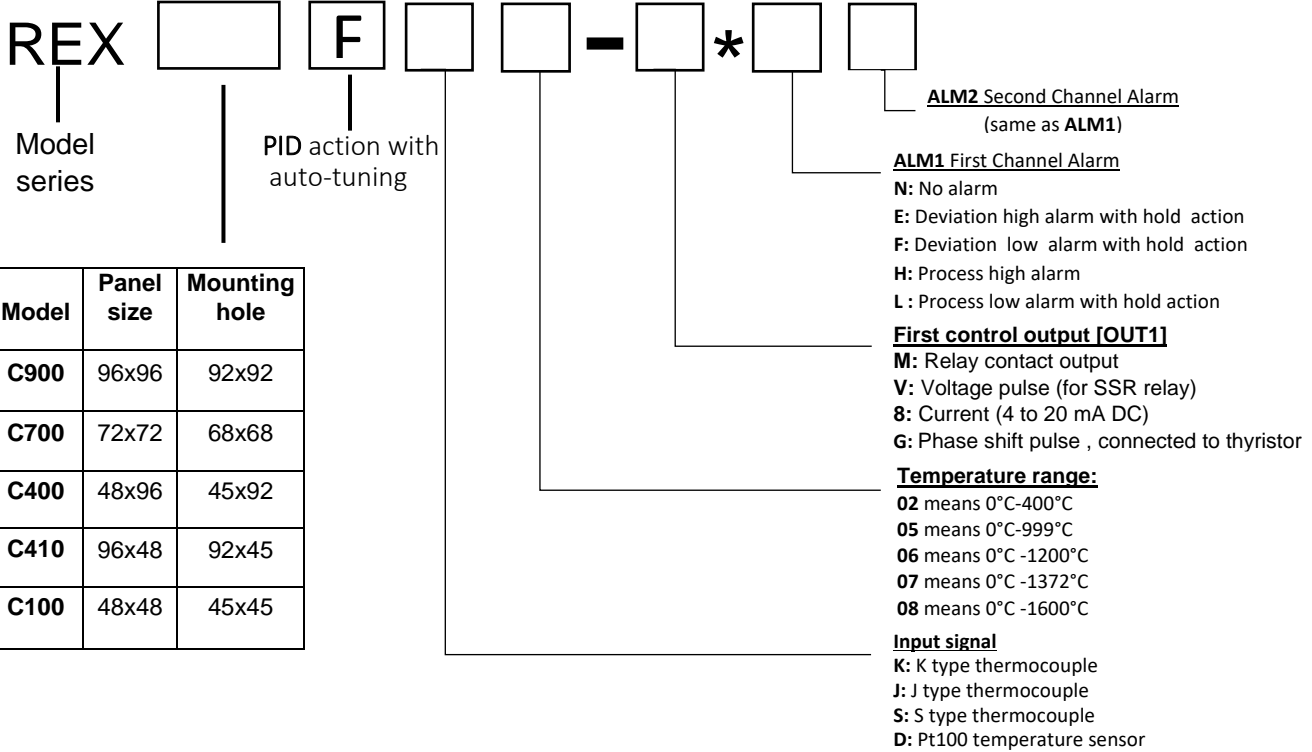


# REX— C900. C700. C400 .C100.C10

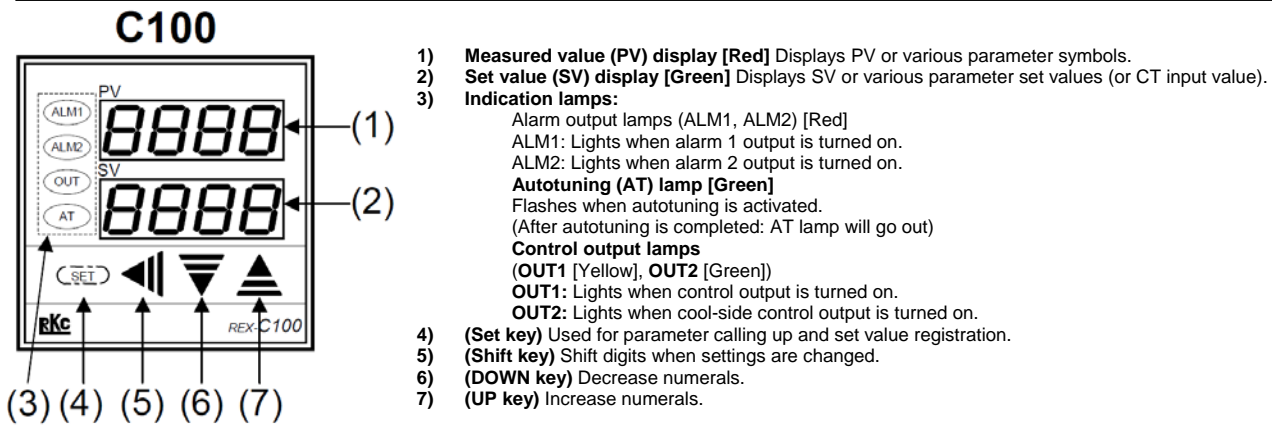
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First of all, thank you for using our products. This series of products is based on the most advanced modern control theory, using microcontroller with PID self-tuning (automatic optimization) function of intelligent temperature control instrument. Please read the instructions carefully before using.



**Example: REX-C100FK02-V\*EN**

This Model should be: The board size is 48x48, PID self tuning function, Match K type thermocouple, The range is 0°C -400°C , Contactless voltage pulse output (for solid state relay SSR), The first alarm is the deviation upper limit alarm, No second alarm.



**SV setting mode:**

Under normal display state of SV/PV, press on **(Set key)** button, the SV display is blinking, by pressing the **(Shift key)** key, set the number of required temperature settings. Then press the **(UP key)** or **(DOWN key)** button, set to the required temperature value, after setting, press the **(Set key)** button again and the controller is set now in normal SV/PV display state.

**Parameter setting mode:**

This parameter is used to set alarm, PID constant and other parameters. Under normal display state, Press and hold the **(Set key)** button for 3 seconds, display parameter setting state in PV display, display its corresponding value in SV display, next, press the **(Set key)** button to display the following table parameter symbols.

**Note:** This controller has an automatic recovery function display, when the operator performs parameter settings and modifications, he forgot to return to the main display mode, the controller will automatically return to the main display mode after 30 seconds.

### Main menu

After the controller is powered up normally, press the **(Set key)** button and hold for about 2 seconds to enter the main menu

Symbol	Name	Default value	Setting range	Description
SV	SV	100	SLL-SLH	Set the desired temperature
AL1	AL 1	10	SLL-SLH	Set alarm value
ATU	AT	0	0 - 1	Auto-tuning 0: FF 1: ON
P	P	30	0 - 999	Proportional term
OH	OH	20	1 - 100	Master control hysteresis (displayed when P== 0)
I	I	120	0 - 999	Integral term (inactive when P == 0)
D	D	30	0 - 999	Derivative ( inactive when P == 0)
Ar	Ar	80	0 - 100	Overshooting and undershooting restriction ( inactive when P == 0)
T	T	20	1 - 100	Heat-side proportioning cycle ( inactive when P == 0)
SC	SC	0	-199 - 199	Sensor correction value
LCK	LCK	0	0-111	Password lock (binary): 000: Controller is unlocked 001: SV AL1 AL2 can be modified 011: SV can be modified 111: Controller is locked

Measuring range of each type of measuring sensor that can be measured with this device

Symbol	Sensor type	Can be measured by this device
B	B	500~999
S	S	-50~999
R	R	-50~999
T	T	-50~999
K	K	-50~999
N	N	-50-999
J	J	-50~999
E	E	-50-800
PT	PT100	-50~800
Cu	Cu50	-50-150

Error cases		
Err	Device failure	Check the device functionality
000	PV is above the high input display range limit.	Check the input signal / sensor
000	PV is below the low input display range limit.	Check the input signal / sensor

### Controllers parameters setting menu

After powering the device, press the **(Set key)** button and the **(Shift key)** button simultaneously and hold it about 3 seconds, now "Cod" is displayed in the PV display. Set the "Cod" to "001", press **(Set key)** button in sequence to get and to go through the following parameters:

Symbol	Name	Default value	Setting range	Description
Sn	SN	K	B, S, R, T, K, N, J, E, PT, Cu	Sensor type
SLL	SLL	-50	Sensor measurement range	Set the measurement lower limit
SLH	SLH	999	Sensor measurement range	Set the measurement upper limit
oud	OUD	0	0 - 1	Control method - 0:heating 1:cooling
ouk	OUK	0	0 - 1	Output mode: 0:switch ON/OFF 1:continuous (1 - 5V or 4-20mA needs corresponding module support).
AC1	AC1	1	0 - 6	AL1 alarm mode: 0:no alarm 1:upper deviation alarm 2: lower deviation alarm 3: upper deviation alarm 4: upper deviation alarm 5: process value upper limit alarm 6: process value lower limit alarm
AC2	AC2	0	0 - 6	AL2 alarm (same as AL1)
AH1	AH1	2	1 - 100	Alarm 1 hysteresis
AH2	AH2	2	1 - 100	Alarm 2 hysteresis
Unit	UNIT	0	0 - 1	Unit: 0: °C 1: °F
df	DF	50	0 - 100	Filter coefficient
Cot	COT	0.4	0.00 - 10.0	Display inhibition
FAC	FAC	0	0 - 100 Over temperature display limit	0: off function Other value after the set value is exceeded, the excess is displayed proportionally SV+ (PV-SV)/FAC

1. Check that the voltage on the specification is the same as at the input to avoid the destruction of the controller.
2. According to the wiring diagram correctly wiring.
3. For thermocouple input signal, please use compensating wire with the same material as thermocouple wire.
4. for the thermal resistance input signal, please use the same specification of low resistance wire, and the length of the three wire is the same as possible.
- \* 5. Pay special attention to the power input line and sensor signal input line can not be confused and misconnected, otherwise the whole instrument burned out and scrapped, can not be repaired. The output terminal can not be short circuited by strong current.
6. The power and signal lines of the instrument should be separated from the large current output lines as far as possible to reduce the influence of electromagnetic radiation on the instrument. When it is unavoidable, the shielding lines should be selected as far as possible.

**When you change Cod to 911, you can restore to the factory default menu.**