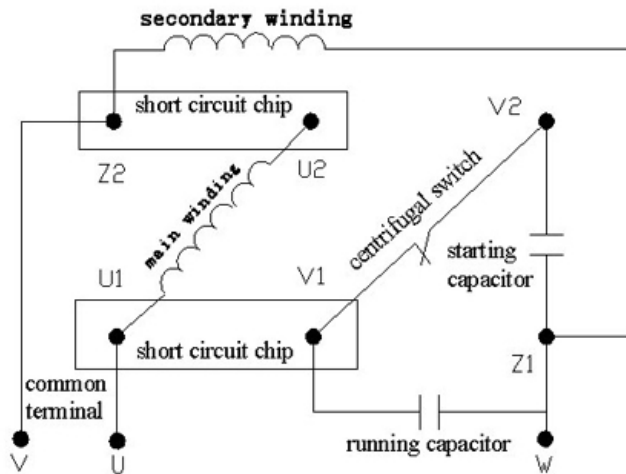
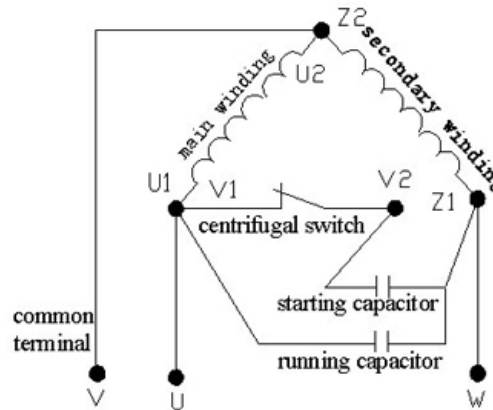


VFD wiring instruction for single phase induction motor

Single phase induction motor has specific wiring requirements in connecting with ATO single phase VFD to enable your single phase motor running properly, please follow below instructions step by step:



VFD output



VFD output

Step 1: Single phase motor has one or two capacitors, disassemble them. The VFD output can't have capacitor.

Step 2: VFD Common Terminal: Running the VFD at 50Hz without connecting loads, measuring the output voltages of U-V, U-W, and V-W, two of three voltage values are the same, their common port is VFD's common terminal. Usually the default common terminal is V phase. (The output voltage is a bit higher for the non-common terminal)

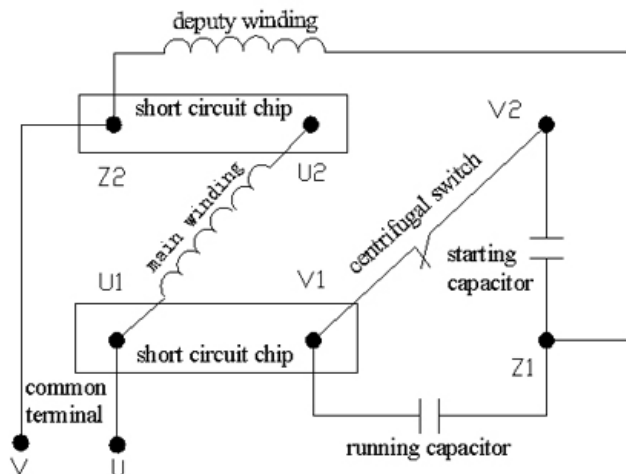
Step 3: Single phase motor has 3 windings and 6 taps. Base on the measuring results of the resistance by a multimeter, the biggest resistance is the secondary winding (Z1, Z2), the smaller resistance is the main winding (U1, U2), the smallest resistance (conducting) is centrifugal switch (V1, V2).

Step 4: The Coupling End of the single phase motor secondary winding (Z2) and main winding (U2) is connected to the VFD's output common terminal (V phase).

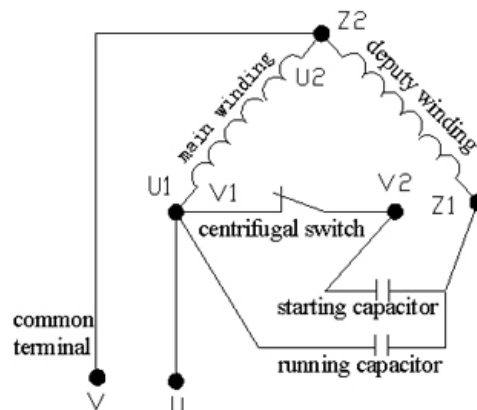
Step 5: The Coupling End of the single phase motor main winding (U1) and centrifugal switch (V1) is connected to the VFD's U phase. The Coupling End of the secondary winding (Z1) and capacitor is connected to the VFD's W phase. In case of the induction motor running in reverse, please exchange the VFD's U phase and W phase.

ATO VFD wiring instruction for single phase motor without disassembling capacitors

Connecting the single phase motor input lines (L, N) to ATO VFD's V, U or W terminals. Generally V Phase should be connected, U or W is optional. Refer to below wiring picture:



VFD output



VFD output