

SIPLUS ET 200SP, DIGITAL OUTPUT MODULE, DQ  
 16X24VDC/0.5A STANDARD, -40 ... +70 DEGREES C Startup -25°C  
 WITH CONFORMAL COATING BASED ON 6ES7132-6BH00-0BA0 .  
 FITS TO BU-TYPE A0, COLOR CODE CC00, MODULE DIAGNOSIS



| General information                                       |                            |
|---|----------------------------|
| Product type designation                                  | DQ 16x24VDC/0.5A ST        |
| Product function  |                            |
| • I&M data  | Yes                        |
| Engineering with  |                            |
| • STEP 7 TIA Portal configurable/integrated as of version | V11 SP2 with HSP 0024 / -  |
| • STEP 7 configurable/integrated as of version            | V5.5 SP2 with GSD file / - |
| Supply voltage  |                            |
| Rated value (DC)  | 24 V                       |
| permissible range, lower limit (DC)                       | 19.2 V                     |
| permissible range, upper limit (DC)                       | 28.8 V                     |
| Reverse polarity protection                               | Yes                        |
| Input current   |                            |
| Current consumption, max.                                 | 60 mA; without load        |
| Power loss  |                            |
| Power loss, typ.  | 1 W                        |

| Address area  |                                       |
|---|---------------------------------------|
| Address space per module  |                                       |
| • Address space per module, max.                                | 2 byte                                |
| Digital outputs   |                                       |
| Number of digital outputs                                       | 16; > +60 °C max. total current 1.0 A |
| Short-circuit protection  | Yes                                   |
| Limitation of inductive shutdown voltage to                     | Typ. L+ (-50 V)                       |
| Controlling a digital input                                     | Yes                                   |
| Switching capacity of the outputs                               |                                       |
| • with resistive load, max.                                     | 0.5 A                                 |
| • on lamp load, max.  | 5 W                                   |
| Load resistance range   |                                       |
| • lower limit   | 48 Ω                                  |
| • upper limit   | 12 kΩ                                 |
| Output current  |                                       |
| • for signal "1" rated value                                    | 0.5 A                                 |
| • for signal "0" residual current, max.                         | 0.1 mA                                |
| Output delay with resistive load                                |                                       |
| • "0" to "1", max.  | 50 μs                                 |
| • "1" to "0", max.  | 100 μs                                |
| Parallel switching of two outputs                               |                                       |
| • for uprating  | No                                    |
| • for redundant control of a load                               | Yes                                   |
| Switching frequency   |                                       |
| • with resistive load, max.                                     | 100 Hz                                |
| • with inductive load, max.                                     | 2 Hz                                  |
| • on lamp load, max.  | 10 Hz                                 |
| Total current of the outputs                                    |                                       |
| • Current per module, max.                                      | 8 A                                   |
| Cable length  |                                       |
| • shielded, max.  | 1 000 m                               |
| • unshielded, max.  | 200 m                                 |
| Isochronous mode  |                                       |
| Isochronous operation (application synchronized up to terminal) | Yes                                   |
| Jitter, max.  | 100 μs                                |
| Interrupts/diagnostics/status information                       |                                       |
| Substitute values connectable                                   | Yes                                   |
| Alarms  |                                       |
| • Diagnostic alarm  | Yes                                   |
| Diagnostic messages   |                                       |

|  |   |
|--|---|
| • Monitoring the supply voltage  | Yes   |
| • Wire-break   | Yes   |
| • Short-circuit  | Yes   |
| <b>Diagnostics indication LED</b>  |   |
| • Monitoring of the supply voltage (PWR-LED)                                 | Yes; green PWR LED  |
| • Channel status display   | Yes; Green LED  |
| • for module diagnostics   | Yes; green/red DIAG LED   |
| <b>Potential separation</b>  |   |
| <b>Potential separation channels</b>   |   |
| • between the channels   | No  |
| • between the channels and backplane bus                                     | Yes   |
| <b>Permissible potential difference</b>                                      |   |
| between different circuits   | 75 V DC/60 V AC   |
| <b>Isolation</b>   |   |
| Isolation tested with  | 707 V DC  |
| <b>Ambient conditions</b>  |   |
| <b>Ambient temperature during operation</b>                                  |   |
| • horizontal installation, min.  | -40 °C; = Tmin; Startup @ -25 °C  |
| • horizontal installation, max.  | 70 °C; = Tmax; > +60 °C max. total current 1.0 A  |
| • vertical installation, min.  | -40 °C; = Tmin; Startup @ -25 °C  |
| • vertical installation, max.  | 50 °C; = Tmax   |
| <b>Extended ambient conditions</b>   |   |
| • relative to ambient temperature-atmospheric pressure-installation altitude | Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m) |
| <b>Relative humidity</b>   |   |
| — With condensation, tested in accordance with IEC 60068-2-38, max.          | 100 %; RH incl. condensation/frost (no commissioning under condensation conditions)   |
| <b>Resistance</b>  |   |
| — against biologically active substances / conformity with EN 60721-3-3      | Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request  |
| — against chemically active substances / conformity with EN 60721-3-3        | Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!                      |
| — against mechanically active substances / conformity with EN 60721-3-3      | Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!   |
| <b>Dimensions</b>  |   |
| Width  | 15 mm   |
| Height   | 73 mm   |
| Depth  | 58 mm   |

## Weights

Weight, approx.

28 g

**last modified:**

06/05/2017