# EH SERIES ELECTRONIC RECORDER



# MODEL EH□00-□□ (Recorder)

The EH series is supplied with either continuous writing or multipoint dotting systems.

This versatile series of electronic selfbalancing strip chart recorders features a 180mm chart.

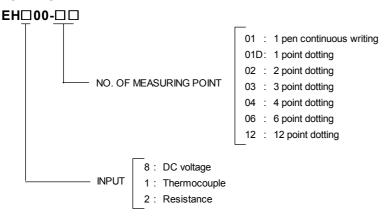
Models are available to recorders various industrial variables such as temperature, mV or DC voltage at 1, 2, 3, 4, 6, 12 points.

Select mV, thermocouple or resistance thermometer type measuring systems.

# 0 200 600

**MODEL EH100-06** 

### **■**MODELS



### **■ FEATURES**

### Wide selection

The EH series instruments are widely adoptable to various needs by combining various options, such as 1-pen, 1 to 12 point recording types, mV, thermocouple and resistance thermometer input signals.

### ● Accuracy ± 0.25% as industrial recorders

The high-reliability design has realized the highest indicating accuracy of  $\pm 0.25\%$  of input span (DC voltage input) as industrial recorders.

### Highly reliable instruments

Highly reliable instruments have been established by searching for the durability and high reliability of parts and circuits, such as balancing slide resistors using conductive plastic, input selectors using a reed switch, servoamplifier with an overshoot preventive circuit and others.

### Clear recording with critical damping

Sensitive recording with a differential antecedent velocity type damping circuit servoamplifier, dot recording by a precision forming dotter and continuous recording with an ink pen and a cartridge pen (option) ensure clear recording on all phenomena.

### Conformance to international standards

These instruments are international products conforming to DIN standards of 288mm x 288mm and ANSI standards as performance specifications.

### Units structure with easy maintenance and check

The range unit, servoamplifier, chart forwarding mechanism and other key components are designed as modular units for easy maintenance and checking.

### **■ GENERAL SPECIFICATIONS**

CASING : Front door..... Diecast aluminum Rear case..... Steel plate

Case.....Metallic silver

MOUNTING: Flush panelmount WEIGHT: About 13.5kg

1mV to 3mVDC span\*
500mV to 100VDC span\*

Thermocouple...... K, E, J, T..... 100°C span or more

R............450°C span or more
B..........1000°C span or more
S.......500°C span or more

Resistance thermometer......30°C span (Pt 100) or more

SCALE LENGTH: 180mm

INDICATING ACCURACY: mV input..... ±0.25% of input span

Thermocouple, resistance thermometer.....±0.5% of input span

DEAD BAND: 0.1% of input span

BALANCING SPEED: About 2.0 sec.(50Hz) or about 1.6 sec.(60Hz) for traveling F.S.

CHART: Fanfold chart

Effective recording width 180mm (Total width 200mm )

Total length 20m (A 30m chart is also available)

RECORDING POINTS: 1, 2, 3, 4, 6 or 12 points

RECORDING SYSTEM: Pen-writing type...... One-point continuous recording

Dotting colors 1 point.....Red

2 points...... 1 Red, 2 Black

6 points............ 1 Red, 2 Black, 3 Sky blue, 4 Green, 5 Brown, 6 Purple

12 points....... 1 Red, 2 Black, 3 Sky blue, 4 Green, 5 Brown, 6 Purple, 7 Orange,

8 Gray, 9 Blue, 10 Greenish brown, 11 Scarlet, 12 Violet

CHART SPEED: 12.5, 25, 50, 100mm/h and FAST DOTTING INTERVAL: 6 sec.(50Hz) or 5 sec.(60Hz)

POWER SUPPLY: 100, 110, 120, 130, 200, 220, 230, 240VAC, 50Hz or 60Hz

ALLOWABLE VOLTAGE FLUCTUATION :

10% to (-)10% of rated value

AMBIENT TEMPERATURE : (-)10°C to 50°C

AMBIENT HUMIDITY: 30 to 90%RH

EXTERNAL RESISTANCE (Potentiometer type only ):

Connectable up to about  $10k\Omega$ 

INPUT IMPEDANCE (Potentiometer type only):

About  $100k\Omega$ 

INSULATION RESISTANCE:  $500VDC, 20M\Omega$  or more between measuring terminals and ground terminal

1000VDC, 20M $\Omega$  or more between power terminals and ground terminal 1000VAC, 20M $\Omega$  or more between measuring terminals and power terminals

WITHSTAND VOLTAGE: 500VAC, 1 min. between measuring terminals and ground terminal

1000VAC (100V power system), 1 min. between power terminals and ground terminal 1500VAC (200V power system), 1 min. between power terminals and ground terminal 1000VAC (100V power system), 1 min. between measuring terminals and power terminals 1500VAC (200V power system), 1 min. between measuring terminals and power terminals

ILLUMINATION: Fluorescent lamp POWER CONSUMPTION: About 24 VA

### **■ STANDARD SCALE**

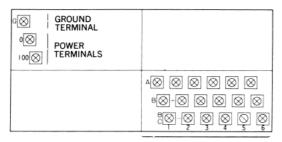
Input	Scale (°C)
R	0 to 1600 (20) 0 to 1400 (10,20) 0 to 1200 (10,20) 800 to 1600 (10) 400 to 1600 (10) 700 to 1400 (5,10)
В	0 to 1800 (20)
К	0 to 1200 (10) 0 to 1000 (10) 0 to 800 (10) 0 to 600 (5) 0 to 500 (5) 0 to 400 (5) 0 to 300 (2,5) 0 to 200 (2) 0 to 150 (1,2) 600 to 1200 (5,10) 100 to 250 (1,2) (-) 100 to 200 (2,5)
Т	0 to 300 (2,5) 0 to 200 (2) 0 to 150 (1,2) 0 to 100 (1) (-) 50 to 200 (2) (-) 50 to 150(2) (-) 50 to 100 (1,2) (-) 50 to 50 (1) (-) 100 to 200 (2)
E	0 to 300 (2,5) 0 to 200 (2) 0 to 150 (1,2) (-) 50 to 150 (2)
J	0 to 600 (5) 0 to 400 (5) 0 to 300 (2,5) 0 to 200 (2)

Input	Scale (°C)
Pt	0 to 500 (5) 0 to 40 (5) 0 to 300 (2,5) 0 to 250 (2) 0 to 200 (2) 0 to 150 (1,2)) 0 to 100 (1) 0 to 50 (0.5) 100 to 250 (1) 50 to 100 (0.5) (-) 20 to 80 (1) (-) 40 to 80 (1) (-) 50 to 150 (2) (-) 50 to 100 (2) (-) 100 to 50 (1)
mV	0 to 1 (V) (0.01) 0 to 100 (1) 0 to 10 (0.1) 0 to 5 (0.05) 1 to 5 (V) (0.05) (-) 5 to 5 (0.1)
Linear	0 to 100 (1)

( ) shows 1 graduation.

### **■ TERMINAL BORD**

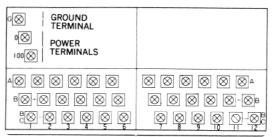
### ●6-POINT RECORDER



INPUT TERMINALS

Thermocouple, mV input (+)(-) terminals Resistance thermometer input (A)(B)(B) terminals

## ●12-POINT RECORDER

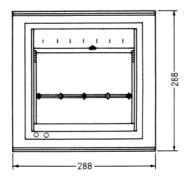


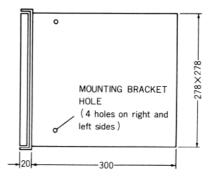
INPUT TERMINALS

Thermocouple, mV input (+)(-) terminals Resistance thermometer input (A)(B)(B) terminals

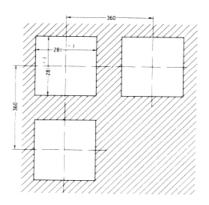


### **■EXTENAL DIMENSIONES**





PANEL CUTOUT



Unit: mm

Specifications subject to change without notice. Printed in Japan (I) 2008. 7. Recycled Paper

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