

SIPLUS ET 200SP F-RQ 24 V DC/24-230 V AC/5 A -25...+60 °C
 Start-up -25 °C with conformal coating based on 6ES7136-6RA00-0BF0 . F-RQ 1x 24 V DC/24..230V AC/5A ST, 20 mm overall width, 1 relay output (2 NO) Summation output current 5 A, load voltage 24 V DC and 24.. 230 V AC, Can be used up to PL E (ISO 13849-1: 2008)/ SIL 3 (IEC 61508: 2010) if control takes place by (e.g. 6AG1136-6DB00-2CA0) F-DQ



Figure similar

General information	
Product type designation	230 RCE
usable BaseUnits	BU type F0, BU20-P8+A4+0B
Color code for module-specific color identification plate	CC42
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• PROFIBUS as of GSD version/GSD revision	V2.3
• PROFINET as of GSD version/GSD revision	V2.3
Supply voltage	
permissible range, lower limit (DC)	100 V
permissible range, upper limit (DC)	253 V
Input current	
Current consumption, max.	40 mA
Power	

Power available from the backplane bus	100 mW
Address area	
Address space per module	
• Inputs	1 byte
Digital outputs	
Type of digital output	Relays
Number of digital outputs	4; Relays
Short-circuit protection	No; external fusing necessary
Limitation of inductive shutdown voltage to	No
Controlling a digital input	Yes
Switching capacity of the outputs	
• with resistive load, max.	5 A
• on lamp load, max.	25 W
Switching frequency	
• with resistive load, max.	2 Hz
• with inductive load, max.	0.1 Hz; See data in manual
• with inductive load (acc. to IEC 60947-5-1, DC13), max.	0.1 Hz
• with inductive load (acc. to IEC 60947-5-1, AC15), max.	2 Hz
Total current of the outputs (per module)	
horizontal installation	
— up to 40 °C, max.	5 A; Note derating data in the manual
— up to 50 °C, max.	4 A; Note derating data in the manual
— up to 60 °C, max.	3 A; Note derating data in the manual
vertical installation	
— up to 50 °C, max.	3 A; Note derating data in the manual
Relay outputs	
• Number of relay outputs	1; 2 NO contacts
• Rated supply voltage of relay coil L+ (DC)	24 V
• Current consumption of relays (coil current of all relays), max.	70 mA
• external protection for relay outputs	yes; 6 A, see data in manual
• Relay approved acc. to UL 508	Yes; Pilot Duty B300, R300
Switching capacity of contacts	
— with inductive load, max.	3 A
— with resistive load, max.	10 A
— Thermal continuous current, max.	5 A
— Switching current, min.	1 mA
— Switching current after exceeding 300 mA, min.	10 mA

— Switching current after exceeding 300 mA, max.	5 A
— Rated switching voltage (DC)	24 V
— Rated switching voltage (AC)	230 V
Cable length	
• shielded, max.	500 m; for load contacts
• unshielded, max.	300 m; for load contacts
• Control cable (input), max.	10 m
Interrupts/diagnostics/status information	
Diagnostics function	yes, firmware update
Diagnostics indication LED	
• RUN LED	Yes; green/red DIAG LED
• Channel status display	Yes; Green LED
Potential separation	
Potential separation channels	
• between the channels	Yes; for SELV / PELV only
• 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	250 V AC (reinforced insulation)
between backplane bus and supply voltage	75 V DC/60 V AC
Isolation	
Isolation tested with	2 545 V DC/2 s (routine test)
Overvoltage category	III
tested with	
• between channels and backplane bus/supply voltage	DC 2545 V 2 s (routine test), impulse voltage test DC 7200 V / 5 positive and 5 negative pulses (type test)
• between backplane bus and supply voltage	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	-25 °C; = Tmin
• horizontal installation, max.	60 °C; = Tmax
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	3 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... Tmax -5K) at 795 hPa ... 701 hPa (+2 000 m ... +3 000 m)
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance	

Coolants and lubricants	
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
from supply voltage 1L+	
— Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!

Dimensions

Width	71.5 mm
Height	90 mm
Depth	60 mm

Weights

Weight, approx.	90 g
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last modified: 05/18/2018