SIEMENS

Data sheet 7KT1682

SENTRON, measuring instrument, 7KT PAC1600, LCD, L-L: 400 V, L-N: 230 V, 5 A, Standard rail device, 3-phase, Modbus RTU/ASCII, multi-function measurement incl. THD



Model	
Product brand name	SENTRON
Design of the product	basic
Product type designation	Measuring instrument
Type of measured value detection	complete
General technical data	
Operating mode for measured value detection	
 automatic line frequency detection 	Yes
● set at 50 Hz	No
• set to 60 Hz	No
Voltage curve	Sinusoidal or distorted
Measurable line frequency / initial value	45 Hz
Measurable line frequency / Full-scale value	66 Hz
Measuring procedure / for voltage measurement	TRMS
Supply voltage	
Type of voltage / of the supply voltage	AC/DC
Apparent power consumption	
 without expansion module / typical 	2.2 V·A

Consumed active power	
 without expansion module / typical 	0.8 W
Protection class	
Protection class IP	
• on the front	IP40
• Rear side	IP20
Electricity	
Measurable current / 2 / at AC / Rated value	5 A
Suitability	
Suitability for operation	Standard mounting rail device
Product function	
Product function	
reactive power measurement	Yes
• frequency measurement	Yes
voltage measurement	Yes
Current measurement	Yes
• active power measurement	Yes
Display and operation	
Design of the display	LCD
Number of keys	4
Communication	
Transfer rate	
• minimum	1 200 kbit/s
• maximum	115 200 kbit/s
Inputs Outputs	
Number of digital outputs	0
Number of digital inputs	0
Type of switching output	solid state
Operating conditions for digital inputs / external	No
voltage supply	
Measuring inputs	
Measurable supply voltage	
between (PE)N and L / at AC / minimum	50 V
• between (PE)N and L / at AC / maximum	415 V
 between (PE)N and L / at AC / maximum rated 	230 V
value	
between the outer conductors / at AC / maximum rated value.	400 V
maximum rated value Measuring category / for voltage measurement	CATIII
weasuring category / for voltage measurement	OATIII

Supply voltage / between the outer conductors / at	288 V
AC / maximum permissible	6 A
Continuous current / at AC / maximum permissible	CATIII
Measuring category / for current measurement Relative measurable current / at AC	CATIII
	0.5 %
• minimum	
• maximum	120 %
Apparent power consumption / for current measurement	
with measuring range 5 A / per phase	2.2 V·A
Measuring procedure / for current measurement	TRMS
Measurable current / 1 / at AC / Rated value	5 A

Connections

Type	of e	lectrical	connection
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• at the measurement inputs for voltage screw-type terminals • at the measurement inputs for current screw-type terminals

Mechanical Design	
Height	90 mm
Width	71.6 mm
Depth	63 mm
Mounting position	any
Mounting type / panel mounting	No
Net weight	280 g

Environmental conditions	
Degree of pollution	2
Installation altitude / at height above sea level / maximum	2 000 m
Relative humidity / at 25 °C / without condensation / during operation	
• maximum	80 %
Ambient temperature	
during operation / minimum	-20 °C
during operation / maximum	60 °C
during storage / minimum	-30 °C
during storage / maximum	80 °C

Certificate of suitability

Yes Approval Russia

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=7KT1682

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/7KT1682

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KT1682

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications