Terminal Type RTD Isolated Transducer (AC Power)

MODEL TZ-1AA

NEW!

**Input Specification**
Pt100Ω 3-wire type (C1604-1997)

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Input signal</th>
<th>Input allowable range</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Pt -50 to 50°C</td>
<td>-50 to 150%</td>
</tr>
<tr>
<td>1</td>
<td>Pt 0 to 100°C</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Pt 0 to 200°C</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Pt 0 to 300°C</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pt 20 to 80°C</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>Other than the above</td>
<td></td>
</tr>
</tbody>
</table>

For Code No. Y
Limit of specifications
Pt input: Less than 800°C and more than -50°C
Minimum span: Less than 800°C and more than 50°C
(Temperature characteristic: ±0.05 %/°C for a span of less than 100°C)

**Output Specification**

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Output signal</th>
<th>Allowable Load resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0 to 5V DC</td>
<td>More than 2kΩ</td>
</tr>
<tr>
<td>1</td>
<td>0 to 10V DC</td>
<td>More than 4kΩ</td>
</tr>
<tr>
<td>2</td>
<td>0 to 10V DC</td>
<td>Negative output: more than 10kΩ</td>
</tr>
<tr>
<td>3</td>
<td>0 to 20VDC</td>
<td>More than 2kΩ</td>
</tr>
<tr>
<td>4</td>
<td>0 to 20VDC</td>
<td>Negative output: more than 10kΩ</td>
</tr>
<tr>
<td>5</td>
<td>0 to 20VDC</td>
<td>More than 2kΩ</td>
</tr>
<tr>
<td>6</td>
<td>0 to 20VDC</td>
<td>Negative output: more than 10kΩ</td>
</tr>
<tr>
<td>7</td>
<td>0 to 20VDC</td>
<td>More than 2kΩ</td>
</tr>
<tr>
<td>A</td>
<td>4 to 20mADC</td>
<td>Less than 550Ω</td>
</tr>
<tr>
<td>B</td>
<td>0 to 20mADC</td>
<td>Other than the above</td>
</tr>
</tbody>
</table>

For Code No. Y
Limit of specifications
Voltage output: Less than +15 VDC and more than -12 VDC
Minimum span: Less than +27 VDC and more than 0.05 VDC
(Road resistance: 10kΩ at the output exceeding 10V, and a negative output)
(Base accuracy: ±0.15 %/F.S and temperature characteristic: ±0.03 %/°F.S/°C for a span of less than 1V)
Current output: Less than 20 mADC and more than 0 mADC
Minimum span: Less than 20 mADC and more than 1 mADC
Outputs can be reversed for both voltage and current outputs.

**General Specifications**

Base Accuracy: ±0.1 %/F.S (25±2°C) ±0.2 %/F.S at more than 500°C
Power supply variation: ±0.06 %/F.S
Load resistance variation: ±0.06 %/F.S
Temperature characteristic: ±0.02 %/°F.S/°C
Response time: 50μsec (Typical: 90%) - 90%
Detect disconnection: 135±10 %/F.S
Front adjustments: ±5% for zero and span
Insulation resistance: Between input and output/power supply: More than 100MΩ at 500 VDC
Dielectric strength: Between input and output/power supply: For 1 min. at 2000VAC
Power supply voltage: 100 to 240VAC ±10 %
Consuming current: Less than 35mA (At current output 100VAC)
Vibration resistance: Frequency: 5 to 55Hz; amplitude (half): 0.15mm to 10 sweeps of 5min each in X, Y, and Z directions
Operating ambient temperature: -5 to 50°C
Operating ambient humidity: Less than 90 %RH (No-condensing)
Storage temperature: -10 to 70°C
Storage humidity: Less than 60%RH (No-condensing)
Case material: ABS resin (Black) 94V-2
Weight: Approx. 80g

**Features**
- AC power supply 90 VAC to 240 VAC
- DIN rail mounting
- Input/Output/Power supply isolated

**Ordering Code**

TZ-1AA-

**Dimensions**

**Connection Diagram**

**Block Diagram**

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