## **SIEMENS**

## **Data sheet**

## 6ES7134-6GB00-0BA1



SIMATIC ET 200SP, Analog input module, AI 2xI 2-/4-wire Standard, Pack quantity: 1 unit, suitable for BU type A0, A1, Color code CC05, Module diagnostics, 16 bit

General information	
Product type designation	Al 2xl 2-/4-wire ST
HW functional status	from FS04
Firmware version	
<ul> <li>FW update possible</li> </ul>	Yes
usable BaseUnits	BU type A0, A1
Color code for module-specific color identification plate	CC05
Product function	
■ I&M data	Yes; I&M0 to I&M3
<ul> <li>Isochronous mode</li> </ul>	No
Measuring range scalable	No
Engineering with	
<ul> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V13 SP1
<ul> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP3
<ul> <li>PROFIBUS from GSD version/GSD revision</li> </ul>	One GSD file each, Revision 3 and 5 and higher
<ul> <li>PROFINET from GSD version/GSD revision</li> </ul>	V2.3 / -
Operating mode	
<ul> <li>Oversampling</li> </ul>	No
• MSI	No
CiR - Configuration in RUN	
Reparameterization possible in RUN	Yes
Calibration possible in RUN	No
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	45 mA; without sensor supply
Encoder supply	
24 V encoder supply	
• 24 V	Yes
Short-circuit protection	Yes
Output current, max.	50 mA; Total current for both channels (two-wire)
Additional 24 V encoder supply	
• 24 V	Yes
Short-circuit protection	Yes; Module-wise
Output current, max.	200 mA; Total current for both channels (four-wire)
Power loss	
Power loss, typ.	1.1 W

Address area	
Address space per module	
Address space per module, max.	4 byte; + 1 byte for QI information
Hardware configuration	
Automatic encoding	Yes
Mechanical coding element	Yes
Type of mechanical coding element	Type A
Selection of BaseUnit for connection variants	· ·
1-wire connection	BU type A0, A1
2-wire connection	BU type A0, A1
4-wire connection	BU type A0, A1
Analog inputs	
Number of analog inputs	2
For current measurement	2
permissible input current for current input (destruction limit), max.	50 mA
Cycle time (all channels), min.	500 μs
Input ranges (rated values), currents	
• 0 to 20 mA	Yes; 15 bit
<ul><li>— Input resistance (0 to 20 mA)</li></ul>	130 $\Omega$ ; 90 ohms with two wires
• -20 mA to +20 mA	Yes; 16 bit incl. sign
<ul><li>— Input resistance (-20 mA to +20 mA)</li></ul>	130 Ω
• 4 mA to 20 mA	Yes; 15 bit
— Input resistance (4 mA to 20 mA)	130 $\Omega$ ; 90 ohms with two wires
Cable length	
• shielded, max.	1 000 m
Analog value generation for the inputs	
Measurement principle	Sigma Delta
Integration and conversion time/resolution per channel	
<ul> <li>Resolution with overrange (bit including sign), max.</li> </ul>	16 bit
Integration time, parameterizable	Yes
Interference voltage suppression for interference frequency f1 in Hz	16.6 / 50 / 60 Hz / off
Conversion time (per channel)	50 ms @ 60 Hz, 60 ms @ 50 Hz, 180 ms @ 16.6 Hz, 500 μs without filter
Smoothing of measured values	
Number of smoothing levels	4
parameterizable	Yes
• Step: None	Yes; 1x conversion time
• Step: low	Yes; 4x conversion time
Step: Medium	Yes; 8x conversion time
Step: High	Yes; 16x conversion time
Encoder	
Connection of signal encoders	
<ul> <li>for current measurement as 2-wire transducer</li> </ul>	Yes
— Burden of 2-wire transmitter, max.	650 Ω
for current measurement as 4-wire transducer	Yes
Errors/accuracies	
Linearity error (relative to input range), (+/-)	0.01 %
Temperature error (relative to input range), (+/-)	0.005 %/K
Crosstalk between the inputs, min.	-50 dB
Repeat accuracy in steady state at 25 °C (relative to input range), (+/-)	0.05 %
Operational error limit in overall temperature range	0.5.0/
Current, relative to input range, (+/-)  Regio error limit (pagrational limit at 35 °C)	0.5 %
Basic error limit (operational limit at 25 °C)	0.2.9/
• Current, relative to input range, (+/-)	0.3 %
<ul> <li>Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference</li> <li>Series mode interference (peak value of interference &lt; rated value of input range), min.</li> </ul>	70 dB
Common mode voltage, max.	10 V
Common mode interference, min.	90 dB
Sommer more more many	

Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
Diagnostic alarm	Yes
Limit value alarm	No
Diagnoses	
<ul> <li>Monitoring the supply voltage</li> </ul>	Yes
Wire-break	Yes; at 4 to 20 mA
Short-circuit	Yes; Short-circuit of the encoder supply
Group error	Yes
<ul> <li>Overflow/underflow</li> </ul>	Yes
Diagnostics indication LED	
<ul> <li>Monitoring of the supply voltage (PWR-LED)</li> </ul>	Yes; green PWR LED
Channel status display	Yes; green LED
<ul> <li>for channel diagnostics</li> </ul>	No
<ul> <li>for module diagnostics</li> </ul>	Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
<ul> <li>between the channels</li> </ul>	No
<ul> <li>between the channels and backplane bus</li> </ul>	Yes
<ul> <li>between the channels and the power supply of the electronics</li> </ul>	Yes
Permissible potential difference	
between the inputs (UCM)	10 Vpp
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
<ul> <li>horizontal installation, min.</li> </ul>	-30 °C; < 0 °C as of FS04
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
<ul> <li>vertical installation, min.</li> </ul>	-30 °C; < 0 °C as of FS04
vertical installation, max.	50 °C
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	32 g

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