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Data sheet 6ES7232-4HD30-0XB0



Figure similar

Spare part SIMATIC S7-1200, Analog output, SM 1232, 4 AO, +/-10 V, 14-bit resolution, or 0-20 mA, 13-bit resolution

General information	
Product type designation	SM 1232, AQ 4x14 bit
Supply voltage	
Rated value (DC)	24 V
Input current	
Current consumption, typ.	45 mA
from backplane bus 5 V DC, typ.	80 mA
Power loss	
Power loss, typ.	1.5 W
Analog outputs	
Number of analog outputs	4; Current or voltage
Output ranges, voltage	
● -10 V to +10 V	Yes
Output ranges, current	
● 0 to 20 mA	Yes
Load impedance (in rated range of output)	
● with voltage outputs, min.	1 000 Ω
● with current outputs, max.	600 Ω
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
● Resolution with overrange (bit including sign), max.	14 bit; Voltage: 14 bit; Current : 13 bit
Errors/accuracies	
Temperature error (relative to output range), (+/-)	25 °C ±0.3%, to 55 °C ±0.6% total measurement range
Basic error limit (operational limit at 25 °C)	
● Voltage, relative to output range, (+/-)	0.3 %
● Current, relative to output range, (+/-)	0.3 %
Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency	
● Common mode voltage, max.	12 V
Interrupts/diagnostics/status information	
Alarms	Yes
Diagnostics function	Yes
Alarms	
● Diagnostic alarm	Yes
Diagnoses	
● Monitoring the supply voltage	Yes
● Wire-break	Yes
● Short-circuit	Yes
Diagnostics indication LED	
● for status of the outputs	Yes

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● for maintenance	Yes
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
Ambient conditions	
Free fall	
● Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
● min.	0 °C
● max.	55 °C
● horizontal installation, min.	0 °C
● horizontal installation, max.	55 °C
● vertical installation, min.	0 °C
● vertical installation, max.	45 °C
Ambient temperature during storage/transportation	
● min.	-40 °C
● max.	70 °C
Air pressure acc. to IEC 60068-2-13	
● Operation, min.	795 hPa
● Operation, max.	1 080 hPa
● Storage/transport, min.	660 hPa
● Storage/transport, max.	1 080 hPa
Relative humidity	
● Operation at 25 °C without condensation, max.	95 %
Pollutant concentrations	
● SO2 at RH < 60% without condensation	S02: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free
connection method	
required front connector	Yes
Mechanics/material	
Enclosure material (front)	
● Plastic	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	180 g

Classifications

	Version	Classification
eClass	14	27-24-22-01
eClass	12	27-24-22-01
eClass	9.1	27-24-22-01
eClass	9	27-24-22-01
eClass	8	27-24-22-01
eClass	7.1	27-24-22-01
eClass	6	27-24-22-01
ETIM	9	EC001420
ETIM	8	EC001420
ETIM	7	EC001420
IDEA	4	3562
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

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Manufacturer Declaration | Miscellaneous | Metrological Approval

EMV	For use in hazardous locations	Marine / Shipping

FM | NK / Nippon Kaiji Kyokai

Marine / Shipping

CCS (China Classification Society)

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