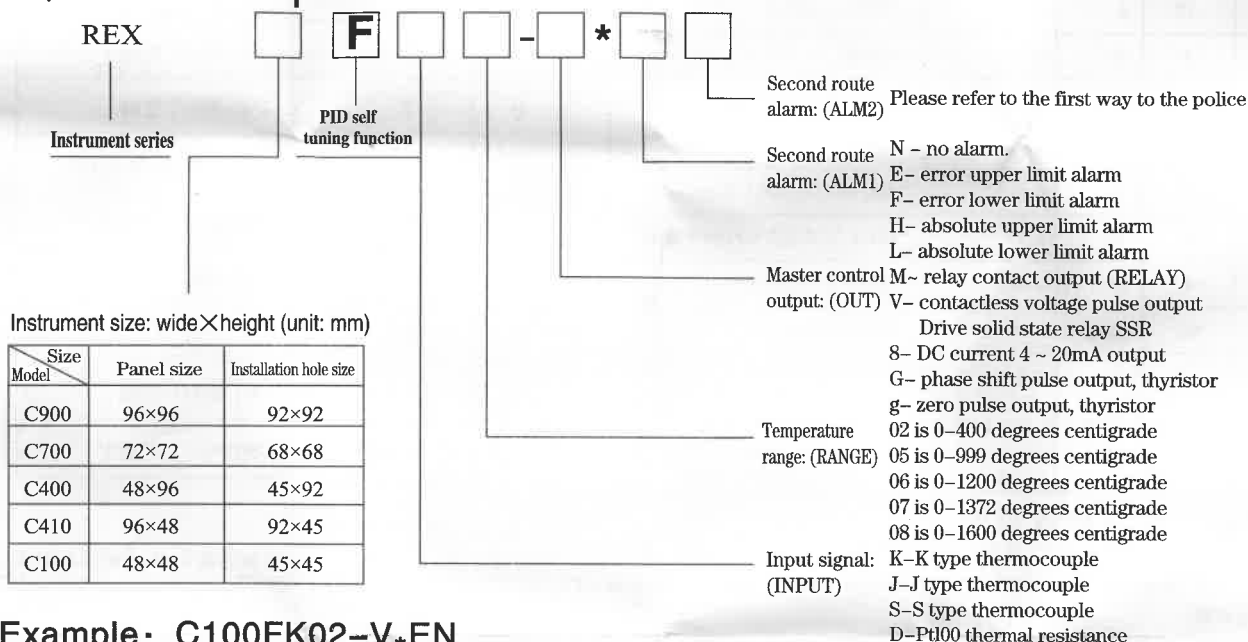


REX—C900.C700.C400.C100.C10

User manual

First of all, thank you for using our company's products. This series of products is based on the most advanced modern control theory, microcomputers controlled by microcomputers and a smart temperature control instrument with PID self tuning (automatic optimization) function. Please read the instructions in detail before use.

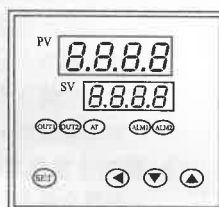
一、 Model description



Example: C100FK02-V*EN

The instrument should be: the size of the panel is 48 X 48; it has PID self setting function; with K thermocouple; temperature range of 0-400 C; contactless voltage pulse output (driving solid state relay SSR); the first alarm for the upper limit of deviation alarm; no second road alarm.

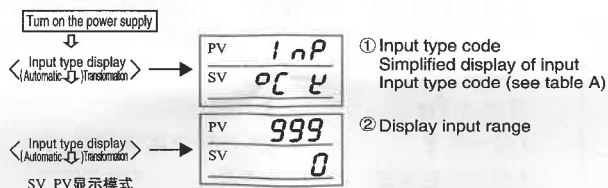
二、 Panel name and its functions



NO	Panel description	Content description
1	PV	Measured value / pattern display value
2	SV	Set value / mode content display value
3	OUT1	Output 1 indicator lamp
4	OUT2	Output 2 indicator lamp
5	AT	PID automatic indicator lamp
6	ALM1	Alarm 1 indicator lamp
7	ALM2	Alarm 2 indicator lamp
8	▲	Add keys
9	▼	Reducing key
10	◀	Displacement key
11	SET	Setting, pattern key

三、 Operation process

3.1 Opening process



3.2 SV setting mode

In the normal display state of SV/PV, press the "SET" key, make SV display in the flicker state, by pressing the "<" key, find the number of required temperature, and then press the rise or drop key, set to the required temperature value, after setting, again press a "SET" key, so that the instrument to SV/PV normal display state.

3.3 Parameter setting mode

This parameter is used to set alarm, PID constant and other parameters. In the normal display state, after holding the "SET" key for three seconds, the parameter setting state is displayed in the PV display, the corresponding value is displayed in the SV display, and the lower table parameter symbol is displayed in turn according to the "SET" key.

Note: This machine has an automatic response function. The instrument automatically returns to the main display mode after 30 seconds when the operator forgets to return to the main display mode by setting parameters and modifying operations. Read the following contents before using or modifying parameters. The contents of the following processes, such as meters without this function, will not display this content.

四. Main menu

After the instrument is energized, press the SET key for about 2 seconds to enter the main menu.

Display character	Parameters	Default value	Adjustable range	Explain
SV	SV	100	SLL-SLH	Set value
AL1	AL1	10	SLL-SLH	Alarm value (AC1 = 0 does not display)
AT	AT	0	0-1	Self tuning 0- closes 1- open
P	P	30	0-999	Proportions
OH	OH	2	1-100	Main control return (P = 0)
I	I	120	0-999	The integral term (P = 0 does not display)
D	D	30	0-999	The differential term (P = 0 does not display)
Ar	Ar	80	0-100	Integral overshoot suppression (P = 0 does not display)
T	T	20	1-100	The cycle (P = 0 does not display)
SC	SC	0	-199-199	Sensor correction value
LCK	LCK	0	0-111(BIN)	Password lock: 000 (Bin) all parameters can be modified 001 (Bin) SV AL1 AL2 modifiable 011 (Bin) SV modifiable 111 (Bin) all non modifiable All other can not be modified

五. Instrument Engineer parameter menu

After the instrument is energized, the "SET" key is pressed down with the "two" key at the same time. After about 3 seconds, the "Cod" is displayed in the PV display. In the "Cod" = 001, press the "SET" button in turn to get and display the following parameters circularly:

Display character	Parameters	Default value	Adjustable range	Explain
SN	SN	K	B,S,R,T,K,N,J,E,PT,Cu	Graduation
SLL	SLL	-50	Sensor corresponding measurable range	Display lower limit
SLH	SLH	999	Sensor corresponding measurable range	Display upper limit
OD	OD	0	0-1	Control mode: 0- heating 1- refrigeration
OUK	OUK	0	0-1	Output mode: 0- switch 1- continuous (1-5V or 4-20mA needs corresponding module support).
AC1	AC1	1	0-6	AL1 alarm mode: 0- without alarm 1 up deviation alarm 2 lower deviation alarm 3 up and down deviation alarm 4 up and down deviation internal alarm 5 process value upper limit alarm 6 process value lower limit alarm
AC2	AC2	0	0-6	AL1 alarm mode: 0- without alarm 1 up deviation alarm 2 lower deviation alarm 3 up and down deviation alarm 4 up and down deviation internal alarm 5 process value upper limit alarm 6 process value lower limit alarm
AH1	AH1	2	1-100	1 error of alarm
AH2	AH2	2	1-100	2 error of alarm
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	0- shutoff function Other values, beyond the set value. The portion of the excess is displayed proportionately Display value = SV+ (PV-SV) / FAC

When the Cod is changed to 911, the factory value menu can be restored.

Measurement range of various types of sensors

Display character	Parameters	Adjustable range
b	B	500~999 (Customized)
S	S	-50~999 (Customized)
r	R	-50~999 (Customized)
t	T	-50~999 (Customized)
ℓ	K	-50~999
n	N	-50~999
J	J	-50~999
E	E	-50~800
PT	PT100	-50~800 (Customized)
Cu	Cu50	-50~150 (Customized)

六. Error display function

When the meter does not work properly, the instrument will display message prompts after self diagnosis.

Message	Explain	Elimination method
Err	Instrument failure	Please send and repair
ooo	Input broken line, polarity connection or beyond the input range	Please check whether the input signal is wrong
uuu	Input broken line, polarity connection or beyond the input range	Please check whether the input signal is wrong

七. Matters of attention

- check whether the instrument graduation number and power supply voltage are the same as the instrument.
- Correct wiring according to the wiring diagram.
- For thermocouple input signal, please use compensating wire with the same material as thermocouple wire.
- For the thermal resistance input signal, use the same specification of low resistance wire, and the three line. The length is the same as possible.
- *5. pay special attention to the power input line and sensor signal input line can not be confused. Otherwise, the whole instrument is burnt out and can not be repaired. The output terminal can not be strong. The current is short circuited. 6, the instrument power line and signal line should be separated from the high current output line as far as possible. The effect of less electromagnetic radiation on instruments is unavoidable. Select the shield line.
- When ordering, please note:
 - Instrument model
 - Distribution number of sensor
 - Instrument output type
 - Measuring range
 - Other special technical and functional requirements.

八、



WARNING

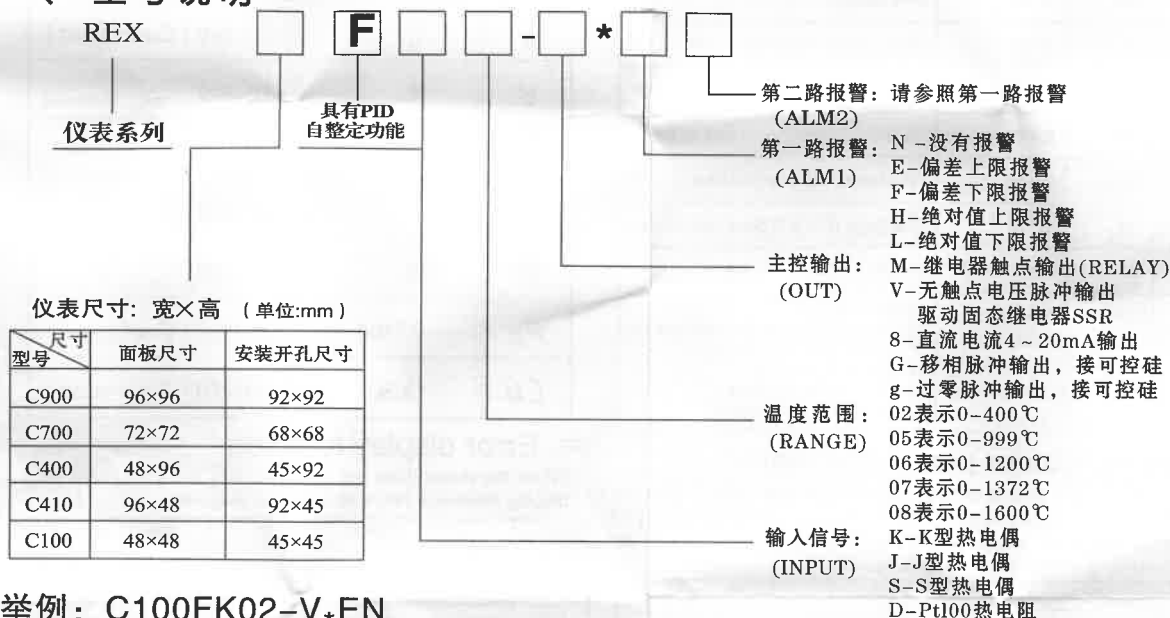
The product is strictly inspected before the factory is out of the factory, such as the product itself that has the right of responsibility for one year because of the quality problems, and does not bear any other joint liability. Damage caused by self dismantled or improper use is not within the scope of warranty.

REX—C900.C700.C400.C100.C10

使用说明书 (中英文)

首先感谢您使用本公司的产品。本系列产品是根据最先进的现代控制理论、采用微电脑单片机控制、具有PID自整定（自动寻优）功能的智慧型温度控制仪表。使用前请您详细阅读本说明书。

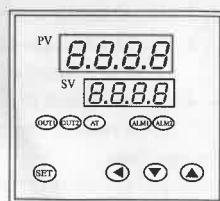
一、型号说明



举例：C100FK02-V*EN

此仪表应该是：面板大小为48×48；具有PID自整定功能；配K型热电偶；温度范围为0~400℃；无触点电压脉冲输出（驱动固态继电器SSR）；第一路报警为偏差上限报警；没有第二路报警。

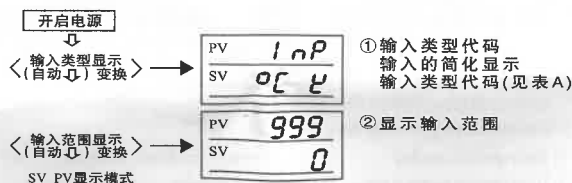
二、面板名称及各部功能



NO	面板说明	内容说明
1	PV	测量值/模式显示值
2	SV	设定值/模式内容显示值
3	OUT1	输出1指示灯
4	OUT2	输出2指示灯
5	AT	PID自动演算指示灯
6	ALM1	报警1指示灯
7	ALM2	报警2指示灯
8	▲	增加键
9	▼	减少键
10	◀	位移键
11	SET	设定、模式键

三、操作流程

3.1 开机流程



3.2 SV 设定模式

在SV/PV正常显示状态下，按一下“SET”键，使SV显示处于闪烁状态，通过按“<”键，找到所需设定温度的位数，再按上升或下降键，设定到所需温度值，设定完毕后，再次按“SET”键，使仪表转到SV/PV正常显示状态。

3.3 参数设定模式

此参数用于设定报警，PID常数等参数。在正常显示状态下，按住“SET”键三秒后，在PV显示器中显示出参数设定状态，在SV显示器中显示其对应的数值，依次按“SET”键显示下表参数符号：

注意：本机有显示自动回复功能。当操作者进行参数的设定修改等操作而忘记回到主显示模式时，仪表会在30秒后自动返回主显示模式

仪表在使用前或进行参数修改时详细阅读以下内容。下列流程中各项内容如仪表无此功能将不显示此项内容。

四. 主菜单

在仪表正常通电后，按SET键约2秒后进入主菜单

显示符	参 数	默认值	可调范围	说 明
SV	SV	100	SLL-SLH	设定值
AL1	AL1	10	SLL-SLH	报警值(AC1 == 0 时不显示)
AT	AT	0	0-1	自整定 0-关闭 1-打开
P	P	30	0-999	比例项
OH	OH	2	1-100	主控回差(P == 0时显示)
I	I	120	0-999	积分项(P == 0时不显示)
D	D	30	0-999	微分项(P == 0时不显示)
Ar	Ar	80	0-100	积分过冲抑制(P == 0时不显示)
T	T	20	1-100	周期(P == 0时不显示)
SC	SC	0	-199-199	传感器修正值
LCK	LCK	0	0-111(BIN)	密码锁: 000(Bin)所有参数可修改 001(Bin) SV AL1 AL2可修改 011(Bin) SV可修改 111(Bin) 全部不可修改 其它 全部不可修改

五. 仪表工程师参数菜单

在仪表正常通电后，将“SET”键与“<”键两键同时按住，约3秒后，在PV显示器内显示“Cod”。在“Cod”=001时，依次按“SET”键可得到并循环显示下列参数：

显示符	参 数	默认值	可调范围	说 明
SN	SN	K	B,S,R,T,K,N,J,E,PT,Cu	分度号
SLL	SLL	-50	传感器对应可测量范围	显示下限
SLH	SLH	999	传感器对应可测量范围	显示上限
oud	oud	0	0-1	控制方式:0-加热 1-制冷
ouk	ouk	0	0-1	输出方式:0-开关 1-连续(1-5V或4-20mA 需要相应模块支持)
AC1	AC1	1	0-6	AL1报警方式:0-无报警 1 上偏差报警 2 下偏差报警 3 上下偏差外报警 4 上下偏差内报警 5 过程值上限报警 6 过程值下限报警
AC2	AC2	0	0-6	AL1报警方式:0-无报警 1 上偏差报警 2 下偏差报警 3 上下偏差外报警 4 上下偏差内报警 5 过程值上限报警 6 过程值下限报警
AH1	AH1	2	1-100	报警1回差
AH2	AH2	2	1-100	报警2回差
Unit	UNIT	0	0-1	单位: 0-℃ 1-℉
DF	DF	50	0-100	滤波系数
COT	COT	0.4	0.00-10.0	显示抑制
FAC	FAC	0	0-100	0-关闭功能 其它值，超过设定值后。 超过的部分按比例显示 显示值 = SV+ (PV-SV)/FAC 超温显示限制

把Cod改成911时，可以恢复出厂值菜单

各型号传感器测量范围

显示符	参 数	可调范围
b	B	500-999 (定制)
S	S	-50-999 (定制)
r	R	-50-999 (定制)
t	T	-50-999 (定制)
k	K	-50-999
n	N	-50-999
J	J	-50-999
E	E	-50-800
PT	PT100	-50-800 (定制)
Cu	Cu50	-50-150 (定制)

六. 错误显示功能

当仪表不能正常工作时，仪表自诊断后会显示讯息提示。

讯 息	说 明	排 除 方 法
Err	仪表故障	请送检修
ooo	输入断线，极性接反或超出输入范围	请检查输入讯号有否错误
uuu	输入断线，极性接反或超出输入范围	请检查输入讯号有否错误

七、适用注意事项

1. 检查仪表分度号规格及电源电压是否与所订仪表相同。
2. 按接线图正确接线。
3. 对热电偶输入信号请用与热电偶丝相同材料的补偿导线。
4. 对热电阻输入信号请用相同规格低电阻值导线，且三线长度尽量相同。
- *5. 特别注意电源输入线与传感器信号输入线不可混淆接错，否则整个仪表烧坏报废，不能修理。输出端子不能被强电流短路。
6. 仪表电源线与信号线尽量与大电流输出线分开面线，以减少电磁辐射对仪表的影响。在无法避免时仪表连线请尽量选用屏蔽线。
7. 订货时请注明：
 - ①仪表型号
 - ②配用传感器分度号；
 - ③仪表输出类型；
 - ④测温范围。
 - ⑤其它特殊技术、功能要求。

八、



警告

产品出厂前全部经严格检验，如因质量出现问题本公司保修一年，所负有责任权限所售产品本身，不负其它任何连带责任。由于自行拆开或使用不当引起的损坏，不在保修的范围内。