

# Digital Deviation Indicating Controller Model: RC-600

#### ■ Model

Model	RC-6			□ /	Е	
Control action	ON/OFF control action	1	! ! !	 		! ! !
	PD control action	2		! ! !		! ! !
Alarm function	No alarm action		0	i i		
	High limit alarm		1	 		! !
	High limit alarm with standby		1	  -  -		Н
	Low limit alarm		2	! !		I I I
	High limit alarm with standby		2	Y I I		Н
	High/Low limits alarm		4	I I I		! ! !
	High/Low limits alarm with standby		4	  -  -		H
	High/Low limit range alarm		6	i i i		i I
	Process high alarm		8	 		 
	Process low alarm		9	I I I		I I !
Output	Relay contact			R		! ! !
	Non-contact voltage			S		 
	DC current			Α		! !
Input	Thermocouple (K, J) (must be specified)			I I I	Е	I I I

**■** Input specifications

Rated scale:

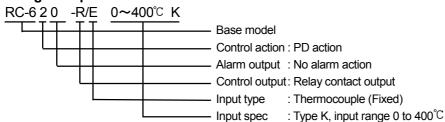
Input Type	Input I	Resolution	
K	0 to 400°C	0 to 999°F	1°C(°F)
J	0 to 400°C	0 to 999°F	1°C(°F)

Input type

: Thermocouple K, J (must be specified)

External resistance:  $100\Omega$  or less

## ■ Ordering example



#### ■ General structure

Dimensions : 48×96×115mm (W×H×D)

Weight : Approx. 280g

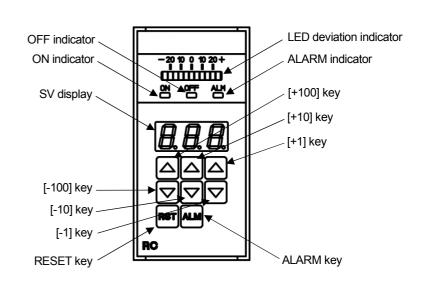
Mounting : Flush
Case : ABS resin
Color : Dark gray
Panel : Membrane sheet

Supply voltage : 100 to 240V AC 50/60Hz

(Allowable voltage fluctuation

range: 85 to 264V AC)

Power consumption: Approx. 6VA



### ■ Indication performance

Indication accuracy: Within 1 bar [Resolution  $5^{\circ}$ C (F)] Input sampling period: 0.25 sec

## ■ Control performance

Setting accuracy: Within  $\pm 0.3\%$  of each input span  $\pm 1$ digit, or  $\pm 2^{\circ}C$  (4°F), whichever is greater

Control action : The following control action can be selected by the DIP switch.

PD control action (with Auto-reset function)
Proportional band (P): 10°C (20°F)
Derivative time (D): 50 sec

Proportional cycle: 3 sec (Non-contact voltage), 30sec (Relay contact)

(Not available for DC current output type)

ON/OFF control action Hysteresis:  $1^{\circ}C$  ( $2^{\circ}F$ )

Main output : Relay contact: 1c

Control capacity: 5A 250V AC (Resistive load)

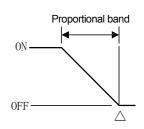
2A 250V AC (Inductive load  $\cos \phi = 0.4$ )

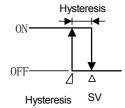
Electric life: 100,000 cycles

Non-contact voltage (for SSR drive): 12<sup>+2</sup><sub>0</sub>V DC

Max. 40mA DC (short circuit protected)

DC current: 4 to 20mA DC (Resolution: 12,000) Load resistive: Max.  $600\Omega$ 





#### Alarm function

The alarm action point is set from the  $\pm$  deviation from the SV (except Process high/low alarm), and when the input goes outside the alarm setting range, the alarm output will be turned ON.

Alarm type : The following alarm types can be selected by the rotary switch.

No alarm, High limit alarm, High limit alarm with standby, Low limit alarm, Low limit alarm with standby, High/Low limits alarm, High/Low limits alarm, High/Low limits alarm, Process high alarm,

and Process low alarm

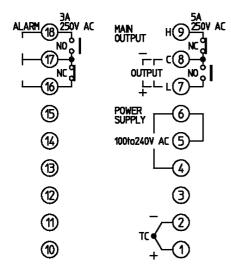
Control action : ON/OFF action Alarm hysteresis: 1°C (2°F)

Output : Relay contact: 1c

Control capacity: 3A 250V AC (Resistive load) 1A 250V AC (Inductive load  $\cos \phi = 0.4$ )

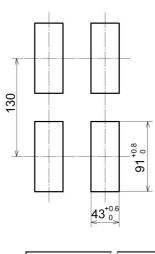
Electric life: 100,000 cycles

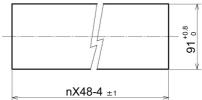
#### **■** Terminal arrangement



TC: Thermocouple input
MAIN OUTPUT: Control output
ALARM: Alarm output

#### ■ Panel cutout (Scale: mm)





Lateral close mounting (n: Number of units mounted)