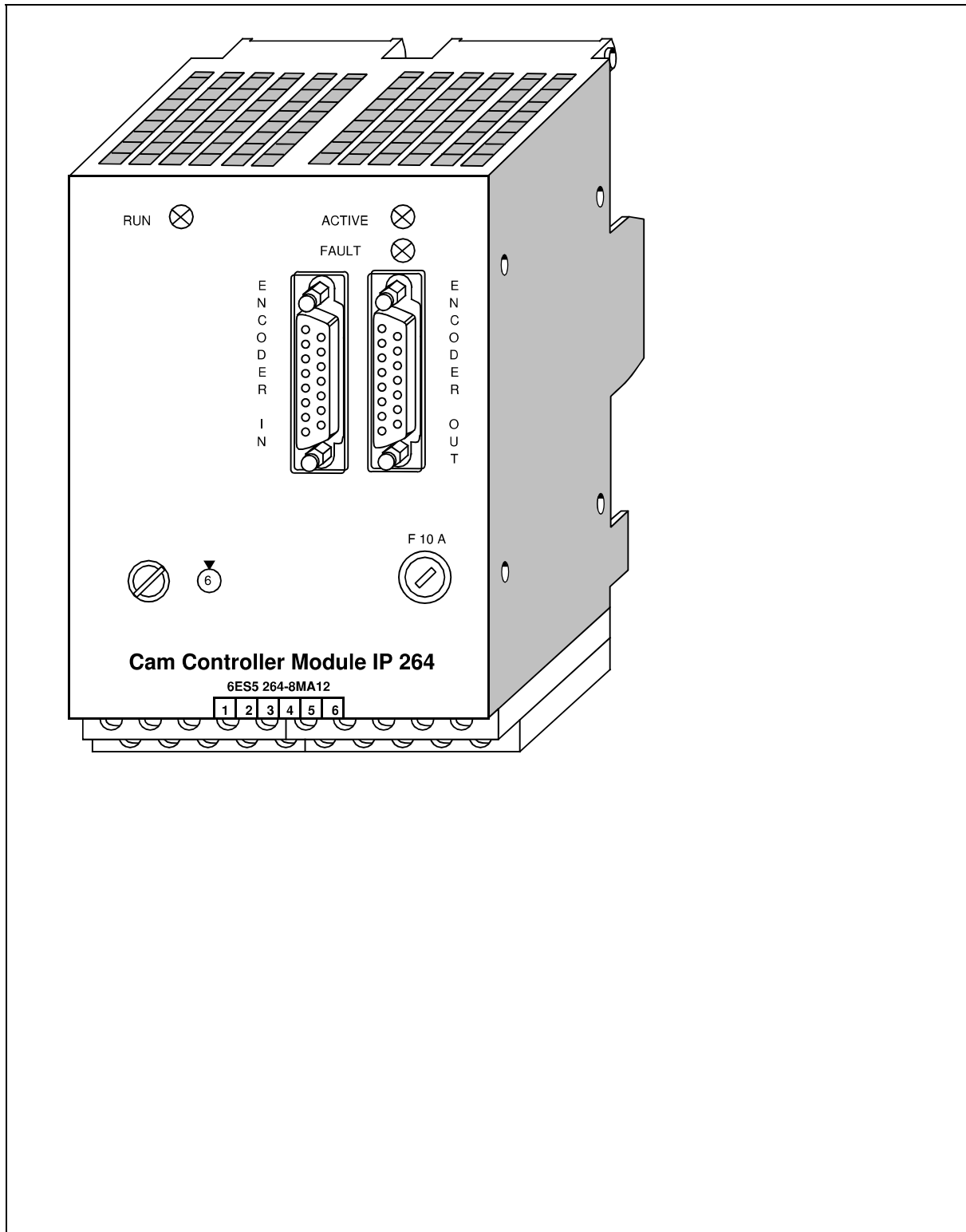


15.9 IP 264 Electronic Cam Controller Module

6ES5 264-8MA12



Technical Specifications

Encoders

Actual value sensing	incremental, absolute (SSI interface)
Maximum traversing range	
- with incremental encoders	2 ¹⁶ increments
- with absolute encoders	2 ¹⁶ encoders
Signal voltages	
- Differential inputs	5 V to RS 422
- Asymmetrical inputs	24 V (only incremental encoders)
Supply voltage for encoders (short-circuit-proof, no overload)	5 V/300 mA 24 V/300 mA
Input frequency and cable length	
Symmetrical encoders (5 V signals):	
- with 5 V encoder supply	max. 200 kHz for 32 m (105 ft.) cable, shielded
- with 24 V encoder supply	max. 200 kHz for 100 m (328 ft.) cable, shielded
Asymmetrical encoders (24 V signal):	max. 100 kHz for 25 m (82 ft.) cable, shielded
	max. 25 kHz for 100 m (328 ft.) cable, shielded
Data transmission rate and cable length with absolute encoders (selectable in steps)	125 kHz (160 m/525 ft. shielded) 250 kHz 500 kHz 1 MHz (32 m/105 ft. shielded)
Input signals	
- Incremental	2 pulse trains displaced by 90° 1 zero pulse
- 24 V initiator (BERO)	1 pulse train
- SSI	Absolute value
Input currents	to RS 422
- 5 V	typ. 5 mA
- 24 V	

Digital Inputs

Input voltage range	-3 V to +30 V
Galvanic isolation	no
0 signal	-3 V to +5 V
1 signal	+13 V to +30 V
Permissible zero-signal current at 0 signal	1.1 mA
Input current at 24 V	typ. 5 mA
Other: If the digital inputs are used, they must always be connected to a defined potential (0 V, 24 V) and must not be kept open.	

Digital Outputs

Output voltage range	+20 V to +30 V
Galvanic isolation	no
Output current at 1 signal	max. 300 mA
Short-circuit protection	Short-circuit-proof output
Cable length, shielded	max. 100 m (328 ft.)

Supply Voltage

Logic voltage from 24 V supply produced with switched-mode power supply	4.9 V to 5.1 V
Current consumption from 24 V without outputs and sensors	typ. 120 mA
Undervoltage monitoring	$V_{\text{internal}} < 4.65 \text{ V}$

Power Loss

typ. 4 W

Module Cycle Time (incl. dead-time compensation)

Separate cam programs with max. 32 cams each for forwards and backwards (incl. dead-time compensation)	57.6 μs
"Common" cam program with max. 32/64 cams for forwards and backwards	57.6/115.2 μs