1. Module mainframe

<table>
<thead>
<tr>
<th>Terminal type</th>
<th>Connector type</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Indication lamps]</td>
<td>[Communication terminals]</td>
</tr>
<tr>
<td>[FAIL (RUN)]</td>
<td>[GND]</td>
</tr>
<tr>
<td>[Self-diagnostic error (FAIL)]</td>
<td>[DC12V]</td>
</tr>
<tr>
<td>[DC5V]</td>
<td>[Data send and receive]</td>
</tr>
<tr>
<td>[A green lamp is on]</td>
<td>[A green lamp flashes]</td>
</tr>
<tr>
<td>[An instrument abnormality (FAIL)]</td>
<td>[A red lamp is on]</td>
</tr>
<tr>
<td>[Communication terminals (RS-485)]</td>
<td>[Communication terminals (RS-485)]</td>
</tr>
<tr>
<td>[Joint connector]</td>
<td>[Joint connector]</td>
</tr>
<tr>
<td>[Used to mechanistically and electrically connect each module]</td>
<td>[Used to mechanistically and electrically connect each module]</td>
</tr>
<tr>
<td>[Supply power terminals]</td>
<td>[Supply power terminals]</td>
</tr>
<tr>
<td>[Supplies power to only one of the joined modules]</td>
<td>[Supplies power to only one of the joined modules]</td>
</tr>
</tbody>
</table>

2. 2.3 DIN Rail Mounting

**Mounting procedures**

1. Pull down the mounting bracket at the bottom of the module (A). Attach the hooks on the top of the module to the DIN rail and push the lower section into place on the DIN rail (B). Slides the mounting bracket up to secure the module to the DIN rail.

**Mounting end plates**

To firmly fix the module, use end plates on both sides of the mounted modules.

**End Plate (solid separately)**

3. Joint connector cover *

   - [Code: KSRZ-517A]

   - It is recommended to use a plastic cover on the connector on both sides of the module for protection of connectors.

3.2 DIN Rail Mounting

**Mounting Cautions**

1. This instrument is intended to be used under the following environmental conditions:

   **Irradiation Level Category** [OVERTHROW CATEGORY (2) POLLUTION DEGREE 2]

2. Use this instrument within the following environment conditions:

   - Ambient temperature: -10°C to +50°C
   - Ambient humidity: 35 to 85% RH
   - Maximum W: 253 g (dry at 101.3 kPa)
   - Installation environment conditions: Indoor use
   - All wiring must be finished before power is turned on to prevent electric shock, fire or malfunction.

3. Avoid the following conditions when selecting the mounting location:

   - Rapid change or atmospheric conditions which may cause condensation
   - Corrosive or inflammable gases
   - Direct shock to the module
   - Water, oil, chemicals, vapor or steam splashes
   - Excessive dust, salt or iron particles
   - Excessive induction noise, static electricity, magnetic fields or noise
   - Direct solar radiation from the sun or sunlight
   - Exposed to direct sunlight
   - Excessive heat accumulation
   - Always ensure that the instrument is mounted in a stable manner to avoid vibration or shock.

4. Mount the modules in the panel considering the following conditions:

   - Ensure at least 50 mm space on top and bottom of the instrument for maintenance and ailments.

5. Do not mount this instrument directly above any equipment that generates large amount of heat (heat exchangers, transformers, semi-conductor functional devices, large wattage resistors).

6. Do not mount this instrument in close proximity to any equipment that generates large amount of heat (heat exchangers, transformers, semi-conductor functional devices, large wattage resistors).

7. Do not place flammable or combustible materials inside the instrument.

8. Do not mount this instrument in locations subject to flammable gas, dust, or other materials.

9. Remove the base from the module (B) while the lock is pressed (A), Fig. (1).

10. Push down the lock heads. Then lock the mounting brackets together.

11. Fix the base to its mounting position using M3 screws. Customer must provide the screws.

12. Mount the module on the base, (Fig. 2).
3. WIRING

To prevent electric shock or instrument failure, do not turn on the power until all wiring is completed. Make sure that the wiring is correct before applying power to the instrument.

3.1 Wiring Cautions

- To avoid noise induction, keep input/output signal wires away from instrument power line, load lines and power lines of other equipment.
- If there is electrical noise in the vicinity of the instrument that could affect operation, use a noise filter.

3.2 Terminal Configuration

3.2.1 Base (Common to both 2-channel and connector type)

3.2.2 Terminal type module

- For communication wiring, refer to 3.3.6 PLC Communication Quick Instruction Manual (Part 1: Preparation) [RMS0111-EC].

3.3 CT Input Connector (Optional)

- The output allocation table

4. SPECIFICATIONS

4.1 Measured input

<table>
<thead>
<tr>
<th>Number of inputs</th>
<th>Input type</th>
<th>TC type</th>
<th>RTD input</th>
<th>Voltage (low)input</th>
<th>Voltage (high)input</th>
<th>Current input</th>
<th>Feedback resistance input</th>
</tr>
</thead>
</table>
| 4 points or 2 points | (Isolated between each input) | K, J, T, E, B, N, L (AAA) | P100 (JJ-B1940/1800-1971) | 0 to 50 mV, 0 to 100 mV | 0 to 10 V | 0 to 20 mA, 4 to 20 mA | 500 kΩ (wiring)

4.2 Triac output

- Voltage output
- ON voltage: 11.0 V to 13.0 V
- OFF voltage: 12.5 V (Rating)

- Triac output
- Voltage pulse/Current:
- CH1: 220 V AC 0.3 A, 20 V DC 1 A
- CH2: 220 V AC 0.3 A, 20 V DC 1 A

- Control type
- Output 1 (OUT1), Output 2 (OUT2), Output 3 (OUT3), Output 4 (OUT4)

- Feedback resistance input
- 500 kΩ

5. MODE SELECT

- 2-channel type
- ZTO-C
- ZTO-D
- Normal instruction manual [RMS0110-EC].