



Figure similar

\*\*\*spare part\*\*\* SIPLUS S7-300 SM 322 8 DO 48-125 V based on 6ES7322-1CF00-0AA0 with conformal coating, -25...+70 °C, digital output isolated, 8 DO, 48-125 V DC, 1.5 A, 1x 20-pole

General information	
based on	<a href="#">6ES7322-1CF00-0AA0</a>
Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> <li>permissible range, lower limit (DC)</li> <li>permissible range, upper limit (DC)</li> <li>Reverse polarity protection</li> </ul>	48 V; 48 V DC to 125 V DC 40 V 140 V Yes; through fuse
Input current	
from load voltage L+ (without load), max.	2 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	7.2 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes; Electronic
<ul style="list-style-type: none"> <li>Response threshold, typ.</li> </ul>	4.4 A
Limitation of inductive shutdown voltage to	M (-1 V)
Controlling a digital input	Yes
Spare fuses	6.3 A / 250 V, quick-response, 5x 20 mm
Switching capacity of the outputs	
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	15 W; 15 W (48 V) or 40 W (125 V)
Output voltage	
<ul style="list-style-type: none"> <li>for signal "1", min.</li> </ul>	L+ (-1.2 V)
Output current	
<ul style="list-style-type: none"> <li>for signal "1" rated value</li> <li>for signal "1" permissible range for 0 to 40 °C, min.</li> <li>for signal "1" permissible range for 0 to 40 °C, max.</li> <li>for signal "1" permissible range for 40 to 60 °C, min.</li> <li>for signal "1" permissible range for 40 to 60 °C, max.</li> <li>for signal "1" minimum load current</li> <li>for signal "1" permissible surge current, max.</li> <li>for signal "0" residual current, max.</li> </ul>	1.5 A 10 mA 1.5 A 10 mA 1.5 A 10 mA 3 A; for 10 ms 0.5 mA
Output delay with resistive load	
<ul style="list-style-type: none"> <li>"0" to "1", max.</li> <li>"1" to "0", max.</li> </ul>	2 ms 15 ms
Parallel switching of two outputs	
<ul style="list-style-type: none"> <li>for uprating</li> </ul>	No

• for redundant control of a load	Yes; only outputs of the same group
<b>Switching frequency</b>	
• with resistive load, max.	25 Hz
• with inductive load, max.	0.5 Hz
• with inductive load (acc. to IEC 60947-5-1, DC13), max.	0.5 Hz
• on lamp load, max.	10 Hz
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 40 °C, max.	6 A
— up to 50 °C, max.	4 A
— up to 60 °C, max.	3 A
— up to 70 °C, max.	1 A
vertical installation	
— up to 40 °C, max.	4 A
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Interrupts/diagnostics/status information</b>	
Alarms	No
Diagnostics function	No
<b>Alarms</b>	
• Diagnostic alarm	No
<b>Diagnoses</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
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
<b>Potential separation</b>	
Potential separation digital outputs	
• between the channels	Yes
• between the channels, in groups of	4
• between the channels and backplane bus	Yes; Optocoupler
<b>Isolation</b>	
Isolation tested with	1 500 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; T1 Category 1 Class A/B horizontal mounting position
<b>Ambient conditions</b>	
Ambient temperature during operation	
• min.	-25 °C
• max.	70 °C; = Tmax; for use on railway vehicles according to EN50155, the rated temperature range -25 ... +55 °C (T1) or 60 °C @ UL/ULhaz/ATEX/FM use applies
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °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)

<b>Relative humidity</b>	
<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)
<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 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	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; *
<b>Usage in industrial process technology</b>	
— 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)
<b>Remark</b>	
— 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
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**Dimensions**

Width	40 mm
Height	125 mm
Depth	120 mm

**Weights**

Weight, approx.	250 g
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**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	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

**General Product Approval**

[Manufacturer Declaration](#)



[China RoHS](#)



**EMV**



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