

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                                     |
| Output current  |  |
| • for signal "1" permissible range for 0 to 60 °C, max. | 10 mA; ±10 %                             |
| Switching frequency                                     |  |
| • with resistive load, max.                             | 100 Hz                                   |
| Cable length  |  |
| • unshielded, max.                                      | 200 m                                    |
| <b>Interrupts/diagnostics/status information</b>        |  |
| Diagnostic functions                                    | Yes                                      |
| Diagnostic messages                                     |  |
| • 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                                      |
| <b>Ex(i) characteristics</b>                            |  |
| Module for Ex(i) protection                             | Yes                                      |
| Maximum values of output circuits (per channel)         |  |
| • 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>                             |  |
| Potential separation digital outputs                    |  |
| • Potential separation digital outputs                  | Yes                                      |
| • between the channels, in groups of                    | 1  |
| <b>Standards, approvals, certificates</b>               |  |
| Use in hazardous areas                                  |  |
| • Type of protection acc. to EN 50020 (CENELEC)         | [EEx 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>                               |  |
| Ambient temperature during operation                    |  |
| • max.  | 60 °C                                    |
| <b>Connection method</b>                                |  |
| required front connector                                | 20-pin                                   |

**Weights**

Weight, approx.

230 g

**last modified:**

08/13/2018