

SIMATIC S7, DIGITAL OUTPUT L SM 322, OPTICALLY ISOLATED, 4 DO, 15V / 20mA, 1 X 20 PIN, FOR SIGNALS FROM HAZARDOUS AREAS CAPABLE OF DIAGNOST., 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                                                          |
| 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               |                                                               |
| 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                                                           |
| Ex(i) characteristics                                   |                                                               |
| Module for Ex(i) protection                             | Yes                                                           |
| Maximum values of output circuits (per channel)         |                                                               |
| • 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                                                       |
| Potential separation                                    |                                                               |
| Potential separation digital outputs                    |                                                               |
| • Potential separation digital outputs                  | Yes                                                           |
| • between the channels, in groups of                    | 1                                                             |
| Standards, approvals, certificates                      |                                                               |
| Use in hazardous areas                                  |                                                               |
| • 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                                                 |
| Ambient conditions                                      |                                                               |
| Ambient temperature during operation                    |                                                               |
| • max.                                                  | 60 °C                                                         |
| Connection method                                       |                                                               |
| required front connector                                | 20-pin                                                        |

## Weights

Weight, approx.

230 g

**last modified:**

10/28/2016