



SIPLUS ET200S EM 4 AI I 2WIRE -25 ... +70 DEGREES C WITH CONFORMAL COATING BASED ON 6ES7134-4GD00-0AB0 . ELECTRONIC MODULE 4 - 20MA; 13BIT WIDTH: 15MM FOR 2-WIRE TRANSDUCER CYCLE TIME 40MS/MODULE WITH LED SF (GROUP FAULT)

<b>Supply voltage</b>	
<b>Load voltage L+</b>	
<b>Rated value (DC)</b>	24 V ; From power module
<b>Reverse polarity protection</b>	Yes
<b>Input current</b>	
<b>from load voltage L+ (without load), max.</b>	125 mA
<b>from backplane bus 3.3 V DC, max.</b>	10 mA
<b>Output voltage</b>	
<b>Power supply to the transmitters</b>	
<b>present</b>	Yes
<b>short-circuit proof</b>	Yes ; approx. 200 mA for module
<b>Power losses</b>	
<b>Power loss, typ.</b>	0.6 W
<b>Address area</b>	
<b>Address space per module</b>	
<b>Address space per module, max.</b>	8 byte
<b>Analog inputs</b>	
<b>Number of analog inputs</b>	4

permissible input current for current input (destruction limit), max.	30 mA ; limited electronically
Cycle time (all channels) max.	40 ms ; 33 to 40 ms
<b>Input ranges</b>	
Voltage	No
Current	Yes
Thermocouple	No
Resistance thermometer	No
Resistance	No
<b>Input ranges (rated values), currents</b>	
4 to 20 mA	Yes ; Into 25 Ohm
<b>Cable length</b>	
Cable length, shielded, max.	200 m
<b>Analog value creation</b>	
Measurement principle	integrating
<b>Integrations and conversion time/ resolution per channel</b>	
Resolution with overrange (bit including sign), max.	13 bit ; 4 to 20 mA: 13 bits
Integration time, parameterizable	Yes
Integration time, ms	16.67/20 ms
Interference voltage suppression for interference frequency f1 in Hz	60 / 50 Hz
<b>Smoothing of measured values</b>	
Parameterizable	Yes ; in 4 stages
Step: None	Yes ; 1 x cycle time
Step: low	Yes ; 4 x cycle time
Step: Medium	Yes ; 16 x cycle time
Step: High	Yes ; 32 x cycle time
<b>Encoder</b>	
<b>Connection of signal encoders</b>	
Burden of 2-wire transmitter, max.	750 Ω
<b>Errors/accuracies</b>	
Linearity error (relative to input area)	+/- 0,01 %
Temperature error (relative to input area)	+/- 0,003 %/K
Crosstalk between the inputs, min.	-50 dB
Repeat accuracy in settled status at 25 °C (relative to input area)	+/- 0,05 %
<b>Operational limit in overall temperature range</b>	
Current, relative to input area	+/- 0,5 %
<b>Basic error limit (operational limit at 25 °C)</b>	
Current, relative to input area	+/- 0,3 %

<b>Interference voltage suppression for <math>f = n \times (f_1 \pm 1\%)</math>, <math>f_1</math> = interference frequency</b>	
<b>Series mode interference (peak value of interference &lt; rated value of input range), min.</b>	70 dB
<b>Isochronous mode</b>	
<b>Isochronous operation (application synchronized up to terminal)</b>	No
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnostic messages</b>	
<b>Diagnostic functions</b>	Yes ; Can be read out
<b>Wire break</b>	Yes ; Measuring range 1 to 5 V only
<b>Group error</b>	Yes
<b>Overflow/underflow</b>	Yes
<b>Diagnostics indication LED</b>	
<b>Group error SF (red)</b>	Yes
<b>Parameter</b>	
<b>Diagnosis: wire break</b>	1
<b>Measurement type/range</b>	1
<b>Group diagnostics</b>	1
<b>Overflow/underflow</b>	1
<b>Galvanic isolation</b>	
<b>Galvanic isolation analog inputs</b>	
<b>between the channels</b>	No
<b>between the channels and the backplane bus</b>	Yes
<b>between the channels and the load voltage L+</b>	No
<b>Isolation</b>	
<b>Isolation checked with</b>	500 V DC
<b>Standards, approvals, certificates</b>	
<b>CE mark</b>	Yes
<b>Ambient conditions</b>	
<b>Extended ambient conditions</b>	
<b>Relative to ambient temperature-atmospheric pressure-installation altitude</b>	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
<b>Relative humidity</b>	
<b>with condensation / maximum</b>	100 % ; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
<b>to biologically active substances / conformity with EN 60721-3-3</b>	Yes ; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation in corrosive atmospheres!

<b>to chemically active substances / conformity with EN 60721-3-3</b>	Yes ; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
<b>to mechanically active substances / conformity with EN 60721-3-3</b>	Yes ; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
<b>Mechanical and climatic conditions during operation</b>	
<b>Climatic conditions in operation</b>	
<b>Temperature</b>	
<b>Min.</b>	-25 °C ; = Tmin
<b>max.</b>	70 °C ; = Tmax
<b>Dimensions</b>	
<b>Width</b>	15 mm
<b>Height</b>	81 mm
<b>Depth</b>	52 mm
<b>Weight</b>	
<b>Weight, approx.</b>	40 g
Status	Jul 22, 2013