



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

<b>Digital outputs</b>	
Type of digital output	Relays
Number of digital outputs	4
Short-circuit protection	No
<b>Switching frequency</b>	
• with resistive load, max.	2 Hz
• with inductive load (acc. to IEC 60947-5-1, DC13), max.	0.5 Hz
• with inductive load (acc. to IEC 60947-5-1, AC15), 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>	
<b>horizontal installation</b>	
— up to 50 °C, max.	20 A
— up to 60 °C, max.	16 A
<b>vertical installation</b>	
— 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 miniature fuse max. 6 A tripping current and quick-response tripping characteristic
• Number of operating cycles, max.	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>	
• shielded, max.	1 000 m
• unshielded, max.	200 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
Substitute values connectable	Yes
<b>Alarms</b>	
• Diagnostic alarm	Yes
<b>Diagnoses</b>	
• Monitoring the supply voltage	Yes
• Wire-break	No
• Short-circuit	No
• Group error	Yes
<b>Diagnostics indication LED</b>	
• 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
<b>Potential separation</b>	
<b>Potential separation channels</b>	
• between the channels	Yes
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	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)
tested with	
• between channels and backplane bus/supply voltage	2 500 V DC
• between backplane bus and supply voltage	707 V DC (type test)
<b>Standards, approvals, certificates</b>	
Suitable for safety functions	No
<b>Ambient conditions</b>	
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
<b>Dimensions</b>	
Width	20 mm
Height	73 mm
Depth	58 mm
<b>Weights</b>	
Weight, approx.	45 g

**last modified:**

4/3/2023 