

SIEMENS

Product data sheet

6ES7350-1AH03-0AE0


SIMATIC S7-300,
COUNTER MODULE FM 350-1 FOR S7-300,
COUNTER FUNCTIONS UP TO 500 KHZ 1
CHANNEL FOR CONNECTION OF 5V AND 24V
INCREMENTAL ENCODERS ISOCHRON MODE,
MEASUREMENT MODE INCL. CONFIG. PACKAGE
ON CD

Supply voltage	
Aux. voltage 1L+, load voltage 2 L+	
Rated value (DC)	24 V
Permissible range (ripple included)	
dynamic, lower limit (DC)	18.5 V
dynamic, upper limit (DC)	30.2 V
static, lower limit (DC)	20.4 V
static, upper limit (DC)	28.8 V
non-periodic skip	
Duration	500 ms
Recovery time	50 s
Value	35 V
Input current	
from load voltage 1L+ (without load), max.	40 mA
from backplane bus 5 V DC, max.	160 mA

Encoder supply	
5 V encoder supply	
5 V	Yes ; 5.2 V +/-2%
Output current, max.	300 mA
24 V encoder supply	
24 V	Yes ; 1L+ (-3 V)
Output current, max.	400 mA
Power losses	
Power loss, typ.	4.5 W
Digital inputs	
Number/binary inputs	3
Functions	1 for gate start, 1 for gate stop, 1 for setting the counter
Input voltage	
for signal "0"	-28.8 to +5 V
for signal "1"	+11 to +28.8 V
Input current	
for signal "1", typ.	9 mA
Digital outputs	
Number/binary outputs	2
Functionality/short-circuit strength	Yes ; Clocked electronically
Limitation of inductive shutdown voltage to	2L+ (-39 V)
Output voltage	
for signal "0", max.	3 V
for signal "1", min.	2L+ (-1.5 V)
Output current	
for signal "1" rated value	0.5 A
for signal "1" permissible range for 0 to 60 °C, min.	5 mA
for signal "1" permissible range for 0 to 60 °C, max.	0.6 A
Output delay with resistive load	
"0" to "1", max.	300 µs
Encoder	
Connectable encoders	
Incremental encoder (symmetrical)	Yes ; With 2 pulse trains offset by 90°

Incremental encoder (asymmetrical)	Yes
24 V initiator	Yes
24 V directional element	Yes ; 1 pulse train, 1 direction level
Counter	
Number of counter inputs	1
Counting range, description	32 bit or +/-31 bit
Minimum pulse width, adjustable	Yes ; 2.5 or 25 µs
Counter input 5 V	
Type	RS 422
Terminating resistor	220 Ω
Differential input voltage	1.3 V
Counting frequency, max.	500 kHz
Counter input 24 V	
Input voltage, for signal "0"	-28.8 to +5 V
Input voltage, for signal "1"	+11 to +28.8 V
Input current, for signal "1", typ.	9 mA
Counting frequency, max.	200 kHz
Minimum pulse width	2.5 µs
Parameter	
Remark	assigned binary addresses: 16 bytes
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels and the backplane bus	Yes ; Optocoupler
Galvanic isolation digital outputs	
between the channels and the backplane bus	Yes ; Optocoupler
Galvanic isolation counter	
between the channels and the backplane bus	Yes ; Optocoupler
Permissible potential difference	
between different circuits	75 VDC / 60 VAC
Isolation	
Isolation checked with	500 V
Connection method	
required front connector	1x 20-pin

Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weight	
Weight, approx.	250 g
Status	Jul 17, 2012