

Control circuit wiring

4

5.

Figure 3 for models: VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A VFD004L11B, VFD004L21A, VFD004L21B, VFD007L21B, VFD007L21B, VFD007L23A

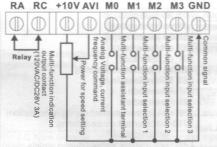
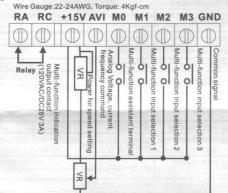


Figure 4 for models: VFD004L21D, VFD004L21E, VFD007L21D, VFD007L21E



Wiring Notes: PLEASE READ PRIOR TO INSTALLATION.

Do not connect the AC input to any of the U/T1, V/T2, W/T3 terminals, as it will damage the AC drive...

Ensure all screws are tightened to the proper torque rating.

During installation, follow all national and local electrical, construction, and safety codes for the country the drive is to be installed in.

Ensure the appropriate protective devices (circuit breaker or fuses) are 2 connected between the power supply and AC drive.

Make sure that the leads are connected correctly and the AC drive is 3 properly grounded. (Ground resistance should not exceed 0.1Ω .)

Use ground leads that comply with AWG/MCM standards and keep them as short as possible.

Multiple VFD-L units can be installed in one location. All the units should be grounded directly to a common ground terminal. The VFD-L ground terminals may also be connected in parallel, as shown in the figure below. Ensure there are no ground loops.

444444 When the AC drive output terminals U/T1, V/T2, and W/T3 are 6 connected to the motor terminals U, V, and W, respectively, the motor will rotate counterclockwise (as viewed from the shaft ends of the motor) when a forward operation command is received. To reverse the direction of motor rotation, switch over any of the two motor leads.

7. Make sure that the power is capable of supplying the correct voltage and required current to the AC drive.

8 Do not attach or remove wiring when power is applied to the AC drive. 9.

Do not monitor the signals on the circuit board while the AC drive is in operation.

10. Route the power and control wires separately, or orthogonal to each

If a filter is required for reducing EMI (Electro-Magnetic Interference), install it as close as possible to AC drive. EMI can also be reduced by lowering the Carrier Frequency.

If the AC drive is installed in the place where a load reactor is needed, install the filter close to U/T1, V/T2, W/T3 side of AC drive. Do not use a Capacitor or L-C Filter (Inductance-Capacitance) or R-C Filter (Resistance-Capacitance).

When using a general GFCI (Ground Fault Circuit Interrupter), select a current sensor with sensitivity of 200mA or above, and not less than 0.1-second operation time to avoid nuisance tripping. For the specific GFCI of the AC motor drive, please select a current sensor with sensitivity of 30mA or above.

Summary of Parameters

neter may be set during operation

Pr.	Functions	Settings	Factory Setting
0-00	Identity code of drive (Read only)	d1: 40W d4: 400W d2: 100W d5: 750W d6: 1.5KW	Rav I
0-01	Rated current display (Read only)	40W: d0.4A 100W: d0.8A 200W: d1.6A 400W: d2.5A 750W: d4.2A 1.5K: d7.0A	
0-02	Parameter reset	d10: Reset Parameters to Factory Setting	d0
№ 0-03	Start-up display of AC drive	d0: F (Frequency command) d1: H (output frequency) d2: U (user-defined unit) d3: A (output current)	d0
№ 0-04	User-defined Unit	d0: Display User-Defined Unit (u) d1: Display Counter Value (C) d2: Display Process Operation (1=tt) (Display the current speed's step and the rest time for this step speed) d3: Display DC-BUS voltage (U) d4: Display output voltage (E)	d0
₩ 0-05	User-defined coefficient K	d0.1 ~ d160	d1.0
0-06	Software version	Read only	#.#
0-07	Password input	d0 ~ d999	d0
0-08	Password configuration	d0 ~ d999	d0

Group 1: Basic Parameters

Pr.	Functions	Settings	Factory
1-00	Maximum operation Freq.	d50.0 ~ d400Hz	d60.0
1-01	Maximum setting Freq.	d10.0 ~ d400Hz	d60.0
1-02	Maximum output voltage	d2.0 ~ d255V	d220
1-03	Mid-point freq.	d1.0 ~ d400Hz	d1.0
1-04	Mid-point voltage	d2.0 ~ d255V	d12.0
1-05	Minimum output freq.	d1.0 ~ d60.0Hz	d1.0
1-06	Minimum output voltage	d2.0 ~ d255V	d12.0
1-07	Upper bound of freq.	d1 ~ d110%	d100
1-08	Lower bound of freq.	d0 ~ d100%	d0.0
№ 1-09	Accel time 1 (Tacc1)	d0.1 ~ d600 Sec	d10.0
№ 1-10	Decel time 1 (Tdec1)	d0.1 ~ d600 Sec	d10.0
₩1-11	Accel time 2	d0.1 ~ d600 Sec	d10.0
w1-12	Decel time 2	d0.1 ~ d600 Sec	d10.0
w1-13	JOG Accel time	d0.1 ~ d600 Sec	d10.0
w1-14	JOG Decel time	d0.0 ~ d600 Sec	d10.0
w1-15	JOG frequency	d1.0Hz~d400Hz	d6.0
1-16	Auto-accel/decel	d0: Linear Accel/Decel d1: Auto accel, linear decel d2: Linear accel, auto decel, d3: Auto Accel/Decel d4: Linear accel. Auto decel, stall prevention during deceleration d5: Auto accel. Auto decel, stall prevention during	d0
1-17	S-curve setting in acceleration	d0 ~ d7	d0
1-18	S-curve setting in deceleration	d0 ~ d7	d0

Pr.	Functions	Settings	Factory Setting
2-00	Source of frequency command	d0: Digital keypad d1: 0 ~ 10V from AVI d2: 4 ~ 20mA from AVI d3: Controlled by V.R on drive d4: RS-485 communication interface	d0
2-01	Source of operation command	d0: By digital keypad d1: By external terminals, keypad STOP enable	d0
100 200 8 108	Facient senserative	d2: By external terminals, keypad d3: By RS-485 communication interface, keypad STOP enable d4: By RS-485 communication interface, keypad STOP disable	1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
2-02	Stop method	d0: Ramp stop d1: Coast stop	d0
2-03	Carrier freq.	d3 ~d10K Hz	d10