

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



Figure similar

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
<b>Output current</b>	
• for signal "1" permissible range for 0 to 60 °C, max.	20 mA; ±10 %
<b>Switching frequency</b>	
• with resistive load, max.	100 Hz
<b>Cable length</b>	
• unshielded, max.	200 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
<b>Diagnoses</b>	
• Diagnostic information readable	Yes
• Short-circuit	Yes
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
• Channel fault indicator F (red)	Yes
<b>Ex(i) characteristics</b>	
Module for Ex(i) protection	Yes
<b>Max. values of output circuits for gas group IIC (per channel)</b>	
• Co (permissible external capacity), max.	500 nF
• Io (short-circuit current), max.	85 mA
• Lo (permissible external inductivity), max.	5 mH
• Po (power of load), max.	335 mW
• Uo (output no-load voltage), max.	15.75 V
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
• 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
<b>Standards, approvals, certificates</b>	
<b>Use in hazardous areas</b>	
• Type of protection acc. to EN 50020 (CENELEC)	[EEx ib] IIC
• Type of protection acc. to FM	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
<b>Ambient conditions</b>	

### 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

**last modified:** 10/13/2020