MODEL ES6□□

The ES600 is a compact industrial analog recorder using 60-mm wide chart paper. Even with its compact size of 96 x 144 mm, it has functions comparable with a large-size recorder including a highly reliable automatic parallel system, easy-to-install fanfold recording chart paper, etc. There are two recording systems, pen type recorders have one-point continuous recording and dot printing type recorders are available which record a maximum of six points. Thermocouples, DC voltages/currents, resistance thermometers are available which enable the recording of temperatures, various industrial units, signal voltages and currents.

■ GENERAL SPECIFICATIONS

Input signal
- mV: More than 10 mV DC span, less than 50 V span
- Thermocouple: K, T, More than 250°C span
- E, J: More than 200°C span
- R: More than 1000°C span
- Resistance thermometer: (±100) J, J±100)
- More than 50°C span

Scale width: 60 mm
Indicating accuracy: ±0.1% of input span
Dead band: 0.4% of input span
Balancing speed: Approx. 2.0 sec (50 Hz), 1.6 sec (60 Hz) for full-scale movement

Chart paper:
- Fanfold type, effective width 60 mm,
- total width 73 mm, total length 10 m

Recording points:
- Pen type: 1 pen
- Dot printing type: 4 types with 1, 2, 3 and 6 points

Recording system:
- Pen type: Cartridge pen continuous recording (color: red)
- Dot printing type: Ink pad dot printing with each point in a different color

Dot printing color:
- 1 point: red
- 2 points: 1 red, 2 blue
- 3 points: 1 red, 2 blue, 3 green
- 6 points: 1 red, 2 blue, 3 green, 4 violet, 5 purple, 6 brown

Choke speed: 10 to 20 mm/sec and fast feed

Dot printing interval:
- Approx. 10 sec

Pen lift: Manual

Power supply:
- 100, 110, 120, 130, 200, 220 V AC, 50/60 Hz
- 0.2 A, 50/60 Hz
- 10% to 10% of rated value

Allowable voltage fluctuations:
- 10°C to 50°C
- 30 to 90% RH

Allowable signal source resistance:
- 10 Ω per wire

Input resistance:
- Approx. 8 MΩ

Max. common mode voltage:
- 200 V AC

Common mode rejection ratio:
- 100 dB or more

Series mode rejection ratio:
- 50 dB or more

Insulation resistance:
- Between measuring terminals and ground terminal: 500 V DC, 20 MΩ or more
- Between power terminals and ground terminal: 500 V DC, 20 MΩ or more
- Between measuring terminals and power terminals: 500 V DC, 20 MΩ or more
- Between measuring terminals and ground terminal: 500 V AC for 1 minute
- Between power terminals and ground terminal: 1000 V AC for 1 minute
- Between measuring terminals and power terminals: 1000 V AC for 1 minute

Withstand voltage:
- Approx. 7 V A

Casing:
- Front door: ABS plastic
- Plunge and rear case: ABS plastic

Color:
- Gray

Mounting:
- Panel mounting

Weight:
- Approx. 1.7 kg

■ MODELS

ES6□□□

Input:
1: Thermocouple
2: Resistance thermometer
8: Current or voltage

Alarm:
0: None
1: High/Low limit
2: High limit
3: Low limit

Number:
01: 1 pen
02: 1 dot
03: 2 dots
06: 3 dots
07: 6 dots

Functions marked * are optional.
■ STANDARD SCALE

<table>
<thead>
<tr>
<th>Thermocouple</th>
<th>Standard scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0 to 1400 (50)</td>
</tr>
<tr>
<td>K</td>
<td>0 to 200° (9)</td>
</tr>
<tr>
<td>J</td>
<td>0 to 300° (10)</td>
</tr>
<tr>
<td>T</td>
<td>0 to 250° (5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>mV</th>
<th>0 to 10 (0.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 to 20 (0.5)</td>
</tr>
<tr>
<td></td>
<td>0 to 100 (2)</td>
</tr>
<tr>
<td></td>
<td>0 to 1 V (0.05V)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>mA</th>
<th>4 to 20mA (0.5mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 to 50 (1)</td>
</tr>
<tr>
<td></td>
<td>0 to 100 (2)</td>
</tr>
<tr>
<td></td>
<td>0 to 100 (10)</td>
</tr>
<tr>
<td></td>
<td>0 to 200 (5)</td>
</tr>
<tr>
<td></td>
<td>0 to 500 (10)</td>
</tr>
<tr>
<td></td>
<td>-20 to 80 (2)</td>
</tr>
<tr>
<td></td>
<td>-50 to 70 (2)</td>
</tr>
<tr>
<td></td>
<td>-50 to 50 (2)</td>
</tr>
</tbody>
</table>

Unit is °C. mV is used only for mV inputs. ( ) shows 1 graduation.

■ OPTIONS

<table>
<thead>
<tr>
<th>Option name</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chart speed</td>
<td>Variable between 5 mm/s to 400 mm/s</td>
</tr>
<tr>
<td>Dots interval</td>
<td>Approx. 5 sec.</td>
</tr>
</tbody>
</table>

Alarms
- Alarm system: High limit (Low limit) type or High/Low limit type
- Setting accuracy: ±1% of input span
- Deadband: 0.6% of input span
- Contact capacity: Resistance load 100V 0.5A, 200V 0.2A
- Alarm signal: On-off make contact signal
- Double scale
  1. Manual switching to double scale
  2. Double scale classified by positions
- Burnout
- In case input is interrupted, indicated value will be beyond high limit (or low limit)
- Portable type
  - With handle and feet

■ EXTERNAL DIMENSIONS

Panel cutout and mounting interval

■ INCLINED MOUNTING

Washin (ø) = 20°

Specifications subject to change without notice. Printed in Japan (1) 2016 10