

SIMATIC ET 200SP, RELAY MODULE NORMALLY OPEN, RQ NO-MA4X120VDC..230VAC/5A ST, WITH MANUAL ACTUATION, PACKAGING UNIT PU 1 FITS TO BU-TYPE B0 OR B1, MODULE DIAGNOSIS



| General information                                       |                                          |
|-----------------------------------------------------------|------------------------------------------|
| Product type designation                                  | ET 200SP, RQ 4x120VDC-230VAC/5A NO MA ST |
| Firmware version                                          | V1.0                                     |
| • FW update possible                                      | Yes                                      |
| usable BaseUnits                                          | BU type B0, B1                           |
| Color code for module-specific color identification plate | CC40                                     |
| Product function                                          |                                          |
| • I&M data                                                | Yes; I&M0 to I&M3                        |
| Engineering with                                          |                                          |
| • STEP 7 TIA Portal configurable/integrated as of version | V13 SP1                                  |
| • STEP 7 configurable/integrated as of version            | V5.5 SP3 / -                             |
| • PROFIBUS as of GSD version/GSD revision                 | GSD Revision 5                           |
| • PROFINET as of GSD version/GSD revision                 | GSDML V2.3                               |
| Operating mode                                            |                                          |
| • DQ                                                      | Yes                                      |
| • DQ with energy-saving function                          | No                                       |
| • PWM                                                     | No                                       |

|                                                                    |                                                     |
|--------------------------------------------------------------------|-----------------------------------------------------|
| • Oversampling                                                     | No                                                  |
| • MSO                                                              | No                                                  |
| <b>Supply voltage</b>                                              |                                                     |
| 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                                                 |
| <b>Input current</b>                                               |                                                     |
| Current consumption, max.                                          | 100 mA; without load                                |
| <b>Power loss</b>                                                  |                                                     |
| Power loss, typ.                                                   | 1.5 W                                               |
| <b>Address area</b>                                                |                                                     |
| Address space per module                                           |                                                     |
| • Address space per module, max.                                   | 1 byte; + 1 byte for QI information                 |
| • Inputs                                                           | 1 byte; With QI                                     |
| • Outputs                                                          | 1 byte                                              |
| <b>Digital outputs</b>                                             |                                                     |
| Number of digital outputs                                          | 4                                                   |
| Short-circuit protection                                           | No                                                  |
| <b>Switching frequency</b>                                         |                                                     |
| • with resistive load, max.                                        | 2 Hz                                                |
| • with inductive load, max.                                        | 0.5 Hz                                              |
| • on lamp load, max.                                               | 2 Hz                                                |
| <b>Total current of the outputs</b>                                |                                                     |
| • Current per channel, max.                                        | 5 A                                                 |
| • Current per module, max.                                         | 20 A                                                |
| <b>Total current of the outputs (per module)</b>                   |                                                     |
| horizontal installation                                            |                                                     |
| — up to 50 °C, max.                                                | 20 A                                                |
| — up to 60 °C, max.                                                | 16 A                                                |
| vertical installation                                              |                                                     |
| — up to 40 °C, max.                                                | 20 A                                                |
| — up to 50 °C, max.                                                | 16 A                                                |
| <b>Relay outputs</b>                                               |                                                     |
| • Number of relay outputs                                          | 4                                                   |
| • Rated supply voltage of relay coil L+ (DC)                       | 24 V                                                |
| • Current consumption of relays (coil current of all relays), max. | 40 mA                                               |
| • external protection for relay outputs                            | Yes, with 6A                                        |
| • Number of operating cycles, max.                                 | 7 000 000; see additional description in the manual |

|                                                                 |                                               |
|-----------------------------------------------------------------|-----------------------------------------------|
| Switching capacity of contacts                                  |                                               |
| — with inductive load, max.                                     | 2 A; see additional description in the manual |
| — with resistive load, max.                                     | 5 A; see additional description in the manual |
| — Thermal continuous current, max.                              | 5 A                                           |
| — Switching current, min.                                       | 100 mA; 5 V DC                                |
| — Rated switching voltage (DC)                                  | 24 V DC to 120 V DC                           |
| — Rated switching voltage (AC)                                  | 24V AC to 230V AC                             |
| Cable length                                                    |                                               |
| • shielded, max.                                                | 1 000 m                                       |
| • unshielded, max.                                              | 200 m                                         |
| Isochronous mode                                                |                                               |
| Isochronous operation (application synchronized up to terminal) | No                                            |
| Interrupts/diagnostics/status information                       |                                               |
| Diagnostics function                                            | Yes                                           |
| Substitute values connectable                                   | Yes                                           |
| Alarms                                                          |                                               |
| • Diagnostic alarm                                              | Yes                                           |
| Diagnostic messages                                             |                                               |
| • Monitoring the supply voltage                                 | Yes                                           |
| • Wire-break                                                    | No                                            |
| • Short-circuit                                                 | No                                            |
| • Group error                                                   | Yes                                           |
| Diagnostics indication LED                                      |                                               |
| • Monitoring of the supply voltage (PWR-LED)                    | Yes; green PWR LED                            |
| • Channel status display                                        | Yes; Green LED                                |
| • for channel diagnostics                                       | No                                            |
| • for module diagnostics                                        | Yes; green/red DIAG LED                       |
| Potential separation                                            |                                               |
| Potential separation channels                                   |                                               |
| • between the channels                                          | Yes                                           |
| • between the channels and backplane bus                        | Yes                                           |
| • between the channels and the power supply of the electronics  | Yes                                           |
| Permissible potential difference                                |                                               |
| between channels and backplane bus/supply voltage               | 240 V AC                                      |
| Isolation                                                       |                                               |
| Isolation tested with                                           | 2 500 V DC (type test)                        |
| tested with                                                     |                                               |

- between channels and backplane bus/supply voltage
- between backplane bus and supply voltage

2500 V DC

707 V DC (type test)

## Dimensions

|        |       |
|--------|-------|
| Width  | 20 mm |
| Height | 73 mm |
| Depth  | 58 mm |

## Weights

|                 |      |
|-----------------|------|
| Weight, approx. | 45 g |
|-----------------|------|

**last modified:** 10/28/2016