

SIMATIC S7-400, digital input SM 421, isolated 32 DI; 24 V DC



|  |                     |
|--|---------------------|
| <b>Input current</b>                                   |                     |
| from backplane bus 5 V DC, max.                        | 20 mA               |
| <b>Power loss</b>                                      |                     |
| Power loss, typ.                                       | 6 W                 |
| <b>Digital inputs</b>                                  |                     |
| Number of digital inputs                               | 32                  |
| Number of simultaneously controllable inputs           |                     |
| • Number of simultaneously controllable inputs         | 32                  |
| <b>Input voltage</b>                                   |                     |
| • Type of input voltage                                | DC                  |
| • Rated value (DC)                                     | 24 V                |
| • for signal "0"                                       | -30 V DC to +5 V DC |
| • for signal "1"                                       | 13 V DC to 30 V DC  |
| <b>Input current</b>                                   |                     |
| • for signal "0", max. (permissible quiescent current) | 1.3 mA              |
| • for signal "1", typ.                                 | 7 mA                |
| Input delay (for rated value of input voltage)         |                     |

|   |            |
|---|------------|
| <b>for standard inputs</b>                            |            |
| — at "0" to "1", min.                                 | 1.2 ms     |
| — at "0" to "1", max.                                 | 4.8 ms     |
| — at "1" to "0", min.                                 | 1.2 ms     |
| — at "1" to "0", max.                                 | 4.8 ms     |
| <b>Cable length</b>                                   |            |
| • shielded, max.                                      | 1 000 m    |
| • unshielded, max.                                    | 600 m      |
| <b>Encoder</b>  |            |
| <b>Connectable encoders</b>                           |            |
| • 2-wire sensor                                       | Yes        |
| — permissible quiescent current (2-wire sensor), max. | 1.5 mA     |
| <b>Interrupts/diagnostics/status information</b>      |            |
| Diagnostics function                                  | No         |
| <b>Diagnostics indication LED</b>                     |            |
| • Status indicator digital input (green)              | Yes        |
| <b>Potential separation</b>                           |            |
| <b>Potential separation digital inputs</b>            |            |
| • between the channels                                | No         |
| • between the channels, in groups of                  | 32         |
| • between the channels and backplane bus              | Yes        |
| <b>Isolation</b>                                      |            |
| Isolation tested with                                 | 500 V DC   |
| <b>Dimensions</b>                                     |            |
| Width   | 25 mm      |
| Height  | 290 mm     |
| Depth   | 210 mm     |
| <b>last modified:</b>                                 | 06/09/2020 |