



Figure similar

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

| Supply voltage  |   |
|---|---|
| Load voltage L+   |   |
| <ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>                                      | 24 V  |
| <ul style="list-style-type: none"> <li>Reverse polarity protection</li> </ul>                           | 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   |
| <ul style="list-style-type: none"> <li>Response threshold, typ.</li> </ul>                              | Output current with short-circuit protection, min. 10 mA + 10 % |
| Load resistance range   |   |
| <ul style="list-style-type: none"> <li>upper limit</li> </ul>   | 390 Ω; Two-wire connection                                      |
| Output voltage  |   |
| <ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>                                      | 24 V  |
| Output current  |   |
| <ul style="list-style-type: none"> <li>for signal "1" permissible range for 0 to 60 °C, max.</li> </ul> | 10 mA; ±10 %  |
| Switching frequency   |   |
| <ul style="list-style-type: none"> <li>with resistive load, max.</li> </ul>                             | 100 Hz  |
| Cable length  |   |
| <ul style="list-style-type: none"> <li>unshielded, max.</li> </ul>                                      | 200 m   |
| Interrupts/diagnostics/status information   |   |
| Diagnostics function  | Yes   |
| Diagnoses   |   |
| <ul style="list-style-type: none"> <li>Diagnostic information readable</li> </ul>                       | Yes   |
| <ul style="list-style-type: none"> <li>Short-circuit</li> </ul>   | Yes   |
| Diagnostics indication LED  |   |
| <ul style="list-style-type: none"> <li>Group error SF (red)</li> </ul>                                  | Yes   |
| <ul style="list-style-type: none"> <li>Status indicator digital output (green)</li> </ul>               | Yes   |
| <ul style="list-style-type: none"> <li>Channel fault indicator F (red)</li> </ul>                       | Yes   |
| Ex(i) characteristics   |   |
| Module for Ex(i) protection   | Yes   |
| maximum values for connecting terminals for gas group IIC   |   |
| <ul style="list-style-type: none"> <li>U<sub>o</sub> (no-load voltage), max.</li> </ul>                 | 25.2 V  |

- I<sub>o</sub> (short-circuit current), max. 70 mA
- P<sub>o</sub> (power output), max. 440 mW
- C<sub>o</sub> (permissible external capacity), max. 90 nF
- L<sub>o</sub> (permissible external inductivity), max. 6.7 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

- Test number PTB Ex-96.D.2093X

### 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

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