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	CC40
plate	
Product function	
● I&M data	Yes; I&M0 to I&M3
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	
• DQ	Yes

 DQ with energy-saving function 	No
• PWM	No
 Oversampling 	No
• MSO	No
Redundancy	
Redundancy capability	Yes
Complexed to a	
Supply voltage Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, lower limit (DC)	28.8 V
Reverse polarity protection	Yes
reverse polarity protection	163
Input current	
Current consumption (rated value)	55 mA; without load
Output voltage	
Rated value (AC)	230 V
Power loss	4.5.W
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
_	177
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
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
Isochronous mode	
Isochronous operation (application synchronized up	No
to terminal)	
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

for module diagnostics
 Yes; green/red DIAG LED

Potential separation

Potential separation channels

between the channels

Yes

No

• 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

land of the same

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 D

707 V DC (type test)

Standards, approvals, certificates

Suitable for safety functions

No

Ambient conditions

Ambient temperature during operation

horizontal installation, min.
 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

last modified:

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