



Figure similar

SIPLUS S7-300 FM350-2 8 channels for medial exposure with conformal coating based on 6ES7350-2AH01-0AE0 . 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
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	

<ul style="list-style-type: none"> • for signal "1", min. 	L+ (-0.8 V)
Output current	
<ul style="list-style-type: none"> • for signal "1" rated value 	0.5 A
<ul style="list-style-type: none"> • for signal "0" residual current, max. 	0.5 mA
Output delay with resistive load	
<ul style="list-style-type: none"> • "0" to "1", max. 	300 µs
Switching frequency	
<ul style="list-style-type: none"> • with resistive load, max. 	500 Hz
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • shielded, max. 	600 m
<ul style="list-style-type: none"> • unshielded, max. 	100 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> • Incremental encoder (asymmetrical) 	Yes
<ul style="list-style-type: none"> • 24 V initiator 	Yes
<ul style="list-style-type: none"> • 24 V directional element 	Yes
<ul style="list-style-type: none"> • NAMUR encoder 	Yes; to DIN 19 234
<ul style="list-style-type: none"> • 2-wire sensor 	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Diagnostic information readable
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	Yes; Parameterizable
<ul style="list-style-type: none"> • Hardware interrupt 	Yes; Parameterizable
Diagnostics indication LED	
<ul style="list-style-type: none"> • Group error SF (red) 	Yes
Counter	
Number of counter inputs	8; 32 bit or ±31 bit
Counter input 24 V	
<ul style="list-style-type: none"> • Input voltage for signal "0" 	-3 to +5V
<ul style="list-style-type: none"> • Input voltage for signal "1" 	11 to 30.2 V
<ul style="list-style-type: none"> • Input current for signal "1", typ. 	9 mA
<ul style="list-style-type: none"> • Counting frequency, max. 	20 kHz; Incremental encoder: 10 kHz
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes; and shielding
Potential separation digital outputs	
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes; and shielding
Potential separation counter	
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes; and shielding
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes; File E239877
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • min. 	0 °C; = Tmin
<ul style="list-style-type: none"> • max. 	60 °C; = Tmax
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • Installation altitude above sea level, max. 	5 000 m
<ul style="list-style-type: none"> • Ambient air temperature-barometric pressure- 	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin

altitude	... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!
connection method / header	
required front connector	1x 40-pin
Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	460 g
last modified:	3/25/2021 