



VFD-L Series Instruction Sheet

Thank you for choosing DELTA's VFD-L series AC Drive. The VFD-L series is manufactured using high-quality components, material and incorporating the latest microprocessor technology available.

This manual will help in the installation, parameter setting, troubleshooting, and daily maintenance of the AC motor drive. To guarantee safe operation of the equipment, read the following safety guidelines before connecting power to the AC motor drive. Keep this operating manual handy and distribute to all users for reference. Important Notes:



- AC input power must be disconnected before any maintenance. Do not connect or disconnect wires while power is applied to the circuit. Only qualified technicians should perform maintenance on
- A charge may still remain in the DC-link capacitor with hazardous voltages even after the power has been turned off. To avoid personal injury, do not remove the cover of the AC drive until all "DISPLAY LED" lights on the digital keypad are off. Please note that there are live components exposed when the AC drive is open,. Be careful to not touch these live parts.
- > The AC drive may be destroyed beyond repair if power is misapplied to the input/output terminals. Never connect the AC drive output terminals U/T1, V/T2, W/T3 directly to the AC main circuit power supply.



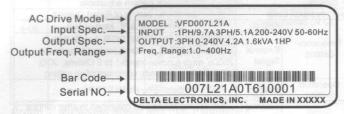
- There are highly sensitive MOS components on the printed circuit boards. These components are especially sensitive to static electricity. To avoid damaging these components, do not touch the circuit boards with metal objects or your bare hands.
- Ground the VFD-L using the ground terminal. The grounding method must comply with the laws of the country where the AC drive is to be installed.

2 Receiving and Inspection

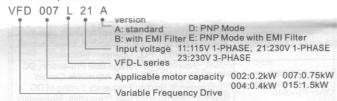
This VFD-L AC drive has gone through rigorous quality control tests at the factory before shipment. Since many things may happen during shipping, please check for the following after receiving the AC motor drive.

- Inspect the unit to insure it was not damaged during shipment.
- Make sure that the part number indicated on the nameplate corresponds with the part number of your order.

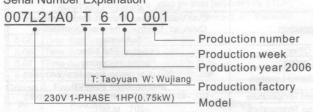
Nameplate Information: Example of 1HP230V



Model Explanation

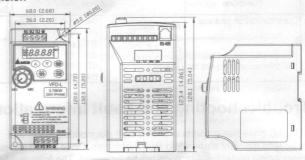


Serial Number Explanation



If there is any nameplate information not corresponding to your purchase order or any problem, please contact your distributor.

Dimension

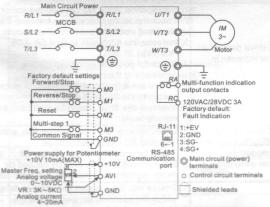


3 Wiring

Basic Wiring Diagram

Users must connect wiring according to the circuit diagram shown below. Please follow all National and State wiring codes, when wiring the VFD-L.

Figure 1 for models of VFD-L series
VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A,
VFD004L11B, VFD004L21A, VFD004L21B, VFD007L21A, VFD007L21B, VFD015L23A



Do not plug in a Modem or telephone line to the RS-485 communication port, permanent damage may result. Terminais 1 & 2 are the power source for the optional copy keypad and should not be used while using RS-485 communication.

del is VFD002L11A/B, VFD004L11A/B, VFD002L21B, VFD004L21B

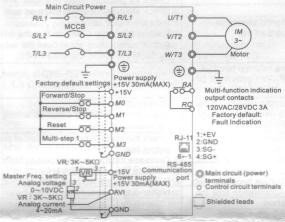
or VFD007L21B, please use power terminals R/L1 and S/L2.

If the AC Drive model is VFD002L21A, VFD004L21A or VFD007L21A, 1-phase/3 phapower may be used on R/L1, S/L2, T/L3. When VFD002L21A/VFD004L21A or VFD007L21A use 1-phase power, please select any two of the three input terminals R/L1, S/L2, T/L3.

If the AC Drive model is VFD015L23A, single phase power is not allowed.

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Figure 2 for models of VFD-L series VFD004L21D, VFD004L21E, VFD007L21D, VFD007L21E



NOTE: Do not plug in a Modem or telephone line to the RS-485 communication port, permanent damage may result. Terminals 1 & 2 are the power source for the optional copy keypad and should not be used while using RS-485 communication.

communication.

"If the AC Drive model is VFD004L21E, VFD007L21E, please use power terminals R/L1 and S/L2.

"If the AC Drive model is VFD004L21D, VFD007L21D, 1-phase/3 phase power may be used on R/L1, S/L2, T/L3. When VFD004L21D/VFD007L21D use 1-phase power, please select any two of the three input terminals R/L1, S/L2, T/L3.

Wiring for NPN mode and PNP mode

