

SIMATIC S7-300, Digital input SM 321, isolated, 16 DI, 24-48 V AC/DC with single rooting, 1x 40-pole



Figure similar

| Supply voltage | |
|---------------------------------------|-------------------------------|
| Load voltage L+ | |
| • Rated value (DC) | 24 V |
| • permissible range, lower limit (DC) | 24 V |
| • permissible range, upper limit (DC) | 48 V |
| Load voltage L1 | |
| • Rated value (AC) | 24 V |
| • permissible range, lower limit (AC) | 24 V |
| • permissible range, upper limit (AC) | 48 V |
| Input current | |
| from backplane bus 5 V DC, max. | 100 mA |
| Power loss | |
| Power loss, typ. | 1.5 W; at 24 V; 2,8 W at 48 V |
| 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/DC |
| • Rated value (DC) | 24 V; DC 24 or 48 V |
| • Rated value (AC) | 24 V; 24 V AC or 48 V AC (0 ... 63 Hz) |
| • for signal "0" | -5V AC to +5V AC |
| • for signal "1" | 14V AC to 60V AC |
| Input current | |
| • for signal "1", typ. | 2.7 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — parameterizable | No |
| — at "0" to "1", min. | 16 ms |
| — at "0" to "1", max. | 16 ms |
| — at "1" to "0", max. | 16 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. | 1 mA |
| Isochronous mode | |
| Isochronous operation (application synchronized up to terminal) | No |
| Interrupts/diagnostics/status information | |
| Diagnostics function | 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 | Yes |
| • between the channels, in groups of | 1 |
| • between the channels and backplane bus | Yes; Optocoupler |

Permissible potential difference

| | |
|----------------------------|-------------------|
| between different circuits | 170 V DC/120 V AC |
|----------------------------|-------------------|

Isolation

| | |
|-----------------------|-----------|
| Isolation tested with | 1500 V AC |
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Connection method

| | |
|--------------------------|--------|
| required front connector | 40-pin |
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Dimensions

| | |
|--------|--------|
| Width | 40 mm |
| Height | 125 mm |
| Depth | 120 mm |

Weights

| | |
|-----------------|-------|
| Weight, approx. | 260 g |
|-----------------|-------|

last modified: 12/14/2018