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Find the Siemens 6ES7231-7PD22-0XA0 at our website: Click HERE

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SIEMENS

Product data sheet

6ES7231-7PD22-0XA0



SIMATIC S7-200, T/C INPUT MOD. EM 231, FOR S7-22X CPU ONLY, 4 AI, +/-80 MV AND THERMOCOUPLE TYPE J,K,S,T,R,E,N; 15BIT+VORZ.

Input current	
from load voltage L+ (without load), max.	60 mA
from backplane bus 5 V DC, max.	87 mA
Power losses	
Power loss, typ.	1.8 W
Analog inputs	
Number of analog inputs	4
permissible input voltage for voltage input (destruction limit), max.	30 V
Loop resistance cable	100 Ω
Updating time (all channels)	405 ms
Input ranges	
Voltage	Yes
Current	No
Thermocouple	Yes
Resistance thermometer	No

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Resistance	No	
Input ranges (rated values), voltages		
-80 mV to +80 mV	Yes	
Input resistance (-80 mV to +80 mV)	1 ΜΩ	
Input ranges (rated values), thermoelements		
Type E	Yes	
Type J	Yes	
Input resistance (type J)	1 ΜΩ	
Type K	Yes	
Input resistance (Type K)	1 ΜΩ	
Type N	Yes	
Input resistance (Type N)	1 ΜΩ	
Type R	Yes	
Input resistance (Type R)	1 ΜΩ	
Type S	Yes	
Input resistance (Type S)	1 ΜΩ	
Туре Т	Yes	
Input resistance (Type T)	1 ΜΩ	
Cable length		
Cable length, shielded, max.	100 m; to the sensor	
Analog value creation		
Measurement principle	Sigma Delta	
Integrations and conversion time/ resolution per chann	nel	
Resolution with overrange (bit including sign), max.	16 bit ; Temperature 0.1 °C / 0.1 °F	
Interference voltage suppression for interference frequency f1 in Hz	85 dB at 50 / 60 / 400 Hz	
Displayable conversion value range		
bipolar signals	-27.648 to +27.648	
Errors/accuracies		
cold connection point	+/-1.5 °C	
Repeat accuracy in settled status at 25 °C (relative to input area)	+/- 0,05 %	
Operational limit in overall temperature range		

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Voltage, relative to output area	+/- 0,1 %
Interference voltage suppression for $f = n \times (fl + /- 1\%)$, $fl = interference$ frequency	
common mode voltage, max.	120 V ; AC
Common mode interference, min.	120 dB ; At 120 V DC
Interrupts/diagnostics/status information	
Diagnostics indication LED	
External fault EXTF (red)	Yes
Group error SF (red)	Yes
Galvanic isolation	
Galvanic isolation analog inputs	
Galvanic isolation analog inputs	Yes
Permissible potential difference	
between inputs and MANA (UCM)	500 V AC
between M internally and the inputs	500 V AC
Connection method	
Plug-in I/O terminals	No
Dimensions	
Width	71.2 mm
Height	80 mm
Depth	62 mm
Weight	
Weight, approx.	210 g
Status	Dec 19, 2011

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