SIEMENS

Data sheet 6ES7332-5TB10-0AB0

Figure similar

********** spare part ********* SIMATIC DP, HART analog output, SM 332, 2 AO, 0/4 - 20 mA HART from HART revision 5.0, for ET200M with IM 153-2, 1 x 20-pole

Supply voltage	
Load voltage L+	
● Rated value (DC)	24 V
● Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	150 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	3.5 W
Analog outputs	
Number of analog outputs	2
Current output, no-load voltage, max.	19 V
Cycle time (all channels) max.	5 ms
Output ranges, current	
● 0 to 20 mA	Yes
● -20 mA to +20 mA	No
● 4 mA to 20 mA	Yes
Connection of actuators	
● for current output two-wire connection	Yes
Load impedance (in rated range of output)	
● with current outputs, max.	650 Ω
● with current outputs, inductive load, max.	7.5 mH
Destruction limits against externally applied voltages and currents	
● Voltages at the outputs towards MANA	max. 17 V / -0.5 V
● Current, max.	60 mA / -1 A
Cable length	
● shielded, max.	400 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
● Resolution with overrange (bit including sign), max.	12 bit; + sign
● Conversion time (per channel)	40 ms
Settling time	
● for resistive load	2.5 ms
● for capacitive load	4 ms
● for inductive load	2.5 ms
Errors/accuracies	
Operational error limit in overall temperature range	
● Current, relative to output range, (+/-)	0.55 %

Basic error limit (operational limit at 25 °C)	
● Current, relative to output range, (+/-)	0.15 %
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Parameterizable
Substitute values connectable	Yes; Parameterizable
Alarms	
● Diagnostic alarm	Yes; Parameterizable
Diagnoses	
● Overrange	Yes
● Wire break	Yes; as of output value > 0.5 mA
● HART communication active	Yes; green LED (H)
Diagnostics indication LED	
● Group error SF (red)	Yes; red LED
● Channel fault indicator F (red)	Yes; per channel
Ex(i) characteristics	
Module for Ex(i) protection	Yes
maximum values for connecting terminals for gas group IIC	
● Uo (no-load voltage), max.	19 V
● Io (short-circuit current), max.	66 mA
● Po (power output), max.	506 mW
● Co (permissible external capacity), max.	230 nF
● Lo (permissible external inductivity), max.	7.5 mH
● Um (voltage at non-intrinsically safe connecting terminals), max.	60 V; DC
Potential separation	
Potential separation analog outputs	
● between the channels	Yes
● between the channels and backplane bus	Yes
● Between the channels and load voltage L+	Yes
Permissible potential difference	
between the outputs (UCM)	60 V DC/30 V AC permitted potential difference (Viso) of signals from hazardous areas
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
Use in hazardous areas	
● ATEX marking	ATEX II 3 G (2) GD Ex nA [ib Gb] [ib IIIC Db] IIC T4 Gc
● ATEX certificate	DEKRA 14 ATEX 0053X
● FM marking	Class I, Division 2, Group A, B, C, D T4; Class I, Zone 2, Group IIC T4
Ambient conditions	
Ambient temperature during operation	
● max.	60 °C
Connection method	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	290 g

Classifications

	Version	Classification
eClass	14	27-24-26-01
eClass	12	27-24-26-01
eClass	9.1	27-24-26-01
eClass	9	27-24-26-01
eClass	8	27-24-26-01
eClass	7.1	27-24-26-01

eClass	6	27-24-26-01
ETIM	10	EC001596
ETIM	9	EC001596
ETIM	8	EC001596
ETIM	7	EC001596
IDEA	4	3562
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval


Miscellaneous

Manufacturer Declaration

General Product Approval


China RoHS

Manufacturer Declaration

Miscellaneous

For use in hazardous locations

For use in hazardous locations

FM

CCC-Ex

Maritime application

NK / Nippon Kaiji Kyokai

Maritime application

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