



*** 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

Supply voltage	
permissible range, lower limit (DC)	11 V
permissible range, upper limit (DC)	30 V
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
Dimensions	
Width	71.2 mm
Height	80 mm
Depth	62 mm
Weights	
Weight, approx.	190 g
Classifications	

	Version	Classification
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	9	EC001422
ETIM	8	EC001422
ETIM	7	EC001422
IDEA	4	3567
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval	For use in hazardous locations	Maritime application
 EG-Konf.	 ATEX	  ABS
		

Maritime application

 DNV	 GL	 LRS	 RMRS	CCS (China Classification Society)
--	---	--	---	--

last modified: 5/22/2024 