

SIPLUS S7-300 SM 326F DO8 -25...+60°C with conformal coating based on 6ES7326-2BF41-0AB0 . Digital output F-DO 8x 24 V DC/2A PM fail-safe digital output Sinking-sourcing up to Category 4 (EN 954-1), SIL 3 (IEC 61508)



Figure similar

Supply voltage	
Rated value (DC)	24 V; 1L+
Reverse polarity protection	Yes
Load voltage L+	
• Rated value (DC)	24 V; 2L+, 3L+
• Reverse polarity protection	No
Input current	
from supply voltage 1L+, max.	75 mA
from load voltage 2L+ (without load), max.	100 mA
from load voltage 3L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	12 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes

Limitation of inductive shutdown voltage to	L+ (-33 V)
<b>Switching capacity of the outputs</b>	
• on lamp load, max.	5 W
<b>Output voltage</b>	
• for signal "1", min.	L+ (-1.0 V)
<b>Output current</b>	
• for signal "1" rated value	2 A
• for signal "1" permissible range for 0 to 40 °C, min.	7 mA
• for signal "1" permissible range for 0 to 40 °C, max.	2 A; 2 A for horizontal installation, 1 A for vertical installation
• for signal "1" permissible range for 40 to 60 °C, min.	7 mA
• for signal "1" permissible range for 40 to 60 °C, max.	1 A; for horizontal installation
• for signal "0" residual current, max.	0.5 mA
<b>Switching frequency</b>	
• with resistive load, max.	30 Hz
• with inductive load, max.	2 Hz
• on lamp load, max.	10 Hz
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 40 °C, max.	7.5 A
— up to 60 °C, max.	5 A
vertical installation	
— up to 40 °C, max.	5 A
<b>Cable length</b>	
• shielded, max.	200 m; 200 m for SIL 3, AK 6, Cat 4
• unshielded, max.	200 m
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Diagnostic alarm	Yes; Parameterizable
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
<b>Diagnostics indication LED</b>	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
• between the channels	Yes
• between the channels, in groups of	4
• between the channels and backplane bus	Yes

- between the channels and the power supply of the electronics

Yes

## Isolation

Isolation tested with 500 V DC/350 V AC

## Standards, approvals, certificates

CE mark Yes

UL approval Yes; File E239877

RCM (formerly C-TICK) Yes

KC approval Yes

EAC (formerly Gost-R) Yes

### Highest safety class achievable in safety mode

- acc. to EN 954 Cat. 4
- Performance level according to ISO 13849-1 e
- SIL acc. to IEC 61508 SIL 3

### Railway application

- EN 50155 No

## Ambient conditions

### Ambient temperature during operation

- min. -25 °C
- max. 60 °C

### Altitude during operation relating to sea level

- Installation altitude above sea level, max. 2 000 m
- Ambient air temperature-barometric pressure-altitude Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 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	
required front connector	40-pin

Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm

Weights	
Weight, approx.	465 g

**last modified:** 05/13/2020