

Data sheet

6ES7322-1FF01-0AA0



Figure similar

spare part SIMATIC S7-300, digital output SM 322, isolated, 8 DO, 120/230 V AC, 1 A, 1x 20-pole

Supply voltage

Load voltage L1	
• Rated value (AC)	230 V; 120/230 V AC
• permissible range, lower limit (AC)	93 V
• permissible range, upper limit (AC)	264 V
• permissible frequency range, lower limit	47 Hz
• permissible frequency range, upper limit	63 Hz

Input current

from load voltage L1 (without load), max.	2 mA
from backplane bus 5 V DC, max.	100 mA

Power loss

Power loss, typ.	8.6 W
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Digital outputs

Number of digital outputs	8
Short-circuit protection	Yes; Fuse 8 A, 250 V; per group
• required current for fuse shutdown, min.	40 A
• Response time, max.	300 ms
Controlling a digital input	Yes
Size of motor starters according to NEMA, max.	5 NEMA compliant
Spare fuses	8 A / quick response
Zero-crossing switch	Yes; Max. 60 V

Switching capacity of the outputs

• on lamp load, max.	50 W
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Output voltage

• for signal "1", min.	L1 (-1.5 V)
• for signal "1" (at max. current), min.	L1 (-1.5 V)
• for signal "1" (at min. current), min.	L1 (-8.5 V)

Output current

• for signal "1" rated value	2 A
• for signal "1" permissible range for 0 to 40 °C, min.	10 mA
• for signal "1" permissible range for 0 to 40 °C, max.	2 A
• for signal "1" permissible range for 40 to 60 °C, min.	10 mA
• for signal "1" permissible range for 40 to 60 °C, max.	1 A
• for signal "1" minimum load current	10 mA
• for signal "1" permissible surge current, max.	20 A; max. 1 AC cycle
• for signal "0" residual current, max.	2 mA

Output delay with resistive load

• "0" to "1", max.	1 AC cycle
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• "1" to "0", max.	1 AC cycle		
Parallel switching of two outputs			
• for uprating	No		
• for redundant control of a load	Yes		
Switching frequency			
• with resistive load, max.	10 Hz		
• with inductive load, max.	0.5 Hz		
• with inductive load (acc. to IEC 60947-5-1, AC15), max.	0.5 Hz		
• on lamp load, max.	1 Hz		
Total current of the outputs (per group)			
horizontal installation			
— up to 40 °C, max.	4 A		
— up to 60 °C, max.	2 A		
vertical installation			
— up to 40 °C, max.	2 A		
Cable length			
• shielded, max.	1 000 m		
• unshielded, max.	600 m		
Interrupts/diagnostics/status information			
Alarms	No		
Diagnostics function	Yes; Fuse blown or load voltage missing		
Alarms			
• Diagnostic alarm	No		
Diagnoses			
• Wire break	No		
• Short-circuit	No		
• Fuse blown	Yes		
• missing load voltage	Yes		
Diagnostics indication LED			
• Rated load voltage PWR (green)	Yes		
• Fuse OK FSG (green)	Yes		
• Group error SF (red)	Yes		
• Status indicator digital output (green)	Yes		
Potential separation			
Potential separation digital outputs			
• between the channels	Yes		
• between the channels, in groups of	4		
• between the channels and backplane bus	Yes; Optocoupler		
Isolation			
Isolation tested with	1 500 V AC		
Connection method			
required front connector	20-pin		
Dimensions			
Width	40 mm		
Height	125 mm		
Depth	120 mm		
Weights			
Weight, approx.	275 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	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

[Miscellaneous](#)

[Manufacturer Declaration](#)



General Product Approval	EMV	For use in hazardous locations
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[China RoHS](#)

[Manufacturer Declaration](#)



[FM](#)

Maritime application



[NK / Nippon Kaiji Kyokai](#)



Maritime application



[CCS \(China Classification Society\)](#)

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