• active power measurement		Yes
• reactive power measurement		Yes
• pulse measurement		Yes
• frequency measurement		Yes
MTBF	a	185.8
Reference code		
• acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750		P
• acc. to DIN EN 61346-2		P

Measurement:

Measuring procedure		
• for voltage measurement		RMS
• for current measurement		TRMS
Type of measured value detection		complete
Voltage curve		Sinusoidal or distorted
Measurable line frequency	Hz	45 … 65
Operating mode for measured value detection		
• automatic line frequency detection		Yes
• set at 50 Hz		No
• set to 60 Hz		No

Measuring inputs for voltage:

Measurable supply voltage		
• between (PE)N and L / with AC / maximum rated value	V	400
• between the outer conductors / with AC / maximum rated value	V	690
• between (PE)N and L / with AC	V	40 … 480
• between the outer conductors / with AC	V	70 … 831
Supply voltage / between the outer conductors / with AC		
• maximum permissible	V	831
Measuring category / for voltage measurement		CATIII
Outer conductors and neutral conductors internal resistance		
• for voltage measurement	MΩ	1.05
Active power consumption / for voltage measurement		
• per phase	mW	220
Voltage measuring range extension		
• with external voltage transformers		Yes

Measuring inputs for current:

Measurable current		
• 1 / with AC / Rated value	A	1
• 2 / with AC / Rated value	A	5
Relative measurable current / with AC	%	1 … 120
Continuous current / with AC / maximum permissible	A	10
Short-time current resistance (Icw) / limited to 1 s / Rated value	A	100
Zero-point suppression / for current measurement		0,1 ... 10 %
Measuring category / for current measurement		CATIII
Current measuring range extension		
• with external current transformers		Yes

Fault limits:

Reference condition / for metering accuracy		Acc. to IEC62053-22 and IEC62053-23

Formula for relative total measurement inaccuracy		
• for measured variable voltage		+/- 0,3 %
• for measured variable current		+/- 0,2 %
• for measured variable output		+/- 0,5 %
• for measured variable output factor		+/- 0,5 %
• for measured variable active energy		Cl. 0.5 acc. to... IEC62053-22
• for measured variable reactive energy		Class 2 according to IEC61557-12 and/or IEC62053-23

Supply voltage:		
Design of the power supply		Wide-range power supply
Type of voltage / of the supply voltage		AC/DC
Relative symmetrical tolerance / of the supply voltage	%	10
Measuring category / for supply voltage		CATIII
Supply voltage / 1 / with AC	V	95 … 240
Apparent power consumption		
• without expansion module / typical	V·A	6
• with expansion module / maximum	V·A	8
Supply voltage / 1 / for DC	V	110 … 340

Digital input:		
Number of digital inputs		1
Input voltage / at digital input		
• for DC / Rated value	V	24
• Full-scale value for signal<0> recognition	V	8
• initial value for signal<1>-recognition	V	13
Input current / at digital input		
• for signal <1>	mA	7
Input delay time / at digital input		
• for signal <1> to <0> / maximum	ms	5
• for signal <0> to <1> / maximum	ms	5

Digital output:		
Number of digital outputs		1
Digital output version		switching or pulse output function
Standard / for pulse emitter		according to IEC62053-31
Pulse duration	ms	30 … 500
Adjustable time period / minimum	ms	10
Operating voltage / as output voltage / for DC / maximum permissible	V	30
Output current		
• at digital output		

• for signal <1>	mA	10 … 27
• with signal <0> / maximum	mA	0.2
• at the digital outputs / for DC / maximum	mA	100
Output delay / at digital output		
• for signal <1> to <0> / maximum	ms	5
• for signal <0> to <1> / maximum	ms	5
Internal resistance / at the digital outputs	Ω	55
Switching frequency / at digital output / maximum	Hz	17
Property of the output / Short-circuit proof		Yes
Measuring category / for digital signals		CATII

Communication:		
Number of interfaces / acc. to Fast Ethernet		1
Design of cable / connectable		
• Twisted pair		Yes
Protocol / at the Ethernet interface / is supported		MODBUS TCP
Protocol / is supported		SEAbus TCP / MODBUS TCP (switchable)
Transfer rate	kbit/s	10,000 … 10,000
Refresh time		
• at the interface	s	0.33 … 1

Indication and operation:		
Number of keys		4
Design of the display		LCD, graphical, monochrome
Color / of the background of the display		white
National language / on the display screen / is supported		ger, en, fr, spa, ita, por, tur, chi
Horizontal image resolution		128
Vertical screen resolution		96
Width / of the display	mm	72
Height / of the display	mm	54
Refresh time / on display	s	0.33 … 3

Dimensions and weights:		
Suitability for use		Installation in stationary control panels in closed rooms
Mounting type / panel mounting		Yes
mounting position		vertical
Width	mm	96
Height	mm	96
Depth	mm	56
Installation depth	mm	51

Cutout height	mm	92
Cutout width	mm	92

Degree of protection and safety class:

Operating resource protection class		
• when installed		II
Protection class IP		
• on the front		IP65

Ambient conditions:

Ambient temperature		
• during operation	°C	-10 … +55
• during storage	°C	-25 … +70
Relative humidity / at 25 °C / without condensation		
• during operation	%	5 … 95
Installation altitude / at height above sea level / maximum	m	2,000
Standard		
• for environmental coldness check		IEC 60068-2-1
• for environmental dry heat check		IEC 60068-2-2
• for cyclic, environmental damp heat check		IEC 60068-2-30

Certificates/approvals:

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"
• as approval for USA		UL 61010-1, 2nd Ed. CAN/CSA-C22.2 NO. 61010-1-04
• as approval for Canada		UL 61010-1, 2nd Ed. CAN/CSA-C22.2 NO. 61010-1-04

Certificates/approvals:

General Product Approval		EMC	Declaration of Conformity
GOST	UL	C-TICK	EG-Konf.
other			
Confirmation	GOST	Profibus	PROFINET-Certification

Further information:

Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/lowvoltage/catalogs

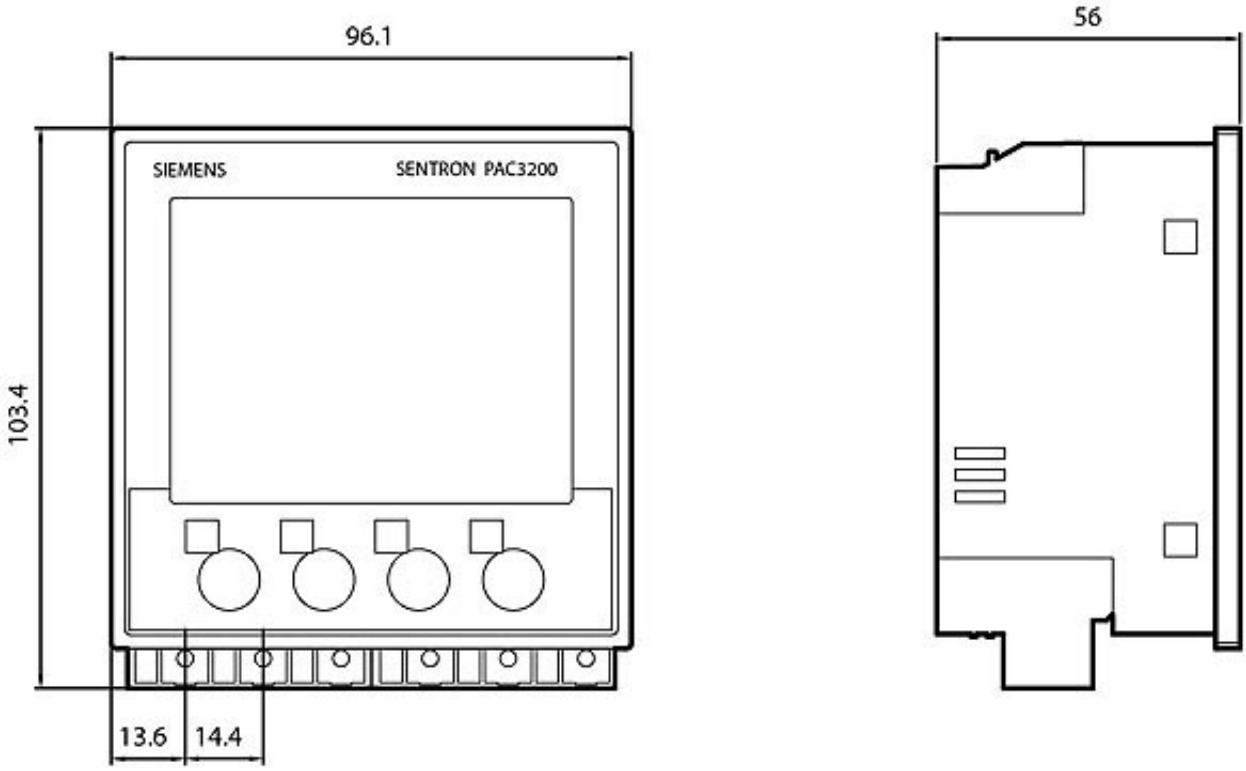
Industry Mall (Online ordering system)
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/7KM2112-0BA00-2AA0

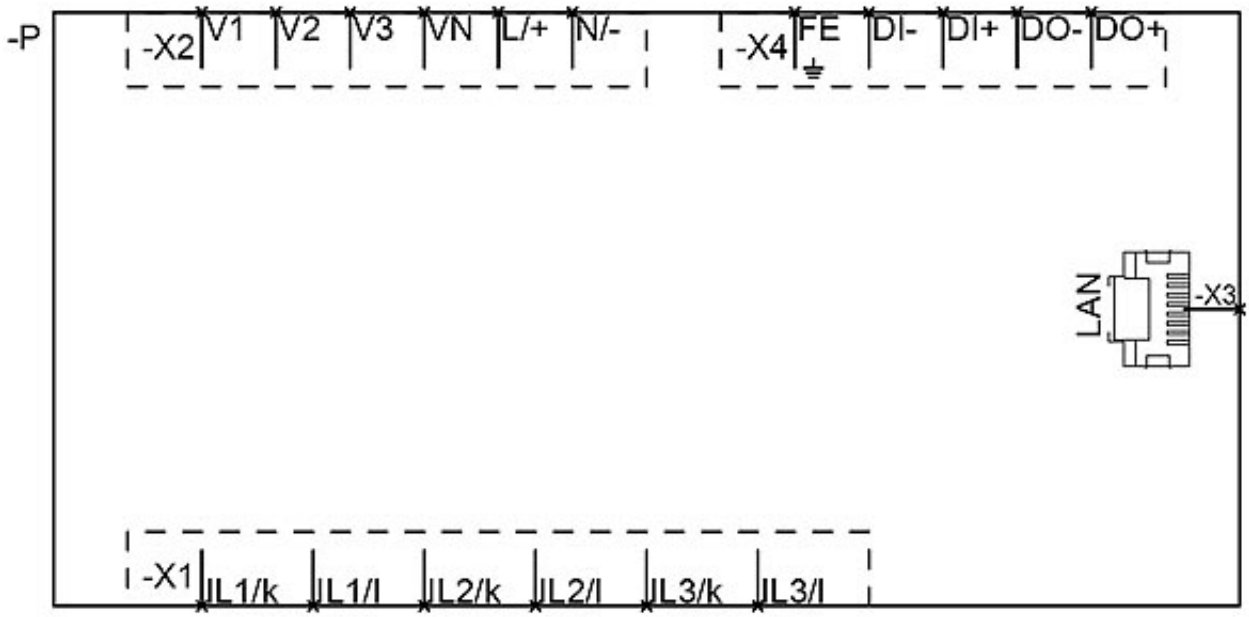
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/7KM2112-0BA00-2AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KM2112-0BA00-2AA0

CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
Datanorm GAEB81 GAEB83 RTF TXT





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