



***** spare part ***** SIMATIC S7/PCS7, digital output SM 322, 16 DO; 24 V DC / 0.5 A, diagnostics-capable, wire break detection with 0 and 1 signal, 1 x 40-pole, connection IM 153-X HF required

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	6 W
Digital outputs	
Number of digital outputs	16
Short-circuit protection	Yes
• Response threshold, typ.	1.4 A; per channel
Limitation of inductive shutdown voltage to	L+ (-68 V)
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
• upper limit	4 kΩ
Output voltage	
• for signal "1", min.	L+ (-0.7 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range, min.	5 mA
• for signal "1" permissible range, max.	0.6 A
• for signal "0" residual current, max.	0.7 mA
Output delay with resistive load	
• "0" to "1", max.	3 ms
• "1" to "0", max.	3 ms
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	100 Hz
• with inductive load (acc. to IEC 60947-5-1, DC13), max.	2 Hz
• on lamp load, max.	10 Hz
Total current of the outputs (per group)	
horizontal installation	

— 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	Yes	
Diagnostics function	Yes	
Alarms		
• Diagnostic alarm	Yes	
Diagnoses		
• Diagnostic information readable	Yes	
• Wire break	Yes	
• Short-circuit	Yes	
• Missing load voltage	Yes	
Diagnostics indication LED		
• Rated load voltage PWR (green)	No	
• Group error SF (red)	Yes	
• Status indicator digital output (green)	Yes	
• Channel fault indicator F (red)	Yes	
Potential separation		
Potential separation digital outputs		
• between the channels	No	
• between the channels, in groups of	4	
• between the channels and backplane bus	Yes	
• between the channels and the power supply of the electronics	No	
Isolation		
Isolation tested with	500 V DC	
Connection method		
required front connector	1x 40-pin	
Dimensions		
Width	40 mm	
Height	125 mm	
Depth	120 mm	
Weights		
Weight, approx.	350 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		

[Manufacturer Declaration](#)

[Miscellaneous](#)



General Product Approval

For use in hazardous locations

[China RoHS](#)

[Manufacturer Declaration](#)

[Miscellaneous](#)



[FM](#)

For use in hazardous locations

Maritime application



[Miscellaneous](#)



Maritime application

[NK / Nippon Kaiji Kyokai](#)



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