MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7135-4LB01-0AB0

TWO-CHANNEL VOLTAGE OUTPUT MODULE

Used with the applicable SIMATIC ET 200S configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens 6ES7135-4LB01-0AB0 official product data; applicable specification pages.

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Data sheet 6ES7135-4LB01-0AB0

SIMATIC DP, ELECTRONIC MODULE 2 AO HIGH FEATURE U FOR ET 200S, 15 MM WIDE, +/-10V; 15 BIT + SIGN, 1 .. 5V; 15 BIT, OPERATIONAL LIMITS +/-0.07% WITH LED SF (GROUP FAULT)

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V; From power module
• Reverse polarity protection	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	
• Address space per module, max.	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.	2.5 ms
Output ranges, voltage	
• 1 V to 5 V	Yes
• -10 V to +10 V	Yes
Connection of actuators	
• for voltage output two-wire connection	Yes; Without compensation of the line resistances
• for voltage output four-wire connection	Yes
Load impedance (in rated range of output)	
• with voltage outputs, min.	1 kΩ
• with voltage outputs, capacitive load, max.	1 µF
Destruction limits against externally applied voltages and currents	
• Voltages at the outputs towards MANA	15 V; max. 15 V continuous; 75 V for max. 1 s (mark to space ratio 1:20)
• Current, max.	50 mA; DC
Cable length	
• shielded, max.	200 m
Analog value generation for the outputs	

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Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	16 bit; 1 to 5 V: 14 bit, ±10 V: 16 bit
Settling time	
• for resistive load	0.1 ms
• for capacitive load	0.5 ms
• for inductive load	0.5 ms

Errors/accuracies	
Output ripple (relative to output range, bandwidth 0 to 50 kHz), (+/-)	0.02 %
Linearity error (relative to output range), (+/-)	0.02 %
Temperature error (relative to output range), (+/-)	0.001 %/K
Crosstalk between the outputs, min.	60 dB
Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)	0.01 %
Operational error limit in overall temperature range	
• Voltage, relative to output range, (+/-)	0.07 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to output range, (+/-)	0.03 %

Isochronous mode	
Isochronous operation (application synchronized up to terminal)	Yes

Interrupts/diagnostics/status information	
Substitute values connectable	Yes; Parameterizable; 0 to 65535 (value range must be within rated range)
Diagnostic messages	
• Diagnostic information readable	Yes
• Short-circuit	Yes
• Group error	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes

Parameter	
Remark	7 byte
Diagnostics short-circuit	Disable / enable
Output type/range	deactivated / 1 to 5 V / ±10 V
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

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• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes

Permissible potential difference	
between MANA and M internally (UISO)	75 V DC/60 V AC

Isolation	
Isolation tested with	500 V DC

Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm

Weights	
Weight, approx.	40 g

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