SIEMENS

Data sheet

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
Color code for module-specific color identification plate	CC40
Product function	
• I&M data	Yes; I&M0 to I&M3
• Isochronous mode	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	V14
• STEP 7 configurable/integrated as of version	V5.5 SP3
• PCS 7 configurable/integrated as of version	V8.1 SP1
• PROFIBUS as of GSD version/GSD revision	One GSD file each, Revision 3 and 5 and higher
• PROFINET as of GSD version/GSD revision	GSDML V2.3
Operating mode	

05/21/2020

• 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	
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
• Mechanical coding element	Yes
Digital outputs	
Type of digital output	Relays
Number of digital outputs	4
Current-sinking	Yes
Current-sourcing	Yes
Digital outputs, parameterizable	Yes
Short-circuit protection	No
Parallel switching of two outputs	
• for logic links	Yes
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	2 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	2 Hz

05/21/2020

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
● 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
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; 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

Cable length	
● shielded, max.	1 000 m
● unshielded, max.	200 m

Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
● Diagnostic alarm	Yes
Diagnostic messages	
● Monitoring the supply voltage	Yes
● Wire-break	No
● Short-circuit	No
Diagnostics indication LED	
● 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

05/21/2020

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	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.	40 g
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