



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	6ES7322-1CF00-0AA0
Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection 	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"> Response threshold, typ. 	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"> on lamp load, max. 	15 W; 15 W (48 V) or 40 W (125 V)
Output voltage	
<ul style="list-style-type: none"> for signal "1", min. 	L+ (-1.2 V)
Output current	
<ul style="list-style-type: none"> for signal "1" rated value for signal "1" permissible range for 0 to 40 °C, min. for signal "1" permissible range for 0 to 40 °C, max. for signal "1" permissible range for 40 to 60 °C, min. for signal "1" permissible range for 40 to 60 °C, max. for signal "1" minimum load current for signal "1" permissible surge current, max. for signal "0" residual current, max. 	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"> "0" to "1", max. "1" to "0", max. 	2 ms 15 ms
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 	Yes; only outputs of the same group
Switching frequency	
<ul style="list-style-type: none"> • with resistive load, max. 	25 Hz
<ul style="list-style-type: none"> • with inductive load, max. 	0.5 Hz
<ul style="list-style-type: none"> • with inductive load (acc. to IEC 60947-5-1, DC13), max. 	0.5 Hz
<ul style="list-style-type: none"> • on lamp load, max. 	10 Hz
Total current of the outputs (per group)	
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
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	1 000 m
<ul style="list-style-type: none"> • unshielded, max. 	600 m
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	No
Diagnoses	
<ul style="list-style-type: none"> • Wire break 	No
<ul style="list-style-type: none"> • Short-circuit 	No
<ul style="list-style-type: none"> • Fuse blown 	No
<ul style="list-style-type: none"> • missing load voltage 	No
Diagnostics indication LED	
<ul style="list-style-type: none"> • Rated load voltage PWR (green) 	No
<ul style="list-style-type: none"> • Fuse OK FSG (green) 	No
<ul style="list-style-type: none"> • Group error SF (red) 	Yes
<ul style="list-style-type: none"> • Status indicator digital output (green) 	Yes
Potential separation	
Potential separation digital outputs	
<ul style="list-style-type: none"> • between the channels 	Yes
<ul style="list-style-type: none"> • between the channels, in groups of 	4
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes; Optocoupler
Isolation	
Isolation tested with	1 500 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
Railway application	
<ul style="list-style-type: none"> • EN 50155 	Yes; T1 Category 1 Class A/B horizontal mounting position
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • min. 	-25 °C
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • min. 	-40 °C
<ul style="list-style-type: none"> • max. 	70 °C
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • Installation altitude above sea level, max. 	2 000 m
<ul style="list-style-type: none"> • Ambient air temperature-barometric pressure-altitude 	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)

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	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	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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