

SIEMENS

Product data sheet

6ES7145-4GF00-0AB0


SIMATIC DP,
ELECTRONIC MODULES FOR ET200PRO 4 AO I
HIGH FEATURE,
+-20mA;
0...20mA;
4-20mA;
CHANNEL DIAGNOSTICS;
INCLUSIVE BUS MODULE CONNECTING MODULE
IO 6ES7194-4..00-0AA0 MUST BE ORDERED
SEPERATELY

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
Reverse polarity protection	Yes ; against destruction
Input current	
from backplane bus 3.3 V DC, max.	10 mA
Address area	
Address space per module	
Address space per module, max.	8 byte
Analog outputs	
Number of analog outputs	4
Voltage output, short-circuit protection	Yes ; per module, electronic to frame
Current output, no-load voltage, max.	16 V
Cycle time (all channels) max.	3 ms
Output ranges, current	

0 to 20 mA	Yes
-20 to +20 mA	Yes
4 to 20 mA	Yes
Connection of actuators	
for current output 2-conductor connection	Yes
for current output 4-conductor connection	Yes
Load impedance (in rated range of output)	
with current outputs, max.	600 Ω
with current outputs, inductive load, max.	1 mH
Destruction limits against externally applied voltages and currents	
Current, max.	100 mA
Cable length	
Cable length, shielded, max.	30 m
Analog value creation	
Integrations and conversion time/ resolution per channel	
Resolution with overrange (bit including sign), max.	15 bit ; at +/- 20 mA; 14 bits at 0 to 20 mA; 15 bits at 4 to 20 mA
Conversion time (per channel)	0.7 ms
Settling time	
for resistive load	0.1 ms
for inductive load	1 ms
Errors/accuracies	
Output ripple (based on output area, bandwidth 0 to 50 kHz)	+/- 0.02 %
Linearity error (relative to output area)	+/- 0.1 %
Temperature error (relative to output area)	+/- 0.01 %
Repeat accuracy in settled status at 25 °C (relative to output area)	+/- 0.05 %
Operational limit in overall temperature range	
Current, relative to output area	+/- 0.2 %
Basic error limit (operational limit at 25 °C)	
Current, relative to output area	+/- 0.15 %
Interrupts/diagnostics/status information	
Substitute values connectable	Yes

Alarms	
Diagnostic alarm	Yes ; Parameterizable
Hardware interrupt	No
Diagnostic messages	
Wire break	Yes ; per channel, not in zero range
Diagnostics indication LED	
Group error SF (red)	Yes
Parameter	
Output type/range	1
Diagnosis: wire break	1
Diagnosis: short circuit	Encoder supply to M
Group diagnostics	1
Behavior on CPU/Master STOP	1
Galvanic isolation	
Galvanic isolation analog outputs	
between the channels	No
between the channels and the backplane bus	Yes
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm
Weight	
Weight, approx.	150 g
Status	Jul 17, 2012