

SIMATIC S7, digital output SM 322, isolated, 4 DO, 24 V DC, 10 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. 10 mA + 10 %
Load resistance range	
• upper limit	390 Ω; Two-wire connection
Output voltage	

• Rated value (DC)	24 V
<b>Output current</b>	
• for signal "1" permissible range for 0 to 60 °C, max.	10 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.	90 nF
• Io (short-circuit current), max.	70 mA
• Lo (permissible external inductivity), max.	6.7 mH
• Po (power of load), max.	440 mW
• Uo (output no-load voltage), max.	25.2 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)	[Ex ib] IIC
• Type of protection acc. to FM	Class I, Division 2, Group A, B, C, D T4
• Test number PTB	Ex-96.D.2093X
<b>Ambient conditions</b>	

<b>Ambient temperature during operation</b>	
• max.	60 °C
<b>Connection method</b>	
required front connector	20-pin
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	120 mm
<b>Weights</b>	
Weight, approx.	230 g
<b>last modified:</b>	10/13/2020