



SIMATIC DP,  
ELECTRONIC MODULE FOR ET 200S,  
2 AO I 15 MM WIDE, +/-20 MA;  
13 BIT + SIGN, 4 . .20 MA;  
13 BIT CYCLE TIME < 1 MS WITH LED SF (GROUP  
FAULT)

<b>Supply voltage</b>	
Load voltage L+	
Rated value (DC)	24 V ; From power module
Reverse polarity protection	Yes
<b>Input current</b>	
from load voltage L+ (without load), max.	150 mA
from backplane bus 3.3 V DC, max.	10 mA
<b>Power losses</b>	
Power loss, max.	2 W
<b>Address area</b>	
Address space per module	
Address space per module, max.	4 byte
<b>Analog outputs</b>	
Number of analog outputs	2
Current output, no-load voltage, max.	18 V
Cycle time (all channels) max.	1.5 ms
<b>Output ranges, current</b>	
-20 to +20 mA	Yes

4 to 20 mA	Yes
<b>Connection of actuators</b>	
for current output 2-conductor connection	Yes
for current output 4-conductor connection	No
<b>Load impedance (in rated range of output)</b>	
with current outputs, max.	500 Ω
with current outputs, inductive load, max.	1 mH
<b>Destruction limits against externally applied voltages and currents</b>	
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
<b>Cable length</b>	
Cable length, shielded, max.	200 m
<b>Analog value creation</b>	
<b>Integrations and conversion time/ resolution per channel</b>	
Resolution with overrange (bit including sign), max.	14 bit ; 4 to 20 mA: 13 bits, +/-20 mA: 14 bits
<b>Settling time</b>	
for resistive load	0.1 ms
for capacitive load	0.5 ms
for inductive load	0.5 ms
<b>Errors/accuracies</b>	
Output ripple (based on output area, bandwidth 0 to 50 kHz)	+/- 0,02 %
Linearity error (relative to output area)	+/- 0,02 %
Temperature error (relative to output area)	+/- 0,01 %/K
Repeat accuracy in settled status at 25 °C (relative to output area)	+/- 0,05 %
<b>Operational limit in overall temperature range</b>	
Current, relative to output area	+/- 0,5 %
<b>Basic error limit (operational limit at 25 °C)</b>	
Current, relative to output area	+/- 0,3 %
<b>Interrupts/diagnostics/status information</b>	
Substitute values connectable	Yes ; 0 to 65535 (range of values must be within the rated range)
<b>Diagnostic messages</b>	
Wire break	Yes
Group error	Yes
<b>Diagnostics indication LED</b>	
Group error SF (red)	Yes
<b>Parameter</b>	
Remark	7 bytes

<b>Output type/range</b>	deactivated / +/-20 mA / 4 to 20 mA
<b>Diagnosis: wire break</b>	Disable / enable
<b>Group diagnostics</b>	Disable / enable
<b>Behavior on CPU/Master STOP</b>	Output current and de-energized/substitute a value/keep last value
<b>Ex(i) characteristics</b>	
<b>Max. values of output circuits (per channel)</b>	
<b>U<sub>o</sub> (output no-load voltage), max.</b>	18 V
<b>Galvanic isolation</b>	
<b>Galvanic isolation analog outputs</b>	
<b>between the channels</b>	No
<b>between the channels and the backplane bus</b>	Yes
<b>between the channels and the load voltage L+</b>	Yes
<b>Dimensions</b>	
<b>Width</b>	15 mm
<b>Height</b>	81 mm
<b>Depth</b>	52 mm
<b>Weights</b>	
<b>Weight, approx.</b>	40 g
Status	Dec 16, 2013