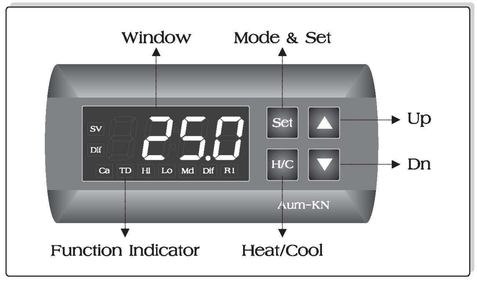
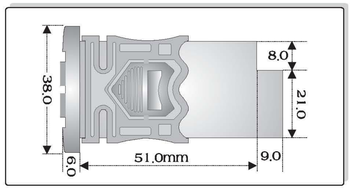
Manual for dimensions & functions

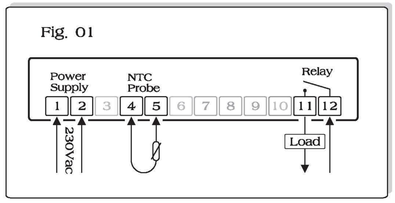
Page - 1 - CE ISO INNOBIZ Mod. : Aum-KN

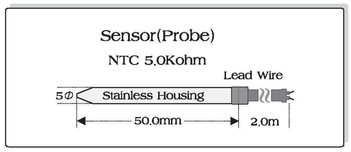




*. Color : Black
*. Drilling Template : B.:70.5xH.:30.0xD.:60.0mm

Fig. 01





Please be sure to read and fully understand the notices before using it.

At Model "**Aum-KN**", you can choose Heating or Cooling,

a. When "**Aum-KN**" is connected to **230Vac power** and a sensor after power on, the sensing temperature will be shown on its window.

b. Whenever "**Set**" key is pressed, the next function will be chosen (**S**election **V**alue ⇨ **Dif**ferential Value ⇨ **Ca**libration ⇨ **T**ime **D**elay ⇨ **Hi**gh Alarm ⇨ **Lo**w Alarm ⇨ Alarm mode ⇨ Alarm Differential Value). However, "**Calibration**" can be selected by pressing "**Set**" and "**H/C**" key at the same time.

c. After selecting a function by "**Set**" key, revise the values by pressing "▲/▼" key. Then, press "**Set**" key again to complete the setting. If **10** minutes pass after the setting, the present temperature will be displayed on the window automatically. Or, if you press continuously up to the end of all modes, the present temperature will be displayed. When you press "▲/▼" key in the function to be adjusted, the mode is blinking on the window.

d. When changing the mode of "**Heat/Cool**". Pressing the "**H/C**" key for **5** seconds, the "HEAt" is displayed. And press the "▲/▼" key in the above situation, and then the "HEAt/Cool" mode is selected. This mode must be matched with "Load".

e. When the temperature sensor is disconnected or short, "**-Lo-**" will be displayed on the window.

f.. The relay(5A/250Vac) is for signals only. It should not exceed **100w/230Vac.**

*. All specifications are subject to change without notice.

Method of program loading

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No.1 : Selection V.(**SV**) Range : **-20.0~99.9°C** Apply : Heater/Cooler	a. Select a function with "**Set**" key & set the value by pressing "▲/▼" key. Then, "**Set**" key must be pressed to finalize the new setting. b. Selection Value is as follows : **-20.0°C** <(S.V)+(Dif)+(Ca)< **99.9°C**.	25.0
No.2 : Differential V.(**Dif**) Range : **0.1 ~ 12.7°C** Apply : ± Select'n Value	a. The **Dif**ferential value is as applied follows : For heating, if the "**SV**" **25.0**, "**Dif**" **2.0**, the working range will be within **23.0~25.0°C**. For cooling, if the "**SV**" **25.0**, "**Dif**" **2.0** the working range will be **25.0~27.0°C**.	0.5
No.3 : Calibration(**Ca**) Range : **0.0 ~ +/-6.3°C** Apply : +/-Present Temp.	a. When the sensor is installed in the away from the controller, This function compensate the difference of the actual temperature by the extended wire's resistance value. b. It can be selected to press the "Set & H/C" key at the same time.	0.0
No.4 : Time Delay(**TD**) Range : **00:00~15:00**(m:s) Apply : R1 "OFF" ▶ Delay	a. This function protects a machine from the damage that can be resulted from frequent operation by delaying the operation of a relay during the set value. The relay won't operate for the set value of **T**ime **D**elay from the time of "**OFF**" of the relay. b. It protects a machine from the chattering due to noise.	00:00
No.5 : High Alarm & Lock Range : **S.V. < 99.9°C** Apply : Alarm lamp	a. If the present temperature exceeds the highest limit, the -Hi- lamp on the window will be turn on. The alarm output is possible in the Aum-KNA. b. The S.V is limited within the highest limit value, It's "Lock" function.	90.0
No.6 : Low Alarm & Lock Range : **-20.0 < S.V.** Apply : Alarm lamp	a. If the present temperature exceeds the lowest limit, the -Lo- lamp on the window will be turn on. The alarm output is possible in the Aum-KNA. b. The S.V is limited within the lowest limit value, It's "Lock" function.	-20.0
No.7: Alarm mode Range : **AL:ALert/AL:FLick** Apply : Alarm	a. There are two different signals with regard to the function of alarm. One is a state of "**Alert**"=Continuity/ "**FLick**"=Flash(Dif. 0.0°C). b. Press "▲/▼" key to choose "**AL:FL / AL:AL**".	AL:AL
No.8 : R2 Differential(Dif) Range : **0.0 ~ 12.7°C** Apply : High(+), Low(-)	**N/A** a. The set value of the "**Dif**"(R2) applies to alarm (**Hi**gh+Dif.)/(**Lo**w-Dif.). b. If you want to operate an auxiliary machine(Heater/Cooler) instead of alarm, the differential value should be set to protect the machine. At this time, **No.7** should be **AL:AL.**	0.0
H/C + ▲/▼ Convert Range : **HEAt / COOL** Apply : Load Relay	a. press "▲" key while pressing "**H/C**" key after **5** seconds, "**HEAt**" and the other "▼" key, "**COOL**" mode will be changed functions. b. It must be matching the load, the operation of Heat/Cool can be apply the output relay.	HEAt

-LO- Fault of Sensor

Cautions in use

Mod.: Aum-KN
NTC Sensor

1. Please avoid excessive rising of temperature, humidity and impact.
2. Please it upright to prevent water droplet at the end part of sensor.
3. Keep it away from high voltage device or power generator and motor.
4. Please wait for **5**seconds to turning it on again to avoid electric impact.
5. Use it between **0~60°C** in temperature, **60%** humidity around the controllers.
6. Please install in safe from strong acids, alkalis, oil, dust & direct rays of sun.
7. Please set safe protection at the double circuit when using at expensive appliances (Freezer, Heater and motor).