Module Type Controller SRZ

Communication Installation Module Z-COM

1. PARTS DESCRIPTION

1.1 Module mainframe

- **Address setting switch**: Used to set the address of the module.
- **Indication lamp (PLC)**: Used to indicate the status of the module.
- **Communication ports (COM. PORT1, COM. PORT2, COM. PORT3, COM. PORT4)**: Used for communication with other devices.
- **DIP switch**: Used to set the configuration parameters of the module.

1.2 Communication port (modular connector and Communication port terminal)

- **COM. PORT1, COM. PORT2, COM. PORT3, COM. PORT4**: Used for connecting to other devices.

2. MOUNTING

2.1 Mounting Cautions

1. Avoid mounting the module to a location that is subject to vibrations or shock.
2. Avoid mounting the module to a location that is subject to direct exposure to sunlight.
3. Ensure that there is sufficient ventilation around the module to prevent overheating.
4. Ensure that the module is mounted in a location that is protected from water and moisture.
5. Ensure that the module is mounted in a location where it is not subject to extreme temperature variations.

2.2 Joining Each Module

- **Joint connector cover (KSRZ-517A)**: Used to cover the joint connector to protect it from damage.
- **Power terminal cover (KSRZ-518A)**: Used to cover the power terminal to prevent accidental contact.

3. WIRING

3.1 Wiring Cautions

1. Avoid connecting the power supply to the module before ensuring that the wiring is correct.
2. Avoid using the same power supply for multiple modules.
3. Avoid using the same power supply for multiple instruments.
4. Avoid using the same power supply for multiple controllers.

3.2 Terminal Configuration

- **Power supply terminal**: Used to supply the power to the module.
- **Function module connector**: Used to connect the function modules to the module.

4. SAFETY PRECAUTIONS

- **Avoid mounting the module in a location that is subject to vibrations or shock.**
- **Avoid using the module in a location that is subject to direct exposure to sunlight.**
- **Ensure that the module is mounted in a location that is protected from water and moisture.**
- **Ensure that the module is mounted in a location where it is not subject to extreme temperature variations.**

5. SPECIFICATIONS

- **Module Type**: SRZ
- **Controller Type**: Z-COM
- **SRZ Unit**: Z-CT modules
- **Communication Ports**: COM. PORT1, COM. PORT2, COM. PORT3, COM. PORT4
- **Indication Lamps**: RX1/TX1, RX2/TX2

6. NOTICE

- **This module is intended for use with industrial equipment only.**
- **This module is not designed for use with medical equipment.**
- **This module is not intended for use in nuclear facilities.**
- **This module is not intended for use in explosive atmospheres.**
- **This module is not intended for use in medical equipment.**

7. CAUTION

- **Do not connect the power supply to the module before ensuring that the wiring is correct.**
- **Avoid using the same power supply for multiple modules.**
- **Avoid using the same power supply for multiple instruments.**
- **Avoid using the same power supply for multiple controllers.**

8. WARNING

- **Avoid mounting the module to a location that is subject to vibrations or shock.**
- **Avoid mounting the module to a location that is subject to direct exposure to sunlight.**
- **Ensure that the module is mounted in a location that is protected from water and moisture.**
- **Ensure that the module is mounted in a location where it is not subject to extreme temperature variations.**

9. IMPORTANT

- **Ensure that the wiring is correct before connecting the power supply.**
- **Avoid using the same power supply for multiple modules.**
- **Avoid using the same power supply for multiple instruments.**
- **Avoid using the same power supply for multiple controllers.**

10. DISCLAIMER

- **RKC INSTRUMENT INC. is not responsible for any damage or injury resulting from the use of this instrument.**
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11. TERMINAL CONFIGURATION

- **Terminal 1**: Used for the power supply to the module.
- **Terminal 2**: Used for the communication to the module.
- **Terminal 3 and 4**: Used for the power supply to the module.
- **Terminal 5**: Used for the communication to the module.

12. FUNCTION MODULE CONNECTOR

- **Function module connector**: Used to connect the function modules to the module.

13. WARNING

- **To avoid electric shock, connect the power supply to the module before ensuring that the wiring is correct.**
- **Avoid using the same power supply for multiple modules.**
- **Avoid using the same power supply for multiple instruments.**
- **Avoid using the same power supply for multiple controllers.**

14. IMPORTANT

- **Ensure that the wiring is correct before connecting the power supply.**
- **Avoid using the same power supply for multiple modules.**
- **Avoid using the same power supply for multiple instruments.**
- **Avoid using the same power supply for multiple controllers.**

15. DISCLAIMER

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16. CAUTION

- **Do not connect the power supply to the module before ensuring that the wiring is correct.**
- **Avoid using the same power supply for multiple modules.**
- **Avoid using the same power supply for multiple instruments.**
- **Avoid using the same power supply for multiple controllers.**

17. IMPORTANT

- **Ensure that the wiring is correct before connecting the power supply.**
- **Avoid using the same power supply for multiple modules.**
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3.3 Contents of the Communication Port

The contents of the modular connector signal are all the same from COM. PORT1 to COM. PORT4.

RS-422A

MITSUBISHI MELSEC series

When preparing a cable of connecting the computer link module belonging to the MITSUBISHI MELSEC series to our Z-COM module, cross each pair of wires A and B terminal positions on their terminal boards are asymmetrical.

- **Z-COM module internal block diagram**

3.4 Example of Connection to the PLC

Up to four SRZ units can be multiplexed connected to one PLC communication port.

Customer is required to prepare a communication cable for the Z-COM to be connected by the PLC. (Recommended manufacturer and model type: Electric Wire, TMS-9959)

For wiring example using the connection cable W-BF-01, refer to the Z-COM Instruction Manual (MS0172-E02).

RS-422A

MITSUBISHI MELSEC series

When preparing a cable of connecting the computer link module belonging to the MITSUBISHI MELSEC series to our Z-COM module, cross each pair of wires A and B terminal positions on their terminal boards are asymmetrical.

- **Z-COM module internal block diagram**

3.5 Example of Connection to the Host Computer

Up to four SRZ units can be connected to a host computer communication port. The communication cable must be provided by the customer.

If communication errors occur frequently due to the operation environment or the communication distance, connect termination resistors to the Z-COM module and the other unit.

RS-422A

MITSUBISHI MELSEC series

When preparing a cable of connecting the computer link module belonging to the MITSUBISHI MELSEC series to our Z-COM module, cross each pair of wires A and B terminal positions on their terminal boards are asymmetrical.

- **Z-COM module internal block diagram**

3.6 Z-COM Module Termination Resistor

If communication errors occur frequently due to the operation environment or the communication distance, connect termination resistors to the Z-COM module and the other unit.

When connecting multiple Z-COM module, connect a termination resistor to the Z-COM module at the last end of the communication line.

RS-485

MITSUBISHI MELSEC series

When preparing a cable of connecting the computer link module belonging to the MITSUBISHI MELSEC series to our Z-COM module, cross each pair of wires A and B terminal positions on their terminal boards are asymmetrical.

- **Z-COM module internal block diagram**


### 5. MODELS CODE

![Z-COM-A](image.png)

<table>
<thead>
<tr>
<th>Code (4 to 6)</th>
<th>Code (1 to 3)</th>
<th>Code (7 to 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(1) COM. PORT1, COM. PORT2 communication (Communication 1)</td>
<td>1: ANSI/RKC standard protocol 2: Modbus protocol</td>
</tr>
<tr>
<td>2</td>
<td>COM. PORT3 communication (Communication 2)</td>
<td>3: RS-422A</td>
</tr>
<tr>
<td>3</td>
<td>COM. PORT4 communication (Communication 2)</td>
<td>4: RS-422A</td>
</tr>
<tr>
<td>4</td>
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<td>5: (Quick start code)</td>
</tr>
<tr>
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- **PLC communication** Refer to 3.3 Contents of the Communication Port.
- **Data Link, Inc.** R-KA Communication 1: ANSI/RKC standard protocol 2: Modbus protocol

### 6. THE NUMBER OF THE CORRESPONDENCE CHANNELS (Only PLC communication)

- **CPL unit with a built-in communication port**
- **CPU unit of SYSMAC C55i series and C1i series**
  - Serial communication
  - CANopen
  - SIOBUS
- **CPU unit of SYSMAC C55i series and C1i series**
  - Serial communication
  - CANopen
  - SIOBUS
- **Central processor unit**
  - CJ1W-ES31 (CJ1 series), etc.
- **YOKOGAWA FA-M3R**
  - Personal computer link module

### 7. SPECIFICATIONS

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### 8. THE NUMBER OF THE CORRESPONDENCE CHANNELS (Only PLC communication)

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  - CANopen
  - SIOBUS
- **Central processor unit**
  - CJ1W-ES31 (CJ1 series), etc.
- **YOKOGAWA FA-M3R**
  - Personal computer link module

### 9. General specifications

- **Power supply voltage**: 24 V DC
- **Power supply voltage range**: [Including power supply voltage variation]
- **Current consumption**: Rated current: 4 mA or less
- **Ambient temperature**: -10°C to 50°C
- **Relative humidity**: 85% RH or less
- **Installation environment conditions**: Indoor use
- **Weight**: Approx. 110 g
- **Dimensions**: 65 x 17 x 21 mm

### 10. MODELS CODE

![Z-COM-A](image.png)

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