The digital indication controller was adopted 8bit micro-process, capable of the most suitable mode among the 4 mode, possible of multi Output or 2 output as desired.

Features

- **Multiple input/ output**
- **Scaling range of -1999~9999**
- **Optional :** Interface RS-485
  Remote SP
  Analog Output (4-20mA)
- **2 output**
- **Emergency output**

Ordering Codes

MODE	TYPE	OUT PUT	DUAL OUTPUT	INTER FACE	OPTION	CONTENT
KP-5	5					96 X 100 X 96 X 100
	3					48 X 96 X 100
		0				THE 1 OUTPUT
		1				THE 2 OUTPUT
			0			MULTI OUT
			1			4~20 mA + 4~20 mA
			2			4~20 mA + SSR
			3			4~20 mA + REALY
			4			SSR + 4~20 mA
			5			SSR + SSR
			6			SSR + REALY
			7			REALY + 4~20 mA
			8			REALY + SSR
			9			REALY + REALY
				0		NONE
				2		RS485
					0	NONE
					1	AO
					2	REMOTE SP
					3	AO + REMOTE SP

Specifications

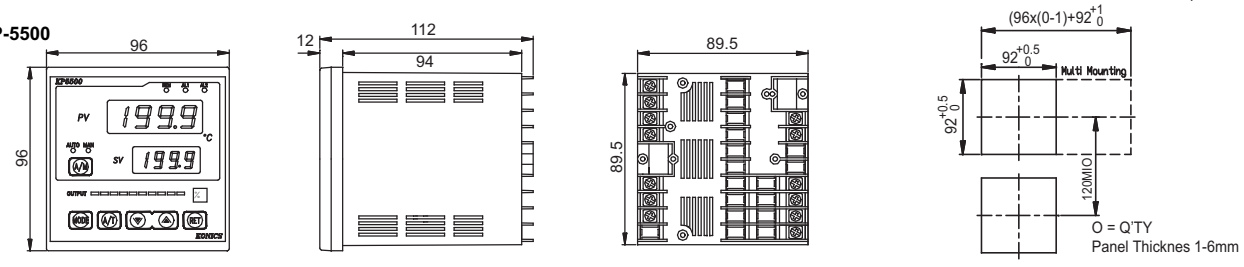
- **Input :** Universal Range Type

INPUT TYPE		SCALE RANGE	
		° C	° F
T/C	B(PR30%)	0~1800	32~3273
	R(PR13%)	0~1750	32~3182
	S(PR10%)	0~1750	32~3182
	K(CA)	-200~1350	-328~2462
	E	-200~800	-328~1472
	J(IC)	-200.0~800.0	-328~1472
	T(CC)	-200.0~400.0	-328~752
RTD	DIN 100 RTD	-200~600	-328~1112
	JIS 100 RTD	-200~600	-328~1112
	KIN 100 RTD	-200.0~600.0	-328~1112
mV	± 200	-1999~+9999,	-1.999~+9999
mA	± 20	-1999~+9999,	-1.999~+9999
V	± 20	-1999~+9999,	-1.999~+9999

Dimensions, Panel Cutout

(Unit : mm)

KP-5500



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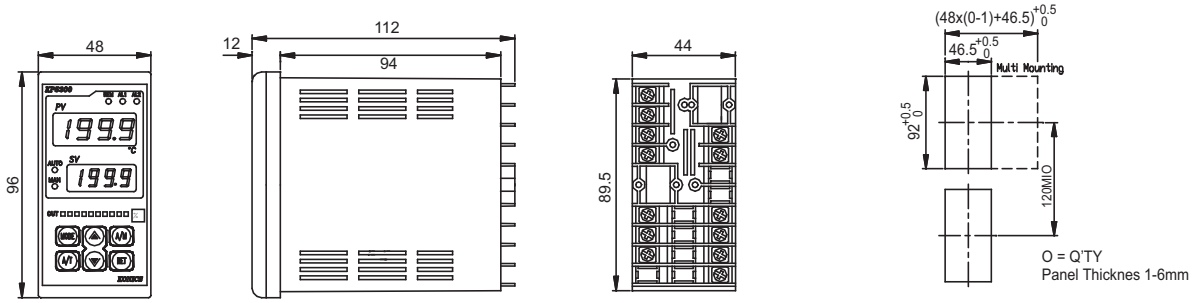
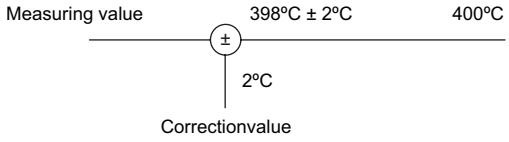


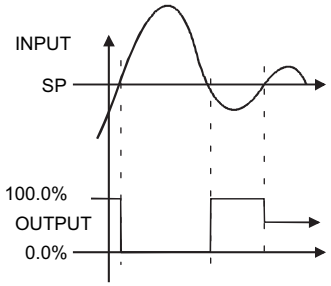
- **Output :** CURRENT4~20mA(Load resistance Max 600 or less)
  REALY contact(AC250V/8A. DC30V/2A)
  SSR Drive ON ... DC 24V(Max20mA)
  OFF ...DC 0V
- **Input resistance :** Volt type 200KΩ or more
  mA type 250Ω remote resistance
  Others 1MΩ or more
- **Accuracy :** Higher value of 0.25% or Digit(Full Scale)
- **Signal :** RESISTANCE(MAX) OTHERS 300Ω OR LESS
  RTD TYPE 20Ω(MAX)or less per line
- **Scale :** TC/RTD Set within the full scale
  mV, V, mA, -1.999~+9.999, -1999~+9999
- **Display :** PV, SV Display simultaneously -1999~+9999
  LED 7Segment 4Dight PV ... RED.
  SV or out ... GREEN Bar graphic 10
  Bar(0.0~100.0%)RED
- **Direct/reverse action change :** Standard
- **Input measuring & controlling cycle :** 100ms
- **Control mode :** PID. PD. ON/OFF(comm. no1, 2 output)
  PD- ON/OFF, ON/OFF-RD (No2 output)only
- **Control constant :** Proportional band(p) 0.1~999.9%(no1. Output)
  Integral time(i) 0.1~99.99min
  Derivative time(d) 0~20.00min
  Manual reset- 0.0~100.0%
  P2 0.1~999.9(optional no2 output)
  Dead bend ±0.5(optional no2 output)
- **Auto-tuning function :** Standard
- **Cycle time :** 1~120sec(in case of relay/SSR Drive Output)
- **C.M.A.R :** 140dB or more
- **N.M.R.R :** 40dB or more
- **Burn out :** TC. RTD. mV Scale upV.mV Scale Down
- **Input filter function :**FIR Filter Built-in
- **Sensor correction :**Full scale
- **ºC ºF CHANCE**
- **SELF-DIAGNOSIS :** Standard
- **Insulation resistance :**FG-input(100Ω)
  FG -power(100Ω)
  Power-input(100Ω)
  Input-output(100Ω)
- **Alarm :** High low limit alarm set point deviation deadband ... 0~99
- **Alarm point :** 2point(AL1, AL2)
- **Alarm response time :** 100mS
- **Contact rating :** AC 125V/0.5ADC 30V/5A
- **Data backup :** Save by EEPROM
- **Ambient temp :** Operating temp humidity -5ºc ~55ºc / 10~90%
  Storage temp humidity -20ºc~70ºc / 5~95%
- **Automatic return :** No key operation for automatically return to mode
- **Power supply :** AC85-264V, 47~63Hz
- **Power consumption :** 5VA (110V AC)
- **Weight :** Approx. 500g or less(KC)
- **Mounting :** Front panel mounting

Functions

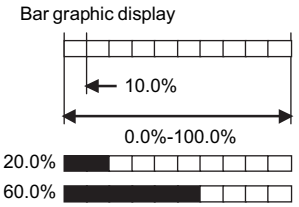
- **Correction of sensor**
  For the measuring value(PV)-Possible to add or subtract the correction value within a scope of full-scale
  Sensor = 398ºC(Before correction)
  Sensor(After correction)=Measuring value
  = correction value
  = 398ºC +2ºC
  = 400ºC



- **2-Auto-Tuning function**
  · In case of the Output is 0.0% or 100.0(In case of electric current Output)take measurement the specific characteristics of process of the changes of measuring value for lowest value of the Output limit or highest limit.
  · Set a new value after operated the most suitable control hand depending upon the result of measurement.



- **Output display function**
  · 1st output : If you press the A/M key onetime,the outputting volume indicated on the SP window which was outputted from the current from the 1st output
  (SP Value -> the 1st output volume -> SP Value ...)
  · In case of the 2nd output(option)Press the A/M key gradually and indicate the outputting volume in the order of SP value->the1st outputting volume ->the 2nd outputting volume ->SP value.
  · Incase of the normal mode indicator outputting volume currently, manual outputting volume shall be indicated in the manual output mode.



Connections

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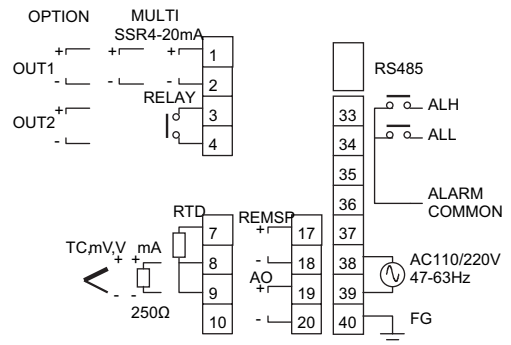

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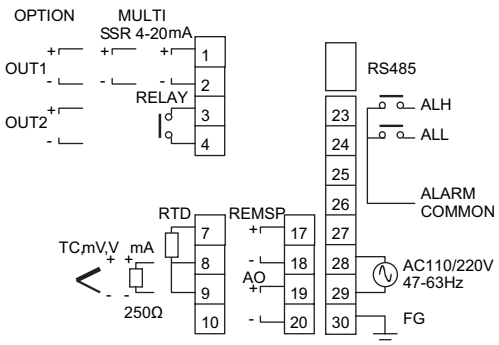


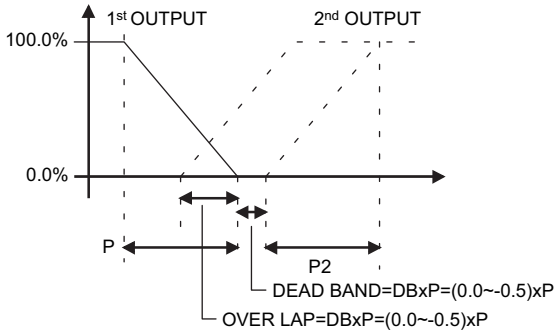
• Dual output function(option)

· This should be used in case of regulated by one (1) regulator for heating an cooling.

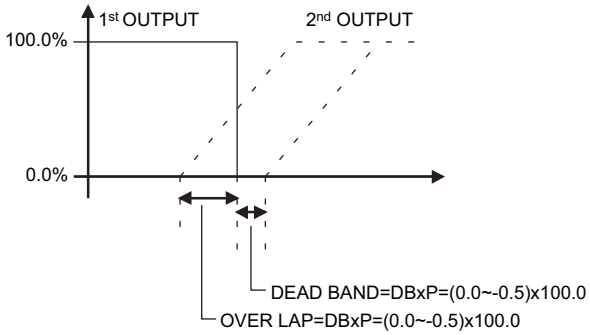
· The overlap of dead band shall be set up by % for the width of scale.

· There gulating mode is possible to use upon making choice among the PID,PD,ON/OFF,PD-ON/OFF,ON/OFF-PD.

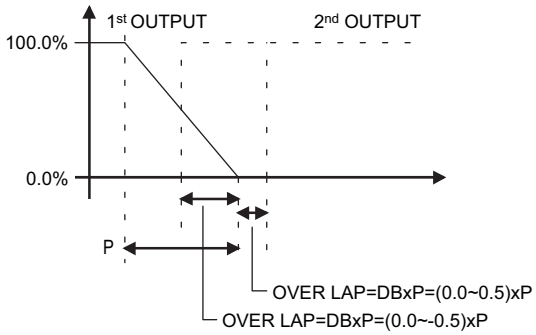
· 1stOUTPUT(PID) + 2ndOUTPUT2(PID)



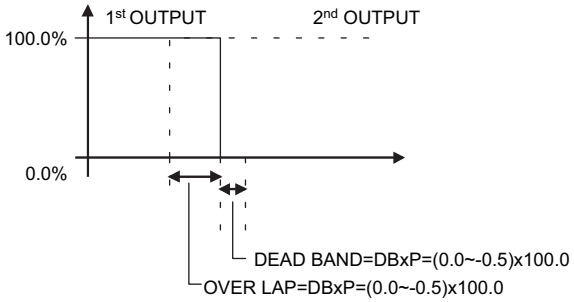
· 1stOUTPUT(ON/OFF) + 2ndOUTPUT2(PD)



· 1stOUTPUT(PD) + 2ndOUTPUT2(ON/OFF)



· 1stOUTPUT(ON/OFF) + 2ndOUTPUT2(ON/OFF)



Option

- **Communication interface :** RS 485
- **Remote set point :** 1~5V
- **Analog output :** 4~20mA
- **Dual output**