SIEMENS

Data sheet 6AG1131-4BD01-7AB0



SIPLUS ET 200S EM 4DI HF based on 6ES7131-4BD01-0AB0 with conformal coating, -25…+70 °C, 5 units per packing unit,

Supply voltage	
Rated value (DC)	24 V; From power module
Reverse polarity protection	Yes
Input current	
from supply voltage L+, max.	Dependent on encoder
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
Type of output voltage	min. L+ (-0.5 V), under load
Short-circuit protection	Yes; Electronic
Output current	
● Rated value	500 mA
● permissible range, lower limit	0 mA
● permissible range, upper limit	500 mA
Power loss	
Power loss, typ.	0.7 W
Address area	
Address space per module	
● Address space per module, max.	1 byte
● with packing	4 bit
Digital inputs	
Number of digital inputs	4
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
● Type of input voltage	DC
● Rated value (DC)	24 V
● for signal "0"	-30 to +5 V
● for signal "1"	+11 to +30V
Input current	
● for signal "1", typ.	8 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.1 / 0.5 / 3 / 15 ms
— at "0" to "1", min.	0.05 / 0.4 / 2.7 / 14.85
— at "0" to "1", max.	0,15 / 0,6 / 3,3 / 15,15
— at "1" to "0", min.	0.05 / 0.4 / 2.7 / 14.85
— at "1" to "0", max.	0,15 / 0,6 / 3,3 / 15,15
Cable length	
● shielded, max.	1 000 m
● unshielded, max.	600 m

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Encoder	
Connectable encoders	
● 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
● Short-circuit	Yes; Short-circuit of outputs to ground; module by module
Diagnostics indication LED	
● Group error SF (red)	Yes
● Status indicator digital input (green)	Yes; per channel
Potential separation	
Potential separation digital inputs	
● between the channels	No
● between the channels and backplane bus	Yes
Isolation	
Isolation tested with	500 V DC
Standards, approvals, certificates	
CE mark	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 permitted (no commissioning in bedewed state)
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.	35 g

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Classifications

	Version	Classification
eClass	16	27-24-26-04
eClass	14	27-24-26-04
eClass	12	27-24-26-04
eClass	9.1	27-24-26-04
eClass	9	27-24-26-04
eClass	8	27-24-26-04
eClass	7.1	27-24-26-04
eClass	6	27-24-26-04
ETIM	10	EC001599
ETIM	9	EC001599
ETIM	8	EC001599
ETIM	7	EC001599
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Manufacturer Declaration

China RoHS

EMV

For use in hazardous locations

CCC-Ex

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