SIEMENS

Product data sheet 6ES7144-4FF00-0AB0



SIMATIC DP,
ELECTRONIC MODULE FOR ET200PRO 4 AI U HIGH FEATURE,
+-10V;
0...10V;
+-5V;
1...5V;
CHANNEL DIAGNOSTICS;
INCLUSIVE BUS MODULE CONNECTING MODULE IO
6ES7194-4..00-0AA0 MUST BE ORDERED SEPERATELY

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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
Power losses	
Power loss, typ.	1.1 W
Address area	
Address space per module	
Address space per module, max.	8 byte
Analog inputs	
Number of analog inputs	4
permissible input voltage for voltage input (destruction limit), max.	35 V
Cycle time (all channels) max.	267 ms
Input ranges	
Voltage	Yes
Current	No

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Thermocouple	No
Resistance thermometer	No
Resistance	No
Input ranges (rated values), voltages	
1 to 5 V	Yes
-10 V to +10 V	Yes
-5 V to +5 V	Yes
Cable length	
Cable length, shielded, max.	30 m
Analog value creation	
Measurement principle	integrating
Integrations and conversion time/ resolution per channel	
Resolution with overrange (bit including sign), max.	15 bit ; at +/- 10 V, at +/- 5 V; 14 bits at 0 to 10 V, at 1 to 5 V
Integration time, ms	20 / 16,667
Interference voltage suppression for interference frequency f1 in Hz	50/60 Hz
Conversion time (per channel)	67 ms
Smoothing of measured values	
Parameterizable	Yes
Step: None	Yes ; 1 x cycle time
Step: low	Yes ; 4 x cycle time
Step: Medium	Yes ; 16 x cycle time
Step: High	Yes ; 64 x cycle time
Errors/accuracies	
Linearity error (relative to input area)	+/- 0.01 %
Temperature error (relative to input area)	+/- 0.002 %/K
Crosstalk between the inputs, min.	-50 dB
Repeat accuracy in settled status at 25 °C (relative to input area)	+/- 0.025 %
Operational limit in overall temperature range	
Voltage, relative to input area	+/- 0.15 %
Basic error limit (operational limit at 25 °C)	
Voltage, relative to input area	+/- 0.1 %
Interference voltage suppression for f = n x (f1 +/- 1%), f1 = interference frequency	
Series mode interference (peak value of interference < rated value of input range), min.	50 dB
common mode voltage (USS < 2.5 V) , min.	70 dB ; Interference voltage < 5 V
Interrupts/diagnostics/status information	
Diagnostic messages	

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Wire break	Yes ; at 1 to 5 V
Diagnostics indication LED	
Group error SF (red)	Yes
Galvanic isolation	
Galvanic isolation analog inputs	
between the channels	No
between the channels and the backplane bus	Yes
Permissible potential difference	
between inputs and MANA (UCM)	5 Vpp AC
between MANA and M internally (UISO)	500 V DC
Isolation	
Isolation checked with	500 V DC
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm
Weight	
Weight, approx.	150 g
Status	Feb 11, 2013

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