SIEMENS

Data sheet 7KT0110

Power Monitoring Device Panel instrument for voltage and current 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
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
Display and operation	
design of the display	LED
height of the display	37 mm
width of the display	43 mm
color of the background of the display	Black
national language on the display screen is supported	EN
number of keys	2
Fault limits	
reference condition for metering accuracy	according to IEC61557-12
formula for relative total measurement inaccuracy	
● for measured variable voltage	Class 1 acc. to IEC 61557-12
● for measured variable current	Class 1 acc.to IEC 61557-12
Measuring inputs	
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	
measurable supply voltage between the line conductors at AC	
● 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 MΩ
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
installation depth	49 mm
cutout height	92 mm
cutout width	92 mm
net weight	2 070 g
mounting position	Vertical
Environmental conditions	
ambient temperature during operation	
● 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
degree of pollution	2

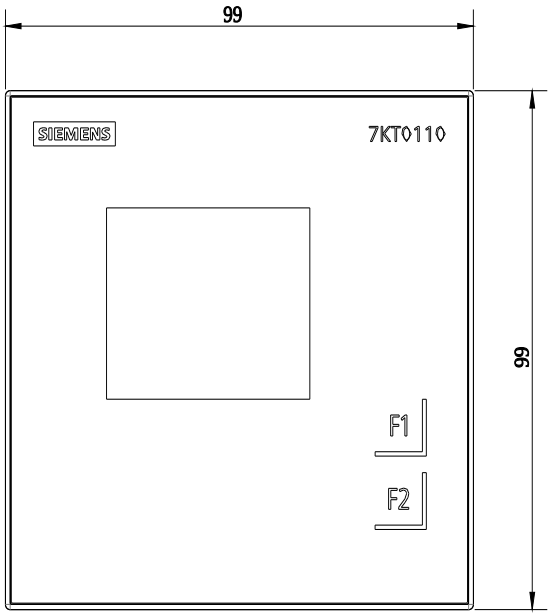
Approvals Certificates

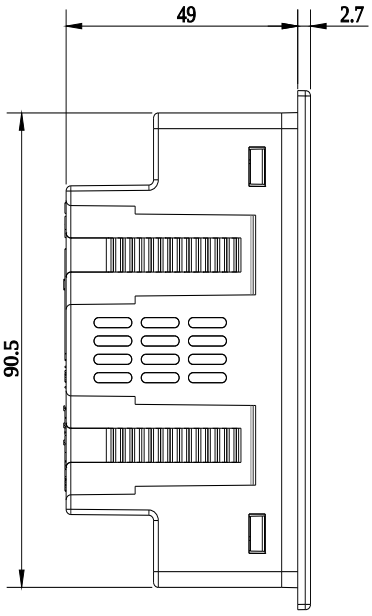
General Product Approval	other		Environment
Confirmation	Confirmation	Miscellaneous	Environmental Con-firmations

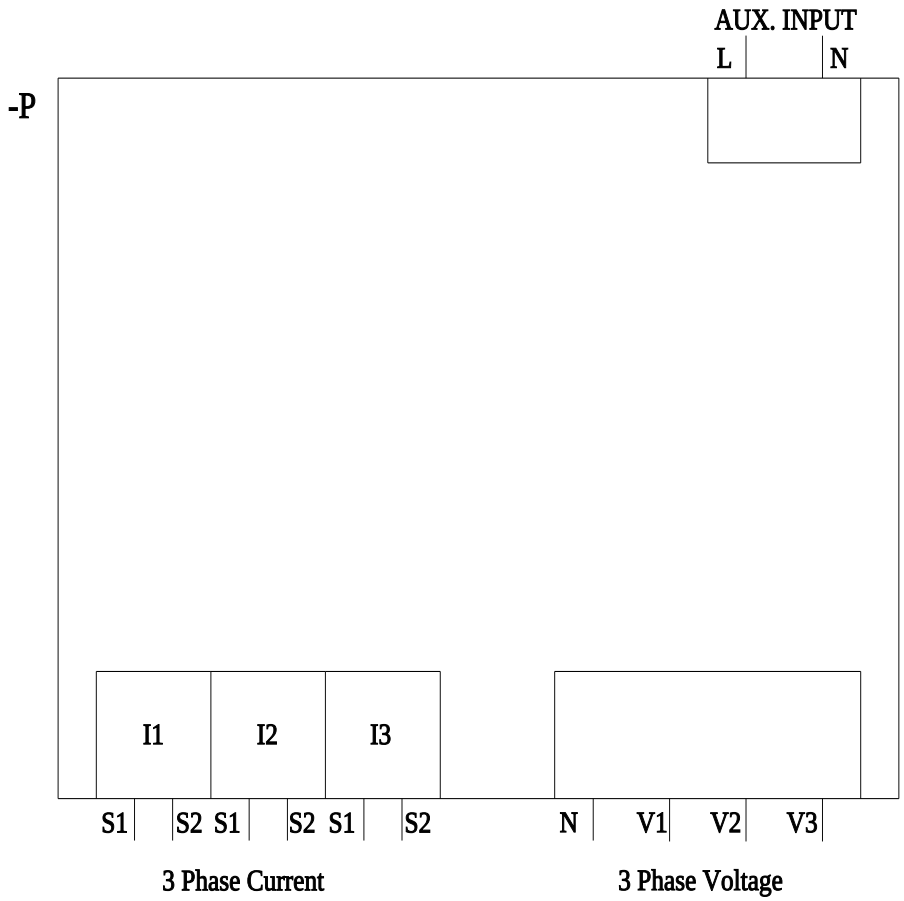
Further information

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=7KT0110
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/7KT0110
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KT0110
CAx-Online-Generator
http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications







last modified: 9/22/2023

SIEMENS

Data sheet 7KT0120

Power Monitoring Device Panel instrument for voltage, current and frequency 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
● frequency measurement	Yes
Display and operation	
design of the display	LED
height of the display	53 mm
width of the display	47 mm
color of the background of the display	Black
national language on the display screen is supported	EN
number of keys	2
Fault limits	
reference condition for metering accuracy	according to IEC61557-12
formula for relative total measurement inaccuracy	
● for measured variable voltage	Class 1 acc. to IEC 61557-12
● for measured variable current	Class 1 acc.to IEC 61557-12
Measuring inputs	
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 maximum rated value	415 V
measurable supply voltage between the line conductors at AC	
● 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 MΩ
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
installation depth	49 mm
cutout height	92 mm
cutout width	92 mm
net weight	2 230 g
mounting position	Vertical
Environmental conditions	
ambient temperature during operation	
● 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
degree of pollution	2

Approvals Certificates

General Product Approval	other		Environment
Confirmation	Confirmation	Miscellaneous	Environmental Confirmations

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)

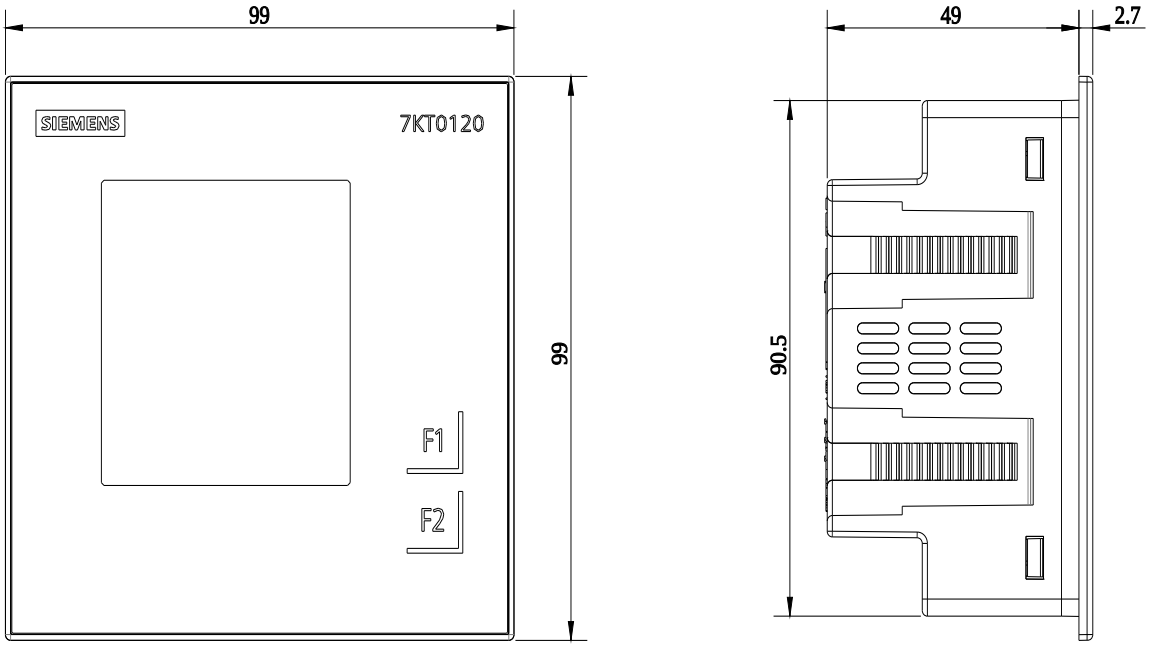
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=7KT0120

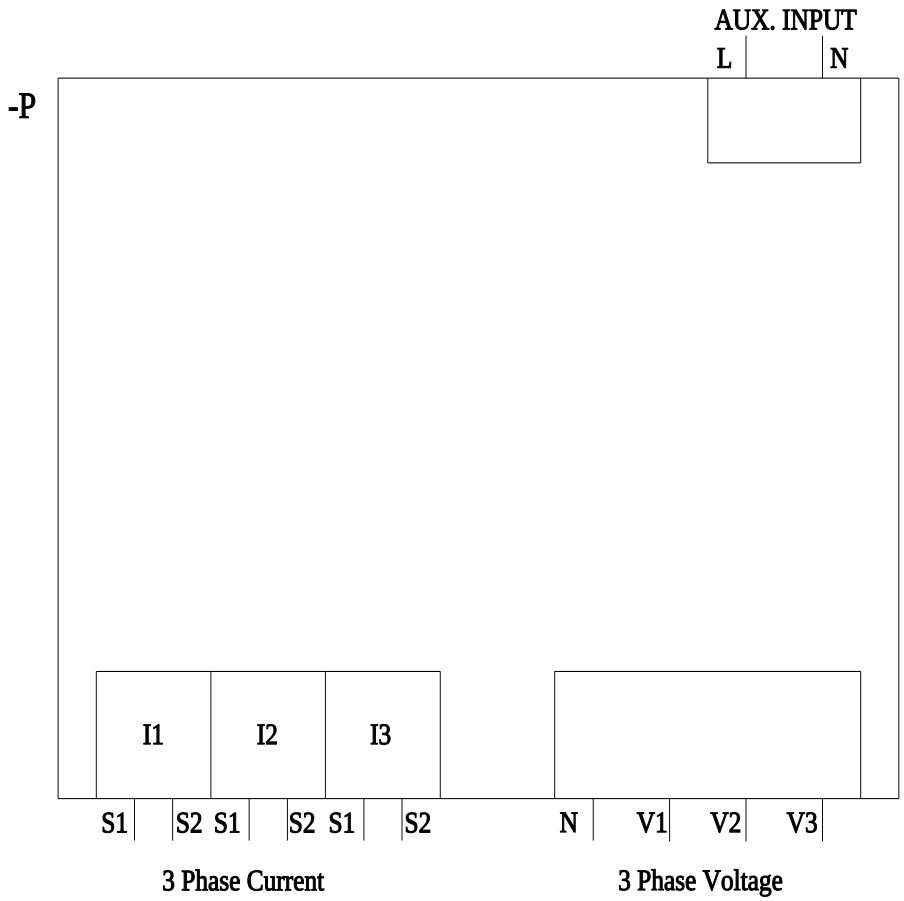
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/7KT0120

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KT0120

CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications





last modified: 9/22/2023