

ATC-1000 Instruction

Features and function:

- ◆ Use high stable PIC to increase the system stability
- ◆ SMT&THT assembly technology, optimizing programming design and multi hardware solutions to better the system's anti-interference ability.
- ◆ Easy to set the parameters and easy to operate
- ◆ Can reset the parameters when the system is running without stop.
- ◆ Compressor open delay functions
- ◆ Auto/forced defrosting functions
- ◆ Fan delay functions (Fan turns into work after compressor working for 1 minute)
- ◆ Sound and Light alarm when pressure, overload and phase lacking error.

Main technical parameters:

- ◆ Temperature measuring range: $-40^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- ◆ Temperature controlling range: $-39^{\circ}\text{C} \sim +49^{\circ}\text{C}$
- ◆ Accuracy: $\pm 1^{\circ}\text{C}$
- ◆ Resolution: 0.1°C
- ◆ Defrosting cycle: 0~99 Hour
- ◆ Defrosting time: 0~99 Min
- ◆ Sensor temperature calibration: $-5.0^{\circ}\text{C} \sim +5.0^{\circ}\text{C}$
- ◆ Control Ways: 3 ways (for control of Compressor, Fan and Defroster)
- ◆ Input Way: 4 ways (1 way for temp. measuring others for error monitoring)
- ◆ Power supply: 220VAC/50Hz
- ◆ Output contact capacity: 7A/220VAC
- ◆ Panel size: 180 x 100 x 54(mm)

Operation description:

- ◆ Power on: Close the switch in the Electronic Control Box, then the controller displays normally and then into controlling status, and now can set each parameters.
- ◆ Temp. upper limit set: press "SET" key for 3 seconds into parameters setting status. Press "UP" or "DOWN" to select "F01" item and then press "SET" and "UP" (or "DOWN") together to set the parameters.
- ◆ Temp. lower limit set: press "SET" key for 3 seconds into parameters setting status. Press "UP" or "DOWN" to select "F02" item and then press "SET" and "UP" (or "DOWN") together to set the parameters.
- ◆ Temp. Calibration: press "SET" key for 3 seconds into parameters setting status. Press "UP" or "DOWN" to select "F03" item and then press "SET" and "UP" (or "DOWN") together to set the parameters.
- ◆ Defrosting cycle set: press "SET" key for 3 seconds into parameters setting status. Press "UP" or "DOWN" to select "F04" item and then press "SET" and "UP" (or "DOWN") together to set the parameters.
- ◆ Defrosting time set: press "SET" key for 3 seconds into parameters setting status. Press "UP" or "DOWN" to select "F05" item and then press "SET" and "UP" (or "DOWN") together to set the parameters.
- ◆ Alarm when exceeding temp. limit: press "SET" key for 3 seconds into parameters setting status. Press "UP" or "DOWN" to select "F06" item and then press "SET" and "UP" (or "DOWN") together to set the parameters.

- ◆ Save the set parameters: Press "RESET" to save the newly set parameter, display store temperature and "Refrigerate" light flashes, it shows the system begins to control and the compressor in delay status
- ◆ Examine the set parameters: in non-setting status, press "UP" to display set upper limit value, 2 seconds later to display current temperature; press "DOWN" to display set lower limit value, 2 seconds later to display current temperature; press "SET" to display defrosting cycle and then defrosting time each for 2 seconds and then display current temperature.

Parameter instruction and set:

Code	Function	Set range	Default	Unit
F01	Temp. upper limit	-39 ~ +50	-10	$^{\circ}\text{C}$
F02	Temp. lower limit	-40 ~ +49	-20	$^{\circ}\text{C}$
F03	Temp. calibration	± 5	0	$^{\circ}\text{C}$
F04	Defrosting cycle	0 ~ 99	6	Hour
F05	Defrosting time	0 ~ 99	30	Minute
F06	Alarm when exceeding temp. limit	0 ~ 20	15	$^{\circ}\text{C}$

Alarm when sensor error Buzzer and Flash 444 when sensor short or open circuit

Indicator description:

Indicator light	Color	Status
Refrigerate Indicator light	Green flash	Compressor delay starts
Fan indicator light	Green	Forced refrigeration run
Defrost indicator light	Red	Auto refrigeration run
Alarm	Red	Fan run
	Green	Forced defrosting run
	Red	Auto defrosting run
	Red	Error alarm

Notices:

1. The connected load can't be over the contact capacity.
2. Connecting wires and connecting tips should be connected firmly
3. Before use please read the instruction carefully

Warranty:

1. Warranty time: free to repair within one year from the purchasing day
2. Warranty dis-available:
 - A: operations not according to the instruction
 - B: not right repair
 - C: Man-made mistake or wrong operation or change the system
 - D: Without the buying certificate like Invoice..
3. We will offer you professional, efficient and prompt services.

Elementary diagram:

