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Data sheet 6ES7138-4DD01-0AB0



Figure similar

*** Spare part *** SIMATIC DP, Electronics module for ET 200S, 2 pulses Pulse generator and timer module, 15 mm wide, 2 channels

Supply voltage	
Load voltage L+	
● Rated value (DC)	24 V; From power module
● Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	40 mA
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
Type of output voltage	L+ (-0.8 V)
Short-circuit protection	Yes
Output current	
● nominal	500 mA
Power loss	
Power loss, typ.	1.8 W
Digital inputs	
Number of digital inputs	2
Input characteristic curve in accordance with IEC 61131, type 2	Yes
Input voltage	
● Rated value (DC)	24 V
● for signal "0"	-30 to +5 V
● for signal "1"	+11 to +30V
Input current	
● for signal "1", typ.	9 mA
Input delay (for rated value of input voltage)	
● Input frequency (with a time delay of 0.1 ms), max.	20 kHz
● Minimum pulse width for program reactions	100 µs
Cable length	
● shielded, max.	100 m
Digital outputs	
Number of digital outputs	2
Short-circuit protection	Yes
● Response threshold, typ.	10 A
Limitation of inductive shutdown voltage to	L+ (-50 to -65 V)
Controlling a digital input	Yes
Accuracy of pulse duration	±(time period x 100 ppm), ±100 µs with a load ≤ 50 ohms
minimum pulse duration	100 µs
Switching capacity of the outputs	
● on lamp load, max.	10 W

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Output voltage	
● for signal "1", min.	L+ (-1 V)
Output current	
● for signal "1" rated value	2 A
● for signal "1" permissible range for 0 to 60 °C, min.	7 mA
● for signal "1" permissible range for 0 to 60 °C, max.	2 A
● for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
● "0" to "1", max.	100 µs
● "1" to "0", max.	200 µs
Switching frequency	
● with resistive load, max.	5 kHz
● with inductive load, max.	2 Hz
● on lamp load, max.	10 Hz
Cable length	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Encoder	
Connectable encoders	
● 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	2 mA
Interrupts/diagnostics/status information	
Diagnostics indication LED	
● Group error SF (red)	Yes
● Status indicator digital input (green)	Yes
● Status indicator digital output (green)	Yes
Integrated Functions	
Pulse generator	
● Number of channels	2; 1 digital input and 1 digital output per channel
Potential separation	
Potential separation digital inputs	
● between the channels	No
● between the channels and backplane bus	Yes
Potential separation digital outputs	
● between the channels	No
● between the channels and backplane bus	Yes
Isolation	
Isolation tested with	500 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	40 g
Classifications	

	Version	Classification
eClass	16	27-24-26-05
eClass	14	27-24-26-05
eClass	12	27-24-26-05
eClass	9.1	27-24-26-05
eClass	9	27-24-26-05
eClass	8	27-24-26-05
eClass	7.1	27-24-26-05
eClass	6	27-24-26-05
ETIM	10	EC001601
ETIM	9	EC001601

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ETIM	8	EC001601
ETIM	7	EC001601
IDEA	4	3567
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval





Miscellaneous

Manufacturer Declaration





General Product Approval



China RoHS





EMV



For use in hazardous locations



For use in hazardous locations

FM









Miscellaneous

For use in hazardous locations

CCC-Ex

Maritime application









NK / Nippon Kaiji Kyokai

Maritime application





CCS (China Classification Society)

KR (Korean Register of Shipping)

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