

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
Firmware version	V0.0
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	No
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>	V14
<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>PCS 7 configurable/integrated as of version</li> </ul>	V8.1 SP1
<ul style="list-style-type: none"> <li>PROFIBUS as of GSD version/GSD revision</li> </ul>	One GSD file each, Revision 3 and 5 and higher
<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
<b>Redundancy</b>	
• Redundancy capability	Yes
<b>Supply voltage</b>	
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
<b>Input current</b>	
Current consumption (rated value)	55 mA; without load
<b>Output voltage</b>	
Rated value (AC)	230 V
<b>Power loss</b>	
Power loss, typ.	1.5 W
<b>Address area</b>	
Address space per module	
• Inputs	+ 1 byte for QI information
• Outputs	1 byte
<b>Hardware configuration</b>	
Automatic encoding	Yes
• Mechanical coding element	Yes
<b>Digital outputs</b>	
Type of digital output	Relays
Number of digital outputs	4
Current-sinking	Yes
Current-sourcing	Yes
Short-circuit protection	No
<b>Parallel switching of two outputs</b>	
• for logic links	Yes
• for uprating	No
• for redundant control of a load	Yes
<b>Switching frequency</b>	
• with resistive load, max.	2 Hz
• with inductive load, 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>	
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; in all other mounting positions
<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 6A
• 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; 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>	
• shielded, max.	1 000 m
• unshielded, max.	200 m
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
Substitute values connectable	Yes
<b>Alarms</b>	
• Diagnostic alarm	Yes
<b>Diagnostic messages</b>	
• Monitoring the supply voltage	Yes
• Wire-break	No
• Short-circuit	No
<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

Potential separation	
Potential separation channels	
• between the channels	Yes
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	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	
• between channels and backplane bus/supply voltage	2500 V DC
• between backplane bus and supply voltage	707 V DC (type test)

Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C; in all other mounting positions
• vertical installation, max.	50 °C; in all other mounting positions
Altitude during operation relating to sea level	
• Ambient air temperature-barometric pressure-altitude	On request: Ambient temperatures lower than 0 °C (without condensation) and/or installation altitudes greater than 2 000 m

Dimensions	
Width	20 mm
Height	73 mm
Depth	58 mm

Weights	
Weight, approx.	40 g
<b>last modified:</b>	10/15/2018