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Data sheet 6ES7147-4BB00-0AA0



SIMATIC DP, electronic modules for ET 200pro EM 2 SSI position detection for 2 SSI absolute encoders incl. bus module, connection module CM SSI 6ES7194-4CC00-0AA0 to be ordered separately

General information	
Product function	
● Isochronous mode	No
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	STEP 7 V18.0.1.4 or higher
● PROFINET from GSD version/GSD revision	GSDML V2.35
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Input current	
from supply voltage 1L+, max.	30 mA; without output current for the 24 V Encoder supply
from backplane bus 3.3 V DC, max.	20 mA
Encoder supply	
Number of outputs	2
24 V encoder supply	
● 24 V	Yes; L+ (-0.8 V)
● Short-circuit protection	Yes; electronic/thermal
● Output current, max.	150 mA; Per channel
Power loss	
Power loss, typ.	0.65 W
Address area	
Address space per module	
● Address space per module, max.	8 byte
● Inputs	8 byte
● Outputs	0 byte
Digital inputs	
Cable length	
● shielded, max.	30 m
Encoder	
Encoder signals, absolute encoder (SSI)	
● Input signal	to RS-422
● Telegram length, parameterizable	10 ... 40 bit
● Clock frequency, max.	2 MHz; 125 kHz, 250 kHz, 500 kHz, 1 MHz, 1.5 MHz or 2 MHz
● Binary code	Yes
● Gray code	Yes
● Cable length, shielded, max.	30 m; Up to 500 kHz
● Parity bit, parameterizable	Yes
● Monoflop time	16, 32, 48, 64 µs & automatic
● Multiturn	Yes

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● Singleturn	Yes
Interface types	
● RS 422	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Parameterizable
Alarms	
● Diagnostic alarm	Yes
Diagnoses	
● Diagnostic information readable	Yes
● Wire break	Yes
● Short-circuit	Yes; Encoder supply to M, channel by channel
● Telegram error at SSI encoder	Yes
Diagnostics indication LED	
● ERROR LED	Yes
● Channel status display	Yes
● for channel diagnostics	Yes
Integrated Functions	
Fast mode	Yes
Position detection	
● Absolute acquisition	Yes
Potential separation	
Potential separation channels	
● between the channels	No
● between the channels and backplane bus	Yes
● Between the channels and load voltage L+	No
Isolation	
Isolation tested with	707 V DC (type test)
Connection method	
Design of electrical connection	M12, 8-pin
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm
Weights	
Weight, approx.	150 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
ETIM	8	EC001601
ETIM	7	EC001601

Approvals / Certificates

General Product Approval

Manufacturer Declaration

Miscellaneous

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General Product Approval					EMV
RCM	China RoHS	CE EG-Konf.	UK CA	Manufacturer Declaration	KC

EMV	Maritime application	
RCM	NK / Nippon Kaiji Kyokai	CCS (China Classification Society)

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