

# SIEMENS

## Product data sheet

**6ES7135-4MB02-0AB0**


SIMATIC DP,  
ELECTRONIC MODULE 2 AO I HIGH FEATURE FOR  
ET 200S,  
15 MM WIDE,  
CYCLE TIME PER MODULE: 0.5MS, +/-20MA;  
15 BIT + SIGN, 4 .. 20MA;  
15 BIT,  
OPERATIONAL LIMITS +/-0.05% WITH LED SF  
(GROUP FAULT)

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	80 mA
from backplane bus 3.3 V DC, max.	10 mA
Power losses	
Power loss, max.	1.2 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.	0.5 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 $\Omega$
with current outputs, inductive load, max.	1 mH
<b>Destruction limits against externally applied voltages and currents</b>	
Current, max.	50 mA
<b>Cable length</b>	
Cable length, shielded, max.	200 m ; 100m if $T_{wa} < 2ms$
<b>Analog value creation</b>	
<b>Integrations and conversion time/ resolution per channel</b>	
Resolution with overrange (bit including sign), max.	16 bit
<b>Settling time</b>	
for resistive load	0.3 ms
for capacitive load	1 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)	+/- 0,01 %
Temperature error (relative to output area)	+/- 0,003 %/K
Crosstalk between the outputs, min.	60 dB
Repeat accuracy in settled status at 25 °C (relative to output area)	+/- 0,01 %
<b>Operational limit in overall temperature range</b>	
Current, relative to output area	+/- 0,1 %
<b>Basic error limit (operational limit at 25 °C)</b>	
Current, relative to output area	+/- 0,05 %

Isochronous mode	
Isochronous operation (application synchronized up to terminal)	Yes
Interrupts/diagnostics/status information	
Substitute values connectable	Yes
Diagnostic messages	
Diagnostic information readable	Yes
Wire break	Yes
Group error	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Parameter	
Remark	7 bytes
Output type/range	deactivated / +/-20 mA / 4 to 20 mA
Diagnosis: wire break	Disable / enable
Interference frequency suppression	Disable / enable
Group diagnostics	Disable / enable
Behavior on CPU/Master STOP	Output current and de-energized/substitute a value/keep last value
Galvanic isolation	
Galvanic isolation analog outputs	
Galvanic isolation analog outputs	Yes
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)	75 VDC / 60 VAC
Isolation	
Isolation checked with	500 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weight	

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Weight, approx.	40 g
Status	Jul 17, 2012