

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

S7-400

6ES7452-1AH00-0AE0

FM 452 CAM CONTROLLER MODULE

Applicable product family: SIMATIC S7-400 function modules

OFFICIAL SOURCE

6ES7452-1AH00-0AE0.pdf

The following pages are selected from the supplied manufacturer document and retain their original page content.

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



Supply voltage

Rated value (DC)	24 V
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Input current

Current consumption, max.	500 mA
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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
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Digital inputs

Number of digital inputs	11
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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)	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

- Telegram 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

Potential separation

Potential separation digital inputs

- Potential separation digital inputs No

Potential separation digital outputs

- Potential separation digital outputs No

Degree and class of protection

Degree of protection acc. to EN 60529

- IP20 Yes

Ambient conditions

Ambient temperature during operation

- min. 0 °C
- max. 55 °C

Ambient temperature during storage/transportation

- min. -40 °C
- max. 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

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