

SIMATIC ET 200SP, relay module normally open, RQ NO-MA4x120VDC..230VAC/5A ST, with manual operation, packing unit VPE 1, suitable for BU type B0 or B1, Module diagnostics



General information	
Product type designation	RQ 4x120 V DC ... 230 V AC/5 A NO MA ST
HW functional status	From FS03
Firmware version	
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	Yes
usable BaseUnits	BU type B0, B1
Color code for module-specific color identification plate	CC40
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated as of version</li> </ul>	V13 SP1
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	V5.5 SP3 / -
<ul style="list-style-type: none"> <li>PROFIBUS as of GSD version/GSD revision</li> </ul>	GSD Revision 5
<ul style="list-style-type: none"> <li>PROFINET as of GSD version/GSD revision</li> </ul>	GSDML V2.3
Operating mode	
<ul style="list-style-type: none"> <li>DQ</li> </ul>	Yes
<ul style="list-style-type: none"> <li>DQ with energy-saving function</li> </ul>	No

- PWM No
- Oversampling No
- MSO No

### 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.	100 mA; without load
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### Power loss

Power loss, typ.	1.5 W
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### Address area

Address space per module	
• Inputs	1 byte; With QI
• Outputs	1 byte

### Digital outputs

Type of digital output	Relays
Number of digital outputs	4
Short-circuit protection	No

### 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

<ul style="list-style-type: none"> <li>external protection for relay outputs</li> </ul>	Yes, with miniature fuse max. 6 A tripping current and quick-response tripping characteristic
<ul style="list-style-type: none"> <li>Number of operating cycles, max.</li> </ul>	7 000 000; see additional description in the manual
<b>Switching capacity of contacts</b>	
— 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
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>shielded, max.</li> </ul>	1 000 m
<ul style="list-style-type: none"> <li>unshielded, max.</li> </ul>	200 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
Substitute values connectable	Yes
<b>Alarms</b>	
<ul style="list-style-type: none"> <li>Diagnostic alarm</li> </ul>	Yes
<b>Diagnostic messages</b>	
<ul style="list-style-type: none"> <li>Monitoring the supply voltage</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Wire-break</li> </ul>	No
<ul style="list-style-type: none"> <li>Short-circuit</li> </ul>	No
<ul style="list-style-type: none"> <li>Group error</li> </ul>	Yes
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>Monitoring of the supply voltage (PWR-LED)</li> </ul>	Yes; green PWR LED
<ul style="list-style-type: none"> <li>Channel status display</li> </ul>	Yes; green LED
<ul style="list-style-type: none"> <li>for channel diagnostics</li> </ul>	No
<ul style="list-style-type: none"> <li>for module diagnostics</li> </ul>	Yes; green/red DIAG LED
<b>Potential separation</b>	
<b>Potential separation channels</b>	
<ul style="list-style-type: none"> <li>between the channels</li> </ul>	Yes
<ul style="list-style-type: none"> <li>between the channels and backplane bus</li> </ul>	Yes
<ul style="list-style-type: none"> <li>between the channels and the power supply of the electronics</li> </ul>	Yes
<b>Permissible potential difference</b>	
between channels and backplane bus/supply voltage	240 V AC
<b>Isolation</b>	
Isolation tested with	2 500 V DC (type test)
<b>tested with</b>	
<ul style="list-style-type: none"> <li>between channels and backplane bus/supply voltage</li> </ul>	2 500 V DC

- between backplane bus and supply voltage 707 V DC (type test)

### Standards, approvals, certificates

Suitable for safety functions No

### Ambient conditions

#### Ambient temperature during operation

- horizontal installation, min. -30 °C
- horizontal installation, max. 60 °C
- vertical installation, min. -30 °C
- vertical installation, max. 50 °C

#### Altitude during operation relating to sea level

- 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. 45 g

**last modified:** 05/09/2020