Voltage or current problem on the test bench are mostly cause by the factor as below:

- 1. Radiator
- 2. Mother board(YC01-003-158)
- 3. Automatic control board(YC01-003-131)
- 4. Relay board(YC01-003-130)

For three phase test bench, can exchange the board between good phase and problem phase to know which board has the problem.

Before doing any movement, be sure a lamp was made series into the power supply.

The radiator is easy to exchange. Be careful is that after turn off the bench, the  $\pm$  30,50V terminal of the radiator still has some stored power within it. Have to discharge in order to continued to do the disconnection and prevent electric shot.

The Automatic control board(YC01-003-131) is not easy to exchange. Be attention that the Automatic control board has to aline with the relay board very well. Otherwise is will cause the mis-control of current relay and lead to open circuit and other problem. See on the back side of the 131 board, on the connector you will notice that it has deliberately cut on one side of the connector. This makes the connector between 131 board and 130 board not perfectly fit with each other.

By aline the left edge of the 131 board and 130 board, at the same time aline the screw in the middle of the 131, a good installation can be make.

The mother board(YC01-003-158) is easy to change. Be attention that each phase has its ID number. Phase A is 220, B is 221, C is 222. The VFD key board communicate to the mother board to raise power according to its ID. For example, when exchange mother board between phase A and C. Raise power on phase A, the standard meter will show reading on phase C. So after knowing that the mother board has problem, be remember to change the good mother board back to its original phase.

The relay board(YC01-003-130) will takes the much time to exchange. The wire is complicated and easy to wrongly connect. By taking photos and marking and comparing between phase, will have a more promising result.