SIEMENS

Data sheet 6ES7253-1AA22-0XA0



*** spare part *** SIMATIC S7-200, EM253 positioning expansion module, 200 kHz, for controlling stepper motors or servo drives, open-loop control, programming via Micro/WIN

Input current	
from supply voltage L+, max.	300 mA; from 12 V DC, 130 mA from 24 V DC
from backplane bus 5 V DC, max.	190 mA
Power loss	
Power loss, typ.	2.5 W
Hardware configuration	
Number of modules per CPU	max. 5 with CPU 226/226XM, max. 3 with CPU 224, max. 1 with CPU 222
Digital inputs	
Number of digital inputs	5; P-reading
Functions	Stop (STP), reference point switch (RPS), upper limit switch (LMT+), lower limit switch (LMT-), zero point (ZP)
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
● Rated value (DC)	24 V
● for signal "0"	STP, RPS, LMT+, LMT- DC 5 V; ZP DC 1 V
● for signal "1"	STP, RPS, LMT+, LMT- DC 15 V; ZP DC 3 V
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; STP, RPS, LMT+, LMT- 0.2 to 12.8 ms; ZP min 2 µs
Cable length	
● shielded, max.	100 m; STP, RPS, LMT+, LMT- 100 m, ZP 10 m
● unshielded, max.	30 m; STP, RPS, LMT+, LMT- 30 m, ZP not recommended
Encoder	
Connectable encoders	
● 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1 mA
Drive interface	
Number of drive interfaces	4; optionally RS 422 / 485 or 5 V DC
Stepper drive	
● Differential output voltage, min.	2.8 V; RL = 200 ohms
● Output current, max.	50 mA
● Pulse frequency	200 kHz
● Cable length, shielded, max.	10 m
Potential separation	
Potential separation digital inputs	
● between the channels	Yes
● between the channels, in groups of	1 (STP, RPS, ZP), 2 (LMT-, LMT+)
Permissible potential difference	
between different circuits	500 V AC

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Dimensions	
Width	71.2 mm
Height	80 mm
Depth	62 mm

Weights	
Weight, approx.	190 g

Classifications

	Version	Classification
eClass	16	27-24-22-05
eClass	14	27-24-22-05
eClass	12	27-24-22-05
eClass	9.1	27-24-22-05
eClass	9	27-24-22-05
eClass	8	27-24-22-05
eClass	7.1	27-24-22-05
eClass	6	27-24-22-05
ETIM	10	EC001422
ETIM	9	EC001422
ETIM	8	EC001422
ETIM	7	EC001422
IDEA	4	3567
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Miscellaneous

China RoHS

For use in hazardous locations

FM

Maritime application

ABS, BUREAU VERITAS, DNV, GL, LRS, RMRS

Maritime application

CCS (China Classification Society)

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