

SIPLUS S7-300 SM 326 10F-DO with conformal coating with conformity with EN 50155 T1 Kat 1 KI A/B based on 6ES7326-2BF10-0AB0 . Digital output 24 V DC/2A PP, fail-safe digital output for SIMATIC S7F systems, with diagnostic alarm, LVV, 1x 40-pole



Figure similar

Supply voltage	
Rated value (DC)	24 V; 1L+
Reverse polarity protection	Yes
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V; 2L+, 3L+
<ul style="list-style-type: none"> <li>Reverse polarity protection</li> </ul>	No
Input current	
from supply voltage 1L+, max.	100 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.	6 W
Digital outputs	
Number of digital outputs	10
Short-circuit protection	Yes

<b>Switching capacity of the outputs</b>	
• on lamp load, max.	5 W
<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.	2.4 A
• for signal "1" permissible range for 40 to 60 °C, min.	7 mA
• for signal "1" permissible range for 40 to 60 °C, max.	2.4 A
• for signal "0" residual current, max.	0.5 mA
<b>Switching frequency</b>	
• with resistive load, max.	25 Hz
• with inductive load, max.	25 Hz
• on lamp load, max.	10 Hz
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 40 °C, max.	10 A
— up to 60 °C, max.	6 A
vertical installation	
— up to 40 °C, max.	5 A
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Diagnostic alarm	Yes
<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	5
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes

Isolation	
Isolation tested with	500V AC for 1 min (internal voltage limiting to ±120V)
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	
<ul style="list-style-type: none"> <li>• acc. to EN 954</li> </ul>	Cat. 4
<ul style="list-style-type: none"> <li>• SIL acc. to IEC 61508</li> </ul>	SIL 3
Railway application	
<ul style="list-style-type: none"> <li>• EN 50155</li> </ul>	Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B, EN 50155:2007
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• min.</li> </ul>	-25 °C; = Tmin
<ul style="list-style-type: none"> <li>• max.</li> </ul>	60 °C; = Tmax; the rated temperature range of -25 ... +55 °C (T1) applies for the use on railway vehicles according to EN50155
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	2 000 m
<ul style="list-style-type: none"> <li>• Ambient air temperature-barometric pressure-altitude</li> </ul>	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Relative humidity	
<ul style="list-style-type: none"> <li>• With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	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 land craft, rail vehicles and special-purpose vehicles	
— to biologically active substances according to EN 60721-3-5	Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request
— to chemically active substances according to EN 60721-3-5	Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 50155 (ST2); *
— to mechanically active substances according to EN 60721-3-5	Yes; Class 5S3 incl. sand, dust; *
Remark	

— Note regarding classification of environmental conditions acc. to EN 60721

\* The supplied plug covers must remain in place over the unused interfaces during operation!

#### Conformal coating

- Coatings for printed circuit board assemblies acc. to EN 61086
- Electronic equipment on rolling stock acc. to EN 50155
- Military testing according to MIL-I-46058C, Amendment 7
- Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A

Yes; Class 2 for high availability

Yes; Class PC2 protective coating acc. to EN 50155:2017

Yes; Discoloration of coating possible during service life

Yes; Conformal coating, Class A

#### Connection method

required front connector

40-pin

#### Dimensions

Width

40 mm

Height

125 mm

Depth

120 mm

#### Weights

Weight, approx.

330 g

**last modified:**

12/14/2018