



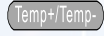




# 100F1 series User manual / Fan inverter

## 1、 Function description

1. Output Frequency: 0HZ-50HZ.
2. Type: 1.5KW-220V , 2.2KW-220V  
1.5KW-380V , 2.2KW-380V , 3KW-380V
3. Hand mode: Fan speed is controlled by potentiometer and ▲/▼ .
4. Auto mode: Fan speed is adjusted by temperature PID function with temperature sensor.
5. Min. Output frequency: 20HZ.

## 2、 Operation instructions

1. The inverter should be installed at : No water drop , Metallic particles , Less dust、 Oil、 free from vibration、 high temperature、 and EMC noise.
2. Wiring according to below drawings : R/S/T input terminal , U/V/W output terminal, 2PIN Temperature sensor terminal.
3. keyboard operation instructions:
  - 3.1  : Fan run or Fan stop
  - 3.2  : Hand mode control, Fan speed can be controlled in 0-50HZ by potentiometer and ▲/▼ button.
    - 3.2.1 Press Hand button 3 seconds, enable the function of Auto-start after re-power on, and remember the last frequency status.
    - 3.2.2 In Auto-start status, press Hand button 3 seconds, back to normal start mode.
  - 3.3  : Auto mode control, Fan speed is adjusted by temperature PID function with temperature sensor, two PID mode can be selected:
    - 3.3.1 Multi-Speed PID ( parameters P081=1 ) : 5-speed can be implemented according to the difference between the target temperature and the actual temperature.
    - 3.3.2 Automatic PID ( parameters P081=0 ) : Stepless speed control can be implemented according to the difference between the target temperature and the actual temperature.
    - 3.3.3 Press Auto button 3 seconds, enable the low temperature shutdown function , When the actual temperature is less than target temperature 1 degree.
  - 3.4  : Set target temperature, temperature range 1-80 degrees, default 25 degrees, the set value can be memorized.
  - 3.5  : add or reduce the target temperature value.
  - 3.6  : add and reduce the output frequency/Fan speed on Hand mode.
  - 3.7  : add and reduce the output frequency/Fan speed on Hand mode.

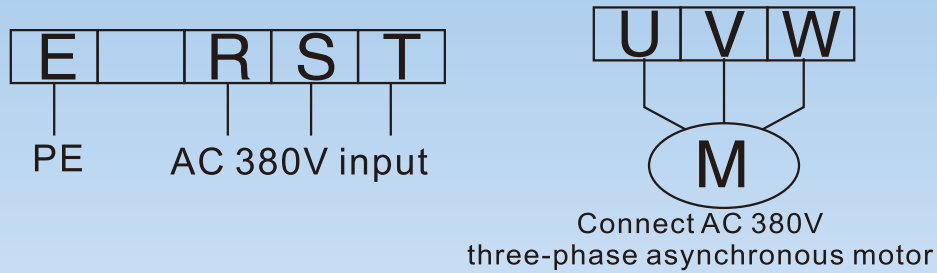
## 3、 Protection and alarm code

1. Low voltage: E.LU
2. Over current/ short circuit: E.OC
3. Over voltage: E.OU
4. Over heat: E.OH
5. Overload: E.OL

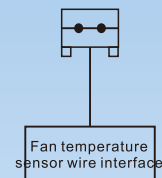
**Note:** The alarm code display is composed of two sets of digital tubes of actual temperature and frequency. The set temperature digital tube displays the set temperature value.



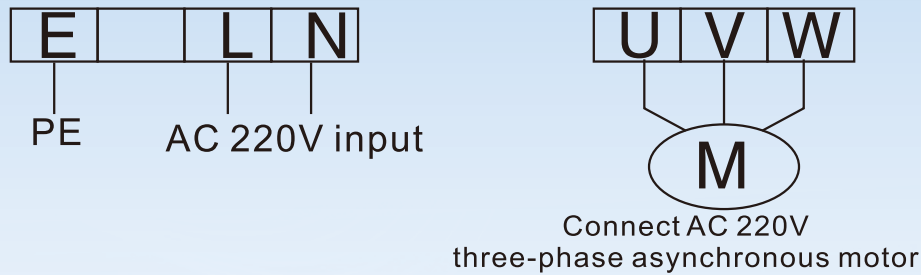
## 4、Wiring diagram



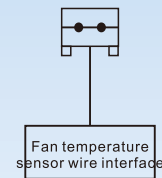
AC 380V input, AC 380V output wiring diagram



The temperature sensor interface is high voltage and cannot be plugged or unplugged with power



AC 220V input, AC 380V output wiring diagram



The temperature sensor interface is high voltage and cannot be plugged or unplugged with power

## 5、Functional parameters description

At the same time, press the temperature +/ temperature - button to enter the parameter debugging mode; After debugging, press the same operation above to return to the mode of cooling fan.

Parameter	Pefault	Functional explanation	Scope	Note
P011	20	Lower frequency of free PID		
P018	5	Timed running time		
P019	20	Timed stop time		
P042	10	Timed downtime		
P045	0	Timing function setting	0	Invalid
			1	Time on, frequency set to original state
			2	The current temperature is lower than the value of P042, the timing switch is started, and the frequency comes to the current state
			3	If the current temperature is lower than P042, the timing switch is started and the frequency is P095
P055	100	Temperature correction factor		
P081	0	PID mode selection	0	Freedom PID
			1	Multistage PID
P086	20	The frequency corresponding to 2 degrees below the set value		
P087	25	The frequency corresponding to 1 degree below the set value		
P088	30	Is equal to the corresponding frequency of the set value		
P089	40	The current frequency above or equal to 1 degree set the temperature control		
P090	50	The current frequency above or equal to the set temperature control of 2 degrees		
P091	50	The current frequency above or equal to the set temperature control of 3 degrees		
P092	50	The current frequency above or equal to the set temperature control of 4 degrees		
P093	50	The current frequency above or equal to the set temperature control of 5 degrees		
P095	10	Below the set temperature control timing operation frequency		
P157	1	Automatic PID control speed	1~5	1: Fast; 5: Slow