SIEMENS

Datasheet 6ES7134-6PA00-0BD0

SIMATIC ET 200SP, ANALOG INPUT MODULE, AI ENERGY METER ST, FITS TO BU-TYPE D0, COLOR CODE CC00, CHANNEL DIAGNOSIS,

Product type designation	
General information	
Usable BaseUnits	BU type D0, BU20-P12+A0+0B
Color code for module-specific color identification plate	CC00
Product function	
• Voltage measurement	Yes
• Current measurement	Yes
• Energy measurement	Yes
• Frequency measurement	Yes
• Active power measurement	Yes
• Reactive power measurement	Yes
• I&M data	Yes
• Isochronous mode	No
Operating mode	
• Cyclic measurement	Yes
• Acyclic measurement	Yes
Supply voltage	
Description	Supply via voltage measurement channel L1
Type of supply voltage	100 - 240 V AC
Relative symmetrical tolerance of the supply voltage	10 %
permissible range, lower limit (AC)	90 V
permissible range, upper limit (AC)	264 V
Line frequency	

• permissible frequency range, lower limit	47 Hz
• permissible frequency range, upper limit	63 Hz
Power	
Power consumption without expansion module, typ.	0.6 V·A
Address area	
Address space per module	
• Address space per module, max.	44 byte; 32 byte input / 12 byte output
Analog inputs	
Cycle time (all channels), typ.	50 ms
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	24 bit
Interrupts/diagnostics/status information	
Alarms	
• Diagnostic alarm	Yes
• Limit value alarm	No
Diagnostics indication LED	
• Monitoring of the supply voltage (PWR-LED)	Yes
• Channel status display	Yes
• for channel diagnostics	Yes
• for module diagnostics	Yes
Integrated Functions	
Measuring functions	
• Buffering of measured variables	No
• Parameter length	44 byte
• Measuring procedure for voltage measurement	TRMS
• Measuring procedure for current measurement	TRMS
• Type of measured value acquisition	seamless
• Curve shape of voltage	Sinusoidal or distorted
Operating mode for measured value acquisition	
— Automatic detection of line frequency	No; Parameterizable
— Fixation to 50 Hz	No; Default setting
— Fixation to 60 Hz	No
Measuring range	
— Frequency measurement, min.	45 Hz
— Frequency measurement, max.	65 Hz
Measuring inputs for voltage	
— Measurable line voltage between phase and neutral conductor	230 V

— Measurable line voltage between the line conductors	400 V
— Measurable line voltage between phase and neutral conductor, min.	90 V
— Measurable line voltage between phase and neutral conductor, max.	264 V
— Measurable line voltage between the line conductors, min.	155 V
— Measurable line voltage between the line conductors, max.	460 V
— Measurement category for voltage measurement	CAT III acc. to IEC 61010 Part 1
— Power consumption per phase	20 mW
Measuring inputs for current	
— Measurable relative current (AC), min.	5 %; Relative to the secondary rated current; 1 A, 5 A
— Measurable relative current (AC), max.	100 %; Relative to the secondary rated current; 1 A, 5 A
— Continuous current (AC), maximum permissible	5 A
— Apparent power consumption per phase for measuring range 5 A	0.6 V·A
— Rated value short-time withstand current restricted to 1 s	100 A
— Surge strength for 1 s	10 A; for 1 minute
Meter uncertainties	
— Reference condition for measurement accuracy	Symmetric load, rated current: 20-100%, 50 Hz; active power: LF = 1, reactive power: LF = 0
— for measured variable voltage	±0.5%
— for measured variable current	±0.5%
— for measured variable power	±0.5%
— for measured variable active power	±0.5%
— for measured variable reactive power	±0.5%
— for measured variable total active energy	Class 1 acc. to IEC 62053-21:2003
— for measured variable total reactive energy	Class 2 acc. to IEC 62053-23:2003

Dimensions	
Width	20 mm

Weights	
Weight (without packaging)	45 g

other	
Data for selecting a current transformer	
• Burden power current transformer x/1A, min.	1.25 V·A
• Burden power current transformer x/5A, min.	1.5 V·A

• Cable length (terminal-transformer) dependent on Zn and Imax	200 m
last modified:	10.02.2015