SIEMENS

Data sheet 7KT0307



Power Monitoring Device Panel instrument for std electrical values Protocol: Modbus RTU Single line LED Display Vaux: 95V to 240V AC x/1 or 5 A, Class 1

Measurements	
measuring procedure	
for voltage measurement	True RMS
for current measurement	True RMS
type of measured value detection	complete
voltage curve	Sinusoidal or distorted
measurable line frequency	
• initial value	45 Hz
• full-scale value	65 Hz
operating mode for measured value detection automatic line frequency detection	Yes
Supply voltage	
design of the power supply	SMPS power supply
type of voltage of the supply voltage	AC
Degree of protection protection class	
protection class IP on the front	IP54
protection class IP of the terminal	IP20
Suitability	
suitability for operation	Installation in stationary panels in closed rooms
Product Functions	
product function	
 voltage measurement 	Yes
 current measurement 	Yes
 active power measurement 	Yes
 reactive power measurement 	Yes
 power factor measurement 	Yes
 frequency measurement 	Yes
 apparent energy/active energy/reactive energy 	Yes
Display and operation	
design of the display	LED
height of the display	24 mm
width of the display	71 mm
color of the background of the display	Black
national language on the display screen is supported	EN
number of keys	2
Communication	
transfer rate minimum	0.3 kbit/s
transfer rate maximum	19.2 kbit/s
Fault limits	
reference condition for metering accuracy	according to IEC61557-12, IEC62053-21, IEC62053-23

formula for calabia habel	
formula for relative total measurement inaccuracy	Class 0.5 and to IEC 64557.40
for measured variable current for measured variable current	Class 0.5 acc. to IEC 61557-12
for measured variable current	Class 0.5 acc. to IEC 61557-12
for measured variable apparent power	Class 1 as per IEC 61557-12
for measured variable active power	Class 1 acc. to IEC 61557-12
for measured variable reactive power	Class 2 as per IEC 61557-12
for measured variable output factor	Class 1 as per IEC 61557-12
for measured variable active energy	Class 1 according to IEC 61557-12 and IEC62053-21
for measured variable reactive energy	Class 2 as per IEC 61557-12 and IEC 62053-23
Measuring inputs	04014
measurable supply voltage between (PE)N and L at AC maximum rated value	240 V
measurable supply voltage between (PE)N and L at AC • minimum	11 V
maximum	300 V
measurable supply voltage between the line conductors at AC	415 V
maximum rated value	410 0
measurable supply voltage between the line conductors at AC	40.17
• minimum	19 V
• maximum	519 V
voltage measuring range extension with external voltage transformers	Yes
line conductors and neutral conductors internal resistance for voltage measurement	1.12 ΜΩ
measuring category for voltage measurement	CAT III
measurable current	
• 1 at AC rated value	1 A
• 2 at AC rated value	5 A
relative measurable current at AC	
• minimum	1 %
• maximum	120 %
current measuring range extension with external current transformers	Yes
apparent power consumption for current measurement with measuring range 5 A per phase	3 VA
measuring category for current measurement	CAT III
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	
fastening method standard rail mounting	No
size of Power Monitoring Device	size 96
height	99 mm
width	99 mm
depth	52 mm
·	52 mm
installation depth	92 mm
cutout width	
cutout width	92 mm
net weight	2 280 g
mounting position	Vertical
Environmental conditions	
ambient temperature during operation	40.00
• minimum	-10 °C
maximum	55 °C
ambient temperature during storage	
• minimum	-20 °C
maximum	75 °C
relative humidity at 25 °C without condensation during operation maximum	85 %
installation altitude at height above sea level maximum	2 000 m

Approvals Certificates

General Product Approval

other

Confirmation



Confirmation

Miscellaneous

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (catalogues, leaflets,...)

http://www.siemens.com/energy-automation

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=7KT0307

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

https://support.industry.siemens.com/cs/ww/en/ps/7KT0307

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

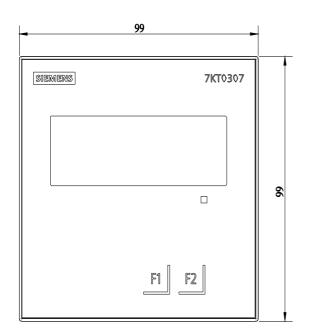
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KT0307

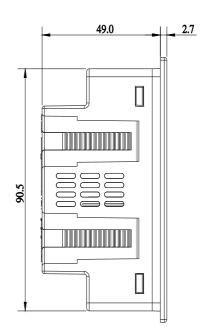
CAx-Online-Generator

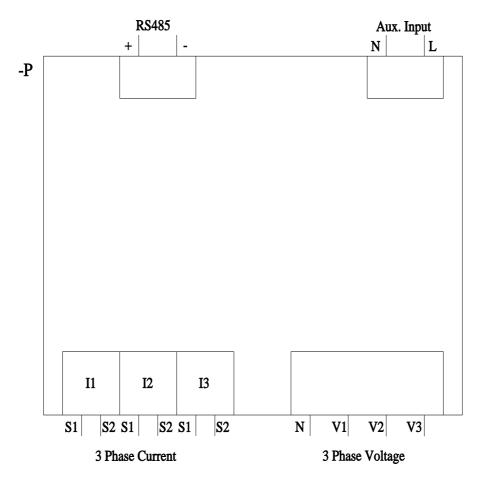
http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







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