

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
<b>Input voltage</b>	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> <li>for signal "0"</li> <li>for signal "1"</li> </ul>	24 V -28.8 ... +5V +11 to +28.8V
<b>Input current</b>	
<ul style="list-style-type: none"> <li>for signal "0", max. (permissible quiescent current)</li> <li>for signal "1", typ.</li> </ul>	2 mA 9 mA
<b>Digital outputs</b>	
Number of digital outputs	16
Functions	Cam track
Short-circuit protection	Yes
<b>Output voltage</b>	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> <li>for signal "1", min.</li> </ul>	24 V UP - 0.8 V
<b>Output current</b>	
<ul style="list-style-type: none"> <li>for signal "1" permissible range for 0 to 55 °C, max.</li> <li>for signal "0" residual current, max.</li> </ul>	600 mA; with UPmax 0.5 mA
<b>Encoder</b>	
<b>Connectable encoders</b>	
<ul style="list-style-type: none"> <li>Incremental encoder (symmetrical)</li> <li>Incremental encoder (asymmetrical)</li> <li>Absolute encoder (SSI)</li> <li>2-wire sensor</li> </ul>	Yes Yes Yes Yes
<b>Encoder signals, incremental encoder (symmetrical)</b>	
<ul style="list-style-type: none"> <li>Trace mark signals</li> <li>Zero mark signal</li> <li>Input voltage</li> <li>Input frequency, max.</li> </ul>	A, notA, B, notB N, notN 5 V difference signal (phys. RS 422) 1 MHz
<b>Encoder signals, incremental encoder (asymmetrical)</b>	
<ul style="list-style-type: none"> <li>Trace mark signals</li> <li>Zero mark signal</li> <li>Input voltage</li> <li>Input frequency, max.</li> </ul>	A, B N 24 V 50 kHz; 50 kHz for 25 m cable length; 25 kHz for 100 m cable length
<b>Encoder signals, absolute encoder (SSI)</b>	
<ul style="list-style-type: none"> <li>Input signal</li> <li>Data signal</li> <li>Clock signal</li> </ul>	5 V difference signal (phys. RS 422) DATA, notDATA 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

### 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

**last modified:** 06/09/2020