



SIPLUS ET 200S EM 2AQ U based on 6ES7135-4FB01-0AB0 with conformal coating, -25...+60 °C,

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V; From power module
<ul style="list-style-type: none"> <li>Reverse polarity protection</li> </ul>	Yes
Input current	
from load voltage L+ (without load), max.	130 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"> <li>Address space per module, max.</li> </ul>	4 byte
Analog outputs	
Number of analog outputs	2
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	25 mA
Cycle time (all channels) max.	1.5 ms
Output ranges, voltage	
<ul style="list-style-type: none"> <li>1 V to 5 V</li> </ul>	Yes
<ul style="list-style-type: none"> <li>-10 V to +10 V</li> </ul>	Yes
Connection of actuators	
<ul style="list-style-type: none"> <li>for voltage output two-wire connection</li> </ul>	Yes; Without compensation of the line resistances
<ul style="list-style-type: none"> <li>for voltage output four-wire connection</li> </ul>	Yes
Load impedance (in rated range of output)	
<ul style="list-style-type: none"> <li>with voltage outputs, min.</li> </ul>	1 kΩ
<ul style="list-style-type: none"> <li>with voltage outputs, capacitive load, max.</li> </ul>	1 μF
Destruction limits against externally applied voltages and currents	
<ul style="list-style-type: none"> <li>Voltages at the outputs towards MANA</li> </ul>	15 V; max. 15 V continuous; 75 V for max. 1 s (mark to space ratio 1:20)
<ul style="list-style-type: none"> <li>Current, max.</li> </ul>	50 mA; DC
Cable length	
<ul style="list-style-type: none"> <li>shielded, max.</li> </ul>	200 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> <li>Resolution with overrange (bit including sign), max.</li> </ul>	14 bit; 1 to 5 V: 12 bit, ±10 V: 13 bit + sign
Settling time	
<ul style="list-style-type: none"> <li>for resistive load</li> </ul>	0.1 ms
<ul style="list-style-type: none"> <li>for capacitive load</li> </ul>	0.5 ms
<ul style="list-style-type: none"> <li>for inductive load</li> </ul>	0.5 ms
Errors/accuracies	
Operational error limit in overall temperature range	

• Voltage, relative to output range, (+/-)	0.4 %
<b>Basic error limit (operational limit at 25 °C)</b>	
• Voltage, relative to output range, (+/-)	0.2 %
<b>Interrupts/diagnostics/status information</b>	
Substitute values connectable	Yes; 0 to 65535 (range of values must be within the rated range)
<b>Diagnoses</b>	
• Short-circuit	Yes
• Group error	Yes
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
<b>Parameter</b>	
Remark	7 byte
Diagnostics short-circuit	Disable / enable
Group diagnostics	Disable / enable
Response to CPU/master STOP	Output current and de-energized/substitute a value/keep last value
<b>Potential separation</b>	
<b>Potential separation analog outputs</b>	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• min.	-25 °C; = Tmin
• max.	60 °C; = Tmax
<b>Altitude during operation relating to sea level</b>	
• 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)
<b>Relative humidity</b>	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
<b>Use in stationary industrial systems</b>	
— 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, *
<b>Use on ships/at sea</b>	
— 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; *
<b>Usage in industrial process technology</b>	
— 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)
<b>Remark</b>	
— 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!
<b>Dimensions</b>	
Width	15 mm
Height	81 mm
Depth	52 mm
<b>Weights</b>	
Weight, approx.	40 g

last modified:

5/13/2024 

