

SIMATIC DP, ELECTRONIC MODULE FOR ET 200S, 2 AO I 15 MM WIDE, +/-20 mA; 13 BIT + SIGN, 4 . .20 mA; 12 BIT 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. 150 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
- Current output, no-load voltage, max. 18 V
- Cycle time (all channels) max. 1.5 ms

Output ranges, current

- -20 mA to +20 mA Yes
- 4 mA to 20 mA Yes

Connection of actuators

- for current output two-wire connection Yes
- for current output four-wire connection No

Load impedance (in rated range of output)

- with current outputs, max. 500 Ω
- with current outputs, inductive load, max. 1 mH

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; 4 to 20 mA: 13 bits, +/-20 mA: 14 bits
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), (+/-)	0.01 %/K
Crosstalk between the outputs, min.	-40 dB
Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)	0.05 %
Operational error limit in overall temperature range	
Current, relative to output range, (+/-)	0.5 %
Basic error limit (operational limit at 25 °C)	
Current, relative to output range, (+/-)	0.3 %
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	
Wire-break	Yes
Group error	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Parameter	
Remark	7 byte
Diagnostics wire break	Disable / enable
Output type/range	deactivated / +/-20 mA / 4 to 20 mA
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
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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