

SIPPLUS S7-300 SM 322-40-pole -25...+60 °C with conformal coating  
 Conformity with EN 50155 T1 Cat 1 CI A/B based on 6ES7322-1HF10-0AA0 . Digital output Isolated 8 DO (relay), 1x 40-pole, 24 V DC, 5 A or 230 V AC, 5 A, connectors with spring-loaded terminal can be used as of 6ES7392-1BM01-0AA0



Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	120 V
Load voltage L1	
• Rated value (AC)	230 V
Input current	
from supply voltage L+, max.	125 mA
from backplane bus 5 V DC, max.	40 mA
Power loss	
Power loss, typ.	4.2 W
Digital outputs	
Number of digital outputs	8; Relays
Switching capacity of the outputs	
• on lamp load, max.	1 500 W; 230 V AC
Output current	
• for signal "1" rated value	5 A

• for signal "1" minimum load current	5 mA
<b>Switching frequency</b>	
• with resistive load, max.	2 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	2 Hz
• mechanical, max.	10 Hz
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 60 °C, max.	5 A
— up to 70 °C, max.	5 A
vertical installation	
— up to 40 °C, max.	5 A
<b>Relay outputs</b>	
• Rated supply voltage of relay coil L+ (DC)	24 V
• Number of operating cycles, max.	300 000; 300 000 (24 V DC, at 2 A); 200 000 (120 V AC, at 3 A); 100 000 (230 V AC, at 3 A)
<b>Switching capacity of contacts</b>	
— with inductive load, max.	3 A; 3 A (230 V DC), 2 A (24 V AC)
— with resistive load, max.	8 A; 8 A (230 V DC), 5 A (24 V AC)
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	No
<b>Alarms</b>	
• Diagnostic alarm	No
<b>Diagnostic messages</b>	
• Wire-break	No
• Short-circuit	No
• Fuse blown	No
• missing load voltage	No
<b>Diagnostics indication LED</b>	
• Rated load voltage PWR (green)	No
• Fuse OK FSG (green)	No
• Status indicator digital output (green)	Yes
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
• between the channels	Yes
• between the channels, in groups of	1
• between the channels and backplane bus	Yes; Optocoupler
<b>Isolation</b>	

Isolation tested with	2000 V AC
<b>Standards, approvals, certificates</b>	
CE mark	Yes
UL approval	Yes; File E239877
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
<b>Railway application</b>	
• EN 50155	Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B, EN 50155:2007
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• min.	-25 °C
• max.	60 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-40 °C
• max.	70 °C
<b>Altitude during operation relating to sea level</b>	
• 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)
<b>Relative humidity</b>	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
<b>Use in stationary industrial systems</b>	
— 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, *
<b>Use on land craft, rail vehicles and special-purpose vehicles</b>	
— 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; *
<b>Use on ships/at sea</b>	
— 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

— to mechanically 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); \*

Yes; Class 6S3 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.

320 g

**last modified:**

12/14/2018