SIEMENS

Data sheet

6ES7132-6GD51-0BA0



SIMATIC ET 200SP, Signal relay module, RQ CO 4x 24V DC/2A ST, 4 changeover contacts, isolated contacts, packing unit: 1 piece, fits to BU-type A0, Colour Code CC00, substitute value output, module diagnostics for: supply voltage

Product type designation RQ CO 4x24VDC/2A ST HW functional status From FS02 Firmware version V0.0 • FW update possible No usable BaseUnits BU type A0 Color code for module-specific color identification plate CC00 Product function CC00 Product function CC00 Product function Ves; I&M0 to I&M3 • Isochronous mode No Engineering with V14 • STEP 7 Tal Portal configurable/integrated from version V5.5 SP3 • 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 Ves • DO Yes • DA with energy-saving function No • PROFINET from GSD version/GSD revision No • DA with energy-saving function No • DA with energy-saving function No • DA with energy-saving function No • PROFINET from GSD version/GSD revision No • DA with energy-saving function No • DA with energy-saving function No • DA with energy-saving function No • Redundarcy 24 V permissible range, lower limit (DC)<	General information	
Firmware version V0.0 • FW update possible No usable BaseJunits BU type A0 Color code for module-specific color identification plate CC00 Product function • I&M data Yes; I&M0 to I&M3 • Is Schronous mode No Engineering with • STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP3 • PROFIBUS from GSD version/GSD revision Gob GSD file each, Revision 3 and 5 and higher • DQ PROFINET from GSD version/GSD revision • DQ with energy-saving function No • VWM No • Vorsampling No • NSO No • Redundancy Yes • Redundancy capability Yes Supply voltage Z4 V permissible range, lower limit (DC) 28.8 V reverse polarity protection Yes Input current Current consumption (rated value) Power loss Formation Power loss, fyp. 1.2 W Address pace per module - • Log upds + 1 byte for QI information • Otypits 1 byte	Product type designation	RQ CO 4x24VDC/2A ST
• FW update possible No usable BaseUnits BU type A0 Color code for module-specific color identification plate CC00 Product function • IkM data Yes; IkM0 to IkM3 • Isochronous mode No Engineering with • TEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 TIA Portal configurable/integrated from version V55 SP3 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • ROFINET from CSD version/GSD revision Gone GSD file each, Revision 3 and 5 and higher • DQ Yes Operating mode • DQ Yes No • DQ with energy-saving function No No • WM No No • edundancy Vers • Redundancy capability Yes Yes Supply voltage 24 V permissible range, lower limit (DC) 19.2 V 24 V permissible range, lower limit (DC) 28.8 V Reverse polarity protection Reverse polarity protection <td>HW functional status</td> <td>From FS02</td>	HW functional status	From FS02
usable BaseUnits BU type A0 Color code for module-specific color identification plate CC00 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 TIA Portal configurable/integrated from version V55 SP3 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • PROFIBUS from GSD version/GSD revision Gose SD file each, Revision 3 and 5 and higher • PROFIBUS from GSD version/GSD revision Gose SD file each, Revision 3 and 5 and higher • PROFIBUS from GSD version/GSD revision Gose SD file each, Revision 3 and 5 and higher • PROFIBUS from GSD version/GSD revision Gose SD file each, Revision 3 and 5 and higher • PROFIBUS from GSD version/GSD revision Gose SD file each, Revision 3 and 5 and higher • DQ With energy-saving function No • DQ Wolk when energy-saving function No • PWM No No • Medundancy Yes Supply voltage • Redundancy Sa8 V	Firmware version	V0.0
Color code for module-specific color identification plate COO Product function • 18M data Yes; 18M0 to 18M3 • Is Schronous mode No Engineering with • 100 to 1803 • STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 To Configurable/integrated from version V5.5 SP3 • PROFIBUS from GSD version/GSD revision GSDML V2.3 Operating mode • 00 • DQ with energy-saving function No • DQ with energy-saving function No • NSO No Rated value (DC) 24 V permissible range, upper limit (DC) 19.2 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consumption (rated value) Power loss, typ. 1.2 W Address area - Address area - Address area - Address area - Address area + Automatic encoding Yes	FW update possible	No
Product function i&M data	usable BaseUnits	BU type A0
• I&M data Yes; I&M0 to I&M3 • isochronous mode No Engineering with • • STEP 7 TA Portal configurable/integrated from version V14 • STEP 7 tan Portal configurable/integrated from version V5.5 SP3 • 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, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current • Current consumption (rated value) • Power loss, typ. 1.2 W Address area • • Inputs + 1 byte for QI information • Outputs 1 byte • Inputs + 1 byte for QI information • Outputs 1 byte	Color code for module-specific color identification plate	CC00
Isochronous mode No Engineering with	Product function	
Engineering with • STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 Configurable/integrated from version V5.5 SP3 • 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 Yes • Redundancy capability Yes • Prover loss. 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) Course to consumption (rated value) 50 mA Power loss. typ. 1.2 W Address area Address space per module • Inputs + 1 byte for Ql information • Outputs 1 byte	• I&M data	Yes; I&M0 to I&M3
• STEP 7 TiA Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP3 • 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 Yes • DQ Yes • DQ vitth 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, lower limit (DC) 28.8 V Reverse polarity protection Yes Input current - Current consumption (rated value) 50 mA Power loss, typ. 1.2 W Address space per module + 1 byte for Ql information • Outputs + 1 byte for Ql information • Outputs + 1 byte Hardware configuration	Isochronous mode	No
• STEP 7 configurable/integrated from versionV5.5 SP3• PROFIBUS from GSD version/GSD revisionOne GSD file each, Revision 3 and 5 and higher• PROFINET from GSD version/GSD revisionGSDML V2.3Operating modeVes• DQYes• DQ with energy-saving functionNo• PWMNo• OversamplingNo• MSONoRedundancy capabilityYes• Redundancy capabilityYes• Redundancy capabilityYes• Purpt init (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, uper limit (DC)28.8 VReverse polarity protectionYesInput currentSo mAPower loss, typ.1.2 WAddress areaAddress space per module+ 1 byte for QI information• Outputs1 byteHardware configurationYes• Mechanical coding elementYes	Engineering with	
• PROFIBUS from GSD version/GSD revisionOne GSD file each, Revision 3 and 5 and higher• PROFINET from GSD version/GSD revisionGSDML V2.3Operating mode• DQ• DQYes• DQ with energy-saving functionNo• PWMNo• OversamplingNo• MSONo• Redundancy• Yes• Redundancy capabilityYes• Redundancy capabilityYes• Purple• Purple• Redundancy capabilityYes• Oversampling• No• Redundancy capabilityYes• Redundancy capabilityYes• Current consumption (rated value)28.8 V• Power loss, typ.1.2 WAddress space per module• 1 byte for QI information• Outputs+ 1 byte for QI information• Outputs+ 1 byte for QI information• Mechanical coding elementYes	 STEP 7 TIA Portal configurable/integrated from version 	V14
• PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode	 STEP 7 configurable/integrated from version 	V5.5 SP3
Operating mode• DQYes• DQ with energy-saving functionNo• PWMNo• OversamplingNo• MSONoRedundancyYesSupply voltageYesRated value (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYesInput current50 mAPower loss, typ.1.2 WAddress space per module+ 1 byte for Ql information• Unputs+ 1 byte for Ql information• Outputs1 byteHardware configurationYesAutomatic encoding • Mechanical coding elementYes	 PROFIBUS from GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
• DQYes• DQ with energy-saving functionNo• PWMNo• OversamplingNo• MSONo• RedundancyYes• Redundancy capabilityYesSupply voltage24 VPermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYesInput currentSo mAPower loss, typ.1.2 WAddress pace per module-• Inputs+ 1 byte for Ql information• Outputs1 byteHardware configurationYesAutomatic encoding • Mechanical coding elementYes	 PROFINET from GSD version/GSD revision 	GSDML V2.3
DQ with energy-saving functionNo• PWMNo• OversamplingNo• MSONoRedundancyYes• Redundancy capabilityYesSupply voltage24 VPermissible range, lower limit (DC)19.2 Vpermissible range, lower limit (DC)28.8 VReverse polarity protectionYesInput current50 mAPower loss1.2 WAddress area1.2 WAddress pace per module1 byte or Ql information• Unputs1 byte Or Ql information• Outputs1 byteHardware configurationYesAutomatic encodingYes• Mechanical coding elementYes	Operating mode	
• PVMINo• OversamplingNo• MSONoRedundancyYesSupply voltageYesSupply voltage24 VPermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYesInput currentSo mAPower loss, typ.1.2 WAddress area4ddress pace per module• Inputs+ 1 byte for Ql information• Outputs1 byteHardware configurationYesAutomatic encodingYes• Mechanical coding elementYes	• DQ	Yes
• OversamplingNo• MSONoRedundancyYes• Redundancy capabilityYesSupply voltage24 VPatted value (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYesInput currentCurrent of So mAPower loss, typ.1.2 WAddress space per module1.2 W• Inputs+ 1 byte for QI information• Outputs1 byte	 DQ with energy-saving function 	No
• MSONoRedundancyYes• Redundancy capabilityYesSupply voltage24 VRated value (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYesInput current50 mACurrent consumption (rated value)50 mAPower loss, typ.1.2 WAddress areaAddress space per module• Inputs+ 1 byte for Ql information• Outputs1 byteHardware configurationYesAutomatic encodingYes• Mechanical coding elementYes	• PWM	No
Redundancy • Redundancy capability Yes Supply voltage 24 V Permissible range, lower limit (DC) 19.2 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current 20 mA Current consumption (rated value) 50 mA Power loss 1.2 W Address space per module 1.2 W • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes Automatic encoding Yes	Oversampling	No
• 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 50 mA Current consumption (rated value) 50 mA Power loss 1.2 W Address space per module + 1 byte for Ql information • Inputs + 1 byte for Ql information • Outputs 1 byte Hardware configuration Yes	• MSO	No
Supply voltageRated value (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYesInput currentTo make the second seco	Redundancy	
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 Yes Current consumption (rated value) 50 mA Power loss 1.2 W Address space per module 1.2 W Address space per module + 1 byte for Ql information • Outputs 1 byte Hardware configuration Yes Automatic encoding Yes • Mechanical coding element Yes	 Redundancy capability 	Yes
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) Current consumption (rated value) 50 mA Power loss Power loss, typ. Power loss, typ. 1.2 W Address area Address space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes Automatic encoding Yes • Mechanical coding element Yes	Supply voltage	
permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current 50 mA Current consumption (rated value) 50 mA Power loss 1.2 W Address area Address space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes Automatic encoding Yes • Mechanical coding element Yes	Rated value (DC)	24 V
Reverse polarity protection Yes Input current Input current Current consumption (rated value) 50 mA Power loss 1.2 W Power loss, typ. 1.2 W Address area Address space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration 1 byte Automatic encoding Yes • Mechanical coding element Yes	permissible range, lower limit (DC)	19.2 V
Input current Current consumption (rated value) 50 mA Power loss 12 W Power loss, typ. 1.2 W Address area Address space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes • Mechanical coding element Yes	permissible range, upper limit (DC)	28.8 V
Current consumption (rated value) 50 mA Power loss 1.2 W Power loss, typ. 1.2 W Address area 4ddress space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes • Mechanical coding element Yes	Reverse polarity protection	Yes
Power loss Power loss, typ. 1.2 W Address area Address space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes • Mechanical coding element Yes	Input current	
Power loss, typ. 1.2 W Address area Address space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes • Mechanical coding element Yes	Current consumption (rated value)	50 mA
Address area Address space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration 1 byte Automatic encoding Yes • Mechanical coding element Yes	Power loss	
Address space per module • Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes • Mechanical coding element Yes	Power loss, typ.	1.2 W
• Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes • Mechanical coding element Yes	Address area	
• Inputs + 1 byte for QI information • Outputs 1 byte Hardware configuration Yes • Mechanical coding element Yes	Address space per module	
Hardware configuration Automatic encoding Yes • Mechanical coding element Yes		+ 1 byte for QI information
Automatic encoding Yes • Mechanical coding element Yes	Outputs	1 byte
Mechanical coding element Yes	Hardware configuration	
	Automatic encoding	Yes
	Mechanical coding element	Yes
	-	type C



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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
Total current of the outputs	
Current per channel, max.	2 A
Current per module, max.	8 A
Total current of the outputs (per module)	
horizontal installation	
— up to 40 °C, max.	8 A
— up to 50 °C, max.	6 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 30 °C, max.	8 A
— up to 40 °C, max.	6 A
— up to 50 °C, max.	4 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),	40 mA
max.	
Number of operating cycles, max. Switching capacity of contacts	500 000
Switching capacity of contacts	2.4
— with resistive load, max.	2 A 2 A
 Thermal continuous current, max. Switching current, min 	2 A 1 mA: 5 V DC
 — Switching current, min. — Rated switching voltage (DC) 	1 mA; 5 V DC
 Rated switching voltage (DC) Rated switching voltage (AC) 	24 V 24 V
- Rated switching voltage (AC)	24 V
Cable length	1 000 m
shielded, max.	1 000 m
unshielded, max. Interrupts/diagnostics/status information	200 m
Interrupts/diagnostics/status information	Voc
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	Vec
Diagnostic alarm	Yes
Diagnoses	Vec
Monitoring the supply voltage	Yes
Wire-break Short circuit	No
Short-circuit	No
Diagnostics indication LED	Vec: green DW/P LED
Monitoring of the supply voltage (PWR-LED) Channel status display	Yes; green PWR LED
Channel status display for channel diagnostics	Yes; green LED
for channel diagnostics for module diagnostics	
for module diagnostics Potential separation	Yes; green/red DIAG LED
Potential separation	
Potential separation channels	Vaa
 between the channels between the channels and backplane bus 	Yes
 between the channels and backplane bus between the channels and the power supply of the 	Yes
 between the channels and the power supply of the electronics 	Yes
Isolation	



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Isolation tested with	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	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	30 g

last modified:

8/16/2023 🖸

