## **SIEMENS**

Data sheet 7KT1661

SENTRON, measuring device, 7KT PAC1600, LCD, L-L: 400 V, L-N: 230 V, 5 A, strd rail instr., 3-phase, Modbus RTU/ASCII, apparent/active/ reactive energy, self-powered, screw terminals

	230 V, 5 A, strd rail instr., 3-phase, Modbus RTU/ASCII,			
	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				
<ul> <li>automatic line frequency detection</li> </ul>	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	self-powered			
Consumed active power				
<ul><li>without expansion module / typical</li></ul>	1.6 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				
<ul> <li>reactive power measurement</li> </ul>	Yes			
<ul><li>frequency measurement</li></ul>	Yes			
<ul> <li>voltage measurement</li> </ul>	Yes			
Current measurement	Yes			

active power measurement	Yes
Display and operation	
Design of the display	LCD
Number of keys	3
Communication	
Transfer rate	
• minimum	1 200 kbit/s
• maximum	115 200 kbit/s
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	0
Number of digital inputs	1
Type of switching output	solid state
Type of electrical connection	
at the digital outputs	screw-type terminals
Operating conditions for digital inputs / external	Yes
voltage supply	
Measuring inputs	
Measurable supply voltage	
	187 V
• between (PE)N and L / at AC / minimum	
<ul> <li>between (PE)N and L / at AC / minimum</li> <li>between (PE)N and L / at AC / maximum</li> </ul>	264 V
• between (PE)N and L / at AC / minimum	
<ul> <li>between (PE)N and L / at AC / minimum</li> <li>between (PE)N and L / at AC / maximum</li> <li>between (PE)N and L / at AC / maximum rated</li> </ul>	264 V
<ul> <li>between (PE)N and L / at AC / minimum</li> <li>between (PE)N and L / at AC / maximum</li> <li>between (PE)N and L / at AC / maximum rated value</li> </ul>	264 V 230 V
<ul> <li>between (PE)N and L / at AC / minimum</li> <li>between (PE)N and L / at AC / maximum</li> <li>between (PE)N and L / at AC / maximum rated value</li> <li>between the outer conductors / at AC /</li> </ul>	264 V 230 V
<ul> <li>between (PE)N and L / at AC / minimum</li> <li>between (PE)N and L / at AC / maximum</li> <li>between (PE)N and L / at AC / maximum rated value</li> <li>between the outer conductors / at AC / maximum rated value</li> </ul>	264 V 230 V 400 V
<ul> <li>between (PE)N and L / at AC / minimum</li> <li>between (PE)N and L / at AC / maximum</li> <li>between (PE)N and L / at AC / maximum rated value</li> <li>between the outer conductors / at AC / maximum rated value</li> <li>Measuring category / for voltage measurement</li> </ul>	264 V 230 V 400 V
<ul> <li>between (PE)N and L / at AC / minimum</li> <li>between (PE)N and L / at AC / maximum</li> <li>between (PE)N and L / at AC / maximum rated value</li> <li>between the outer conductors / at AC / maximum rated value</li> <li>Measuring category / for voltage measurement</li> <li>Continuous current / at AC / maximum permissible</li> </ul>	264 V 230 V 400 V CATIII 6 A
between (PE)N and L / at AC / minimum     between (PE)N and L / at AC / maximum     between (PE)N and L / at AC / maximum rated value     between the outer conductors / at AC / maximum rated value  Measuring category / for voltage measurement  Continuous current / at AC / maximum permissible  Measuring category / for current measurement	264 V 230 V 400 V  CATIII 6 A CATIII
between (PE)N and L / at AC / minimum     between (PE)N and L / at AC / maximum     between (PE)N and L / at AC / maximum rated value     between the outer conductors / at AC / maximum rated value  Measuring category / for voltage measurement Continuous current / at AC / maximum permissible Measuring category / for current measurement Zero-point suppression / for current measurement	264 V 230 V 400 V  CATIII 6 A CATIII
between (PE)N and L / at AC / minimum     between (PE)N and L / at AC / maximum     between (PE)N and L / at AC / maximum rated value     between the outer conductors / at AC / maximum rated value  Measuring category / for voltage measurement Continuous current / at AC / maximum permissible Measuring category / for current measurement Zero-point suppression / for current measurement Relative measurable current / at AC	264 V 230 V 400 V  CATIII 6 A  CATIII 10 mA
between (PE)N and L / at AC / minimum     between (PE)N and L / at AC / maximum     between (PE)N and L / at AC / maximum rated value     between the outer conductors / at AC / maximum rated value  Measuring category / for voltage measurement Continuous current / at AC / maximum permissible Measuring category / for current measurement Zero-point suppression / for current measurement Relative measurable current / at AC     minimum     maximum Apparent power consumption / for current	264 V 230 V 400 V  CATIII 6 A CATIII 10 mA
between (PE)N and L / at AC / minimum     between (PE)N and L / at AC / maximum     between (PE)N and L / at AC / maximum rated value     between the outer conductors / at AC / maximum rated value  Measuring category / for voltage measurement  Continuous current / at AC / maximum permissible  Measuring category / for current measurement  Zero-point suppression / for current measurement  Relative measurable current / at AC     minimum     maximum  Apparent power consumption / for current measurement	264 V 230 V 400 V  CATIII 6 A  CATIII 10 mA  1 % 120 %
between (PE)N and L / at AC / minimum     between (PE)N and L / at AC / maximum     between (PE)N and L / at AC / maximum rated value     between the outer conductors / at AC / maximum rated value  Measuring category / for voltage measurement Continuous current / at AC / maximum permissible Measuring category / for current measurement Zero-point suppression / for current measurement Relative measurable current / at AC     minimum     maximum Apparent power consumption / for current measurement  with measuring range 5 A / per phase	264 V 230 V  400 V  CATIII 6 A  CATIII 10 mA  1 % 120 %
between (PE)N and L / at AC / minimum     between (PE)N and L / at AC / maximum     between (PE)N and L / at AC / maximum rated value     between the outer conductors / at AC / maximum rated value  Measuring category / for voltage measurement  Continuous current / at AC / maximum permissible  Measuring category / for current measurement  Zero-point suppression / for current measurement  Relative measurable current / at AC     minimum     maximum  Apparent power consumption / for current measurement  with measuring range 5 A / per phase  Measuring procedure / for current measurement	264 V 230 V  400 V  CATIII 6 A  CATIII 10 mA  1 % 120 %
between (PE)N and L / at AC / minimum     between (PE)N and L / at AC / maximum     between (PE)N and L / at AC / maximum rated value     between the outer conductors / at AC / maximum rated value  Measuring category / for voltage measurement Continuous current / at AC / maximum permissible Measuring category / for current measurement Zero-point suppression / for current measurement Relative measurable current / at AC     minimum     maximum Apparent power consumption / for current measurement  with measuring range 5 A / per phase	264 V 230 V  400 V  CATIII 6 A  CATIII 10 mA  1 % 120 %

## Type of electrical connection

• at the measurement inputs for voltage

• at the measurement inputs for current

screw-type terminals 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	
<ul><li>during operation / minimum</li></ul>	-25 °C
<ul><li>during operation / maximum</li></ul>	55 °C
• during storage / minimum	-25 °C
• during storage / maximum	70 °C

CE	ar u	IIC	สแ	35

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=7KT1661

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

https://support.industry.siemens.com/cs/ww/en/ps/7KT1661

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=7KT1661">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=7KT1661</a>

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications