



SIMATIC S7-400, FM 452 ELECTRONIC CAM CONTROLLER INCL. CONFIG. PACKAGE ON CD

Supply voltage	
Rated value (DC)	
<ul style="list-style-type: none"> • 24 V DC 	Yes
Input current	
Current consumption, max.	500 mA
Encoder supply	
5 V encoder supply	
<ul style="list-style-type: none"> • 5 V 	Yes
<ul style="list-style-type: none"> • Output current, max. 	300 mA
<ul style="list-style-type: none"> • Cable length, max. 	32 m
24 V encoder supply	
<ul style="list-style-type: none"> • 24 V 	Yes
<ul style="list-style-type: none"> • Output current, max. 	300 mA
<ul style="list-style-type: none"> • Cable length, max. 	100 m
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	
<ul style="list-style-type: none"> • Rated value (DC) 	24 V
<ul style="list-style-type: none"> • for signal "0" 	-28.8 ... +5V
<ul style="list-style-type: none"> • for signal "1" 	+11 to +28.8V
Input current	

• for signal "0", max. (permissible quiescent current)	2 mA
for 2-wire sensor	
— 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)	Yes
• Absolute encoder (SSI)	Yes
• 2-wire sensor	Yes
Encoder signals, incremental encoder (symmetrical)	
• Trace mark signals	A, notA, B, notB
• Zero mark signal	N, notN
• Input signal	5 V difference signal (phys. RS 422)
• Input frequency, max.	1 MHz
Encoder signals, incremental encoder (asymmetrical)	
• Trace mark signals	A, B
• Zero mark signal	N
• Input voltage	24 V
• Input frequency, max.	50 kHz; 50 kHz for 25 m cable length; 25 kHz for 100 m cable length
Encoder signals, absolute encoder (SSI)	
• Input signal	5 V difference signal (phys. RS 422)
• Data signal	DATA, notDATA
• Clock signal	CL, notCL
• Message frame length, parameterizable	13 or 25 bit serial
• Clock frequency, max.	1 MHz
• Gray code	1
• Cable length, shielded, max.	300 m; at max. 125 kHz

Galvanic isolation

Galvanic isolation digital inputs	
• Galvanic isolation digital inputs	No
Galvanic isolation digital outputs	
• Galvanic isolation digital outputs	No
Degree and class of protection	
Degree of protection to EN 60529	
• IP20	Yes
Ambient conditions	
Ambient temperature in operation	
• Min.	0 °C
• max.	55 °C
Storage/transport temperature	
• Min.	-40 °C
• max.	70 °C
Relative humidity	
• Humidity class F	Yes
Connection method	
required front connector	1x 48-pin
Dimensions	
Width	25 mm
Height	290 mm
Depth	210 mm
Weights	
Weight, approx.	650 g
last modified:	12.03.2015