

6ES7350-2AH00-0AE0

FM350-2, COUNTER MOD. 8 CHANNELS, 20KHZ

Technical data

SIMATIC S7-300, COUNTER MODULE FM 350-2, 8 CHANNELS, 20 KHZ, 24V ENCODER FOR COUNTING, MEASURING FREQUENCIES, SPEED MEASUREMENT, PERIOD DURATION MEASUREMENT AND PROPORTIONING INCL. CONFIG. PACKAGE AND ELECTRONIC DOCU ON CD

Supply voltage

Auxiliary voltage 1L+, load voltage 2L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V

Input current

from load voltage L+ (without load), max.	150 mA
from backplane bus 5 V DC, max.	100 mA

Encoder supply

Type of output voltage	NAMUR-encoder supply: 8.2 V ±2 %
Short-circuit protection	Yes

Output current	
• Rated value	200 mA

Power loss

Power loss, typ.	10 W
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Digital inputs

Number of digital inputs	8
Number of NAMUR inputs	8
Functions	1 each for gate start/ gate stop

Input voltage	
• for signal "0"	-3 to +5V
• for signal "1"	11 to 30.2 V

Input current	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	9 mA

Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	50 µs

Cable length	
• shielded, max.	100 m

Digital outputs

Number of digital outputs	8
Short-circuit protection	Yes
Limitation of inductive shutdown voltage to	L+ (-40 V)

Output voltage	
• for signal "1", min.	L+ (-0.8 V)

Output current	
• for signal "1" rated value	0.5 A
• for signal "0" residual current, max.	0.5 mA

Output delay with resistive load	
• "0" to "1", max.	300 µs

Switching frequency	
• with resistive load, max.	500 Hz
• with inductive load, max.	0.5 Hz

Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	2 A
all other mounting positions	
— up to 40 °C, max.	2 A

Cable length	
• shielded, max.	600 m
• unshielded, max.	100 m

Encoder

Connectable encoders	
• Incremental encoder (asymmetrical)	Yes
• 24 V initiator	Yes
• 24 V directional element	Yes
• NAMUR encoder	Yes
• 2-wire sensor	Yes

NAMUR encoder	
• Input signal	to DIN 19 234
• Input current for signal "0", max.	1.2 mA
• Input current for signal "1", min.	2.1 mA
• Input delay, max.	50 µs
• Input frequency, max.	20 kHz
• Cable length, shielded, max.	100 m

Interrupts/diagnostics/status information

Diagnostics function	Yes; Diagnostic information readable
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Alarms	
• Diagnostic alarm	Yes; Parameterizable

• Hardware interrupt	Yes; Parameterizable
Diagnostics indication LED	
• Group error SF (red)	Yes
Counter	
Counter input 24 V	
• Number	8; 32 bit or ±31 bit
• Input voltage for signal "0"	-3 to +5V
• Input voltage for signal "1"	11 to 30.2 V
• Input current for signal "0", max. (permissible quiescent current)	2 mA
• Input current for signal "1", typ.	9 mA
• Input delay, max.	50 µs
• Counting frequency, max.	20 kHz; 24 V incremental encoder: 10 kHz; 24-V direction encoder: 20 kHz; 24-V initiator: 20 kHz; NAMUR encoder: 20 kHz
• Cable length, max.	100 m
Potential separation	
Potential separation digital inputs	
• between the channels and backplane bus	Yes; and shielding
Potential separation digital outputs	
• between the channels and backplane bus	Yes; and shielding
Potential separation counter	
• between the channels and backplane bus	Yes; and shielding
Connection method	
required front connector	1x 40-pin
Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	460 g
last modified:	08/15/2019
Last changes: 08/19/2019	