



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	
• 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 from version	V13 SP1
• STEP 7 configurable/integrated from version	V5.5 SP3 / -
• PROFIBUS from GSD version/GSD revision	One GSD file each, Revision 3 and 5 and higher
• PROFINET from GSD version/GSD revision	GSDML V2.3
Operating mode	
• DQ	Yes
• DQ with energy-saving function	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
Power loss	
Power loss, typ.	1.5 W
Address area	
Address space per module	
• Inputs	1 byte; + 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
Short-circuit protection	No
Switching frequency	
<ul style="list-style-type: none"> <li>with resistive load, max.</li> </ul>	2 Hz
<ul style="list-style-type: none"> <li>with inductive load (acc. to IEC 60947-5-1, DC13), max.</li> </ul>	0.5 Hz
<ul style="list-style-type: none"> <li>with inductive load (acc. to IEC 60947-5-1, AC15), max.</li> </ul>	0.5 Hz
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	2 Hz
Total current of the outputs	
<ul style="list-style-type: none"> <li>Current per channel, max.</li> </ul>	5 A
<ul style="list-style-type: none"> <li>Current per module, max.</li> </ul>	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	
<ul style="list-style-type: none"> <li>Number of relay outputs</li> </ul>	4
<ul style="list-style-type: none"> <li>Rated supply voltage of relay coil L+ (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>Current consumption of relays (coil current of all relays), max.</li> </ul>	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
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	
<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
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
<ul style="list-style-type: none"> <li>Diagnostic alarm</li> </ul>	Yes
Diagnoses	
<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
Diagnostics indication LED	
<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
Potential separation	
Potential separation channels	
<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
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"> <li>• between channels and backplane bus/supply voltage</li> </ul>	2 500 V DC
<ul style="list-style-type: none"> <li>• between backplane bus and supply voltage</li> </ul>	707 V DC (type test)
<b>Standards, approvals, certificates</b>	
Suitable for safety functions	No
<b>Ambient conditions</b>	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• horizontal installation, min.</li> </ul>	-30 °C
<ul style="list-style-type: none"> <li>• horizontal installation, max.</li> </ul>	60 °C
<ul style="list-style-type: none"> <li>• vertical installation, min.</li> </ul>	-30 °C
<ul style="list-style-type: none"> <li>• vertical installation, max.</li> </ul>	50 °C
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	2 000 m; On request: Installation altitudes greater than 2 000 m
<b>Dimensions</b>	
Width	20 mm
Height	73 mm
Depth	58 mm
<b>Weights</b>	
Weight, approx.	45 g

**last modified:**

8/16/2023 