SIEMENS

Data sheet   6ES7135-4FB52-0AB0

SIMATIC DP, ELECTRONIC MODULE FOR ET200S, 2 AO U HIGH
SPEED, 15 MM WIDTH, +/-10V, +/-5V, 1.. 5V; 16BIT, CYCLE TIME:
0.1 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, typ.	2.2 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.	0.25 ms

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Output ranges, voltage	
• 1 V to 5 V	Yes
• -5 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; 0.1 µF for Twa=0.1 ms
Destruction limits against externally applied voltages and currents	
• Voltages at the outputs towards MANA	15 V; Max. 15 V for max. 5 hours, 75 V for max. 1 s
• Current, max.	30 mA; DC
Cable length	
• shielded, max.	200 m; Max. 20 m for TWA 100 µs

Analog value generation for the outputs

Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	16 bit; 1 to 5 V: 14 bits, +/-10 V: 15 bit + sign, +/-5 V: 14 bits + sign
Settling time	
• for resistive load	0.05 ms
• for capacitive load	0.05 ms
• for inductive load	0.05 ms

Errors/accuracies

Output ripple (relative to output range, bandwidth 0 to 50 kHz), (+/-)	0.02 %
Linearity error (relative to output range), (+/-)	0.03 %
Temperature error (relative to output range), (+/-)	0.01 %/K
Crosstalk between the outputs, min.	60 dB
Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)	0.03 %
Operational error limit in overall temperature range	
• Voltage, relative to output range, (+/-)	0.2 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to output range, (+/-)	0.01 %

Isochronous mode

Isochronous operation (application synchronized up to terminal)	Yes

Interrupts/diagnostics/status information

Substitute values connectable	Yes; 0 to 65535 (range of values must be within the rated range)
Diagnostic messages	

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• Diagnostic information readable	Yes
• Wire-break	No
• 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 / +/- 5 V
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 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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