



SIPLUS S7-300 SM 322-20-pole based on 6ES7322-8BF00-0AB0 with conformal coating, -25...+60 °C,

Figure similar

General information	
based on	6ES7322-8BF00-0AB0
Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> permissible range, lower limit (DC) 	20.4 V
<ul style="list-style-type: none"> permissible range, upper limit (DC) 	28.8 V
Input current	
from load voltage L+ (without load), max.	90 mA
from backplane bus 5 V DC, max.	70 mA
Power loss	
Power loss, typ.	5 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes; Electronic
<ul style="list-style-type: none"> Response threshold, typ. 	0.75 to 1.5 A
Limitation of inductive shutdown voltage to	L+ (-45 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
<ul style="list-style-type: none"> on lamp load, max. 	5 W
Load resistance range	
<ul style="list-style-type: none"> lower limit 	48 Ω
<ul style="list-style-type: none"> upper limit 	3 kΩ
Output voltage	
<ul style="list-style-type: none"> for signal "1", min. 	L+ (-0.8 to -1.6 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 "1" permissible range for 0 to 40 °C, min. 	10 mA
<ul style="list-style-type: none"> for signal "1" permissible range for 0 to 40 °C, max. 	0.6 A
<ul style="list-style-type: none"> for signal "1" permissible range for 40 to 60 °C, min. 	10 mA
<ul style="list-style-type: none"> for signal "1" permissible range for 40 to 60 °C, max. 	0.6 A
<ul style="list-style-type: none"> for signal "1" minimum load current 	10 mA
<ul style="list-style-type: none"> for signal "0" residual current, max. 	0.5 A
Output delay with resistive load	
<ul style="list-style-type: none"> "0" to "1", max. 	180 μs
<ul style="list-style-type: none"> "1" to "0", max. 	245 μs
Parallel switching of two outputs	
<ul style="list-style-type: none"> for uprating 	No
<ul style="list-style-type: none"> for redundant control of a load 	Outputs with series diodes only

Switching frequency	
<ul style="list-style-type: none"> with resistive load, max. with inductive load, max. with inductive load (acc. to IEC 60947-5-1, DC13), max. on lamp load, max. 	<p>100 Hz</p> <p>2 Hz</p> <p>2 Hz</p> <p>10 Hz</p>
Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	3 A
— up to 70 °C, max.	2.5 A; (without diode) & 1.5 A (with diode)
vertical installation	
— up to 40 °C, max.	4 A
Cable length	
<ul style="list-style-type: none"> shielded, max. unshielded, max. 	<p>1 000 m</p> <p>600 m</p>
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Parameterizable
Alarms	
<ul style="list-style-type: none"> Diagnostic alarm 	Yes; Parameterizable
Diagnoses	
<ul style="list-style-type: none"> Diagnostic information readable Wire-break Short-circuit Fuse blown missing load voltage 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p>
Diagnostics indication LED	
<ul style="list-style-type: none"> Rated load voltage PWR (green) Fuse OK FSG (green) Group error SF (red) Status indicator digital output (green) Channel fault indicator F (red) 	<p>No</p> <p>No</p> <p>Yes</p> <p>Yes; per channel</p> <p>Yes</p>
Potential separation	
Potential separation digital outputs	
<ul style="list-style-type: none"> between the channels, in groups of between the channels and backplane bus 	<p>8</p> <p>Yes; Optocoupler</p>
Isolation	
Isolation tested with	500 V DC
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes; File E239877
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Railway application	
<ul style="list-style-type: none"> EN 50155 	Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B, EN 50155:2007 (see SIOS entry 109755985)
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> min. max. 	<p>-25 °C; = Tmin</p> <p>70 °C; = Tmax; 60 °C @ UL/cUL use</p>
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> Installation altitude above sea level, max. Ambient air temperature-barometric pressure-altitude 	<p>5 000 m</p> <p>Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (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)</p>
Relative humidity	
<ul style="list-style-type: none"> 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
 — to mechanically 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); *
 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
 — to chemically active substances according to EN 60721-3-5
 — to mechanically 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
 Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 50155 (ST2); *
 Yes; Class 5S3 incl. sand, dust; *

Use on ships/at sea

— to biologically active substances according to EN 60721-3-6
 — to chemically active substances according to EN 60721-3-6
 — to mechanically active substances according to EN 60721-3-6

Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
 Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
 Yes; Class 6S3 incl. sand, dust; *

Usage in industrial process technology

— Against chemically active substances acc. to EN 60654-4
 — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04

Yes; Class 3 (excluding trichlorethylene)
 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 20-pin

Dimensions

Width 40 mm
 Height 125 mm
 Depth 120 mm

Weights

Weight, approx. 210 g

Classifications

	Version	Classification
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

[Miscellaneous](#)



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



EMV

For use in hazardous locations

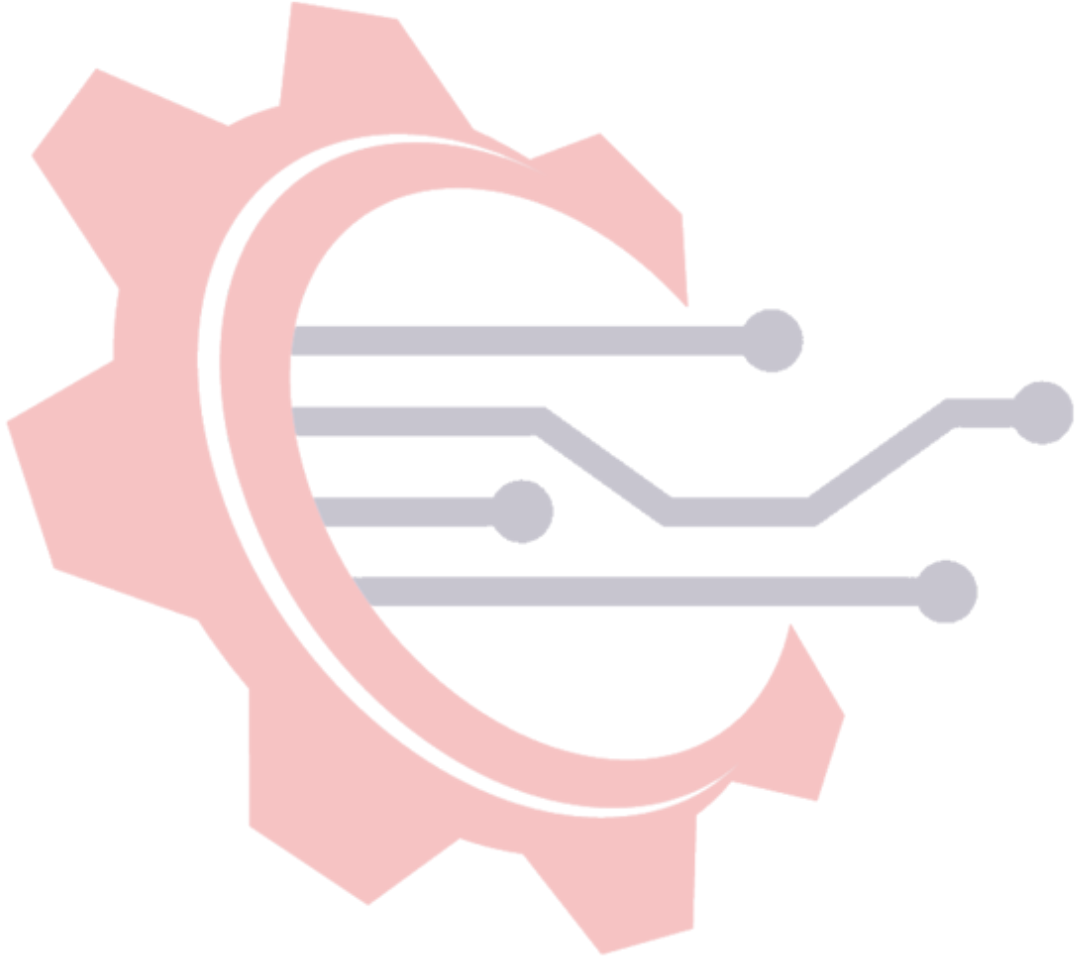
[KC](#)



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last modified:

5/29/2024 



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