## SIEMENS

## Data sheet

## 7KT1682



SENTRON, measuring device, 7KT PAC1600, LCD, L-L: 400 V, L-N: 230 V, 5 A, strd rail instr., 3-phase, Modbus RTU/ASCII, power monitoring incl. THD, AC/DC, screw terminals

Model	
product brand name	SENTRON
product designation	multimeter
design of the product	basic
Measurements	
measuring procedure	
<ul> <li>for voltage measurement</li> </ul>	TRMS
<ul> <li>for current measurement</li> </ul>	TRMS
type of measured value detection	complete
voltage curve	Sinusoidal or distorted
measurable line frequency	
<ul> <li>initial value</li> </ul>	45 Hz
<ul> <li>full-scale value</li> </ul>	66 Hz
operating mode for measured value detection automatic line frequency detection	Yes
operating mode for measured value detection	
• set at 50 Hz	No
• set to 60 Hz	No
Supply voltage	
design of the power supply	Wide-range power supply
type of voltage of the supply voltage	AC/DC
supply voltage at AC	100 240 V
supply voltage at DC	110 250 V
Degree of protection protection class	
protection class IP on the front	IP40
Suitability	
suitability for operation	Standard mounting rail device
Product Functions	
product function	
<ul> <li>voltage measurement</li> </ul>	Yes
<ul> <li>current measurement</li> </ul>	Yes
<ul> <li>active power measurement</li> </ul>	Yes
<ul> <li>reactive power measurement</li> </ul>	Yes
<ul> <li>frequency measurement</li> </ul>	Yes
Display and operation	
design of the display	LCD
number of keys	4
Fault limits	
reference condition for metering accuracy	Acc. to IEC62053-21 and IEC62053-23
Inputs Outputs	

number of digital inputs operating conditions for digital inputs external voltage	0 No
supply	
number of digital outputs	0
type of switching output	solid state
type of electrical connection at the digital outputs	screw-type terminals
Measuring inputs	
measurable supply voltage between (PE)N and L at AC maximum rated value	230 V
measurable supply voltage between (PE)N and L at AC	
• minimum	50 V
maximum     macourable supply voltage between the line conductors at	415 V 400 V
measurable supply voltage between the line conductors at AC maximum rated value	400 V
voltage measuring range extension with external voltage transformers	yes
measuring category for voltage measurement measurable current	CATIII
• 1 at AC rated value	5 A
• 2 at AC rated value	5 A
relative measurable current at AC	
• minimum	0.5 %
• maximum	120 %
current measuring range extension with external current transformers	Yes
zero point suppression for current measurement	25 mA
measuring category for current measurement	CATIII
Connections	
type of electrical connection	
at the measurement inputs for voltage	screw-type terminals
<ul> <li>at the measurement inputs for current</li> </ul>	screw-type terminals
Mechanical Design	
fastening method standard rail mounting	Yes
fastening method standard rail mounting size of Power Monitoring Device	4MW
fastening method standard rail mounting size of Power Monitoring Device height	4MW 90 mm
fastening method standard rail mounting size of Power Monitoring Device height width	4MW 90 mm 71.6 mm
fastening method standard rail mounting size of Power Monitoring Device height width depth	4MW 90 mm 71.6 mm 63 mm
fastening method standard rail mounting size of Power Monitoring Device height width	4MW 90 mm 71.6 mm
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position	4MW 90 mm 71.6 mm 63 mm 280 g
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions	4MW 90 mm 71.6 mm 63 mm 280 g
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position	4MW 90 mm 71.6 mm 63 mm 280 g
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions ambient temperature during operation	4MW 90 mm 71.6 mm 63 mm 280 g any
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions ambient temperature during operation • minimum	4MW 90 mm 71.6 mm 63 mm 280 g any -20 °C
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum	4MW 90 mm 71.6 mm 63 mm 280 g any -20 °C 60 °C -30 °C
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum	4MW 90 mm 71.6 mm 63 mm 280 g any -20 °C 60 °C -30 °C 80 °C
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum relative humidity at 25 °C without condensation during operation maximum	4MW 90 mm 71.6 mm 63 mm 280 g any -20 °C 60 °C -30 °C 80 °C 80 %
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum relative humidity at 25 °C without condensation during operation maximum installation altitude at height above sea level maximum	4MW 90 mm 71.6 mm 63 mm 280 g any -20 °C 60 °C -30 °C 80 °C 80 % 2 000 m
fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum relative humidity at 25 °C without condensation during operation maximum installation altitude at height above sea level maximum degree of pollution	4MW 90 mm 71.6 mm 63 mm 280 g any -20 °C 60 °C -30 °C 80 °C 80 %
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fastening method standard rail mounting size of Power Monitoring Device height width depth net weight mounting position Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum relative humidity at 25 °C without condensation during operation maximum installation altitude at height above sea level maximum degree of pollution Certificates certificate of suitability as EC Declaration of Conformity General Product Approval	4MW 90 mm 71.6 mm 63 mm 280 g any -20 °C 60 °C -30 °C 80 °C 80 % 2 000 m 2 yes of Conformity other
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## Further information

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