

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



Model	
product brand name	SENTRON
Product designation	7KM PAC1600
Design of the product	basic
Product type designation	Measuring instrument
Type of measured value detection	complete
General technical data	
Size of Power Monitoring Device / company-specific	4MW
Operating mode for measured value detection	
<ul style="list-style-type: none"> <li>• automatic line frequency detection</li> <li>• set at 50 Hz</li> <li>• set to 60 Hz</li> </ul>	<p>Yes</p> <p>No</p> <p>No</p>
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 style="list-style-type: none"> <li>without expansion module / typical</li> </ul>	2.7 W
<b>Protection class</b>	
<ul style="list-style-type: none"> <li>protection class IP / on the front</li> </ul>	IP40
<ul style="list-style-type: none"> <li>Protection class IP / Rear side</li> </ul>	IP20
<b>Current</b>	
Measurable current	
<ul style="list-style-type: none"> <li>1 / at AC / Rated value</li> </ul>	5 A
<ul style="list-style-type: none"> <li>2 / at AC / Rated value</li> </ul>	5 A
<b>Suitability</b>	
Suitability for operation	Standard mounting rail device
<b>Product function</b>	
<ul style="list-style-type: none"> <li>product function / reactive power measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>product function / frequency measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>product function / voltage measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>product function / current measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>product function / active power measurement</li> </ul>	Yes
<b>Display and operation</b>	
design of the display	LCD
number of keys	3
<b>Communication</b>	
Protocol	
<ul style="list-style-type: none"> <li>is supported</li> </ul>	Modbus RTU/ASCII + MID
Transfer rate	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	1 200 kbit/s
<ul style="list-style-type: none"> <li>maximum</li> </ul>	115 200 kbit/s
<b>Fault limits</b>	
Reference condition / for metering accuracy	Acc. to IEC62053-21 and IEC62053-23
<b>Inputs Outputs</b>	
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
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### 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	6 A
Measuring category / for current measurement	CATIII
Zero-point suppression / for current measurement	10 mA
Relative measurable current / at AC	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	1 %
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	120 %
<ul style="list-style-type: none"> <li>• apparent power consumption / for current measurement / with measuring range 5 A / per phase</li> </ul>	3 V·A
Measuring procedure / for current measurement	TRMS

### Connections

Type of electrical connection	
<ul style="list-style-type: none"> <li>• at the measurement inputs for voltage</li> </ul>	screw-type terminals
<ul style="list-style-type: none"> <li>• at the measurement inputs for current</li> </ul>	screw-type terminals

### Mechanical Design

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

### Environmental conditions

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 / during operation	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	55 °C
Ambient temperature / during storage	

- minimum
- maximum

-25 °C

70 °C

#### Certificates

- Certificate of suitability / Approval Russia Yes

#### General Product Approval

#### Declaration of Conformity



IMQ



EG-Konf.

#### 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=7KT1662>

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

<https://support.industry.siemens.com/cs/ww/en/ps/7KT1662>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=7KT1662](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KT1662)

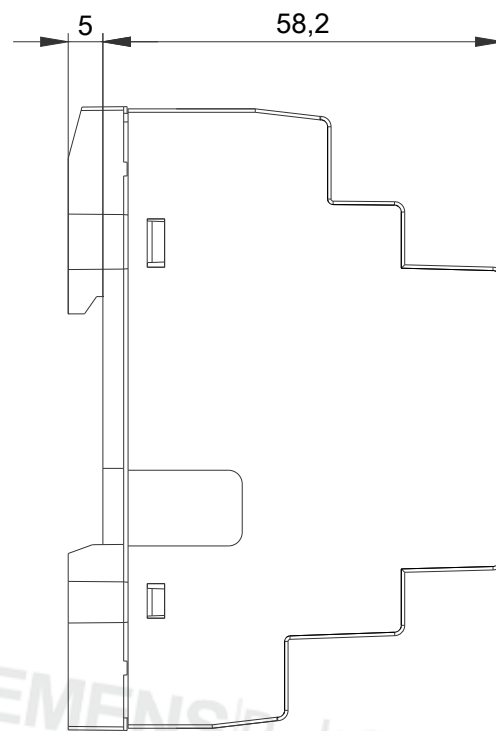
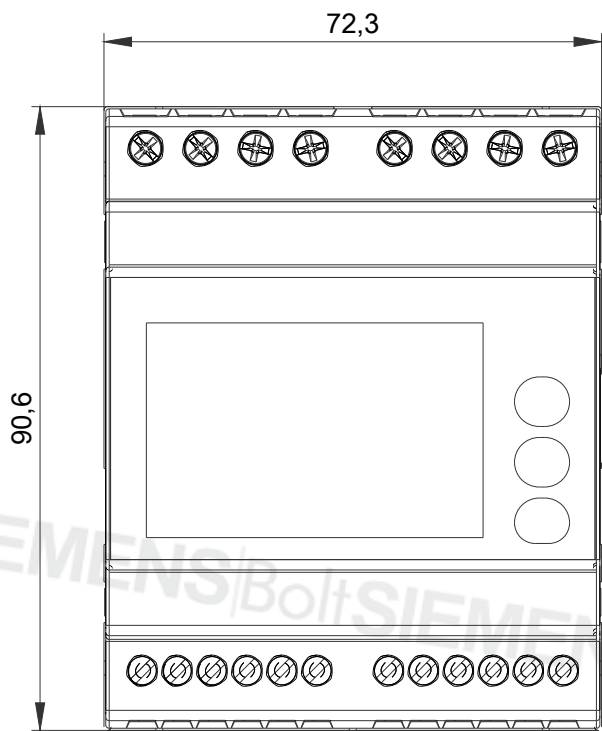
##### CAX-Online-Generator

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

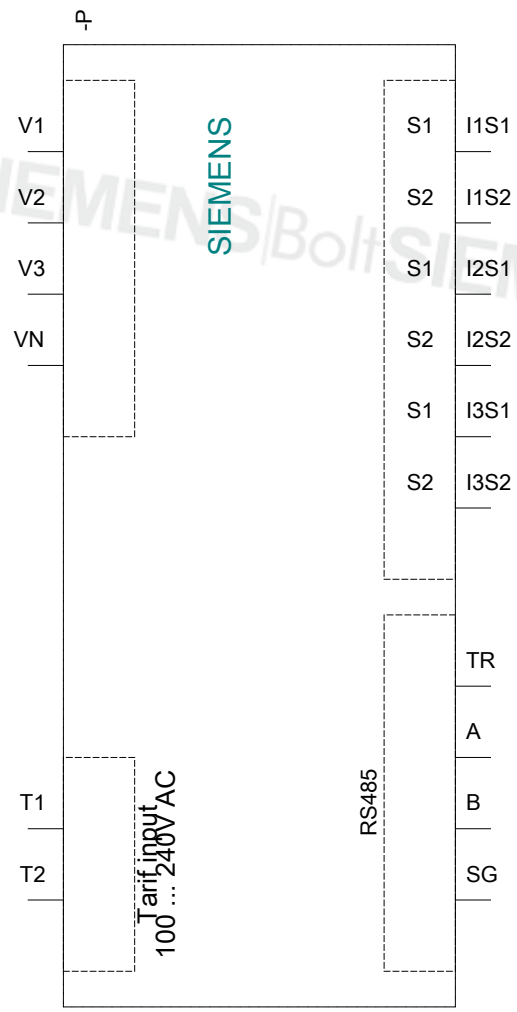
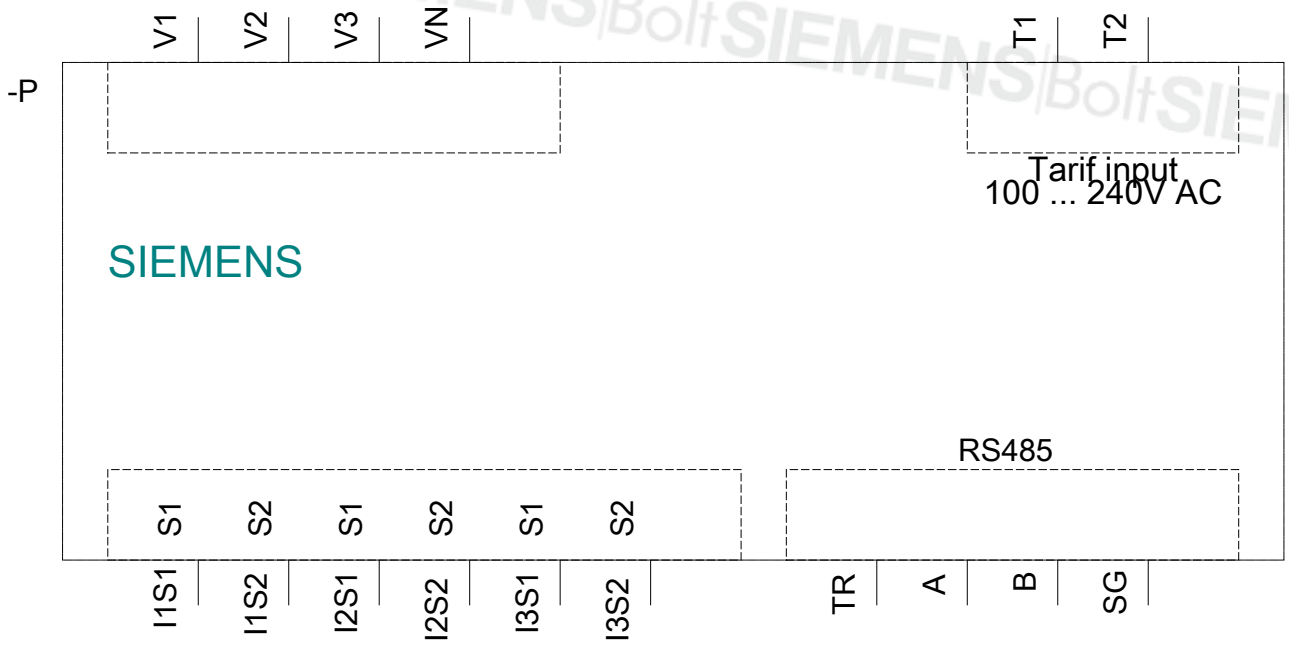
##### Tender specifications

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

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