



SIPLUS ET 200S EM 2AQ I standard based on 6ES7135-4GB01-0AB0 with conformal coating, -25...+70 °C, +/-20 mA; 13 bit+sign, 4..20 mA; 13 bit cycle time less than 1 ms with SF LED (group fault)

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> Rated value (DC) 	24 V; From power module
<ul style="list-style-type: none"> Reverse polarity protection 	Yes
Input current	
from load voltage L+ (without load), max.	150 mA
from backplane bus 3.3 V DC, max.	10 mA
Power loss	
Power loss, max.	2 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. 	4 byte
Analog outputs	
Number of analog outputs	2
Current output, no-load voltage, max.	18 V
Cycle time (all channels) max.	1.5 ms
Output ranges, current	
<ul style="list-style-type: none"> -20 mA to +20 mA 	Yes
<ul style="list-style-type: none"> 4 mA to 20 mA 	Yes
Connection of actuators	
<ul style="list-style-type: none"> for current output two-wire connection 	Yes
<ul style="list-style-type: none"> for current output four-wire connection 	No
Load impedance (in rated range of output)	
<ul style="list-style-type: none"> with current outputs, max. 	500 Ω
<ul style="list-style-type: none"> with current outputs, inductive load, max. 	1 mH
Destruction limits against externally applied voltages and currents	
<ul style="list-style-type: none"> Voltages at the outputs towards MANA 	15 V; max. 15 V continuous; 75 V for max. 1 s (mark to space ratio 1:20)
<ul style="list-style-type: none"> Current, max. 	50 mA; DC
Cable length	
<ul style="list-style-type: none"> shielded, max. 	200 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> Resolution with overrange (bit including sign), max. 	14 bit; 4 to 20 mA: 13 bit, ±20 mA: 14 bit
Settling time	
<ul style="list-style-type: none"> for resistive load 	0.1 ms
<ul style="list-style-type: none"> for capacitive load 	0.5 ms
<ul style="list-style-type: none"> for inductive load 	0.5 ms
Errors/accuracies	
Operational error limit in overall temperature range	
<ul style="list-style-type: none"> Current, relative to output range, (+/-) 	0.5 %

Basic error limit (operational limit at 25 °C)	
• Current, relative to output range, (+/-)	0.3 %
Interrupts/diagnostics/status information	
Diagnoses	
• Wire-break	Yes
• Group error	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
Parameter	
Remark	7 byte
Diagnostics wire break	Disable / enable
Group diagnostics	Disable / enable
Response to CPU/master STOP	Output current and de-energized/substitute a value/keep last value
Potential separation	
Potential separation analog outputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	-25 °C; = Tmin
• max.	70 °C; = Tmax
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	40 g
last modified:	1/16/2021 