

REX-C40, REX-C41, REX-C70, REX-C90 INSTRUCTION MANUAL

IM00C04-E1

▶ NOTE ◀

Make sure that this Instruction Manual is always readily available to personnel who use the REX-C40,C41,C70,C90. The contents of the Instruction Manual are subject to change without notice. If only have any question regarding the manual, contact one of our sales people, our nearest sales office, or the place where you have purchased this controller. Also keep this manual with much care for future reference.

▶ MARKING CAUTIONS ◀

- For safe operation of "REX-C40,C41,C70,C90", the following "Signal Words and Symbol Marks" are used in this manual.

<Signal Words>

WARNING :

Where there are possible dangers such as electric shock, fire (burns), etc. which could cause loss of life or injury, precautions to avoid such dangers are described.


CAUTION :

These describe precautions to be taken if unit damage may result if operating procedures are not strictly followed.

NOTE :

Extra notes or precautions are added to operating procedures and explanations.

<Symbol Marks>

 : This mark is used when great care is needed especially for safety.

* : This mark is used to add extra notes, precautions or supplementary explanations to table and figures.

WARNING

● **Wiring precautions**

- If failure or error of this instrument could result in a critical accident of the system, install an external protection circuit to prevent such an accident.
- In order to prevent instrument damage or failure, protect the power line and the input/output lines from high currents by using fuses with appropriate ratings.

● **Power supply**

- In order to prevent instrument damage or failure, supply power of the specified rating.
- In order to prevent electric shock or instrument failure, do not turn on the power supply until all of the wiring is completed.

● **Never use the instrument near inflammable gases**

- In order to prevent fire, explosion or instrument damage, never use this instrument at a location where inflammable or explosive gases or vapour exist.

● **Never touch the inside of the instrument.**

- In order to prevent electric shock or burns, never touch the inside of the instrument. Only RKC service engineers can touch the inside of the instrument to check the circuit or to replace parts. High voltage and high temperature sections inside the instrument are extremely dangerous.

● **Never modify the instrument.**

- In order to prevent accident or instrument failure, never modify the instrument.

● **Maintenance**

- In order to prevent electric shock, burns or instrument failure, only RKC service engineers may replace parts.
- In order to use this instrument continuously and safely, conduct periodic maintenance. Some parts used in this instrument have a limited service life and may deteriorate over time.

1. PRODUCT CHECK

Check whether the delivered product is as specified by referring to the following model code list.

■ Model code

REX-C40
REX-C41
REX-C70 F □ □ - □ * □ □ □
REX-C90 ① ② ③ ④ ⑤ ⑥ ⑦

① Control action

F : PID action with Auto-tuning [Reverse action]

② Alarm output type

N : No alarm *1
L : LBA output *1
S : Temperature alarm
P : Temperature alarm + LBA

③ Input

C : Thermocouple input R : RTD input

④ Control output

M : Relay contact output V : Voltage pulse output

⑤ Alarm type

1 : Process alarm 2 : Deviation alarm

⑥ Alarm action

A : High alarm B : Low alarm
C : High/Low alarm *2 D : Band alarm *2

⑦ Alarm hold action

N : Without hold action H : With hold action

*1: When alarm type is "N" for no alarm and "L" for LBA output, no need to specify suffix code from after *.

*2: Process alarm is not available with high/low alarm and band alarm. These alarm types can be specified only in deviation alarm.

◎ Standard control action is a reverse action. If a direct action is required, please specify "Z-104" at the time of ordering.

< Input range table >

		Input type	Input range
Thermo Couple	Type K	IEC/JIS	0 to 200°C, 0 to 400°C, 0 to 600°C, 0 to 800°C, 0 to 999°C (1°C)
		IEC *	0 to 800°F, 0 to 999°F, (1°F)
	Type J	IEC/JIS	0 to 200°C, 0 to 400°C, 0 to 600°C, 0 to 999°C (1°C)
		IEC *	0 to 800°F, 0 to 999°F (1°F)
	Type L	DIN	0 to 900°C (1°C)
	Type E	IEC/JIS	0 to 800°C, 0 to 999°C (1°C)
		IEC *	0 to 999°F (1°F)
	Type T	IEC/JIS	-199 to 400°C, 0 to 400°C (1°C) -19.9 to 99.9°C (0.1°C)
		IEC *	-199 to 752°F (1°F) -19.9 to 99.9°F (0.1°F)
	Type U	DIN	-199 to 400°C, 0 to 400°C (1°C) -19.9 to 99.9°C (0.1°C)
	RTD Pt100 or JP100	IEC/JIS	-199 to 200°C, -100 to 100°C 0 to 200°C, 0 to 400°C, 0 to 600°C (1°C) -19.9 to 99.9°C, 0.0 to 50.0°C 0.0 to 99.9°C (0.1°C)
		IEC *	-199 to 999°F, -199 to 400°F, 0 to 200°F, 0 to 500°F, 0 to 999°F, (1°F) -199 to 99.9°F (0.1°F)

* ANSI, DIN and JIS are same as IEC (International Electrotechnical Commission). Calibration of types L and U is IEC equivalent.

Accessories

- Mounting brackets (2 pcs.)
- Instruction manual [IM00C04-E] (1 copy)

2. MOUNTING



WARNING

● In order to prevent electric shock or instrument failure, do not turn on the power supply until all of the wiring is completed.

■ Cautions for mounting

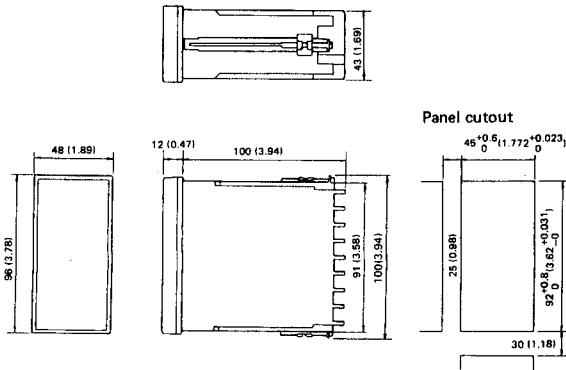
Avoid the following when selecting the mounting location.

- Ambient temperature of less than 0 °C (32 °F) or more than 50 °C (122 °F).
- Ambient humidity of less than 45% or more than 85% RH.
- Rapid changes in ambient temperature which may cause condensation.
- Corrosive or inflammable gases.
- Direct vibration or shock to the mainframe.
- Water, oil, chemicals, vapor or steam splashes.
- Excessive dust, salt or iron particles.
- Excessive induction noise, static electricity, magnetic fields or noise.
- Direct air flow from an air conditioner.
- Should be used indoors where the system is not exposed to direct sunlight.
- Heat to be accumulated radiation heat.

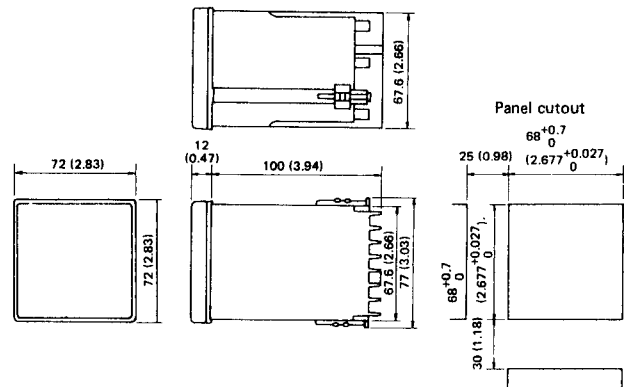
■ Dimensions

Unit: mm (inch)

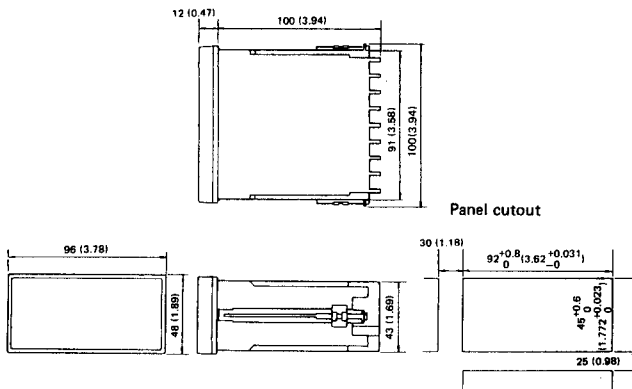
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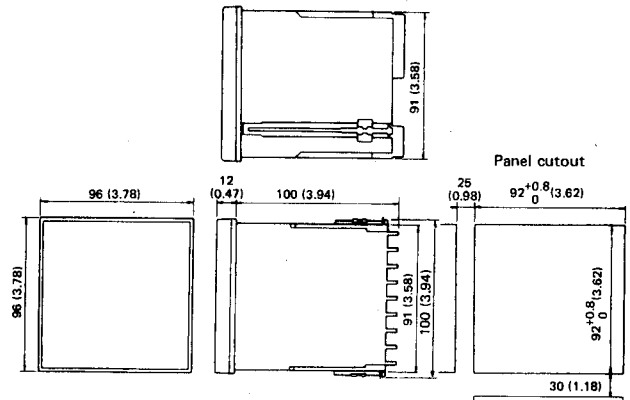
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< REX-C41 >



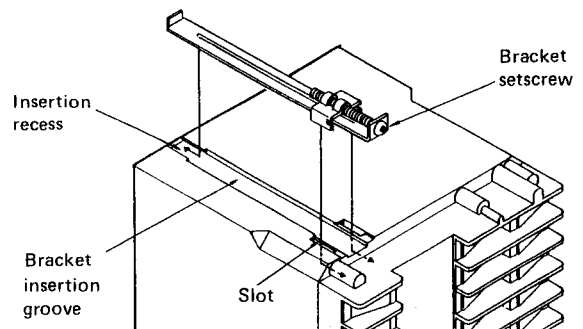
< REX-C90 >



* Dimensions in inches are shown for reference.

■ Mounting procedures

- ① Make a rectangular cutout corresponding to the number of controllers to be mounted on panel by referring to the panel cutout dimensions.
- ② Insert the controllers into the panel from the panel front.
- ③ Insert an upper mounting bracket along the bracket insertion groove from the back, and then engage a projection at the bracket end with a recess at the groove front and also insert metal fitting legs into slots.
- ④ Tighten a bracket setscrew from the rear of the bracket with Phillips screwdriver. Do not overtighten the bracket setscrew.
- ⑤ Set the other mounting bracket in the same way as in ③ and ④.



* An example of the REX-C90 is described here, the same mounting example fig. applies to REX-C40,C41,C70.

3. WIRING

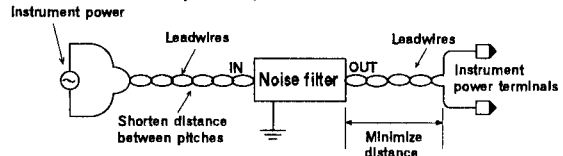


WARNING

- In order to prevent electric shock or instrument failure, do not turn on the power supply until all of the wiring is completed.
- If failure or error of this instrument could result in a critical accident of the system, install an external protection circuit to prevent such an accident.
- In order to prevent instrument damage or failure, protect power line and the input/output lines from high currents by using fuses with appropriate ratings.

■ Cautions for wiring ⚠

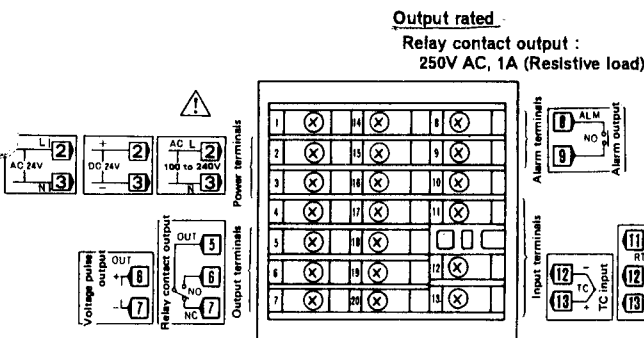
- (1) For thermocouple input, use the specified compensation wire.
- (2) For RTD input, use leads with low resistance and having no resistance differences between the 3 leads.
- (3) Conduct input signal wiring away from instrument power, electric equipment power and load lines as such as possible to avoid noise induction.
- (4) Conduct instrument power wiring so as not to be influenced by noise from the electric equipment power. If it is assumed that a noise generation source is located near the controller and the controller is influenced by noise, use a noise filter.
 - ① To obtain a satisfactory noise filter effect, select the most suitable type after due consideration of instrument power supply voltage and filter frequency characteristics.
 - ② For instrument power wiring, if it is assumed that noise exerts a bad influence upon the controller, shorten the distance between twisted power supply wire pitches. (The shorter the distance between the pitches, the more effective for noise reduction.)
 - ③ Install the noise filter on the panel which is always grounded and minimize the wiring distance between the noise filter output side and the instrument power terminals. Otherwise, the longer the distance wiring, the less effective for noise.
 - ④ Do not install fuses and/or switches on the filter output signal since this may lessen filter effect.
- (5) For wiring, use wires conforming to the domestic standard of each country. (For instrument grounding, use wires with nominal section area of 1.25 to 2.0 mm², and securely ground the instrument at the minimum distance.)
- (6) About 1 to 2 sec. are required as the preparation time of contact output during power-ON. Use a delay relay when the output line, is used for an external interlock circuit.
- (7) When connecting wires, note that the power, input/MCU and output circuits are isolated independently, while the inside of the input and output circuits are not isolated.



■ Terminal configuration

< REX-C70 >

< REX-C40, C41, C90 >



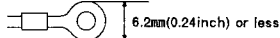
Output rated
 Relay contact output :
 250V AC, 1A (Resistive load)

NO : Normally open
 NC : Normally closed

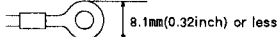
Output rated
 Relay contact output :
 250V AC, 3A (Resistive load)

Voltage pulse output :
 0/12V DC (Load resistance 800 Ω or more)

- Crimp-style terminal lug
 Therefore, use the lug suitable for a screw of M3.
 - Terminals Nos. 1 to 10
 (Power terminals, Alarm terminals and Output terminals)

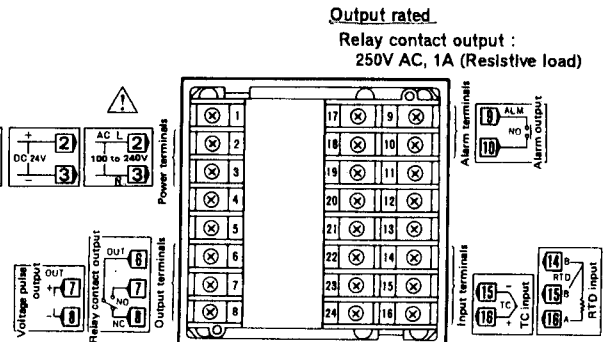


- Terminals Nos. 11 to 13 (Input terminals)



- Recommended tighten torque : 0.4N·m(4kgf·cm)
 Maximum allowance tighten torque : 1.0N·m(10kgf·cm)

NOTE Terminals which are not used according to the controller type are all removed.



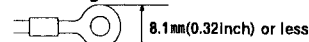
Output rated
 Relay contact output :
 250V AC, 1A (Resistive load)

NO : Normally open
 NC : Normally closed

Output rated
 Relay contact output :
 250V AC, 3A (Resistive load)

Voltage pulse output :
 0/12V DC (Load resistance 800 Ω or more)

- Crimp-style terminal lug
 Therefore, use the lug suitable for a screw of M3.

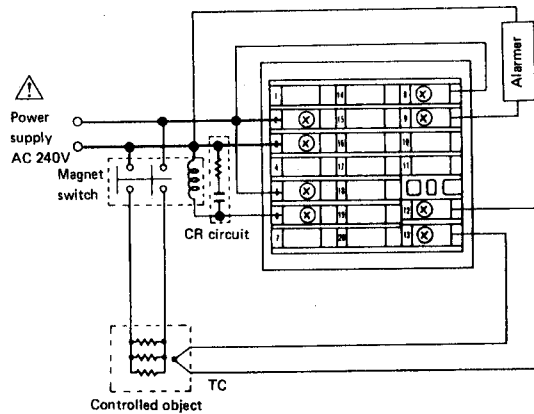


- Recommended tighten torque : 0.4N·m(4kgf·cm)
 Maximum allowance tighten torque : 1.0N·m(10kgf·cm)

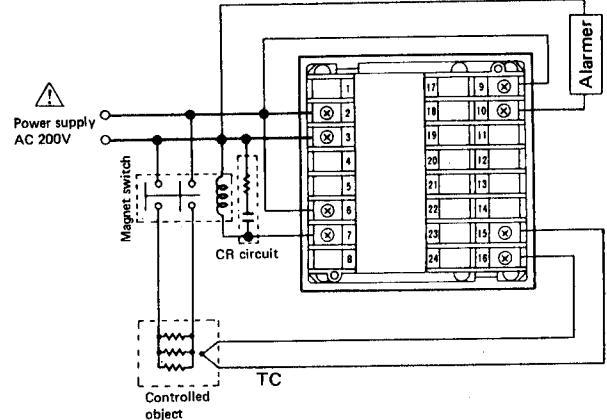
* An example of the REX-C90 is described here, the same wiring example fig. applies to REX-C40,C41.
 (Terminal Nos. 17 to 24 are not provided for REX-C40,C41)

■ Wiring example

< REX-C70 >



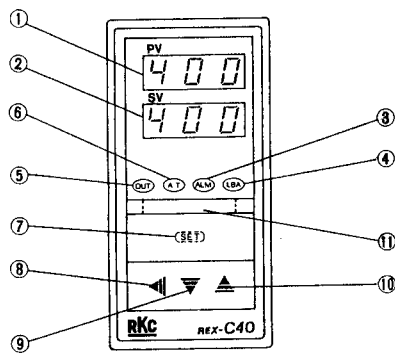
< REX-C90 >



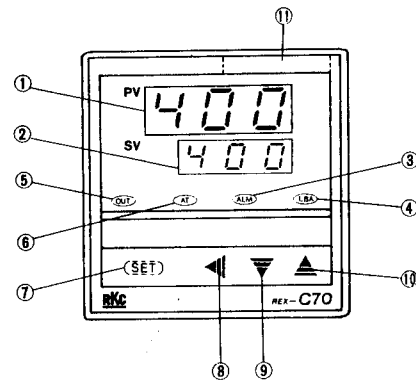
* An example of the REX-C90 is described here, the same terminal configuration fig. applies to REX-C40,C41.
(Terminal Nos. 17 to 24 are not provided for REX-C40,C41)

4. NAME OF PARTS

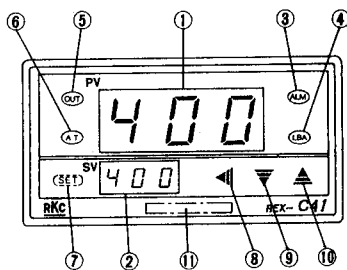
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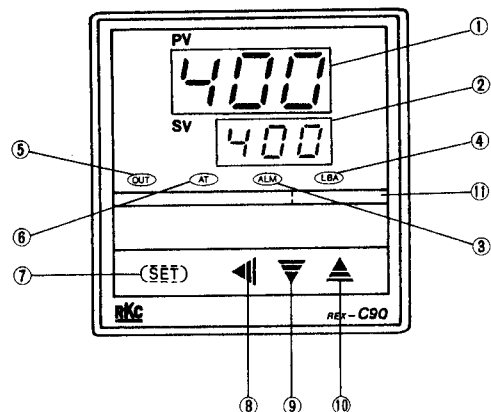
< REX-C70 >



< REX-C41 >



< REX-C90 >



- ① Measured-value (PV) display unit (Green)
- ② Set-value (SV) display unit (Orange)
- ③ Alarm (ALM) lamp (Red)
- ④ Control loop break alarm (LBA) action lamp (Red)
- ⑤ Control output (OUT) lamp (Green)
- ⑥ Auto-tuning (AT) lamp (Green)
- ⑦ Set (SET) key
- ⑧ Setting digit shift key
- ⑨ Set-value decrement key
- ⑩ Set-value increment key
- ⑪ Input range display

5. OPERATION

■ Calling-up procedure of each mode and parameter types

The measured-value (PV) display unit displays a measured-value with the power turned ON, and the set-value (SV) display unit displays the set-value (SV). Every time the (SET) key is pressed, modes and parameters change as shown in the following table. (When the last parameter is displayed, it returns to the first parameter.)

● PV/SV display and SV setting modes

Measured-value (PV) display unit	Set-value (SV) display unit	Description	Setting Range	Initial value prior to shipment
Measured-value	Set-value (SV)	Displays measured-value. Set-value (SV) can be set. *1	Within the Input range	0 or 0.0°C(°F)

Pressing the (SET) key continuously for 5 sec.

*1 : Set-value (SV) is a control target. It is settable within the input range.

● Parameter setting mode

(If no key operation is performed for 1 minute, the controller is set to the PV/SV display mode automatically)

Measured-value (PV) display unit	Symbol	Name	Description	Setting range	Initial value prior to shipment
*2 AL	AL	Alarm	Sets alarm set-value.	-199 to +999°C(°F) or -19.9 to +99.9°C(°F)	50 or 50.0°C(°F)
*3 LbA	LbA	Control loop break alarm	Sets control loop break alarm set-value.	0.1 to 99.9min (Setting below "0.1" cannot be made)	8.0 min
*3 Lbd	Lbd	LBA deadband	Sets the area of not outputting LBA.	0 to 999°C(°F) (For input display resolution of 1°C(°F)) 0 to 200°C(°F) (For input display resolution of 0.1°C(°F))	0°C(°F)
ATU	ATU	Auto-tuning	Turns the auto-tuning function ON/OFF.	0:Auto-tuning end or stop. 1:Auto-tuning start.	0
*4 P	P	Proportional band	Set when proportional control is performed.	1 to span°C(°F) or 0.1 to span°C(°F). Upper within 200°C(°F) or 99.9°C(°F). (ON/OFF action with P set to "0" or "0.0")	30 or 30.0°C(°F)
(SET) I	I	Integral time	Eliminates offset occurring in proportional control.	1 to 999 sec. (I action turns OFF with I set to "0")	240 sec.
d	d	Derivative time	Prevents ripples by predicting output change thereby improving control stability.	1 to 999 sec. (D action turns OFF with D set to "0")	60 sec.
Ar	Ar	Anti-reset windup	Prevents overshoot and/or undershoot caused by integral action effect.	1 to 100% of P band (I action turns OFF with this action set to "0")	100%
f	T	Proportional cycle	Sets control output cycle.	1 to 100 sec.	Relay contact output : 20 sec. Voltage pulse output : 2 sec.
LCK	LCK	Set data lock	Turns the set data lock ON/OFF.	100: No set data locked. 101: Set data locked. 110: Only the set-value (SV) is changeable with the set data locked.	100

*2..... ● No display when alarm is not attached.

● Alarm differential gap : 2°C(°F) or 2.0°C(°F)

*3..... ● No display when control loop break alarm is not attached.

● LBA deadband|differential gap : 0.8°C(°F)

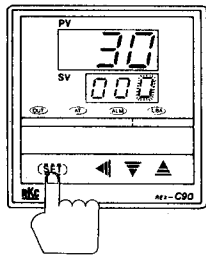
*4..... ● Differential gap at ON/OFF action : 2°C(°F) or 2.0°C(°F) [±1°C(°F) or ±1.0°C(°F) from the set-value (SV)]

Parameter setting procedure

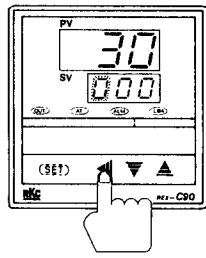
Setting set-value(SV)

Following is an example of set-value(SV) to 200 °C .

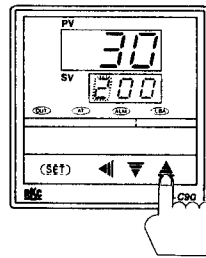
- ① Set to the SV setting mode ② Shift of the digit brightly lit ③ Numeric-value change ④ Set-value entry



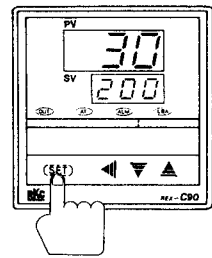
Press the (SET) key enter the SV setting mode. The digit which light brightly is settable.



Press the ◀ key to shift the digit which lights brightly up to the hundred's digit.



Press the ▲ key to set "2". Pressing the ▲ key increments numerals, and pressing the ▼ key decrements numerals.



After finishing the setting, press the (SET) key. All of the set-value digits light brightly and as a result the controller returns to the PV /SV display mode.

Set-value increase or decrease

Example: When a temperature of 199 °C is changed to 200 °C .

Press the ◀ key to shift the digit brightly lit to the least significant digit. Press the ▲ key to change "9" to "0", thereby obtaining 200 °C . The same applies to set-value decrease.

Minus (-) value setting

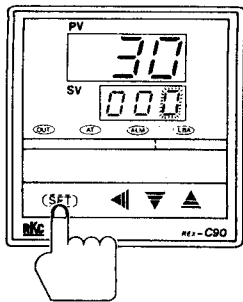
Example: For changing 200 to -100.

Press the ◀ key to shift the digit brightly lit to the hundreds digit. Press the ▼ key to decrement figures in order of 1 → 0 → -1.

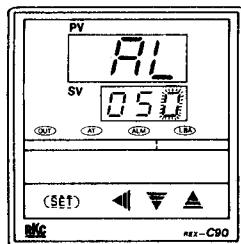
Setting parameters other than set-value

In the PV/SV display mode

In the parameter setting mode



For more than 5 sec.



Press the (SET) key for more than 5 sec. to set controller to the parameter setting mode.

Press the (SET) key by the required number of times until the parameter symbol to be set is displayed.

The setting procedures are the same as those of example ② to ④ in the above "Setting set-value(SV)" (Pressing the (SET) key after the setting is finished in the parameters).

When no parameter setting is required, return the controller to the PV/SV display mode.

⚠ Key operational cautions

- For this controller, the value whose setting was changed is not registered. It is registered for the first time it is shifted to the next parameter by pressing the (SET) key.
- When the controller is not set to the SV setting mode (the set-value (SV) does not light brightly or dimly even with the (SET) key pressed) or each value does not light brightly or dimly even with the controller moved to the parameter setting mode, set data lock is activated. In this case, change the "LCK" parameter set-value to "100".
- This controller returns to the PV/SV display mode status if key operation is not performed for more than 1 minute.

Cautions for operation

- If any problems arise due to hunting exists in the control system, do not use the auto-tuning function. In this case, set each value to match the controlled object.
- Connect the input signal wiring, and then turn ON the power. If the input signal wiring opens, the controller judges that input is disconnected to cause the upscale of measured-value display (For thermocouple input, downscale is also available as option).
- No influence is exerted upon the controller for power failure of 20ms or less. For power failure of 20ms or more, the controller performs the same operation as that at the time of power-ON after power recovery (This applies only when alarm action is turned OFF).
- The alarm hold action is activated when not only the power is turned ON, but also the set-value (SV) is changed.

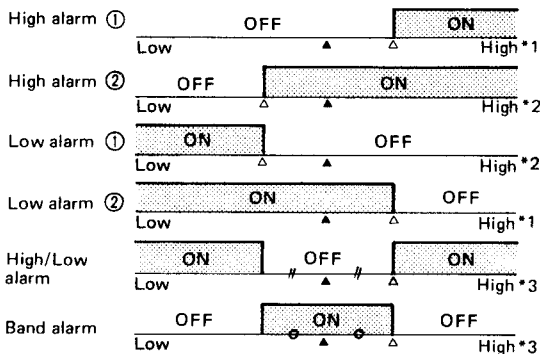
6. MAIN FUNCTION

Alarm (ALM) function

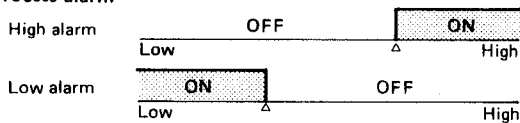
The action for each alarm becomes as follows.

(▲ : Set-value (SV) △ : Alarm set-value)

Deviation alarm



Process alarm



- *1 Alarm status where the alarm set-value is set to plus (+).
- *2 Alarm status where the alarm set-value is set to minus (-).
- *3 Status where alarm is activated at 2 equal deviation points from the set-value (SV) with the alarm set-value (absolute deviation) is set.

NOTE

When both the alarm (ALM) and control loop break alarm (LBA) are selected, the alarm output terminals are used in common with these alarms.

Control loop break alarm (LBA) function

Setting procedure

Usually set the set-value of the LBA to a value twice the integral time (I).

The LBA can also be set by the auto-tuning (AT) function. In this case, the set-value is automatically set to a value twice the integral time (I).

Description of operation

The LBA function starts time measurement from the time the controller PID computed value (output ON time/cycle) becomes 0% or 100%, and detects the amount of measured-value (PV) change at each LBA setting time to determine the amount of change, whether the LBA is to be ON or OFF.

- ① When the status at a 100% PID computed value continues beyond the LBA setting time, the LBA turns ON if the measured-value (PV) does not rise by 2°C(°F) or more.
[In direct action, the above alarm turns ON if the measured-value does not fall by 2°C(°F) or more.]
- ② When the status at 0% PID computed value continues beyond the LBA setting time, the LBA turns ON if the measured-value (PV) does not fall by 2°C(°F) or more.
[In direct action, the above alarm turns ON if the measured-value does not rise by 2°C(°F) or more.]

Causes of activation

The LBA is activated under the following conditions.

- ① Controlled object trouble... Heater break, no power supply, incorrect wiring, etc.
- ② Sensor trouble... Sensor disconnected, shorted, etc.
- ③ Actuator trouble... Burnt relay contact, incorrect wiring, relay contact not closed, etc.
- ④ Output circuit trouble... Burnt internal relay contact, relay contact not open or closed, etc.
- ⑤ Input circuit trouble... The measured-value does not change even if input changes, etc.

* If causes of the above trouble cannot be identified, check the control system.

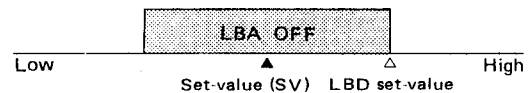
Cautions for control loop break alarm (LBA) function

- ① The LBA function is activated only at the 0% or 100% PID computed value.
Therefore, the time from trouble occurrence till the activation of the LBA function equals the time until the PID computed value becomes 0% or 100% plus the LBA setting time.
- ② No LBA function is activated while the auto-tuning (AT) function is activated.
- ③ The LBA function is influenced by disturbances (other heat sources, etc.) and as a result may be activated even if there is no trouble in the control system.
- ④ If LBA setting time is too short or does not match the controlled object, the above alarm may not be turned ON and OFF or not be turned ON. In such a case, set the setting time of LBA to be slightly longer.

LBA deadband (LBD)

Even if the control system is not abnormal, LBA may be turned ON by the influence of disturbances (other heat sources, etc.), but an area where LBA is not turned ON can be made by setting LBD.

Therefore, if the input value is in the LBD area, LBA is not turned ON even if the requirements for LBA occurrence have been satisfied. From this, pay much attention to LBD setting.



* LBD set-value : Absolute deviation value setting

Auto-tuning (AT) function

The auto-tuning function automatically measures, computes and sets the optimum PID and control loop break alarm (LBA) constants.

This function is activated after power-ON, during temperature rise and/or when control is stabilized from any process state.

- Prior to starting the auto-tuning function, end all the parameter settings other than PID and control loop break alarm (LBA).
- When the set-value (SV) is changed during progress in the auto-tuning function, suspend the auto-tuning to perform PID control using the values before auto-tuning start.
- When the auto-tuning function is suspended halfway, no values of PID and control loop break alarm are changed. (The value before auto-tuning function start is maintained.)

Set data locking function

The set data locking function is used to prevent the changing of each set-value by the front key and the activation of the auto-tuning function, i.e., prevent misoperation after setting has ended.

For set data locking, display "L [L]" (LCK) by pressing the (SET) key, then set the following value in accordance with Item "Parameter setting procedure", thereby enabling data lock ON or OFF.

100: No set data locked

101: All set data locked.

110: Only set-value (SV) can be changed with the set data locked.

NOTES

1. Do not change the most significant digit "1" of the set-value, at it may cause a malfunction.
2. Checking each setting is possible during data lock.

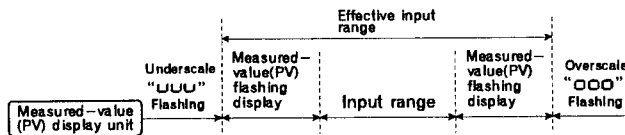
7. DISPLAY AT ERROR OCCURRENCE

● Error display

E r r	RAM failure (Incorrect set-data write, etc.)	Please contact us or your nearest RKC agent.
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● Overscale, Underscale

Measured-value(PV) (Flashing)	Measured-value exceeds the input range.	<div style="border: 1px solid black; padding: 5px; text-align: center;"> ⚠ WARNING In order to prevent electric shock, prior to replacing the sensor, always turn OFF the power. </div>
□ □ □ (Flashing)	Overscale (Measured-value exceeds the high input display range limit.)	
□ □ □ (Flashing)	Underscale (Measured-value below the low input display range limit.)	
		Sensor or input lead check



8. SPECIFICATION

(1) Input

Influence of external resistance	Approx. 0.35 $\mu\text{V}/\Omega$ (For TC input)
Influence of input lead	Approx. 0.01%/ Ω of reading (For RTD input)
Sampling cycle	0.5 sec.
Display accuracy	Within $\pm(0.5\%$ of displayed value + 1 digit) or $\begin{cases} \pm 3^\circ\text{C} [\pm 6^\circ\text{F}] & \text{(For TC input)} \\ \pm 0.8^\circ\text{C} [\pm 1.6^\circ\text{F}] & \text{(For RTD input)} \end{cases}$ * Whichever is greater.

(2) Setting

	Range	Resolution	Accuracy
Set-value (SV)	Same as scale range	1 $^\circ\text{C}$ ($^\circ\text{F}$) or 0.1 $^\circ\text{C}$ ($^\circ\text{F}$)	Within $\pm(0.5\%$ of set-value (SV) + 1 digit) or $\pm 3^\circ\text{C}$ (6°F) * Whichever is greater.
Proportional band (P)	1 to span or 0.1 to span Upper within 200 $^\circ\text{C}$ ($^\circ\text{F}$) or 99.9 $^\circ\text{C}$ ($^\circ\text{F}$)		
Integral time (I)	1 to 999 sec.	1 sec.	Within $\pm 0.5\%$ of setting range.
Derivative time (D)			
Anti-reset windup	1 to 100% of P	1%	
Proportional cycle	1 to 100 sec.	1 sec.	

(3) Output

Control output	Relay contact output	250V AC, 3A (Resistive load), 1 "c" contact Electrical life: 300,000 times or more (Rated load)
	Voltage pulse output	0/12V DC (Load resistance 800 Ω or more)

(4) Alarm

Type	Process alarm, Deviation alarm	
Action	High alarm, Low alarm, High/Low alarm, Band alarm (High/Low, Band : for Deviation alarm only)	
Setting range	-199 to 999 $^\circ\text{C}$ ($^\circ\text{F}$) or 19.9 to 99.9 $^\circ\text{C}$ ($^\circ\text{F}$)	
Setting resolution	Same as set-value (SV)	
Setting accuracy		
Differential gap	2 or 2.0 $^\circ\text{C}$ ($^\circ\text{F}$)	
Output	No. of points	Energized alarm or Non-energized alarm : 1 points, max.
	Rating	Relay contact: 250V AC 1A (Resistive load) 1 "a" contact Electrical life: 50,000 times or more (Rated load)
Additional function	Hold action	

(5) Other specifications

Power supply voltage	<ul style="list-style-type: none"> ● 85 to 264V AC (50/60Hz common use) Including voltage variation (Rated 100 to 240V AC) ● 21.6 to 26.4V DC (50/60Hz common use) Including voltage variation (Rated 24V DC) ● 21.6 to 26.4V AC (50/60Hz common use) Including voltage variation (Rated 24V AC)
Power consumption	<ul style="list-style-type: none"> ● 100 to 240V AC : 15VA or Less ● 24V DC : 24V DC, 160mA or less ● 24V AC : 6VA or less
Allowable ambient temperature	0 to 50 $^\circ\text{C}$ (32 to 122 $^\circ\text{F}$)
Allowable relative humidity	45 to 85% RH
Weight	<ul style="list-style-type: none"> ● REX-C40, C41 : Approx. 230g (0.50 lb) ● REX-C70 : Approx. 250g (0.55 lb) ● REX-C90 : Approx. 300g (0.66 lb)

RKC. RKC INSTRUMENT INC.

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HEAD OFFICE: 16-6, KUGAHARA 5-CHOME, OHTA-KU TOKYO JAPAN
 PHONE: 03-3751-9799 (+81 3 3751 9799)
 TELEX : 0246-8818 RKCTOK J
 CABLE : RKCRIKAROL
 FAX : 03-3751-8585 (+81 3 3751 8585)