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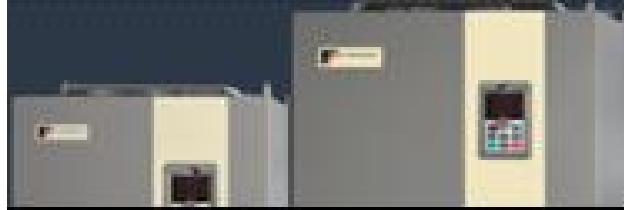


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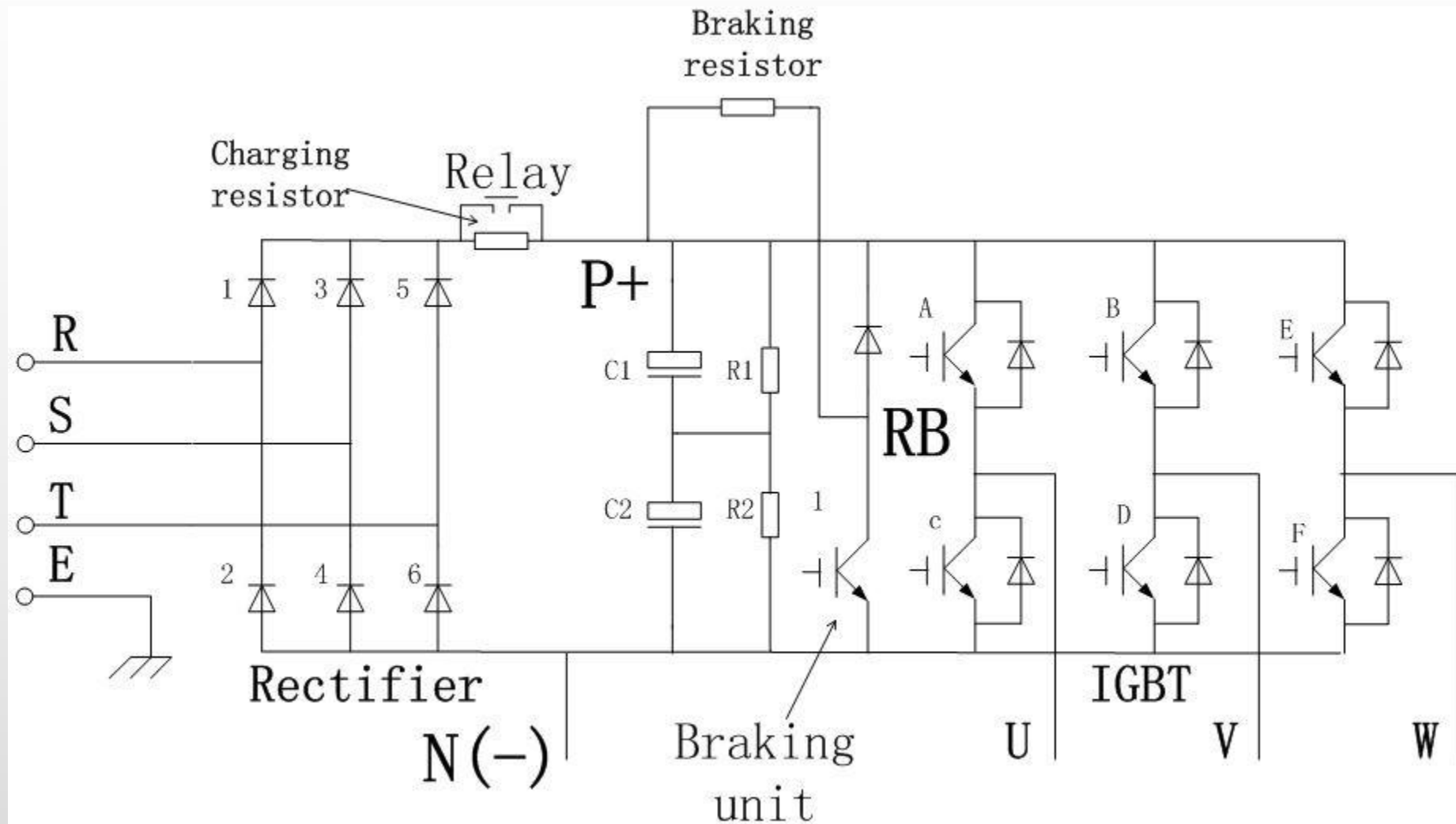
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Main Circuit



Trouble shooting

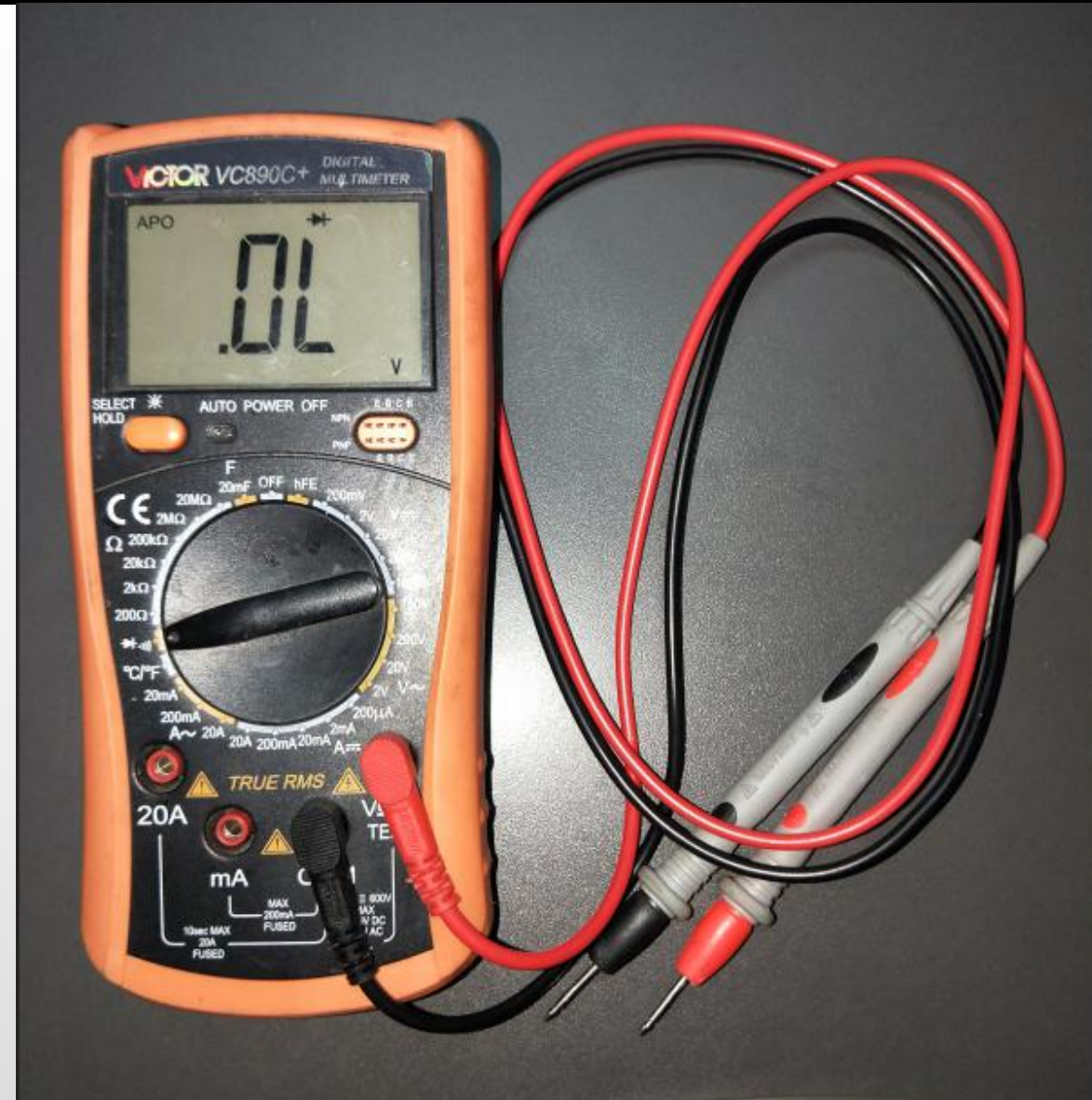
	Rectifier module checking		Value
	black probe	red probe	Good
1	+	R terminal	≈ 0.5
2	+	S terminal	≈ 0.5
3	+	T terminal	≈ 0.5
	Red probe	black Probe	
4	-	R terminal	≈ 0.5
5	-	S terminal	≈ 0.5
6	-	T terminal	≈ 0.5

Table 1

	IGBT module checking		Value
	black probe	red probe	Good
1	+	U terminal	≈ 0.5
2	+	V terminal	≈ 0.5
3	+	W terminal	≈ 0.5
	Red probe	black probe	
4	-	U terminal	≈ 0.5
5	-	V terminal	≈ 0.5
6	-	W terminal	≈ 0.5

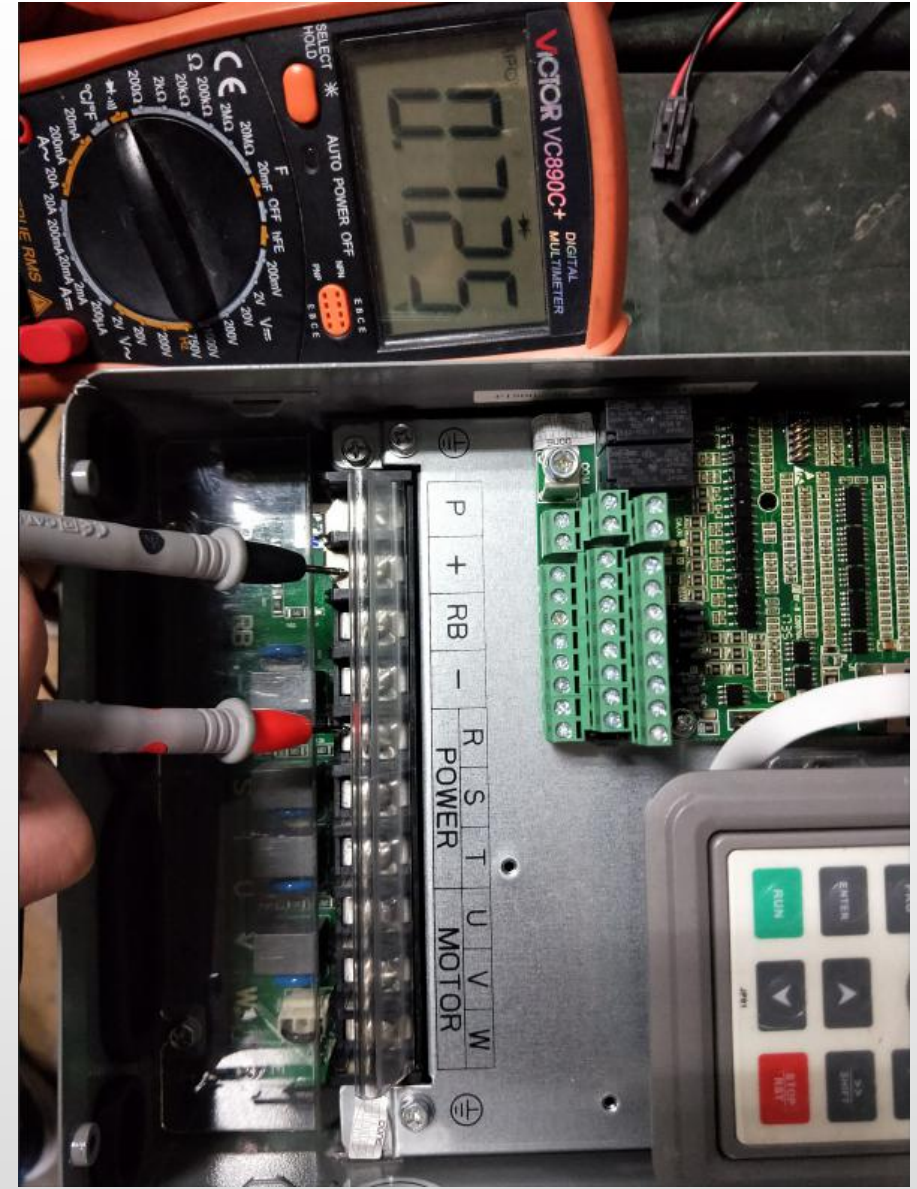
Table 2

- A. Checking the IGBT and rectifier without power on by the diode profile of multimeter .



- **B. Check the diode value of rectifier.**

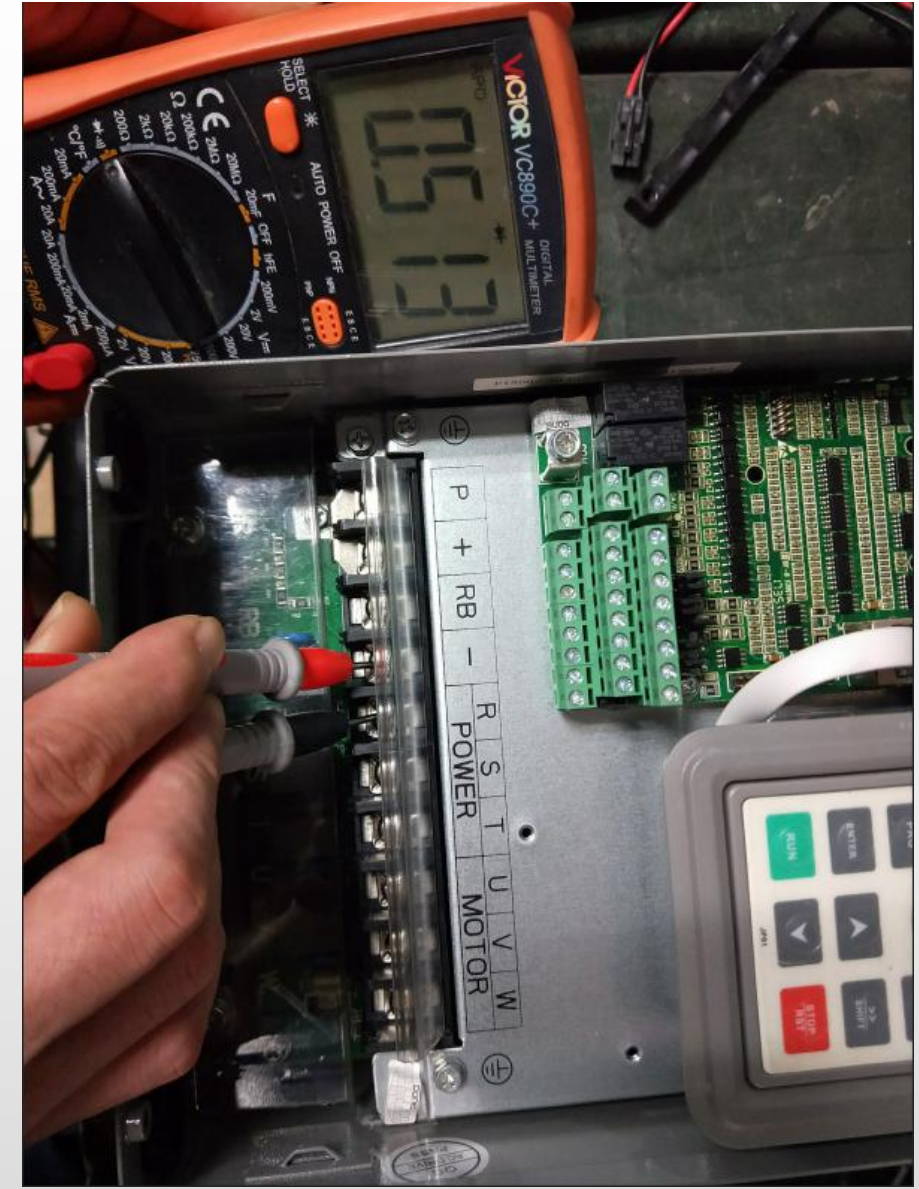
1. Use the black probe touch the "+" terminal and the red probe touch the "R" terminal, if the value around 0.5V, it means OK.
2. Keep the black probe touch the "+" terminal and red probe touch the "S" terminal, if the value around 0.5V, it means OK.
3. Keep the black probe still on "+" terminal and red probe touch the "T" terminal, if the value around 0.5V, it means OK.

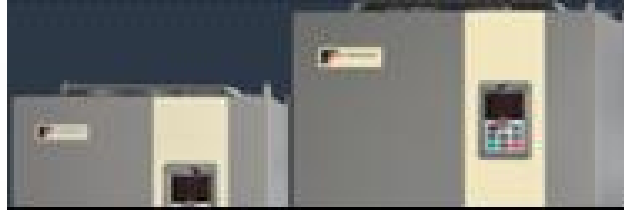


4. Use the red probe touch the " - " terminal and the black probe touch the "R" terminal, if the value around 0.5V, it means OK.

5. Keep the red probe touch the " - " terminal and black probe touch the "S", if the value around 0.5V, it means OK.

6. Keep the red probe still on " - " terminal and black probe touch "T" terminal, if the value around 0.5V, it means OK.





- **Test Result:**

1. Only if the 6 times measuring value around 0.5V, it proved the rectifier is good.

2. If the value is around 0V, it means the rectifier already short-circuit inside .

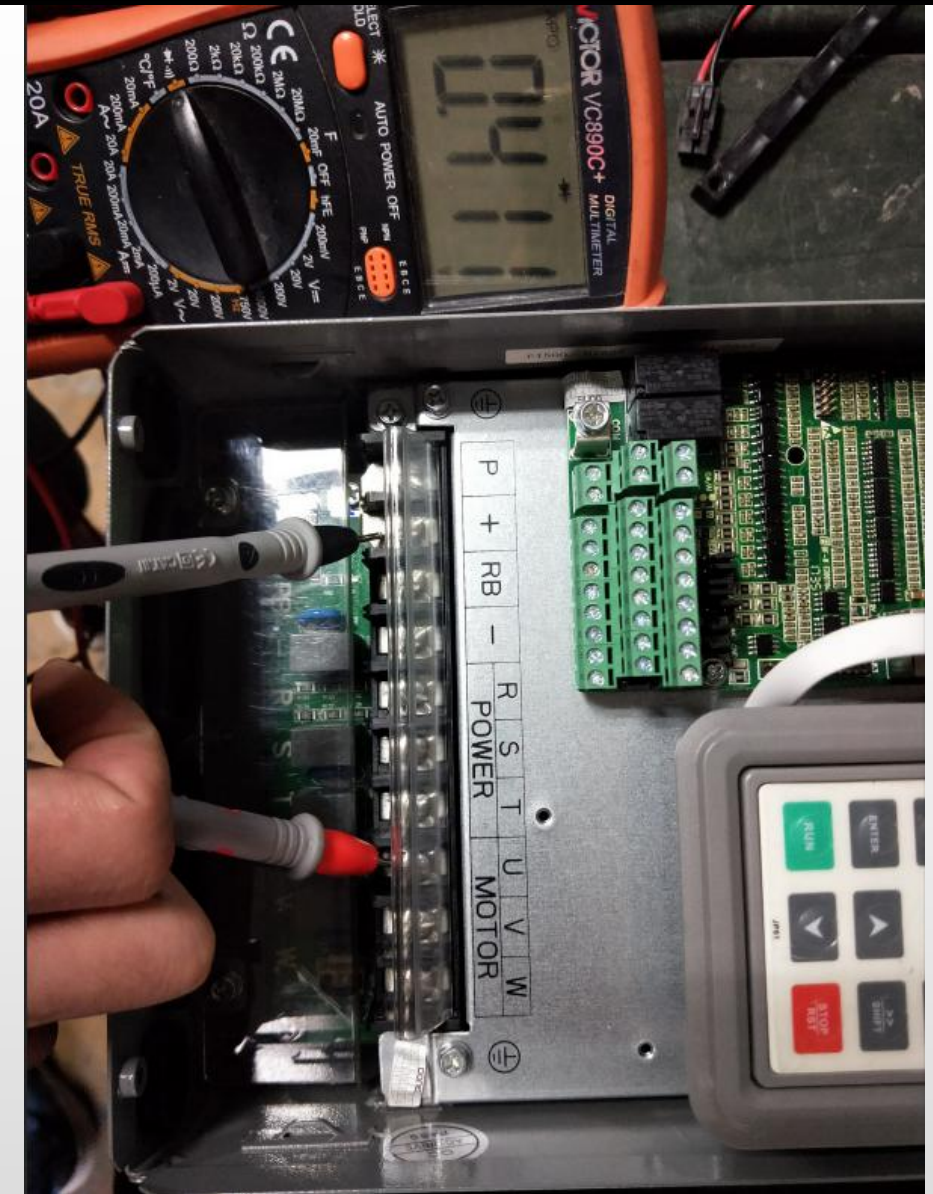
3. If the value is very high, it means the rectifier already broken inside .

- **C. Check the fly-wheel diode value of IGBT.**

1. Use the black probe touch the "+" terminal and the red probe touch the "U" terminal. If the value around 0.5V, it means OK.

2. Keep the black probe touch the "+" and the red probe touch the "V" terminal, if the value around 0.5V, it means OK.

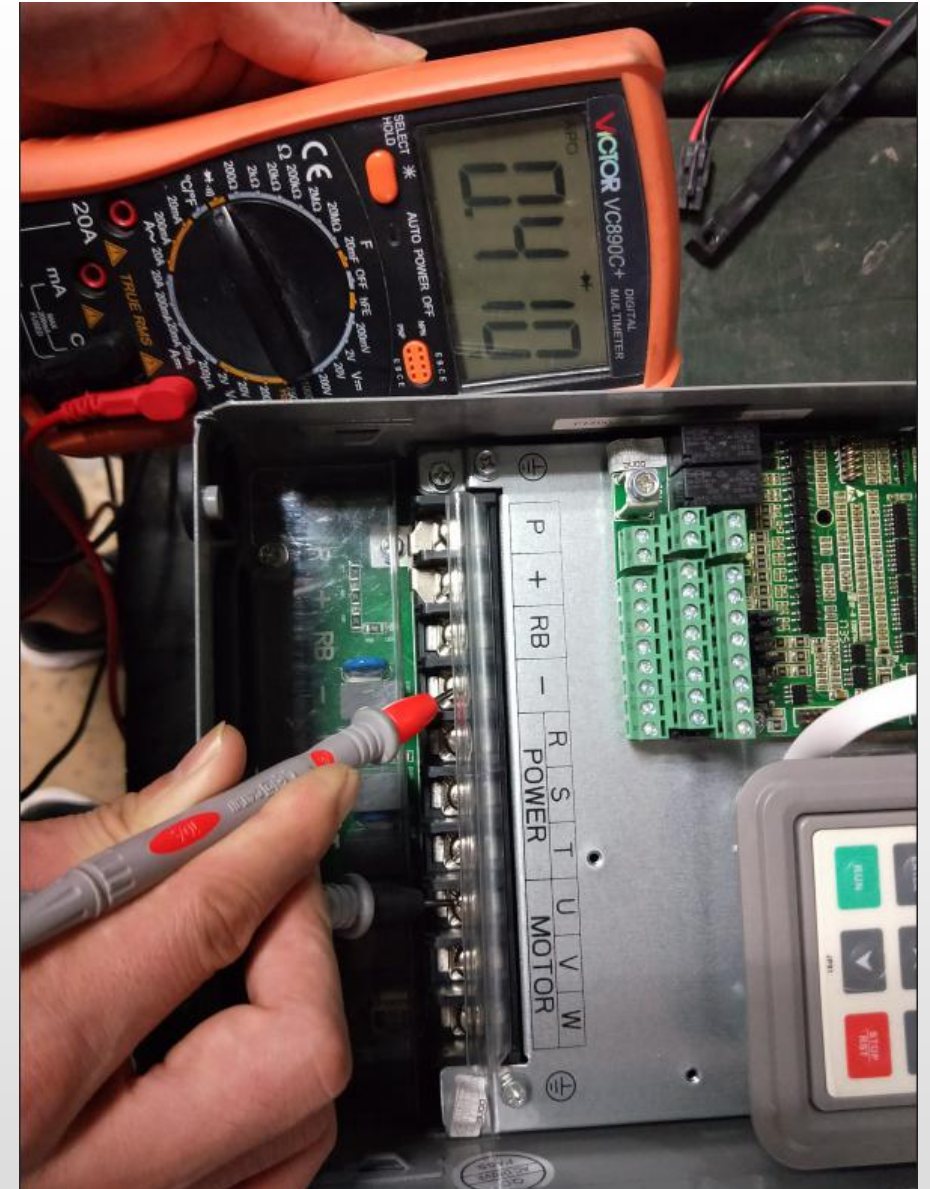
3. Keep the black probe still on "+" and the red probe touch the "W" terminal, if the value around 0.5V, it means OK.

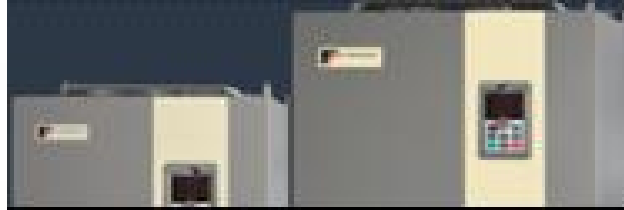


4. Use the red probe to touch the " - " terminal and the black probe to touch the "U" terminal. If the value is around 0.5V, it means OK.

5. Keep the red probe touching the " - " terminal and the black probe touching the "V" terminal. If the value is around 0.5V, it means OK.

Keep the red probe still on " - " terminal and the black probe touching the "W" terminal. If the value is around 0.5V, it means OK.



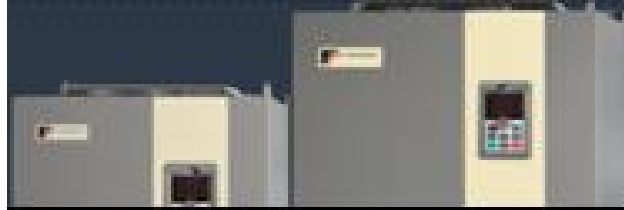


- **Test Result:**

1. Only if the 6 times measuring value around 0.5V, it proved the rectifier is good.

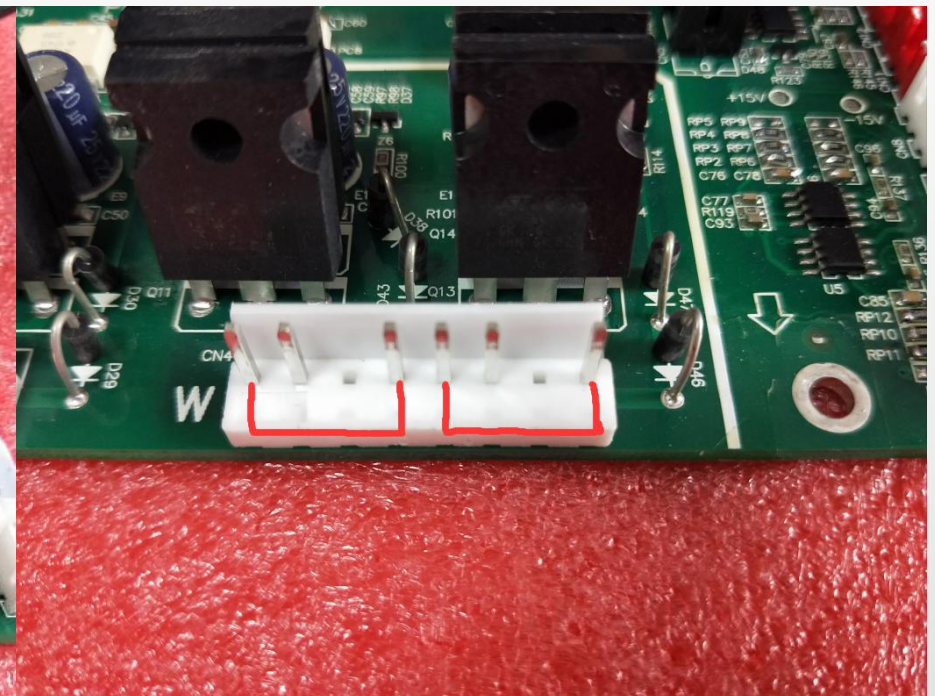
2. If the value is around 0V, it means the rectifier already short-circuit inside .

3. If the value is very high, it means the rectifier already broken inside .

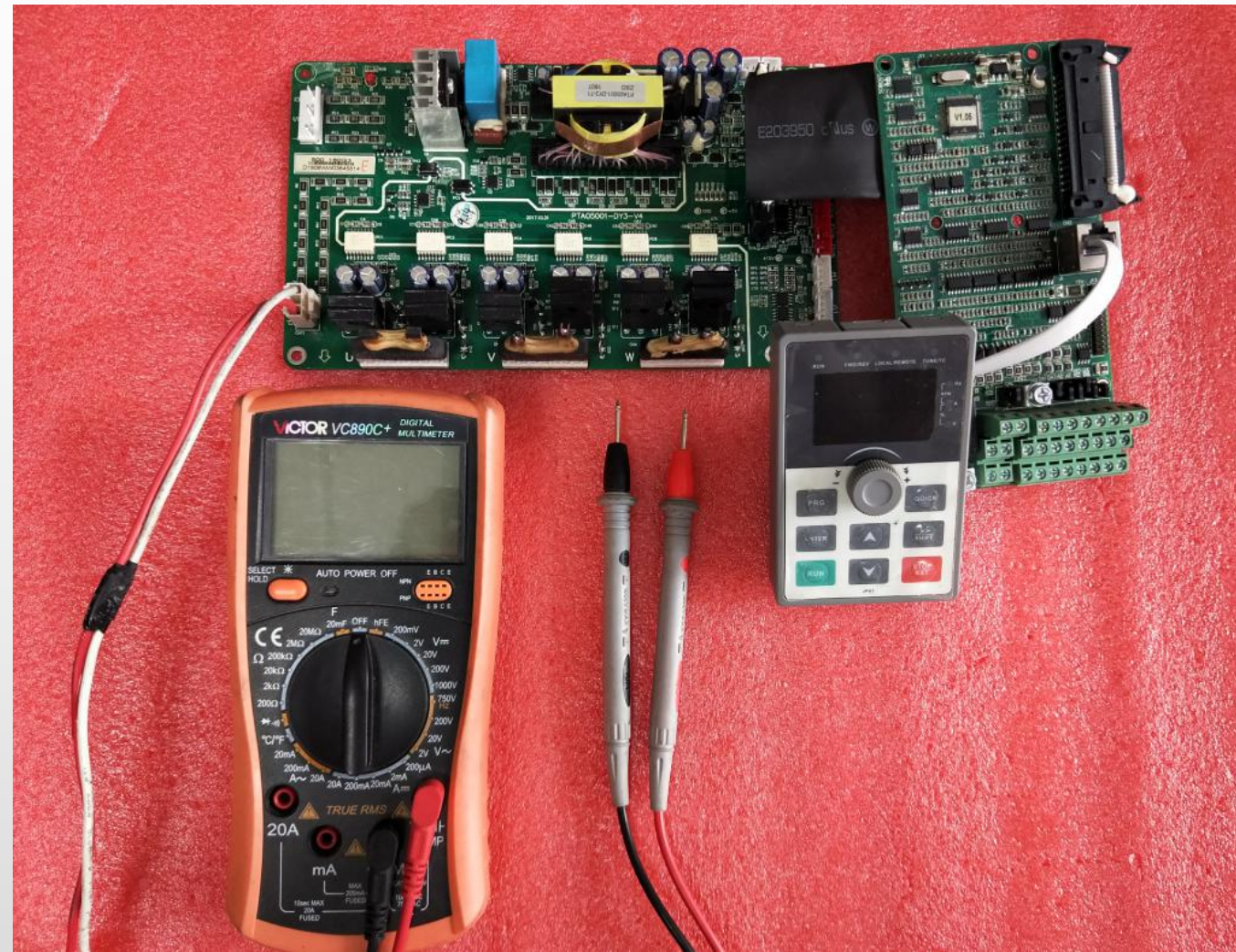


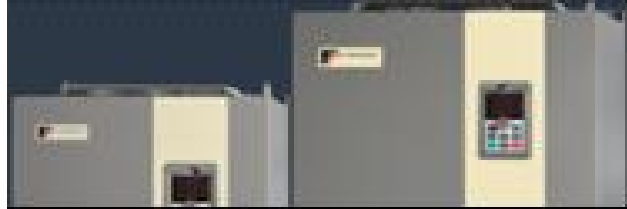
PI500 Power board shooting

1. Pls short the pin on the power board as picture show.

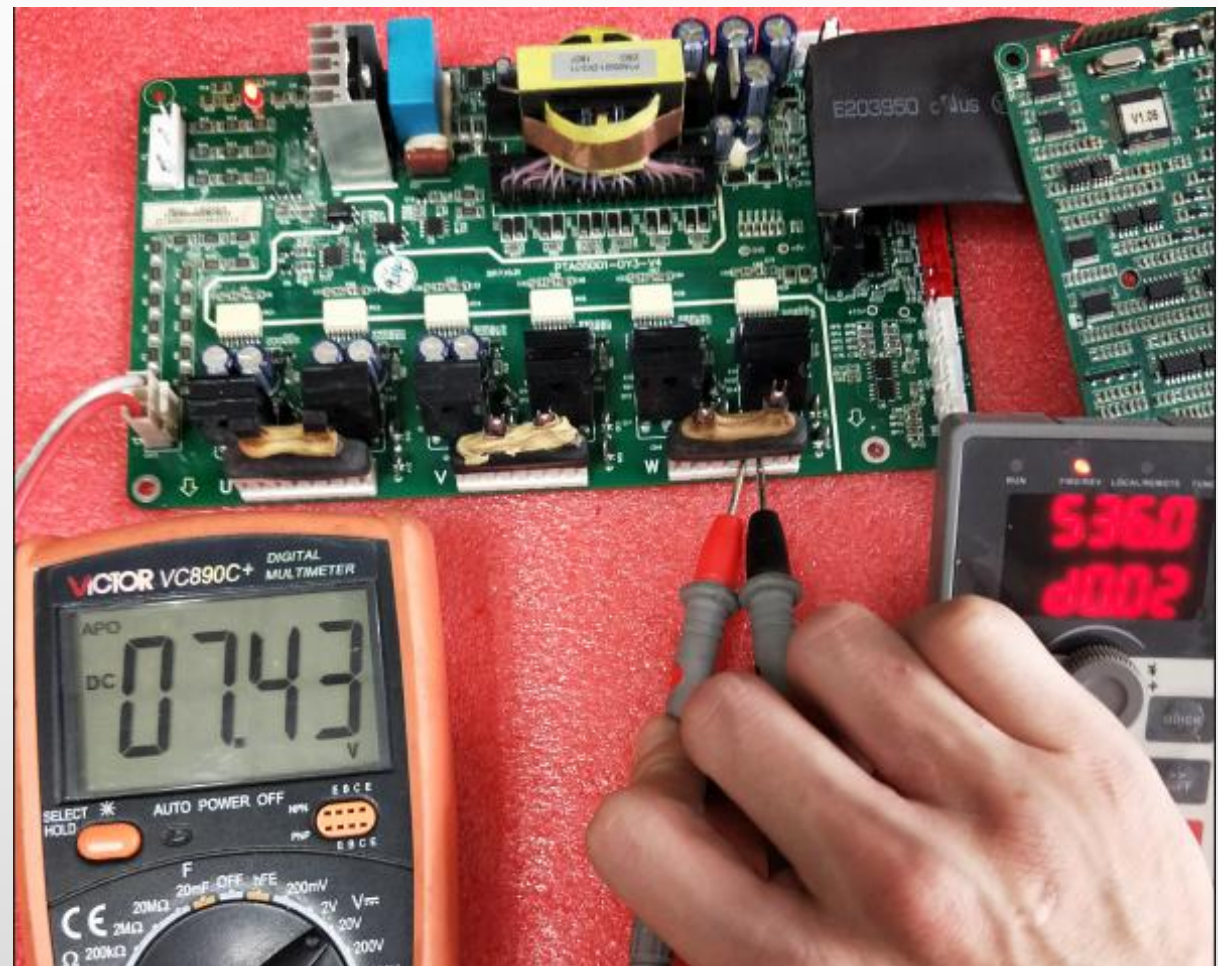
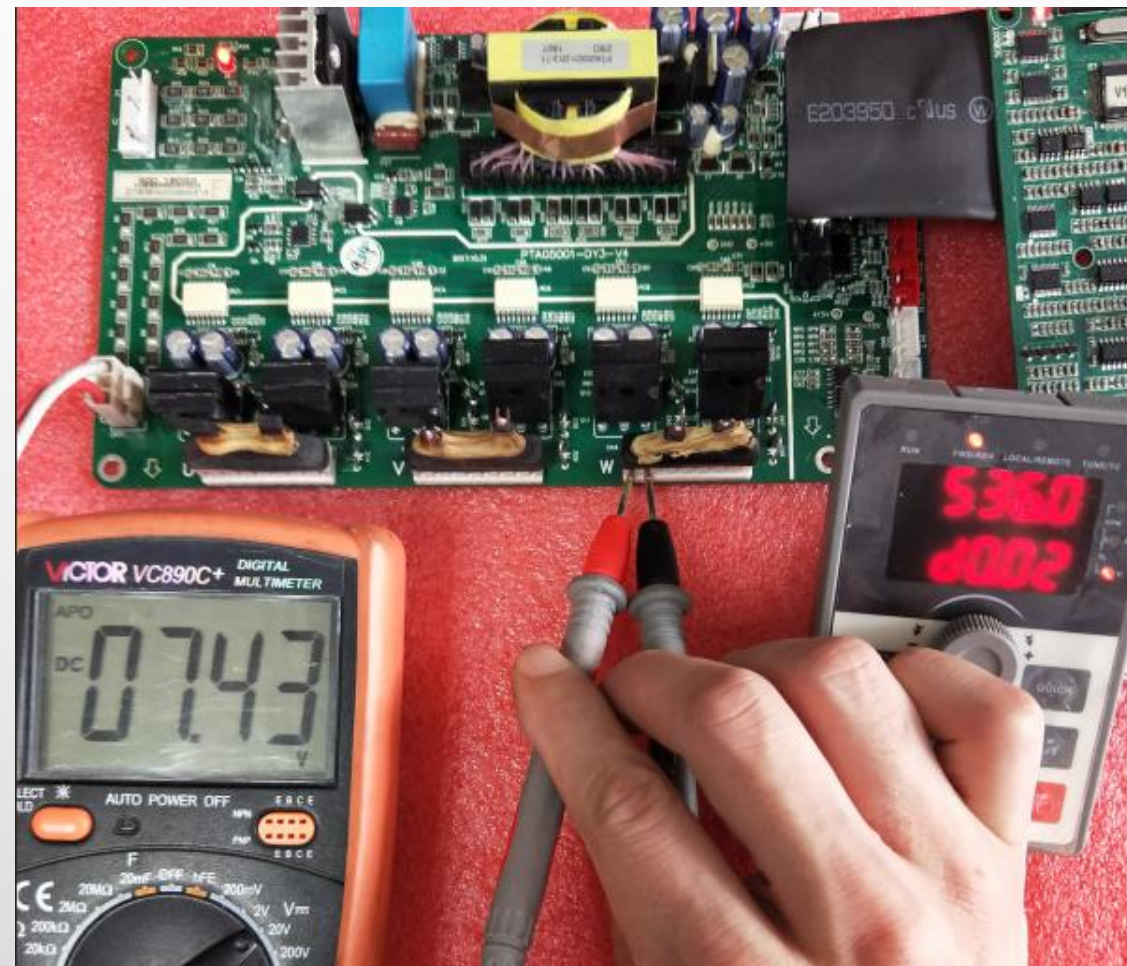


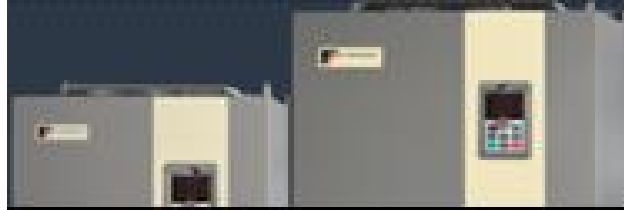
2. Connect the wire between the power board and control board as the picture show. Power supply is 540V DC voltage.



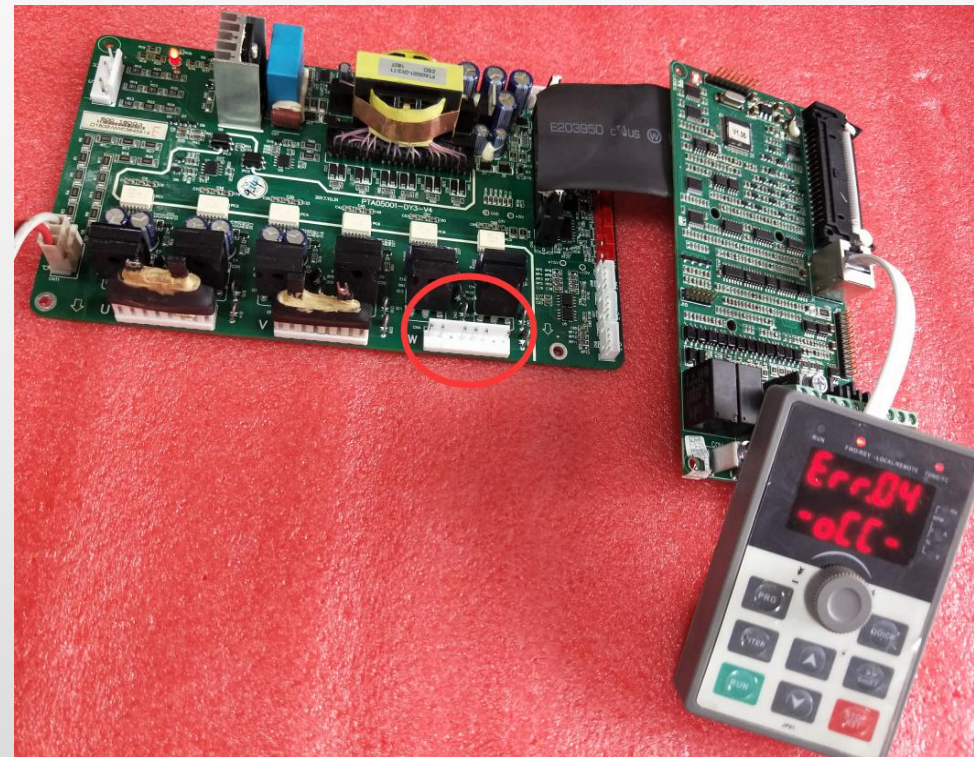
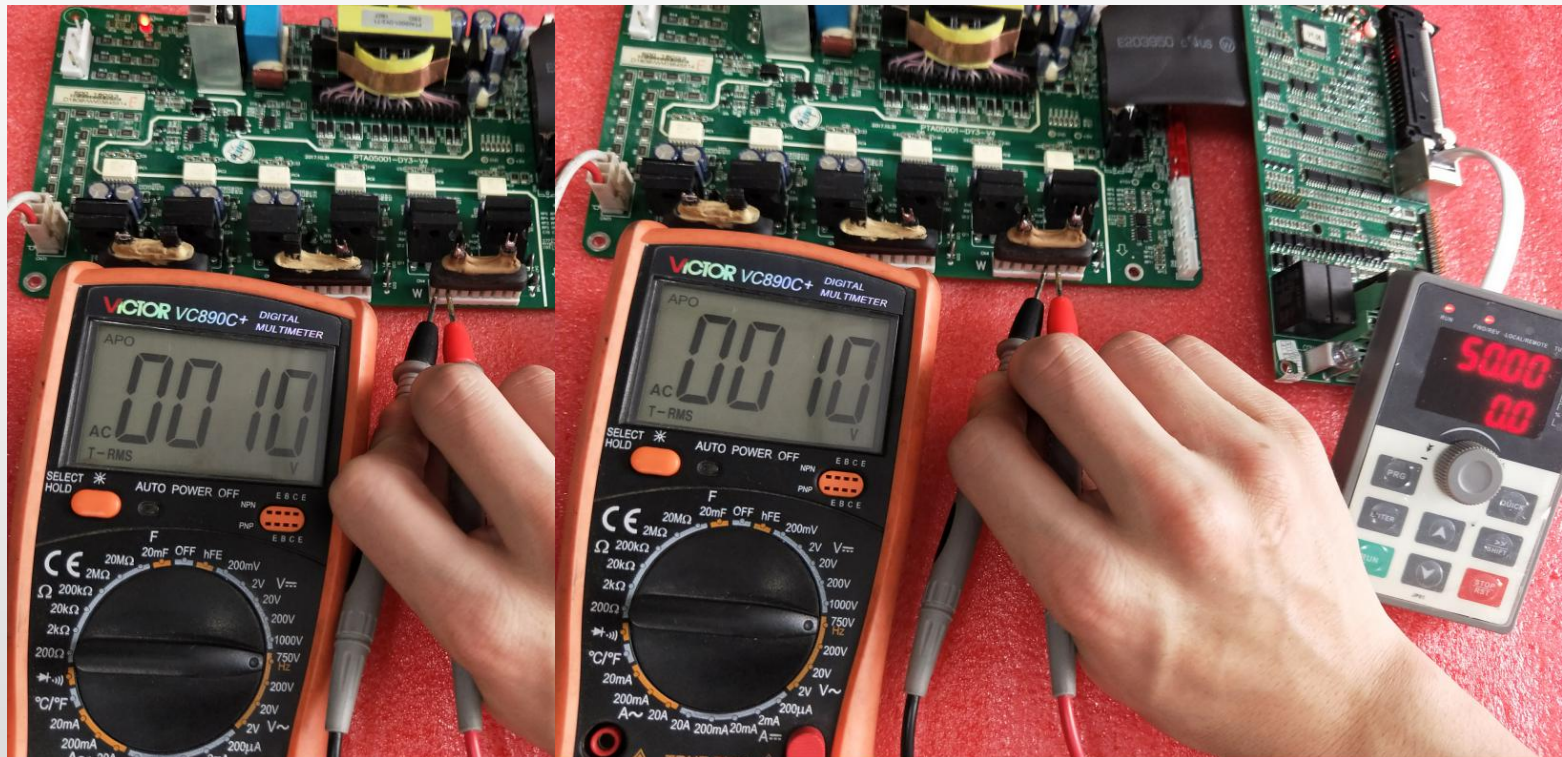


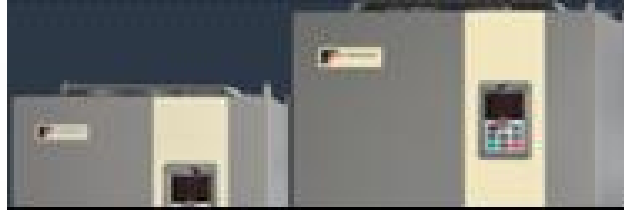
1. Like the picture , test two position by the multimeter red probe and black probe (Pin 1 and Pin2 , Pin5 and Pin6) . The DC voltage of the two positions is about 7.5V DC, it show the Drive IC is OK. More or over ,we also need test another two phases by the same method.





Press the “RUN” button to run the inverter until 50Hz(if press RUN occur error17,please set F8.07=01,after the test please restore the factory setting), then test the AC voltage of the same position. The value is about 11VAC normally,during running state,remove the short line,it will occur error 04 or error 02,it proves the drive borad is ok).All the three phases need to be tested. If the AC voltage is normal(the inverter work without fault) ,it show the drive wave is OK, the power board and control board is no problem.





Thank You !

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