

SIMATIC S7-300, DIGITAL INPUT SM 321, OPTICALLY ISOLATED
16 DI, 120/230V AC, 1 X 20 PIN



Figure similar

| Supply voltage | |
|---|--|
| Load voltage L1 | |
| • Rated value (AC) | 230 V; 120/230 V AC; all load voltages must have the same phase. |
| Input current | |
| from backplane bus 5 V DC, max. | 29 mA |
| Power loss | |
| Power loss, typ. | 4.9 W |
| Digital inputs | |
| Number of digital inputs | 16 |
| Input characteristic curve in accordance with IEC 61131, type 1 | Yes |
| Number of simultaneously controllable inputs | |
| horizontal installation | |
| — up to 40 °C, max. | 16 |
| — up to 60 °C, max. | 16 |

| | |
|---|---|
| vertical installation | |
| — up to 40 °C, max. | 16 |
| Input voltage | |
| • Type of input voltage | AC |
| • Rated value (AC) | 230 V; 120/230V AC |
| • for signal "0" | 0 to 40V |
| • for signal "1" | 79 to 264V |
| • Frequency range | 47 ... 63 Hz |
| Input current | |
| • for signal "1", typ. | 6.5 mA; (120V, 60Hz), 16mA (230V, 50Hz) |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — parameterizable | No |
| — at "0" to "1", min. | 25 ms |
| — at "0" to "1", max. | 25 ms |
| — at "1" to "0", max. | 25 ms |
| Cable length | |
| • shielded, max. | 1 000 m |
| • unshielded, max. | 600 m |
| Encoder | |
| Connectable encoders | |
| • 2-wire sensor | Yes |
| — permissible quiescent current (2-wire sensor), max. | 2 mA |
| Isochronous mode | |
| Isochronous operation (application synchronized up to terminal) | No |
| Interrupts/diagnostics/status information | |
| Diagnostic functions | No |
| Alarms | |
| • Diagnostic alarm | No |
| • Hardware interrupt | No |
| Diagnostics indication LED | |
| • Group error SF (red) | No |
| • Status indicator digital input (green) | Yes |
| Potential separation | |
| Potential separation digital inputs | |
| • between the channels | No |
| • between the channels, in groups of | 4 |
| • between the channels and backplane bus | Yes; Optocoupler |

Isolation

Isolation tested with 4 000 V DC

Connection method

required front connector 20-pin

Dimensions

Width 40 mm

Height 125 mm

Depth 120 mm

Weights

Weight, approx. 240 g

last modified: 03/24/2017