



SIMATIC ET 200SP, Relay module, RQ NO 4x 120V DC ..230VAC/5A ST. 4 normally open contacts, isolated contacts, packing unit: 1 piece, 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
• FW update possible	No
usable BaseUnits	BU type B0, B1
Product function	
• I&M data	Yes; I&M0 to I&M3
• Isochronous mode	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V14
• STEP 7 configurable/integrated from version	V5.5 SP3
• PCS 7 configurable/integrated from version	V8.1 SP1
• 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
Redundancy	
• 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	
• Inputs	+ 1 byte for QI information
• Outputs	1 byte
Hardware configuration	
Automatic encoding	Yes

<ul style="list-style-type: none"> <li>• Mechanical coding element</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Type of mechanical coding element</li> </ul>	type C
<b>Selection of BaseUnit for connection variants</b>	
<ul style="list-style-type: none"> <li>• 2-wire connection</li> </ul>	BU type B1
<ul style="list-style-type: none"> <li>• 3-wire connection</li> </ul>	BU type B0
<b>Digital outputs</b>	
Type of digital output	Relays
Number of digital outputs	4
Current-sinking	Yes
Current-sourcing	Yes
Digital outputs, parameterizable	Yes
Short-circuit protection	No
<b>Parallel switching of two outputs</b>	
<ul style="list-style-type: none"> <li>• for logic links</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• for uprating</li> </ul>	No
<ul style="list-style-type: none"> <li>• for redundant control of a load</li> </ul>	Yes
<b>Switching frequency</b>	
<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; provide one freewheeling diode for switching frequencies higher than 0.1 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
<b>Total current of the outputs</b>	
<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
<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>	
<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
<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; 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
<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>Diagnoses</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
<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> <li>• for channel diagnostics</li> <li>• for module diagnostics</li> </ul>	<p>Yes; green LED</p> <p>No</p> <p>Yes; green/red DIAG LED</p>
<b>Potential separation</b>	
Potential separation channels	
<ul style="list-style-type: none"> <li>• between the channels</li> <li>• between the channels and backplane bus</li> <li>• between the channels and the power supply of the electronics</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
<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	
<ul style="list-style-type: none"> <li>• between channels and backplane bus/supply voltage</li> <li>• between backplane bus and supply voltage</li> </ul>	<p>2 500 V DC</p> <p>707 V DC (type test)</p>
<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> <li>• horizontal installation, max.</li> <li>• vertical installation, min.</li> <li>• vertical installation, max.</li> </ul>	<p>-30 °C</p> <p>60 °C</p> <p>-30 °C</p> <p>50 °C</p>
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.	40 g

**last modified:** 12/8/2024 