

SIMATIC S7-1200, Digital input SB 1221, 4 DI, 24 V DC 200 kHz,  
Sourcing input



Figure similar

### General information

Product type designation SB 1221, DI 4x24 V DC 200 kHz

### Input current

from backplane bus 5 V DC, typ. 40 mA

### Power loss

Power loss, typ. 1 W

### Digital inputs

Number of digital inputs 4; Current-sourcing

- in groups of 4

### Input voltage

- Type of input voltage DC
- Rated value (DC) 24 V
- for signal "0" (L+ minus 5.0 V DC) ... L+ (1.4 ... 0 mA)
- for signal "1" 0 V ... (L+ minus 10 V DC (10 ... 2.9 mA))

### Input current

|  |   |
|--|---|
| • for signal "0", max. (permissible quiescent current) | 1.4 mA  |
| • for signal "1", min.                                 | 2.9 mA  |
| • for signal "1", typ.                                 | 7 mA  |
| <b>Input delay (for rated value of input voltage)</b>  |   |
| for standard inputs                                    |   |
| — parameterizable                                      | Yes; 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 $\mu$ s; 0.05 / 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 ms |
| for interrupt inputs                                   |   |
| — parameterizable                                      | Yes   |
| for technological functions                            |   |
| — parameterizable                                      | Yes   |
| <b>Cable length</b>                                    |   |
| • shielded, max.                                       | 50 m; shielded, twisted pair  |
| <b>Interrupts/diagnostics/status information</b>       |   |
| Diagnostics indication LED                             |   |
| • for status of the inputs                             | Yes   |
| <b>Standards, approvals, certificates</b>              |   |
| CE mark  | Yes   |
| CSA approval   | Yes   |
| UL approval  | Yes   |
| cULus  | Yes   |
| FM approval  | Yes   |
| RCM (formerly C-TICK)                                  | Yes   |
| KC approval  | Yes   |
| Marine approval  | Yes   |
| <b>Ambient conditions</b>                              |   |
| Free fall  |   |
| • Fall height, max.                                    | 0.3 m; five times, in product package   |
| Ambient temperature during operation                   |   |
| • min.   | -20 °C  |
| • max.   | 60 °C   |
| • horizontal installation, min.                        | -20 °C  |
| • horizontal installation, max.                        | 60 °C   |
| • vertical installation, min.                          | -20 °C  |
| • vertical installation, max.                          | 50 °C   |
| Ambient temperature during storage/transportation      |   |
| • min.   | -40 °C  |
| • max.   | 70 °C   |
| Air pressure acc. to IEC 60068-2-13                    |   |
| • Storage/transport, min.                              | 660 hPa   |

|                           |           |
|---------------------------|-----------|
| • Storage/transport, max. | 1 080 hPa |
|---------------------------|-----------|

#### Relative humidity

|   |      |
|---|------|
| • Operation at 25 °C without condensation, max. | 95 % |
|---|------|

#### Mechanics/material

##### Enclosure material (front)

|           |     |
|-----------|-----|
| • Plastic | Yes |
|-----------|-----|

#### Dimensions

|       |       |
|-------|-------|
| Width | 38 mm |
|-------|-------|

|        |       |
|--------|-------|
| Height | 62 mm |
|--------|-------|

|       |       |
|-------|-------|
| Depth | 21 mm |
|-------|-------|

#### Weights

|                 |      |
|-----------------|------|
| Weight, approx. | 35 g |
|-----------------|------|

|                       |            |
|-----------------------|------------|
| <b>last modified:</b> | 10/13/2020 |
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