

DS FOX[®]

DAE SUNG E.N.G

Digital Temperature Controller

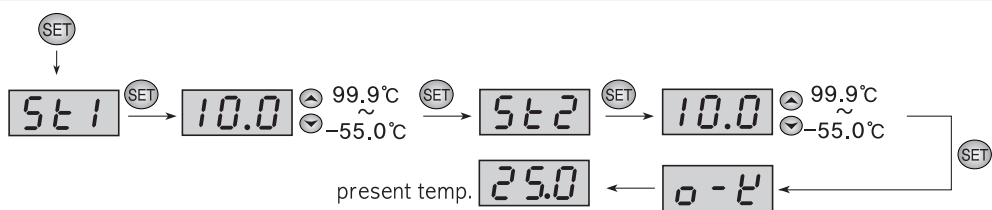
www.foxeng.co.kr



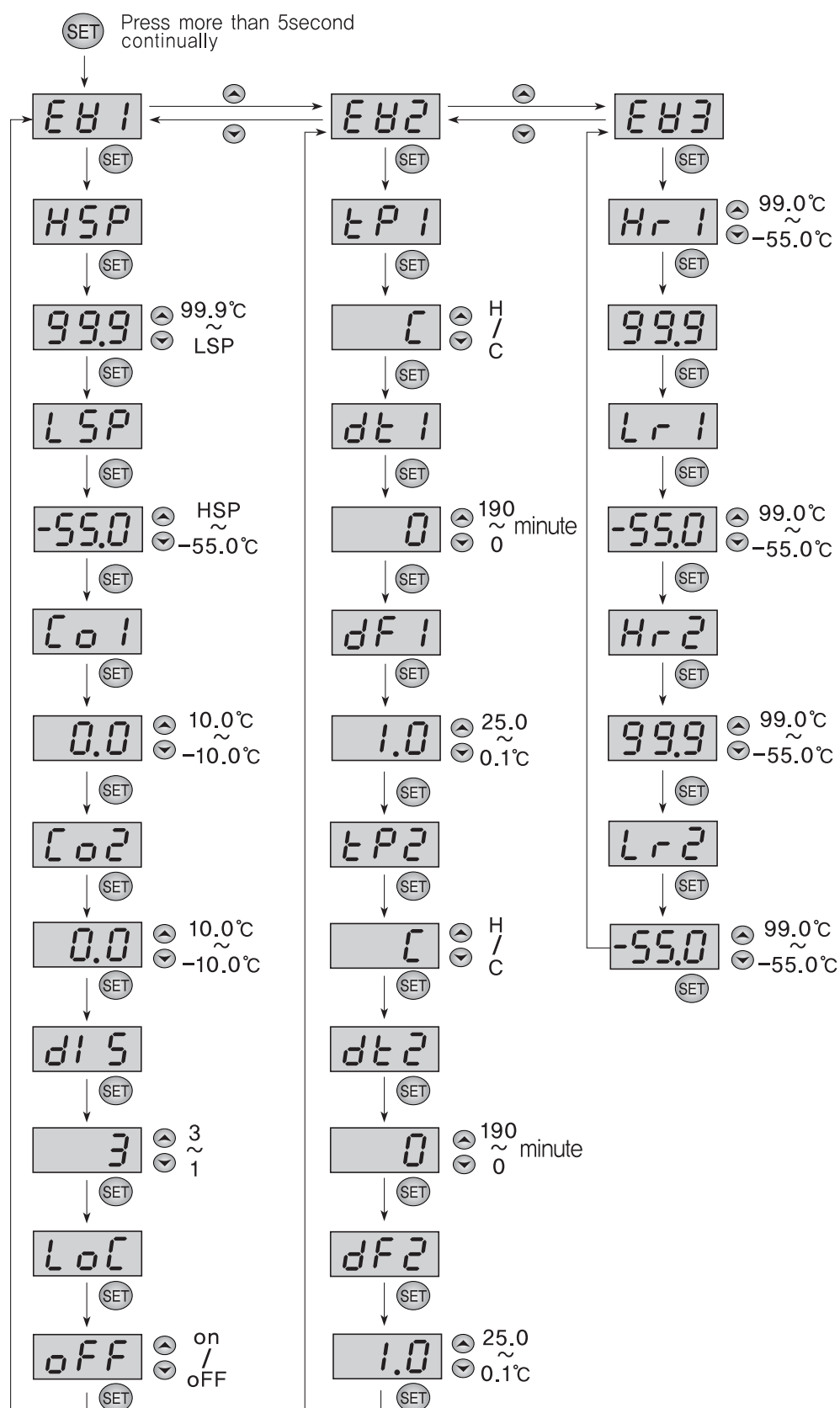
FOX-2006

DAE SUNG E.N.G

Setting Temperature



Setting Program

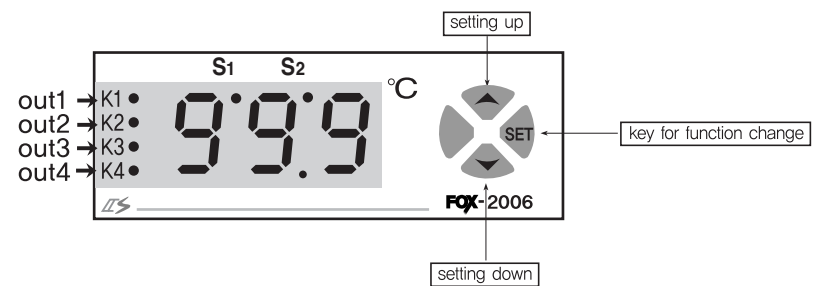


*Above Products information can be changed to improve it's quality without any notification

Manual for digital temp. controller

MODEL	SENSOR	Temp. range	SIZE
FOX-2006	NTC(10K)	-55.0°C ~ 99.9°C	77mm × 35mm

Part name



The function of each key

- SET** : A key to change of the setting values.
To store of the data values, press **SET** key for 2second continually or if there is no any key's input, it is stored the data values automatically after 60second and then, be returned at present temperature display mode
- ▲ ▼** : A key to change of the setting values
 - ▲** : A key for conversion mode of the Sensor 2(S2) temperature display
(The conversion method of the Sensor 2 temperature display : In the present temperature display, if **▲** key is pushed, the S2 temperature is displayed as soon as the sensor 2 display is lighting
And it is returned at **di 5** which was set after about 10 second
 - ▼** : A key for conversion mode of the Sensor 1(S1) temperature display.
(The conversion method of the Sensor 1 temperature display : In the present temperature display, if **▼** key is pushed, the S1 temperature is displayed as soon as the sensor 1 display is lighting
And it is returned at **di 5** which was set after about 10 second

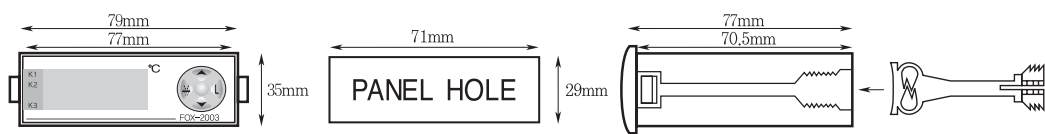
Detailed manual

- Set 1** : Setting for the 1st temperature (out 1)
: Setting for the main output by the S1(sensor 1)
- Set 2** : Setting for the 2nd temperature (out 3)
: Setting for the main output by the S2(sensor 2)
- HSP** : Setting function for the highest limit of temperature range
: (Maximum setting point allowed to the end user)
- LSP** : Setting function for the lowest limit of temperature range
: (Minimum setting point allowed to the end user)
- Co 1** : Temperature correction for the Sensor 1(S1)
- Co 2** : Temperature correction for the Sensor2(S2)
Correction for the present temperature : correction function for an discrepancy between display temp. and real temp.
Ex) A real temperature is 130°C only, but the display temperature was 135°C
You may use this function and can correct the display temperature by 05 °C
- di 5** : The method of temperature display.
This product have two sensors but its display is only one.
Therefore, you have to select the method of the display.
 - S1(Sensor1) is only displayed.
 - S2(Sensor2) is only displayed
 - S1 and S2 is displayed by turns at 5 intervals
- LoC** : The lock function of setting data
 - Setting "ON" : All setting values are locked except for **Set 1** and **Set 2** .
 - Setting "oFF" : Removal of the lock function for all setting values
- tP 1** : The selection of the function for 1st main output
C - when use in cooling
H - when use in heating
- dt 1** : Delay time of the 1st main output
- It is widely used in order to prevent some problems like oscillating, chattering according to the on/off operation's repeat in frequent.
- dF 1** : Setting for temperature deviation
- In the ON/OFF control, it needs at regular interval between ON and OFF.
If these interval are too much narrow, the relay or output contact can be damaging quickly and also occurs the hunting (oscillating, chattering) by virtue of external noise and so on. This function can control these intervals at discretion.
- tP 2** : The selection of the function for 2nd main output.
C - when use in cooling
H - when use in heating
- dt 2** : Delay time for 2nd main output.
- It is widely used in order to prevent some problems like oscillating, chattering according to the on/off operation's repeat in frequent.
- dF 2** : Setting for temperature deviation of the 2nd main output
- In the ON/OFF control, it needs at regular interval between ON and OFF.
If these interval are too much narrow, the relay or output contact can be damaging quickly and also occurs the hunting (oscillating, chattering) by virtue of external noise and so on. This function can control these intervals at discretion.
- Hr 1** : The alarm output for the highest limit by the 1st sensor(S1)
: The alarm output -turn on : The 1st sensor's temperature is higher than **Hr 1** (out2)
- Lr 1** : The alarm output for the lowest limit by the 1st sensor (S1)
: The alarm output -turn on : The 1st sensor's temperature is lower than **Lr 1** (out2)
- Hr 2** : The alarm output for the highest limit by the 2nd sensor(S2)
: The alarm output- turn on : The 2nd sensor's temperature is higher than **Hr 2** (out4)
- Lr 2** : The alarm output for the lowest limit by the 2nd sensor (S2)
: The alarm output -turn on : The 2nd sensor's temperature is lower than **Lr 2** (out4)

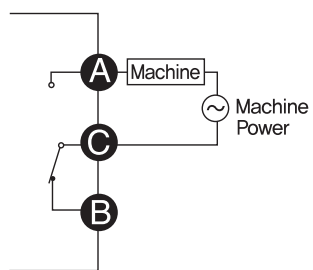
■ Temp. range & set value when deliver

Display	Range	Setting value when deliver
St1	-55.0°C ~ 99.9°C	10.0°C
St2	-55.0°C ~ 99.9°C	10.0°C
HSP	LSP ~ 99.9°C	99.9°C
LSP	-55.0°C ~ HSP	-55.0°C
Co1	-10.0°C ~ 10.0°C	
Co2	-10.0°C ~ 10.0°C	
d1S	1 ~ 3	3
LoC	on/off	off
tP1	C/H	C
dt1	0 ~ 99minute	0
dF1	0.1°C ~ 25.0°C	1.0°C
tP2	C/H	C
dt2	0 ~ 99minute	0
dF2	0.1°C ~ 25.0°C	1.0°C
Hr1	-55.0°C ~ 99.9°C	99.9°C
Lr1	-55.0°C ~ 99.9°C	-55.0°C
Hr2	-55.0°C ~ 99.9°C	99.9°C
Lr2	-55.0°C ~ 99.9°C	-55.0°C

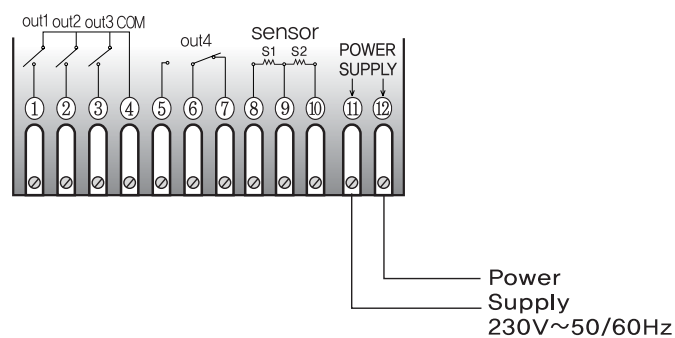
■ Size & Dimension



■ Relay junction



■ Connection



5. CAUTION

Warning

Pls use this item after set up safety device doubly in which is applied at dangerous equipment such as serious human injury or serious damages of property & important machine because this item is not designed as safety device.

Caution

- Do not distributing wires or install the device for the occurrence of an induction load of motor, solenoid.
- Please use shield wire when sensor lengthen, however, do not make it too much longer.
- Please do not use the components which is occurring arks when on/off near it or same power.
- Power cable keeps away from high-voltage cable and do not install the device where water, on and dust.
- Do not install the device from direct rays of the sun & exposed a site due to rain.
- Do not install the device from strong magnet & noise, vibration or shock.
- Please install the device from a great distance out of places occurring strong-alkali or strong-acidity.
- Do not sprinkle water for clean purpose when installing in the kitchen.
- Do not install the device from the places where Temp./Humi. exceed regular power.
- Please use the sensor wire without any cutting & flawing.
- Do not install the sensor wire nearby signal wire, power or load and please use self-pipe
- Please understand you can't get any A/S service when you open or re-model it with free.
- ⚠ is the safety letter like warning, caution.
- Please do not use the device close by which occurring strong high-frequency noise (high-frequency: welding, sewing machine, wireless transmitter, SCR controller for high capacity)
- Please use this item proper method without any damage or injury.

Danger

■ Caution, Danger of electric shock

- Electric shock - Do not touch AC board during on power because of electric shock.
- Please intercept the input power surely when turn on power because of electric shock.

The way of diagnosis for breakdown

■ Indicating ERROR on using items

- This E - 1 is the damage of memory data for various of inner-Data due to be get noised strongly from outside while using this items. Please request us A/S by return. Although our controller is designed as the complementary measures regarding these noise from outside, it is not endurable against these noise with endlessly. It can be damaged the its inner parts when abnormal noise (2KV)' s inflow.
- If these letters like O - E (open error) and S - E (short error) indicates, the sensor's error is the main cause of the displaying. Pls check the sensor.

※ Above Products information can be changed to improve it's quality without any notification
When this products use, pls observe the information of caution & Warning due to give rise to disordering.

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※This device works proper operation with;
Ambient temp. : 0°C~60°C
Ambient humi. : below 80%RH
Regular power : 220VAC

MEMO