

SENTRON, measuring instrument, 7KT PAC1600, LCD, L-L: 400 V, L-N: 230 V, 80 A, standard mounting rail device, 3-phase, M-bus + MID, apparent / active / reactive energy, self-supplied, screw terminal



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	self-powered
Consumed active power	
• without expansion module / typical	1 W

Protection class	
Protection class IP	
<ul style="list-style-type: none"> <li>• on the front</li> </ul>	IP40
<ul style="list-style-type: none"> <li>• Rear side</li> </ul>	IP20
Electricity	
Measurable current / 2 / at AC / Rated value	80 A
Suitability	
Suitability for operation	Standard mounting rail device
Product function	
Product function	
<ul style="list-style-type: none"> <li>• reactive power measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• frequency measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• voltage measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Current measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• active power measurement</li> </ul>	Yes
Display and operation	
Design of the display	LCD
Number of keys	3
Communication	
Transfer rate	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	300 kbit/s
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	38 400 kbit/s
Inputs Outputs	
Input voltage / at digital input	
<ul style="list-style-type: none"> <li>• initial value for signal&lt;1&gt;-recognition</li> </ul>	85 V
<ul style="list-style-type: none"> <li>• at DC / maximum</li> </ul>	240 V
<ul style="list-style-type: none"> <li>• Full-scale value for signal&lt;0&gt; recognition</li> </ul>	240 V
Number of digital outputs	0
Number of digital inputs	1
Type of switching output	solid state
Type of electrical connection	
<ul style="list-style-type: none"> <li>• at the digital outputs</li> </ul>	screw-type terminals
Operating conditions for digital inputs / external voltage supply	Yes
Measuring inputs	
Measurable supply voltage	
<ul style="list-style-type: none"> <li>• between (PE)N and L / at AC / minimum</li> </ul>	187 V
<ul style="list-style-type: none"> <li>• between (PE)N and L / at AC / maximum</li> </ul>	264 V
<ul style="list-style-type: none"> <li>• between (PE)N and L / at AC / maximum rated value</li> </ul>	230 V

<ul style="list-style-type: none"> <li>• between the outer conductors / at AC / maximum rated value</li> </ul>	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	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.9 % 100 %
Apparent power consumption / for current measurement	
<ul style="list-style-type: none"> <li>• with measuring range 5 A / per phase</li> </ul>	2.5 V·A
Measuring procedure / for current measurement	TRMS
Measurable current / 1 / at AC / Rated value	80 A

### Connections

#### Type of electrical connection

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• at the measurement inputs for voltage</li> <li>• at the measurement inputs for current</li> </ul> | screw-type terminals<br>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	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	80 %
Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	-25 °C 55 °C -25 °C 70 °C

### Certificates

Certificate of suitability	
<ul style="list-style-type: none"> <li>• Approval Russia</li> </ul>	Yes



## 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?mfb=7KT1668>

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

<https://support.industry.siemens.com/cs/ww/en/ps/7KT1668>

### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=7KT1668](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=7KT1668)

### CAX-Online-Generator

<http://www.siemens.com/cax>

### Tender specifications

<http://www.siemens.com/specifications>