



LENZE VFD QUICKSTART GUIDE

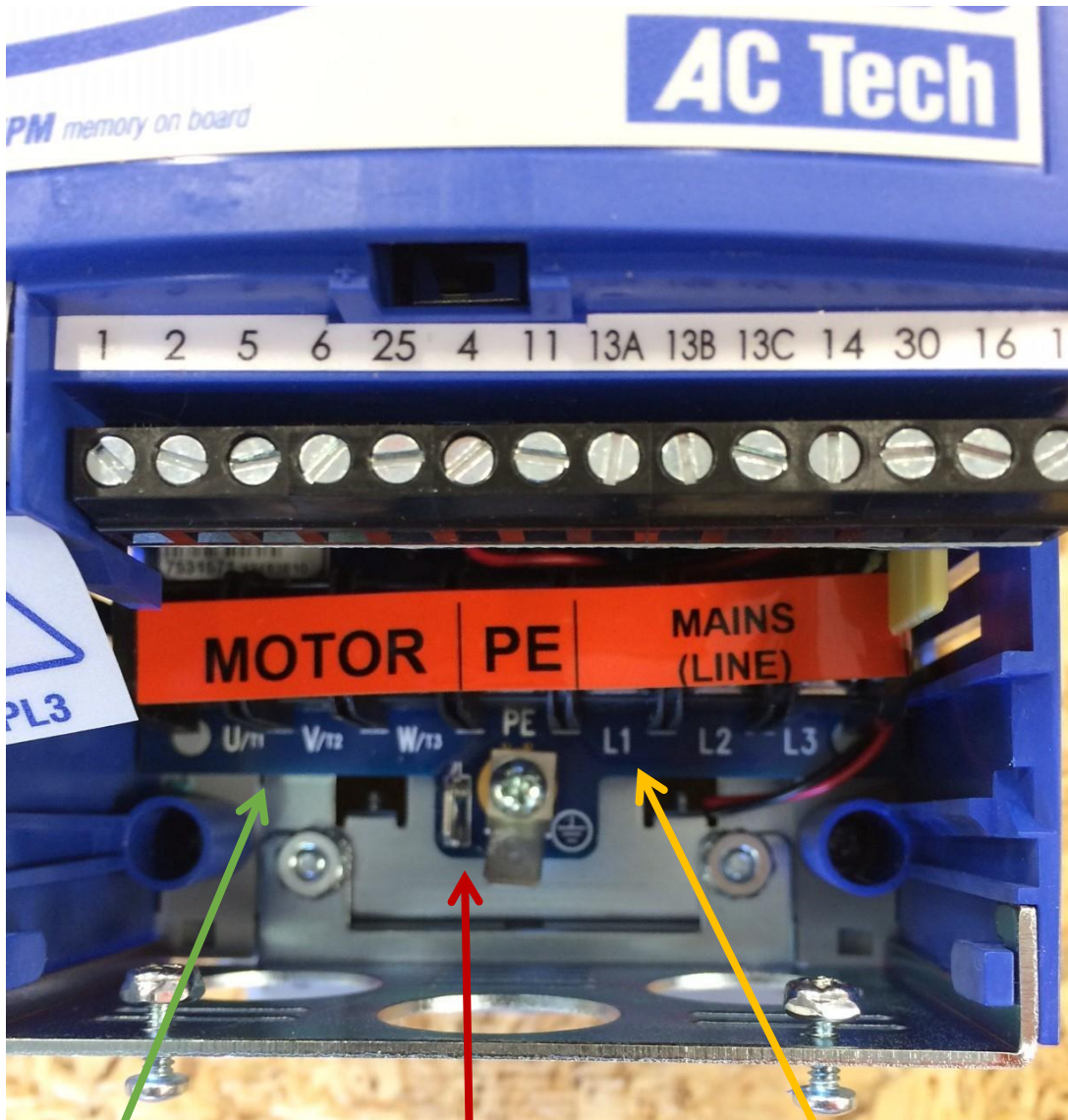
For those that may be lost, a VFD is a variable frequency drive.

Just as a precaution, all pump wiring configurations should be checked prior to starting a pump. Many manufacturers wire their pumps to high voltage (408V/460V) and the configuration should be changed to 230V, or your applicable input voltage.

Just to disclose that this quickstart guide is for taking single phase and converting to 3-phase power. The Lenze VFD is designed to convert the phase. The HP label on the Lenze 1-3HP VFD's 3 phase motor HP. When sizing a VFD always round up to the next largest VFD if it falls in between two sizes. Here at MES we have recently seen a number of drives that were "close enough" and after a few years in service, they failed. A properly sized VFD will last decades.

Wiring the Drive:

- Take your two single phase power wires and connect them to (L1) and (L2)
- Connect three motor power wires to U, V, and W. If using a deep well pump or releaser connect U-Black V- Red W- Yellow. Other combinations will work but this is a known combination that will make the pump go in the correct direction.
- Connect both the motor ground and the incoming ground wires to the ground screws below L1 and L2



U, V, W

Ground Screws

L1 & L2



Wiring the control loop:

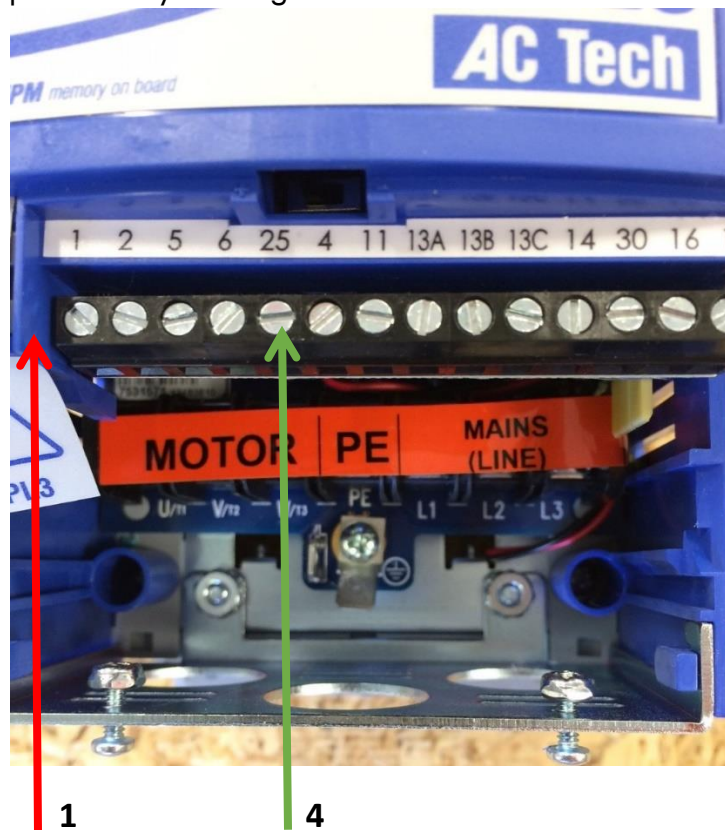
The Lenze VFD has a control loop. The VFD comes preprogrammed so that the control loop turns the power to the pump on and off. The control loop is low voltage and the loop must be complete to have the pump operating. Optional equipment to use in the control loop:

- Switch for on and off of pump
- Float switch for turning pump on and off
- Temperature switch for turning pump on and off.

Wire into the control loop via the following:

1 & 4

If you are not interested in using the control loop simply put a 18 AWG jumper between the two terminals to keep the pump constantly running.





Programming the VFD:

If you purchased your Lenze VFD from MES, it is already programmed. However, if for whatever reason you need to re-program the VFD, here are the parameters that we use.

P100: 1

P101: 0

P102: 20 for releaser, 44 for vacuum pump

P103: 60

P104: 6

P105: 10

P110: 1

P111: 2

P112: 0

If you have any questions about VFD's, programming, or pumps, do not hesitate to call or email us (info@mapleexperts.com).

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