



Figure similar

SIMATIC S7-300, Counter module FM 350-2, 8 channels, 20 kHz, 24 V encoder for counting, frequency measurement, speed measurement, period duration measurement, dosing incl. configuration package and electronic documentation on CD-ROM

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	
NAMUR encoder supply	
• 8.2 V	Yes
• Short-circuit protection	Yes
• Output current, max.	200 mA
Power loss	
Power loss, typ.	10 W
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
for NAMUR encoders	
— for signal "0", max.	1.2 mA
— for signal "1", min.	2.1 mA
Input delay (for rated value of input voltage)	
• Input frequency, max.	20 kHz
for standard inputs	
— at "0" to "1", max.	50 µs
for NAMUR 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		
<b>Encoder</b>			
Connectable encoders			
• Incremental encoder (asymmetrical)	Yes		
• 24 V initiator	Yes		
• 24 V directional element	Yes		
• NAMUR encoder	Yes; to DIN 19 234		
• 2-wire sensor	Yes		
<b>Interrupts/diagnostics/status information</b>			
Diagnostics function	Yes; Diagnostic information readable		
Alarms			
• Diagnostic alarm	Yes; Parameterizable		
• Hardware interrupt	Yes; Parameterizable		
Diagnostics indication LED			
• Group error SF (red)	Yes		
<b>Counter</b>			
Number of counter inputs	8; 32 bit or ±31 bit		
Counter input 24 V			
• Input voltage for signal "0"	-3 to +5V		
• Input voltage for signal "1"	11 to 30.2 V		
• Input current for signal "1", typ.	9 mA		
• Counting frequency, max.	20 kHz; Incremental encoder: 10 kHz		
<b>Potential separation</b>			
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		
<b>connection method</b>			
required front connector	1x 40-pin		
<b>Dimensions</b>			
Width	80 mm		
Height	125 mm		
Depth	120 mm		
<b>Weights</b>			
Weight, approx.	460 g		
<b>Classifications</b>			
		<b>Version</b>	<b>Classification</b>
	eClass	14	27-24-22-05

eClass	12	27-24-22-05
eClass	9.1	27-24-22-05
eClass	9	27-24-22-05
eClass	8	27-24-22-05
eClass	7.1	27-24-22-05
eClass	6	27-24-22-05
ETIM	9	EC001422
ETIM	8	EC001422
ETIM	7	EC001422
IDEA	4	3567
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

**General Product Approval**

[Manufacturer Declaration](#)



[KC](#)



**General Product Approval**

EMV

[BIS CRS](#)



last modified:

3/12/2024