



Figure similar

***** spare part ***** SIMATIC S7, digital output SM 322, isolated, 4 DO; 15 V / 20 mA, 1 x 20-pole, for signals from the hazardous area, diagnostics-capable, PTB tested

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	160 mA
from backplane bus 5 V DC, max.	85 mA
Power loss	
Power loss, typ.	3 W
Digital outputs	
Number of digital outputs	4
Short-circuit protection	Yes; Electronic
• Response threshold, typ.	Output current with short-circuit protection, min. 20.5 mA + 10 %
Load resistance range	
• upper limit	200 Ω; Two-wire connection
Output voltage	
• Rated value (DC)	15 V
Output current	
• for signal "1" permissible range for 0 to 60 °C, max.	20 mA; ±10 %
Switching frequency	
• with resistive load, max.	100 Hz
Cable length	
• unshielded, max.	200 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
• Diagnostic information readable	Yes
• Short-circuit	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
• Channel fault indicator F (red)	Yes
Ex(i) characteristics	
Module for Ex(i) protection	Yes
maximum values for connecting terminals for gas group IIC	
• Uo (no-load voltage), max.	15.75 V
• Io (short-circuit current), max.	85 mA
• Po (power output), max.	335 mW

- Co (permissible external capacity), max. 500 nF
- Lo (permissible external inductivity), max. 5 mH

Potential separation

Potential separation digital outputs

- between the channels Yes; 60 V DC/30 V AC when used in the hazardous area; 400 V DC/250 V AC when used in NON-hazardous area
- between the channels, in groups of 1
- between the channels and backplane bus Yes; 60 V DC/30 V AC when used in the hazardous area; 400 V DC/250 V AC when used in NON-hazardous area
- Between the channels and load voltage L+ Yes; 60 V DC/30 V AC when used in the hazardous area; 400 V DC/250 V AC when used in NON-hazardous area

Standards, approvals, certificates

Use in hazardous areas

- ATEX marking [Ex ib] IIC
- FM marking AIS CL.1, DIV 1, GP A, B, C, D; CL.I, DIV 2, GP A, B, C, D T4
- Test number PTB Ex-96.D.2102X

Ambient conditions

Ambient temperature during operation

- max. 60 °C

Connection method

- required front connector 20-pin

Dimensions

- Width 40 mm
- Height 125 mm
- Depth 120 mm

Weights

- Weight, approx. 230 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](#)

[China RoHS](#)



General Product Approval

For use in hazardous locations



[FM](#)



For use in hazardous locations

Maritime application

[CCC-Ex](#)



[NK / Nippon Kaiji Ky-
okai](#)



last modified:

4/7/2025