Ewelly®

Version: 183TK-349-V1.0

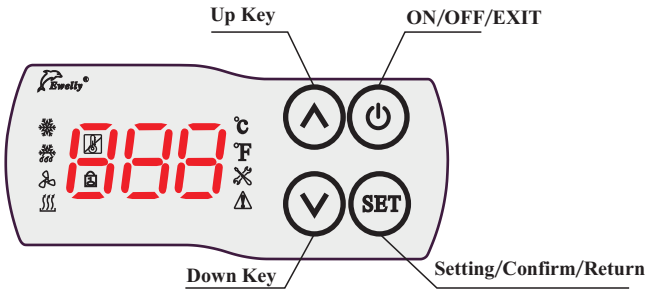
EW-183TK Operation Manual

Thank you for choosing Ewellyinstruments. This product combines a wide range of refrigeration technology,which is simple to operate with accurate temperature control and strong anti-interference ability. It is suitable for a variety of refrigeration, heating equipment and automatic intelligent control systems. The sensor produced by our company is packaged by a precise process, which has moisture-proof function and stable performance.

Product Specification

1. Operating Voltage：AC220V±10% 50HZ/60HZ
2. Output：10A/220V/AC
3. Power Consumption：≤3W
4. Working Environment：-10℃～50℃ RH≤90%
5. Control Range：-40℃～80℃
6. Resolution：1℃ Accuracy: ±1℃
7. Input Signal：1-Off temp. sensor standard cable length 20K x 2m
8. Overall Dimension：82（Width）x 36（Height）x64（Depth）mm
9. Mounting Size：71（Width）x 29（Height）mm

Display Panel



Symbol	Description	Status	Explanation	Symbol	Description	Status	Explanation
❄	Cooling	Off	condition	℉	Fahrenheit Degree	-	-
		On	Cooling		Parameter Setting	On	Parameter Setting
		Flashing	Cooling stops	⚠	Alarm Signal	On	Faulty
♨	Heating	Off	Non heating condition	- - -	Standby Signal	On	Standby Mode
		On	Heating	🔒	Lock	Off	Unlocked
						On	Locked
		Flashing	Heating stops	℃	Centigrade Degree	-	-

Installation Requirement

1. Please make sure that the power supply voltage meets the required voltage of the instrument. The deviation should be less than 10%.
2. The sensor should be kept away from the power cable.
3. Strictly distinguish the interfaces of the sensor, power cable and the relay output.

Operation Instruction

1. Standby function:
   - Hold "**ON/OFF**" key for 3s to enter standby mode, it displays "---"and all outputs are disconnected.
   - In standby mode, press and hold the "**ON/OFF**"key for 3s to return to normal operation.
2. Locking function
   - Under "Lock" mode,press and hold the "▲"key for 3s to unlock along withbuzzer sound. This meter would lock itself automatically after 30s without any actions.
3. Fast temperature setting
   - Under normal operation, press the "**Set**" key to display the control temperature (the value flashes).
   - Press "▲" and "▼" to adjust the parameter values.
   - Hold "▲" and "▼" key to adjust the parameter value quickly. (This is a general operation).
4. Parameter adjustment
   - Hold "**Set**" for 6 seconds until the parameter code"HC" turns on, indicating that the system setting menu has been entered. Switch the corresponding parameter code s by pressing "▲" and "▼".
   - Press " **Set**" to display the parameter value of the corresponding parameter code (the value flashes); Press "▲" and "▼" to adjust the parameter value.
   - Press "**Set**" to confirm the modified parameter value and return to the upper menu.
   - Under the system setting condition, press "**ON/OFF**" to exit the menu setting and return to the normal operation mode.
   - Under the system setting condition, it returns to normal operation automatically when there is no actions in 6 seconds.
5. One-click restore of preset parameters
   - Under normal operation, press and hold the "▼" key for 6s or more, the display screen flashes, and all parameters willbe reset to factory settings. (please make sure to record the setting parameters in advance)
6. Stop/Silence buzzer alarm
   - Press any key to cancel the current buzzer alarm sound, but the indicator light will notturn off until the fault is removed.
7. System Menu

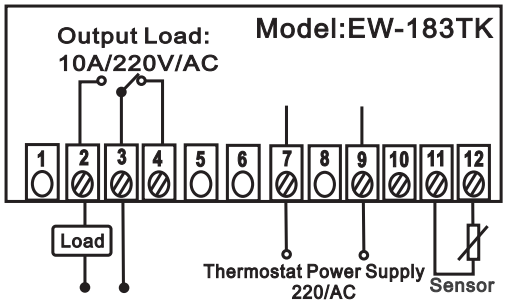
Code	Description	Set Range	Default Setting	Explanation
HC	Refrigeration /Heating	-	C(Refrigeration)	-
CF	Temp. Unit Switch	C=Centigrade F=Fahrenheit	℃	-
d	Temp. Return Difference	1 ～ 15℃/60℉	2℃/5℉	The target temp. can be controlled to be stable in a certain setting range.
CA	Temp. Calibration	-15℃/-60℉～ 15℃/60℉	00	This parameter corrects the temp. when there is an error
Pt	Time Delay	0 ～ 10	1	Protect the meter from frequent start -up
HS	Highest Temp. Limit	Set temp. +1 ～ 80℃/180℉	80℃	Prevent temp. is set too high
LS	Lowest Temp. Limit	-50℃/ ～ Set temp.-1	-40℃/℉	Prevent temp. is set too low

Function

Switch refrigeration and heating modes in parameter setting menu. H is heating, C is refrigeration.

1. Refrigeration
   - Current temp. ≥ set temp. + temp. return difference (**d**) and the "Set time delay (**Pt**)" has been delayed , the load relay is closed.
   - Current temp. ≤ set temp. , the relay is disconnected and refrigeration stops.
2. Heating
   - Current temp. ≤ set temp. − temp. return difference (**d**) and the "Set time delay (**Pt**)" has been delayed, the load relay is closed and heating function starts.
   - Current temp. ≥ set temp. , the relay is disconnected and heating stops.

Wiring Diagram



Trouble Shooting

Failures	Causes	Solutions
No display when power is on	Whether the power source is off; or the temperature controller is defective.	Check the power supply and replace the fuse; check if there is input for power terminal or arrange to change controller with the distributors.
With display but not operating	Set temp. is within the rest interval; External circuit protection; Incorrect set running mode.	Reset the required temperature control value; check overrun and overload, check overheat causes, and eliminate the troubles before reset to work.
Displayed temperature unstable or malfunction	Sensor circuit interfered; poor connection; binding with other power cords; circuit damage.	Separate sensor with power cord or replace the shielded wire, check whether connecting terminal is tightened.
Unusual difference between real temp. and displayed temp.	Sensor installed incorrectly; sensor line is too long that causes high resistance; poor connection; sensor damage.	Must install sensors correctly; increase cross section of extension wire; ensure sealing properly. water and moisture proofing; replace sensor.
Cannot shut down after reaching set temperature	Sensor installed incorrectly, unable to measure value correctly; Contactor of compressor defective.	Check whether sensor measures temperature correctly; replace contactor of compressor.
Relay works too frequently	Temp. return difference was set too small or incorrect settings for the pressure protector.	Increase the temp. return difference values; adjust the pressure protector settings.
With " **E1** " displayed	Sensor line open or short circuit.	Check connection between the sensor wiring and coupling end.

Attention

1.Please read this manual carefully and follow the instructions while using the product. Connect input/output plugs of power & sensor to thecorresponding sockets by following wiring diagram strictly. Tighten all the screws of connection plugs, then connect the power afterwards. Otherwise, it may affect the usage and control, and even result in damage in parts.

2. Keep this product from away moisture, corrosive air and high magnetic field. Otherwise, the normal operation of this product will be affected.

3. All our products have passed strict quality inspections before leaving factory. We provide one-year warranty for this product, which is limitedto product itself and our company is not responsible for any other joint and several liability.

If the product includes but not limited to the following damages caused by being used and installed in unsafe environment, being connected to the load exceeds the allowable range of the product, being disassembled and modified by the user, etc. Our company will not provide replacement or maintenance service within the warranty period. Meanwhile, we will not be liable for any direct or indirect damages caused.
The warranty certificate on the product is an important evidence for our product quality assurance. Any changes without authorization, damages, scratches and lose on the certificate, our company will not provide any replacement or maintenance service for these products.

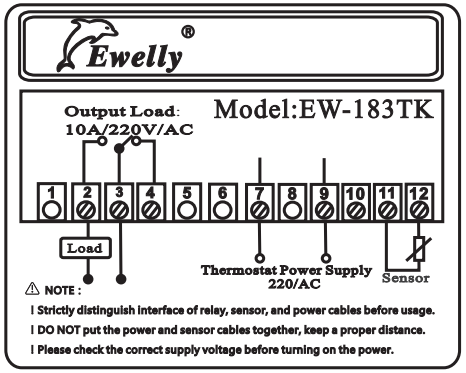
If you have any problem regarding to our products or service, please do not hesitate to contact us. We will provide you with quality service and maintenance. Thank you.

Official website Wechat official account

Guangzhou Ewelly Automatic Control Co. Ltd.

http://www.gzewelly.com

60mm*48mm


Ewelly®
Output Load:
10A/220V/AC
Model:EW-183TK
1
2
3
4
5
6
7
8
9
10
11
12
Load
Thermostat Power Supply
220/AC
Sensor
⚠ NOTE :
I Strictly distinguish interface of relay, sensor, and power cables before usage.
I DO NOT put the power and sensor cables together, keep a proper distance.
I Please check the correct supply voltage before turning on the power.