




SIMATIC ET 200SP, Relay module, RQ NO 4x 120V DC..230VAC/5A ST. 4 normally open contacts, isolated contacts, packing unit: 10 pieces, fits to BU-type B0 and B1, Colour Code CC40, substitute value output, module diagnostics for: supply voltage

| General information | |
|--|--|
| Product type designation | RQ 4x120 VDC ... 230 VAC/5 A NO ST |
| HW functional status | From FS02 |
| Firmware version | V0.0 |
| <ul style="list-style-type: none"> FW update possible | No |
| usable BaseUnits | BU type B0, B1 |
| Color code for module-specific color identification plate | CC40 |
| Product function | |
| <ul style="list-style-type: none"> I&M data | Yes; I&M0 to I&M3 |
| <ul style="list-style-type: none"> Isochronous mode | No |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version | V14 |
| <ul style="list-style-type: none"> STEP 7 configurable/integrated from version | V5.5 SP3 |
| <ul style="list-style-type: none"> PCS 7 configurable/integrated from version | V8.1 SP1 |
| <ul style="list-style-type: none"> PROFIBUS from GSD version/GSD revision | One GSD file each, Revision 3 and 5 and higher |
| <ul style="list-style-type: none"> PROFINET from GSD version/GSD revision | GSDML V2.3 |
| Operating mode | |
| <ul style="list-style-type: none"> DQ | Yes |
| <ul style="list-style-type: none"> DQ with energy-saving function | No |
| <ul style="list-style-type: none"> PWM | No |
| <ul style="list-style-type: none"> Oversampling | No |
| <ul style="list-style-type: none"> MSO | No |
| Redundancy | |
| <ul style="list-style-type: none"> Redundancy capability | Yes |
| 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 (rated value) | 55 mA; without load |
| output voltage / header | |
| Rated value (AC) | 230 V |
| Power loss | |
| Power loss, typ. | 1.5 W |
| Address area | |
| Address space per module | |
| <ul style="list-style-type: none"> Inputs | + 1 byte for QI information |

| | |
|--|---|
| • Outputs | 1 byte |
| Hardware configuration | |
| Automatic encoding | Yes |
| • Mechanical coding element | Yes |
| • Type of mechanical coding element | type C |
| Selection of BaseUnit for connection variants | |
| • 2-wire connection | BU type B1 |
| • 3-wire connection | BU type B0 |
| Digital outputs | |
| Type of digital output | Relays |
| Number of digital outputs | 4 |
| Current-sinking | Yes |
| Current-sourcing | Yes |
| Digital outputs, parameterizable | Yes |
| Short-circuit protection | No |
| Parallel switching of two outputs | |
| • for logic links | Yes |
| • for uprating | No |
| • for redundant control of a load | Yes |
| Switching frequency | |
| • with resistive load, max. | 2 Hz |
| • with inductive load, max. | 0.5 Hz |
| • on lamp load, max. | 2 Hz |
| Total current of the outputs | |
| • Current per channel, max. | 5 A |
| • Current per module, max. | 20 A |
| Total current of the outputs (per module) | |
| 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 |
| Relay outputs | |
| • 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; Max. 1 385 VA, 150 W |
| — 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 |
| Interrupts/diagnostics/status information | |
| Diagnostics function | Yes |
| Substitute values connectable | Yes |
| Alarms | |
| • Diagnostic alarm | Yes |
| Diagnoses | |
| • Monitoring the supply voltage | Yes |
| • Wire-break | No |
| • Short-circuit | No |
| Diagnostics indication LED | |

| | |
|--|---|
| <ul style="list-style-type: none"> • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics | Yes; green PWR LED Yes; green LED No Yes; green/red DIAG LED |
| Potential separation | |
| Potential separation channels | |
| <ul style="list-style-type: none"> • between the channels • between the channels and backplane bus • between the channels and the power supply of the electronics | Yes Yes 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 | |
| <ul style="list-style-type: none"> • between channels and backplane bus/supply voltage • between backplane bus and supply voltage | 2 500 V DC 707 V DC (type test) |
| Standards, approvals, certificates | |
| Suitable for safety functions | No |
| Ambient conditions | |
| Ambient temperature during operation | |
| <ul style="list-style-type: none"> • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. | -30 °C 60 °C -30 °C 50 °C |
| Altitude during operation relating to sea level | |
| <ul style="list-style-type: none"> • Installation altitude above sea level, max. | 2 000 m; On request: Installation altitudes greater than 2 000 m |
| Dimensions | |
| Width | 20 mm |
| Height | 73 mm |
| Depth | 58 mm |
| Weights | |
| Weight, approx. | 40 g |
| last modified: | 1/16/2021  |