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Data sheet 6ES7132-7RD22-0AB0



Figure similar

SIMATIC, electronic module for ET200iSP, 4 DO, 17.4 V DC/40 mA "H"-shutdown, Ex ib (ia Ga) IIC T4 Gb, Ex ib [ia IIIC Da] IIC T4 Gb, Ex ib [ia] I Mb

General information	
Product type designation	4DQ 17.4 V DC/40 mA
HW functional status	2
Firmware version	V3.0.0
Installation type/mounting	
Rack mounting	No
Front mounting	Yes
Rail mounting	Yes
Wall mounting/direct mounting	No
Supply voltage	
Type of supply voltage	DC
Input current	
Current consumption, typ.	380 mA
from load voltage (power bus), max.	400 mA
Power loss	
Power loss, typ.	2.8 W
Address area	
Address space per module	
● Address space per module, max.	2 byte
Hardware configuration	
Fieldbus connection via separate transceiver	Yes
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	4; additionally 1 intrinsically-safe input for H shutdown
Short-circuit protection	Yes
No-load voltage Uao (DC)	17.4 V
Internal resistor Ri	167 Ω
Trend key points E	
● Voltage Ue (DC)	10.7 V
● Current Ie	40 mA; 80 mA when outputs connected in parallel
Output voltage	
● Type of output voltage	DC
Output current	
● for signal "1" rated value	0.04 A
Output delay with resistive load	
● "0" to "1", max.	2 ms
● "1" to "0", max.	1.5 ms
Parallel switching of two outputs	

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● for uprating	Yes
Switching frequency	
● with resistive load, max.	100 Hz
● with inductive load, max.	2 Hz
Cable length	
● shielded, max.	500 m
● unshielded, max.	500 m
Interfaces	
Number of PROFINET interfaces	0
Number of RS 485 interfaces	0
Protocols	
Supports protocol for PROFINET IO	No
PROFIsafe	No
PROFIBUS	No
Interrupts/diagnostics/status information	
Alarms	
● Diagnostic alarm	Yes; Parameterizable
● Hardware interrupt	No
Diagnoses	
● Diagnostic information readable	Yes
● Wire break	Yes; R > 10 kohms, I < 100 µA
● Short-circuit	Yes; R< 80 Ohm (one output), R< 40 Ohm (outputs connected in parallel)
Diagnostics indication LED	
● Group error SF (red)	Yes
● Status indicator digital output (green)	Yes; Per channel
Ex(i) characteristics	
Module for Ex(i) protection	Yes; for more Co/Lo combinations, see certificate IECEx KEM 05.0011
maximum values for connecting terminals for gas group IIC	
● Uo (no-load voltage), max.	19.4 V
● Io (short-circuit current), max.	118 mA
● Po (power output), max.	0.57 W
● Co (permissible external capacity), max.	0.24 µF
● Lo (permissible external inductivity), max.	2.5 mH
● Ui (intrinsically safe input voltage), max.	28 V; switch input circuit
● Pi (intrinsically safe input power), max.	1.2 W; switch input circuit
● Ci (internal capacity), max.	3 nF; switch input circuit
Potential separation	
Potential separation digital outputs	
● between the channels	No
● between the channels and backplane bus	Yes
● Between the channels and load voltage L+	Yes
Permissible potential difference	
between different circuits	60 V DC/30 V AC
Degree and class of protection	
IP degree of protection	IP30
Standards, approvals, certificates	
CE mark	CE 0344
UKCA mark	DEKRA 21UKEX0085 Importer UK: Siemens plc Manchester M20 2UR
cULus	LISTED E334384
FM approval	CLASSIFIED 3025852
Suitable for safety functions	No
INMETRO certificate	UL-BR 12.0073
reference designation according to IEC 81346-2 (2009)	K
Highest safety class achievable in safety mode	
● SIL acc. to IEC 61508	No
Use in hazardous areas	
● ATEX marking	II 2 G (1) G Ex ib [ia Ga] IIC T4 Gb II 2 G (1) D Ex ib [ia IIIC Da] IIC T4 Gb I M2 Ex ib [ia] I Mb
● ATEX certificate	KEMA 04 ATEX 1249

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● IECEx	IECEx KEM 05.0011
● CCC Ex	2020322316002945
● EAC Ex	PB Ex ib [ia] I Mb 1Ex ib [ia Ga] IIC T4 Gb [Ex ia Da] IIIC
● FM marking	Class I, Zone 1 AEx ib [ia] IIC T4 Ex ib IIC T4 NI, Class I, DIV.2, GP. A,B,C,D T4 AIS, Class I, DIV.1, GP. A,B,C,D T4 DIP Class II, III, GP. E,F,G
● Explosion protection category for gas	ATEX gas explosion protection, Zone 1
● Explosion protection category for dust	ATEX dust explosion protection, Zone 21 always install in corresponding enclosure
● associated equipment (Ex ia)	Yes
● associated equipment (Ex ib)	Yes
Marine approval	
● Germanischer Lloyd (GL)	Yes
● American Bureau of Shipping (ABS)	Yes
● Bureau Veritas (BV)	Yes
● Det Norske Veritas (DNV)	Yes
Connection method	
Design of electrical connection	Screw/spring-type terminal
Dimensions	
Width	30 mm
Height	129 mm
Depth	136.5 mm
Weights	
Weight, approx.	255 g

Classifications

	Version	Classification
eClass	16	27-24-26-04
eClass	14	27-24-26-04
eClass	12	27-24-26-04
eClass	9.1	27-24-26-04
eClass	9	27-24-26-04
eClass	8	27-24-26-04
eClass	7.1	27-24-26-04
eClass	6	27-24-26-04
ETIM	10	EC001599
ETIM	9	EC001599
ETIM	8	EC001599
ETIM	7	EC001599
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Miscellaneous

China RoHS

General Product Approval	For use in hazardous locations			
Manufacturer Declaration	ATEX	IECEx	FM	Miscellaneous
			IECEx	

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CCC	CCC-Ex	UL	INMETRO	Miscellaneous	Miscellaneous

Maritime application

ABS	BUREAU VERITAS	DNV	LRS	NK / Nippon Kaiji Kyokai	PRS

Environment

EPD

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