DFY-5 Manual

☞ Main function and technique index

The product is a multifunction detection and protection instrument, and it has the functions of voltage display, over\owe voltage protection, deficient phase protection, phase sequence protection. It has LCD with Chinese font, intuitionistic and easy to operate. It can display current power supply voltage, and can cut off the power supply to protect the controller when over and owe voltage, deficient phase, wrong phase occur.

Main function：

1、 **Voltage display:** Display the current power supply voltage.
2、 **Over load and owe voltage protection:** Cut off the power supply when the value of the voltage is too high or too low, the value can be set.
3、 **Deficient phase protection:** Cut off the power supply when deficient phase occurs.
4、 **Phase sequence protection:** Cut off the power supply when the phase sequence is error.

Main technique index：

- Power supply：Three-phase 170V～450V AC
- Voltage measuring precision：±1%
- Output contact capability：2A/250VAC
- Operating environment：temperature -10°C ~+50°C，humidity ≤85%

🕮 Operating Guide

Ⅰ Set the value of over voltage and owe voltage

Press the “sel” key and hold it for 2 seconds, the LCD displays “setting” and “over voltage”, and then you can press the key “▲” or “▼” to change the setting value of over voltage (“▲”adds 1V，“▼”minuses 1V，press and hold them over 0.5 seconds can add or minus rapidly) ; You can press the “sel” key again to set the value of owe voltage with the same way, and finally press the “sel” key again to exit the setting state.

Ⅱ Alarm

When the over and owe voltage, deficient phase, wrong phase occur, the LCD will display the “over voltage”, “owe voltage”, “deficient phase”, “wrong phase”, here the output contact opens.

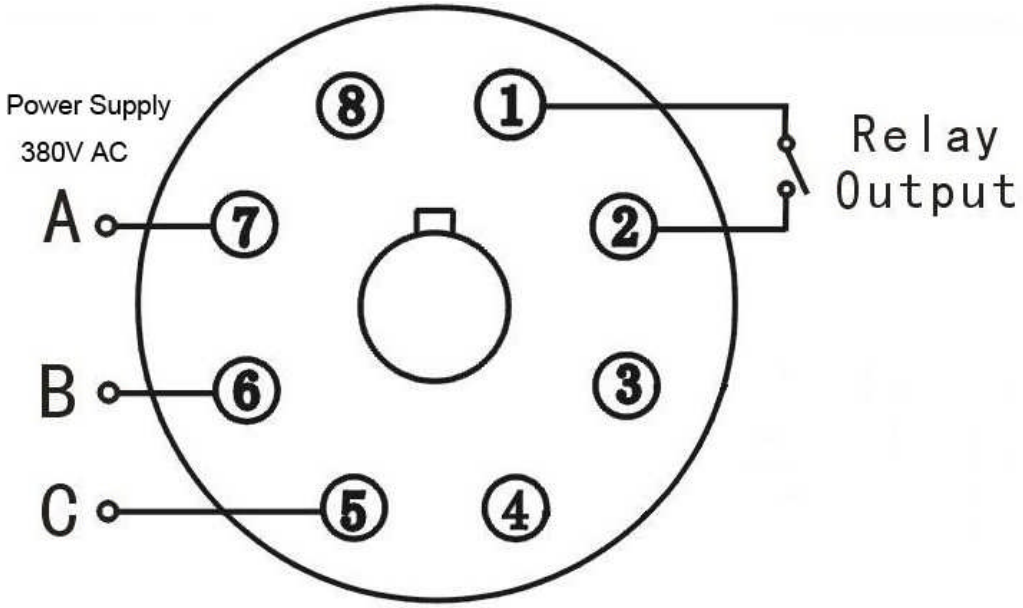
Ⅲ Parameter set

When in the state of displaying voltage, press the ”▲” key and hold it for 5 seconds, you can enter the state of parameter setting, here the nixietube shows “Fxx”，there into xx is a number，it means parameter code. Use ”▲” or ”▼” to select the parameter code，Pressing the “sel” key can make it to show the value of the parameter after select the parameter, here you use”▲” or ”▼” to set the parameter, then press the “sel” key to return to the state of showing parameter code after finishing setting.

Internal parameter code is showing below:

Sort	Code	Parameter Name	Range	Factory Setting	Unit	Remark
Voltage Setting	F11	The setting value of over voltage	200 – 500 OFF	437	V	For example, over voltage alarm occurs when ≥437V, and resume when ≤435V; owe voltage alarm occurs when ≤304V, and resume when ≥306V. “OFF” means turn off the function of over voltage and owe voltage alarm
	F12	The setting value of owe voltage	OFF 150 -- 380	304	V	
	F13	Over voltage and owe voltage resume difference	1 -- 20	2	V	
Action Time	F21	Over voltage and owe voltage action time	0.1 -- 20	5.0	sec	All kinds of error can do nothing until they are keeping for the setting time. “OFF” means turn off the function of deficient phase and wrong phase alarm
	F22	Deficient phase action time	0.1 – 20 OFF	3.0	sec	
	F23	Wrong phase action time	0.1 – 20 OFF	2.0	sec	
Function	F90	Display product type and version				
	F98	Display the phase difference of CA and AB	Display 240° in normal state, 120° in wrong phase state, and 0° in deficient phase state.			
	END	Exit				

Wiring Diagram：



Note: 1. AB phase is the operating voltage, the voltage of operating and over and owe voltage protect are based on AB phase voltage. If A phase or B phase opens, the instrument will not run and relay output open.