SIEMENS

Data sheet 7KT1670

SENTRON, measuring device, 7KT PAC1600, LCD, L-L: 400 V, L-N: 230 V, 80 A, strd rail instr., 3-phase, S0, apparent/active /reactive energy, self-powered, screw terminals

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
Pulse duration	
• initial value	30 ms
• Full-scale value	30 ms
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	self-powered
Consumed active power	
• without expansion module / typical	2.7 W

Protection class

Protection class IP	
• on the front	IP40
• Rear side	IP20

Electricity

Measurable current / 2 / at AC / Rated value	80 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	3

Inputs Outputs

Input voltage / at digital input	
• initial value for signal<1>-recognition	85 V
• at DC / maximum	240 V
• Full-scale value for signal<0> recognition	240 V
Number of digital outputs	2
Number of digital inputs	1
Type of switching output	solid state
Type of electrical connection	
• at the digital outputs	screw-type terminals
Output current	
• at digital output / for signal <1> / maximum	50 mA
• at the digital outputs / at DC / limited to 100 ms / maximum	50 mA
Operating conditions for digital inputs / external voltage supply	Yes
Operating voltage / as output voltage / at DC / maximum permissible	30 V

Measuring inputs

Measurable supply voltage	
• between (PE)N and L / at AC / minimum	187 V
• between (PE)N and L / at AC / maximum	264 V
• between (PE)N and L / at AC / maximum rated value	230 V
• between the outer conductors / at AC / maximum rated value	400 V
Measuring category / for voltage measurement	CATIII
Continuous current / at AC / maximum permissible	80 A
Measuring category / for current measurement	CATIII
Relative measurable current / at AC	
• minimum	0.6 %
• maximum	100 %
Apparent power consumption / for current measurement	
• with measuring range 5 A / per phase	2.5 V·A
Measuring procedure / for current measurement	TRMS
Measurable current / 1 / at AC / Rated value	80 A

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

(height)	90 mm
Width	71.6 mm
Depth	63 mm
(mounting position)	any
Mounting type / panel mounting	No
(net weight)	381 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	-25 °C
• during operation / maximum	55 °C
• during storage / minimum	-25 °C
• during storage / maximum	70 °C

Certificates

Certificate of suitability	
• Approval Russia	Yes

Declaration of Conformity

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=7KT1670

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/7KT1670

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KT1670

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

Tender specifications
http://www.siemens.com/specifications