



SIMATIC S7-400, cam control system FM 452, electronic incl. configuration package on CD

Supply voltage	
Rated value (DC)	24 V
Input current	
Current consumption, max.	500 mA
Encoder supply	
5 V encoder supply	
• 5 V	Yes
• Output current, max.	300 mA
• Cable length, max.	32 m
24 V encoder supply	
• 24 V	Yes
• Output current, max.	300 mA
• Cable length, max.	100 m
Power loss	
Power loss, typ.	8.1 W
Digital inputs	
Number of digital inputs	11
Functions	Reference point switch, flying actual value setting/length measurement, brake release, enable track output no. 3 to 10
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-28.8 ... +5V
• for signal "1"	+11 to +28.8V
Input current	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	9 mA
Digital outputs	
Number of digital outputs	16
Functions	Cam track
Short-circuit protection	Yes
Output voltage	
• Rated value (DC)	24 V
• for signal "1", min.	UP - 0.8 V
Output current	
• for signal "1" permissible range for 0 to 55 °C, max.	600 mA; with UPmax
• for signal "0" residual current, max.	0.5 mA
Encoder	
Connectable encoders	
• Incremental encoder (symmetrical)	Yes

• Incremental encoder (asymmetrical) • Absolute encoder (SSI) • 2-wire sensor	Yes Yes Yes		
Encoder signals, incremental encoder (symmetrical)			
• Trace mark signals • Zero mark signal • Input voltage • Input frequency, max.	A, notA, B, notB N, notN 5 V difference signal (phys. RS 422) 1 MHz		
Encoder signals, incremental encoder (asymmetrical)			
• Trace mark signals • Zero mark signal • Input voltage • Input frequency, max.	A, B N 24 V 50 kHz; 50 kHz for 25 m cable length; 25 kHz for 100 m cable length		
Encoder signals, absolute encoder (SSI)			
• Input signal • Data signal • Clock signal • Telegram length, parameterizable • Clock frequency, max. • Gray code • Cable length, shielded, max.	5 V difference signal (phys. RS 422) DATA, notDATA CL, notCL 13 or 25 bit serial 1 MHz Yes 300 m; at max. 125 kHz		
Potential separation			
Potential separation digital inputs			
• Potential separation digital inputs	No		
Potential separation digital outputs			
• Potential separation digital outputs	No		
Ambient conditions			
Ambient temperature during operation			
• min. • max.	0 °C 55 °C		
Ambient temperature during storage/transportation			
• min. • max.	-40 °C 70 °C		
Connection method			
required front connector	1x 48-pin		
Dimensions			
Width	25 mm		
Height	290 mm		
Depth	210 mm		
Weights			
Weight, approx.	650 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	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](#)



[KC](#)

General Product Ap- proval	EMV	For use in hazardous locations
-------------------------------	-----	--------------------------------



[EM](#)



For use in hazardous locations	Maritime application
--------------------------------	----------------------



[Type Examination Cer-
tificate](#)



Maritime application



[NK / Nippon Kaiji Ky-
okai](#)



[CCS \(China Classifica-
tion Society\)](#)

last modified: 6/7/2025