SIEMENS

Data sheet 6ES7135-4FB01-0AB0

SIMATIC DP, ELECTRONIC MODULE FOR ET 200S, 2 AO U, 15 MM WIDTH, +/-10 V; 13 BIT + SIGN, 1..5V; 12BIT, CYCLE TIME < 1 MS 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.	1.5 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	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	14 bit; 1 to 5 V: 12 bits, +/-10 V: 13 bits + sign
Settling time	
• for resistive load	0.1 ms
• for capacitive load	0.5 ms
• for inductive load	0.5 ms

Errors/accuracies	
Output ripple (based on output area, bandwidth 0 to 50 kHz), (+/-)	0.02 %
Linearity error (relative to output range), (+/-)	0.02 %
Temperature error (relative to output range), (+/-)	0.01 %/K
Crosstalk between the outputs, min.	-40 dB
Repeat accuracy in steady state at 25 °C (relative to output area), (+/-)	0.05 %
Operational error limit in overall temperature range	
• Voltage, relative to output area, (+/-)	0.4 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to output area, (+/-)	0.2 %

Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No

Interrupts/diagnostics/status information	
Substitute values connectable	Yes; 0 to 65535 (range of values must be within the 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
Output type/range	deactivated / 1 to 5 V / +/ -10 V
Diagnostics short-circuit	Disable / enable
Group diagnostics	Disable / enable
Behavior on 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 the backplane bus	Yes
• between the channels and the load voltage L+	Yes

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