



# VFD-L Series Instruction Sheet

## 1 Preface

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:

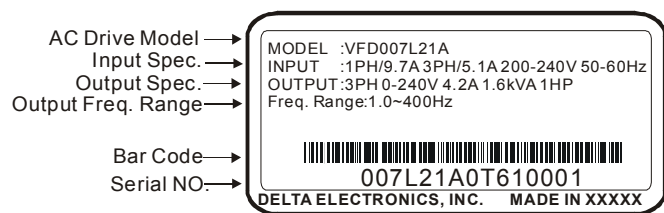
- AC input power must be disconnected before any maintenance. Do not connect or disconnect wires while power is applied to the circuit. Only qualified technicians should perform maintenance on the VFD-L.**
- A charge may still remain in the DC-link capacitor with hazardous voltages even after the power 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

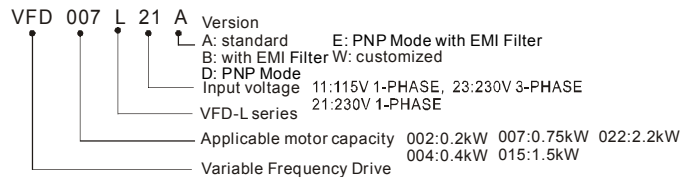
This VFD-L AC drive has gone through rigorous quality control tests at the factory before shipment. Since many things may happen during shipping, please check for the following after receiving the AC motor drive.

- ☉ 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.

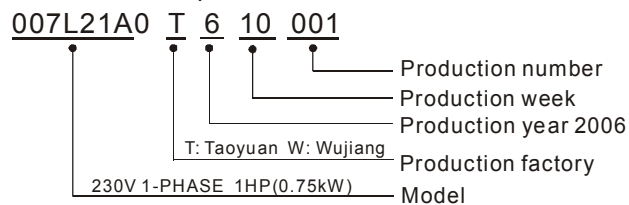
Nameplate Information: Example of 1HP230V



### 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

Figure 1  
For models : VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD004L21D, VFD004L21E, VFD007L21A, VFD007L21B, VFD007L21D, VFD007L21E, VFD015L21W, VFD015L23A

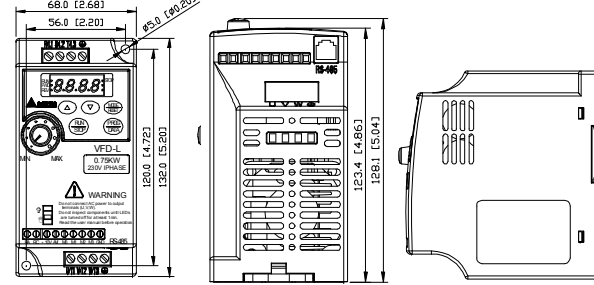
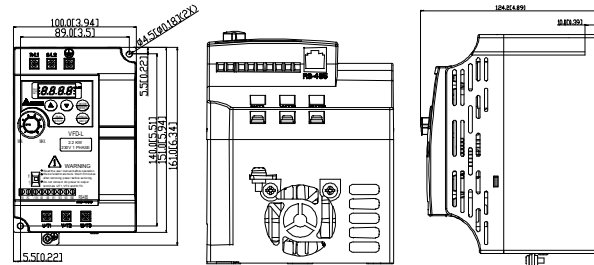


Figure 2  
For models : VFD022L21W

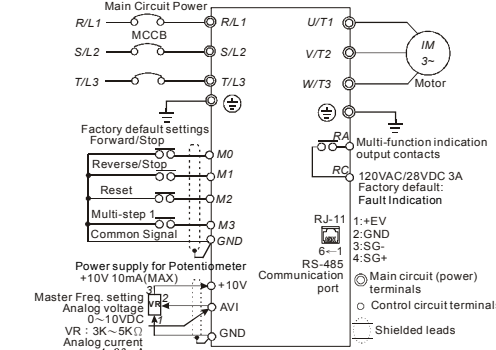


## 3 Wiring

### 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, VFD015L21W, VFD015L23A, VFD022L21W



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.

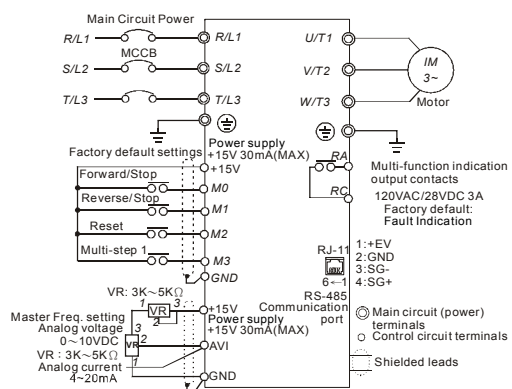
Model VFD015L21W uses power terminals S/L2 and T/L3.

\*If the AC Drive model 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 phase power 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.

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

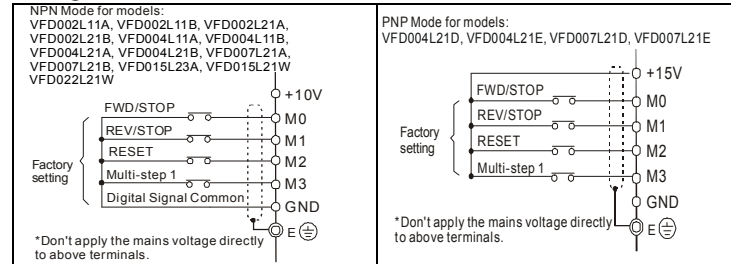


NOTE: Do not plug in a Modem or telephone line to the RS-485 communication port, permanent damage may result. Terminals 1 & 2 are the power source for the optional copy keypad and should not be used while using RS-485 communication.

\*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



### Main circuit wiring

Figure 1  
For models : VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD004L21D, VFD004L21E, VFD007L21A, VFD007L21B, VFD007L21D, VFD007L21E, VFD015L21W, VFD015L23A

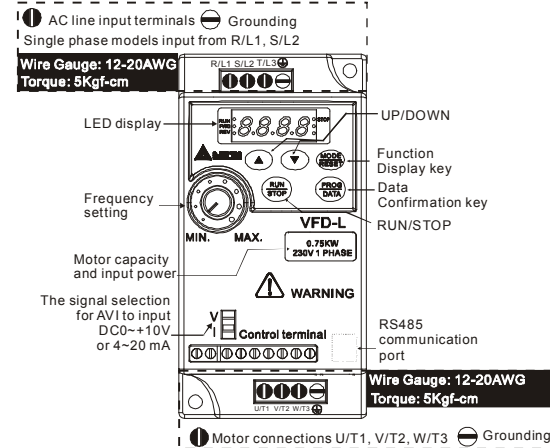
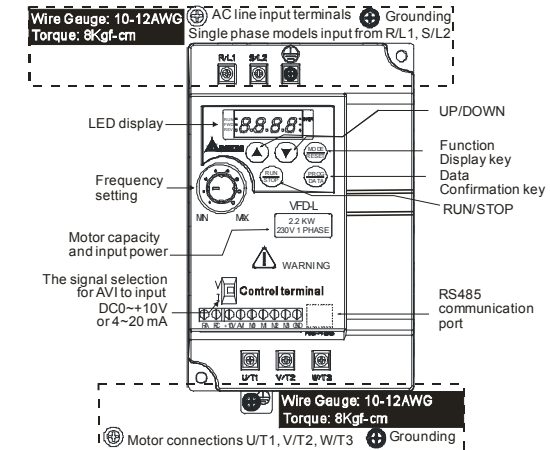


Figure 2  
For models : VFD022L21W



### Control circuit wiring

Figure 3 for models: VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD007L21A, VFD007L21B, VFD015L21W, VFD015L23A, VFD022L21W

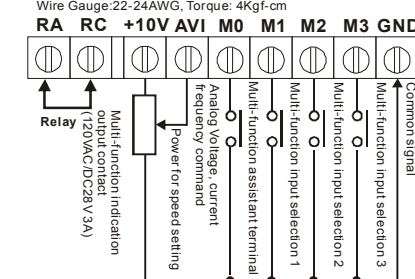
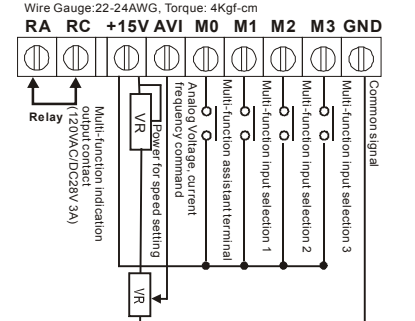


Figure 4 for models: VFD004L21D, VFD004L21E, VFD007L21D, VFD007L21E



## 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.**
- 1. During installation, follow all national and local electrical, construction, and safety codes for the country the drive is to be installed in.
- 2. Ensure the appropriate protective devices (circuit breaker or fuses) are connected between the power supply and AC drive.
- 3. Make sure that the leads are connected correctly and the AC drive is properly grounded. (Ground resistance should not exceed 0.1Ω.)
- 4. Use ground leads that comply with AWG/MCM standards and keep them as short as possible.
- 5. 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.
- 6. When the AC drive output terminals U/T1, V/T2, and W/T3 are 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 other.
- 11. 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.
- 12. 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).
- 13. 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.

## 4 Summary of Parameters

Group 0: User Parameters The parameter may be set during operation.

Pr.	Functions	Settings	Factory Setting
0-00	Identity code of drive (Read only)	d1: 40W d2: 100W d3: 200W d4: 400W	d5: 750W d6: 1.5KW d7: 2.2KW
0-01	Rated current display (Read only)	40W: d0.4A 100W: d0.8A 200W: d1.6A 400W: d2.5A	750W: d4.2A 1.5KW: d7.0A 2.2KW: d11.0A
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 Setting
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
1-12	Decel time 2	d0.1 ~ d600 Sec	d10.0
1-13	JOG Accel time	d0.1 ~ d600 Sec	d10.0
1-14	JOG Decel time	d0.0 ~ d600 Sec	d10.0
1-15	JOG frequency	d1.0Hz~d400Hz	d6.0
1-16	Auto-accel/deccl	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 deceleration	d0
1-17	S-curve setting in acceleration	d0 ~ d7	d0



# VFD-L 系列說明書

## 1 序言

感謝您採用台達高性能・簡易型交流馬達驅動器 VFD-L 系列。VFD-L 係採用高品質之元件、材料及融合最新的微電腦控制技術製造而成。本手冊提供給使用者安裝、參數設定、異常診斷、排除及日常維護本交流馬達驅動器相關注意事項。為了確保能夠正確地安裝及操作本交流馬達驅動器，請在裝機之前，詳細閱讀本使用手冊，並請妥善保存及交由該機器的使用者。以下為特別需要注意的事項：

- 在交流馬達驅動器內部的電子元件對靜電特別敏感，因此不可將其物置入交流馬達驅動器內部或觸摸主電路板。
- 切斷交流電源後，交流馬達驅動器數位操作器指示燈未熄滅前，表示交流馬達驅動器內部仍有高壓十分危險，請勿觸摸內部電路及零組件。
- 絕不可將交流馬達驅動器輸出端子 U/T1, V/T2, W/T3 連接至 AC 電源。
- 實施配線，務必關閉電源。
- 交流馬達驅動器端子 ⊕ 務必正確的接地。

## 2 交貨檢查

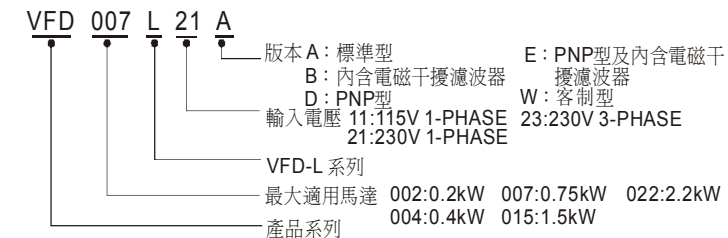
每部 VFD-L 交流馬達驅動器在出廠前，均經嚴格之品管，並做強化之防撞包裝處理。客戶在交流馬達驅動器拆箱後，請即刻進行下列檢查步驟。

- 檢查交流馬達驅動器是否在運輸過程中造成損傷。
- 拆封後檢查交流馬達驅動器機種型號是否與外箱登錄資料相同。

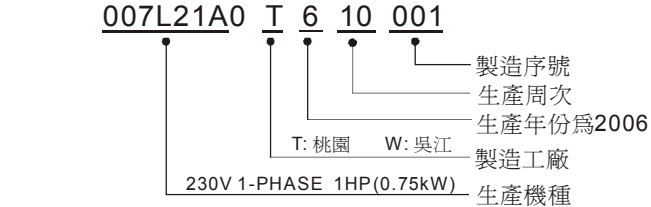
銘牌說明：以 1HP230V 為例



### 型號說明



### 序號說明

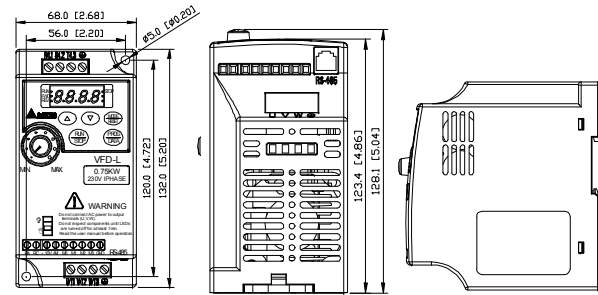


如有任何登錄資料與您訂貨資料不符或產品有任何問題，請您與接洽之代理商或經銷商連絡。

## 外觀尺寸

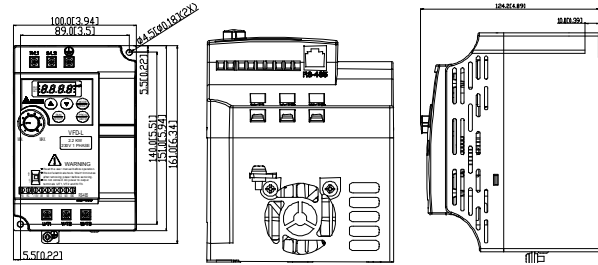
外觀尺寸圖一

適用機種：VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD004L21D, VFD004L21E, VFD007L21A, VFD007L21B, VFD007L21D, VFD007L21E, VFD015L21W, VFD015L23A



外觀尺寸圖二

適用機種：VFD022L21W

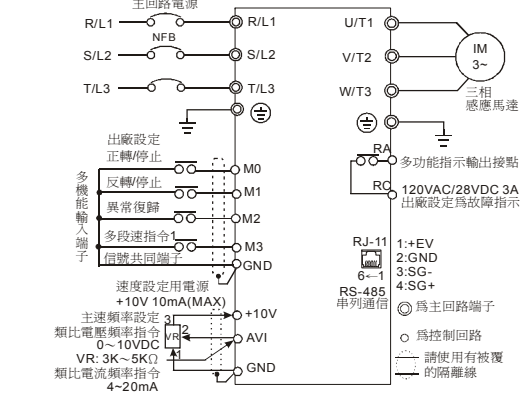


## 3 配線

### 基本配線圖

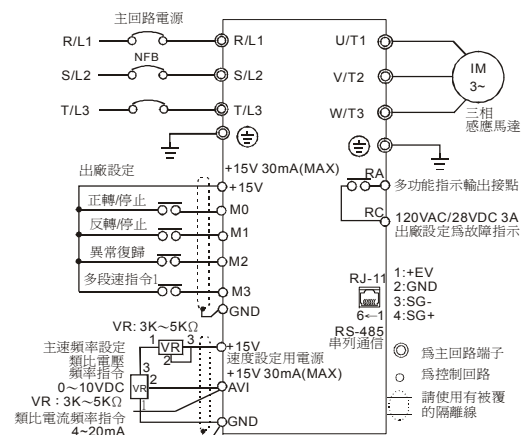
交流馬達驅動器配線部份，分為主回路及控制回路。用戶必須依照下列之配線回路確實連接。下圖為 VFD-L 出廠時交流馬達驅動器的標準配線圖。若僅用數位控制面板操作時，只有主回路端子配線。

配線圖一  
適用機種：VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD007L21A, VFD007L21B, VFD015L21W, VFD015L23A, VFD022L21W



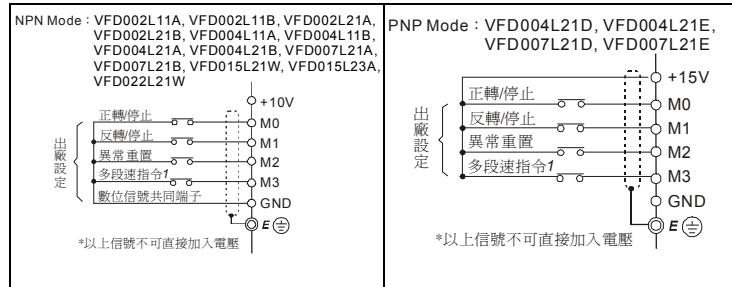
機種 VFD015L21W 主回路端子由 S/L2, T/L3 作為輸入電源端  
機種 VFD022L21W 主回路端子由 T/L3  
\* 若為單相機種 VFD002L11A/B, VFD004L11A/B, VFD002L21B, VFD004L21B, VFD007L21B or VFD022L21W 則主回路端子由 R/L1, S/L2 作為輸入電源  
\* 標準型單相機種 VFD002L21A, VFD004L21A or VFD007L21A 可輸入三相電源  
當使用單相電源時，輸入電源端可從輸入端子 R/L1, S/L2, T/L3 任選兩個  
\* 三相機種 VFD015L23A 請務必輸入三相電源

配線圖二  
適用機種：VFD004L21D, VFD004L21E, VFD007L21D, VFD007L21E



\* 若為單相機種 VFD002L21E, VFD004L21E 則主回路端子由 R/L1, S/L2 作為輸入電源端  
\* 標準型單相機種 VFD004L21D or VFD007L21D 可輸入三相電源。當使用單相電源時，輸入電源端可從輸入端子 R/L1, S/L2, T/L3 任選兩個

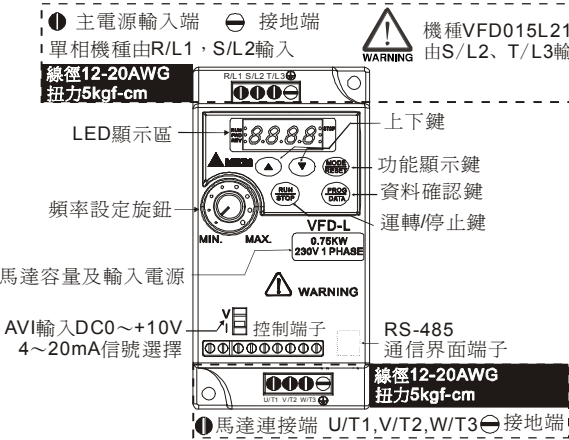
### NPN 模式及 PNP 模式的接線



### 主回路配線

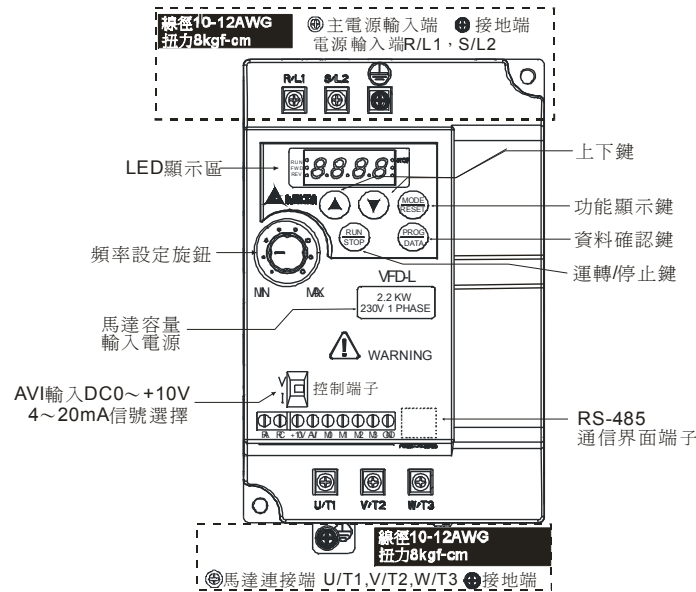
主回路配線圖一

適用機種：VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD004L21D, VFD004L21E, VFD007L21A, VFD007L21B, VFD007L21D, VFD007L21E, VFD015L21W, VFD015L23A



主回路配線圖二

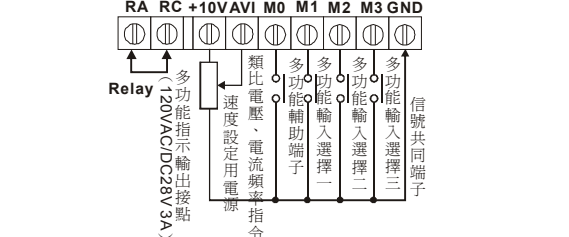
適用機種：VFD022L21W



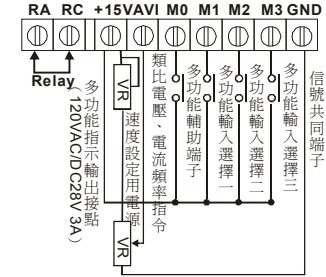
### 控制回路配線

適用機種：VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD007L21A, VFD007L21B, VFD015L21W, VFD015L23A, VFD022L21W

端子台規格：扭力：5Kgf-cm, 線徑：No.10-22AWG, 種類：Copper



適用機種：VFD004L21D, VFD004L21E, VFD007L21D, VFD007L21E  
端子台規格：扭力：5Kgf-cm, 線徑：No.10-22AWG, 種類：Copper

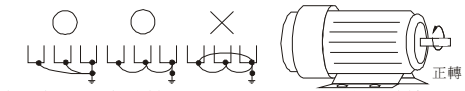


### 配線注意事項



請勿連接 AC 輸入至 U/T1, V/T2, W/T3 任一端子以避免造成變頻器損壞。

- 配線時，配線線徑規格之選定，請依照電工法規之規定施行配線，以策安全。
- 三相交流輸入電源與主回路端子 (R/L1, S/L2, T/L3) 之間的連線一定要接一個無熔絲開關及保險絲。最好能另串接一電磁接觸器 (MC) 以在交流電機驅動器保護功能動作時可同時切斷電源。(電磁接觸器的兩端需加裝 R-C 突波吸收器)。
- 輸入電源 R/L1, S/L2, T/L3 並無相序分別，可任意連接使用；接地端子 ⊕ 以第三種接地方式接地。(接地阻抗 100Ω 以下)
- 交流馬達驅動器接地線不可與電焊機、大馬力馬達等大電流負載共同接地，而必須分別接地。接地配線必須愈短愈好。
- 數台交流馬達驅動器共同接地時，勿形成接地回路。參考下圖：



- 若將交流馬達驅動器輸出端子 U/T1, V/T2, W/T3 相對連接至馬達 U, V, W 端子，則交流馬達驅動器數位控制板上正轉 (FWD) 指示燈亮，則表示交流馬達驅動器執行正轉，馬達旋轉方向如上右圖所示；若逆轉 (REV) 指示燈亮，則表示交流馬達驅動器執行反轉，旋轉方向與上圖相反。若無法確定交流馬達驅動器輸出端子 U/T1, V/T2, W/T3 連接至馬達 U, V, W 端子是否一對一連接，如果交流馬達驅動器執行正轉時，馬達為反轉方向，只要將馬達 U, V, W 端子中任意兩條對調即可。
- 確定供電電源系統的電壓及可供應之最大容量。
- 當「數位操作器」顯示時，請勿連接或拆卸任何配線。
- 請將減速時間加長以避免驅動器跳過電壓保護。
- 不可將交流電源連接至交流馬達驅動器出力側端子 U/T1, V/T2, W/T3。
- 主回路端子的螺絲請確實鎖緊，以防止因震動鬆脫產生火花。
- 主回路與控制回路的配線必需分離，以防止發生誤動作。如必需交錯請作成 90° 的交叉。
- 若交流馬達驅動器出力側端子 U/T1, V/T2, W/T3 有必要加裝雜訊濾波器時，必需使用電感式 L-濾波器，不可加裝進相電容器或 L-C、R-C 式濾波器。
- 控制配線請儘量使用隔離線，端子前的隔離網剝除段請勿露出。
- 電源配線請使用隔離線或線管，並將隔離層或線管兩端接地。
- 如果交流馬達驅動器的安裝場所對干擾相當敏感，則請加裝 RFI 濾波器，安裝位置離交流馬達驅動器越近越好。PWM 的載波頻率越低，干擾也越少。
- 交流馬達驅動器若有加裝一般漏電斷路器以作為漏電故障保護時，為防止漏電斷路器誤動作，請選擇感度電流在 200mA 以上，動作時間為 0.1 秒以上者。使用交流馬達驅動器專用漏電斷路器時，請選擇感度電流在 30mA 以上。

## 4 參數一覽表

參數	參數功能	設定範圍	出廠值
0-00	機種識別 (僅供讀取)	d1: 40W d2: 100W d3: 200W d4: 400W	工廠設定
0-01	額定電流顯示 (僅供讀取)	40W: d0.4A 100W: d0.8A 200W: d1.6A 400W: d2.5A	工廠設定
0-02	參數重置設定	d10: 參數回復工廠設定	d0
↗0-03	開機顯示	d0: F (頻率指令) d2: U (使用者定義) d1: H (輸出頻率) d3: A (輸出電流)	d0
↗0-04	定義多功顯示內容	d0: 顯示使用者定義(U) d1: 顯示計數內容(C) d2: 顯示程序運轉內容(1=tt) (顯示目前運轉的段數及該段剩餘的運轉時間) d3: 顯示 DC-BUS 電壓(U) d4: 顯示輸出電壓(E)	d0
↗0-05	使用者定義比例設定	d0.1~d10	d1.0
0-06	軟體版本	僅能讀取	##
0-07	參數保護密碼輸入	d0 ~ d999	d0: 無密碼鎖/正確密碼已被輸入 d1: 參數已被鎖定
0-08	參數保護密碼輸入	d0 ~ d999	d0: 未設定密碼 d1: 密碼已設定成功





# VFD-L 系列说明书

## 1 序言

感谢您采用台达高性能·简易型交流电机驱动器 VFD-L 系列。VFD-L 系列采用高品质的元件、材料及融合最新的微电脑控制技术制造而成。本手册提供给使用者安装、参数设定、异常诊断、排除及日常维护本交流电机驱动器相关注意事项。为了确保能够正确地安装及操作本交流电机驱动器，请在装机之前，详细阅读本使用手册，并请妥善保存及交由该机器的使用者。以下为特别需要注意的事项：

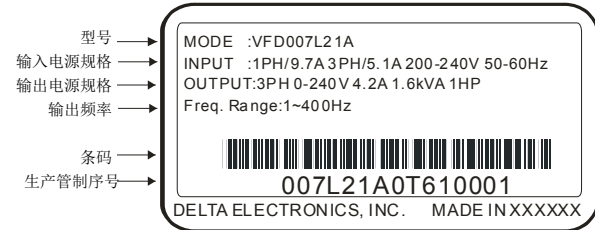
- 在交流电机驱动器内部的电子元件对静电特别敏感，因此不可将异物置入交流电机驱动器内部或触摸主电路板。
- 切断交流电源后，交流电机驱动器数位操作器指示灯未熄灭前，表示交流电机驱动器内部仍有高压十分危险，请勿触摸内部电路及零组件。
- 绝不可将交流电机驱动器输出端子 U/T1, V/T2, W/T3 连接至 AC 电源。
- 实施配线，务必关闭电源。
- 交流电机驱动器端子 请务必正确的接地。

## 2 交货检查

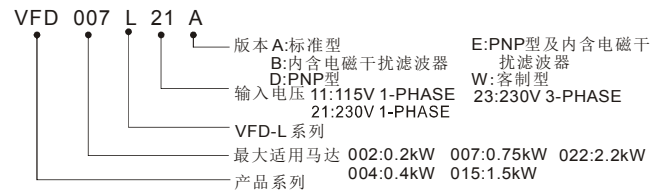
每部 VFD-L 交流电机驱动器在出厂前，均经严格的品管，并做强化的防撞包装处理。客户在交流电机驱动器拆箱后，请即刻进行下列检查步骤。

- 检查交流电机驱动器是否在运输过程中造成损伤。
- 拆封后检查交流电机驱动器机种型号是否与外箱登录资料相同。

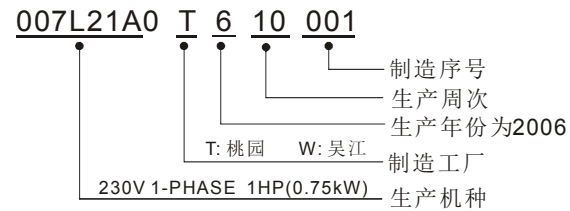
铭牌说明：以 1HP230V 为例



### 型号说明



### 序号说明

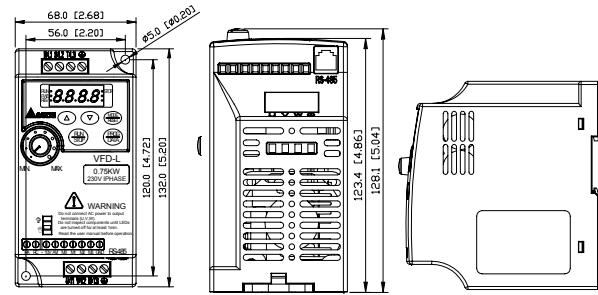


如有任何登录资料与您订货资料不符或产品有任何问题，请您与接洽的代理商或经销商联络。

## 外观尺寸

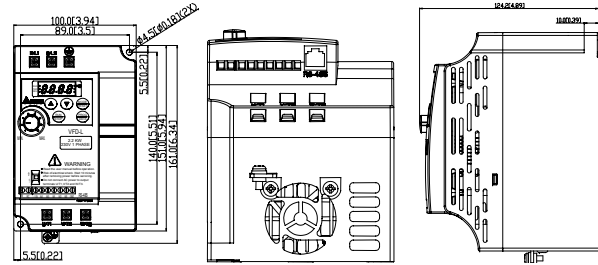
外观尺寸图一

适用机种：VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD004L21D, VFD004L21E, VFD007L21A, VFD007L21B, VFD007L21D, VFD007L21E, VFD015L21W, VFD015L23A



外观尺寸图二

适用机种：VFD022L21W

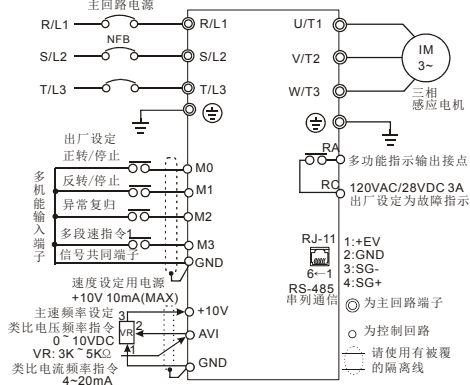


## 3 配线

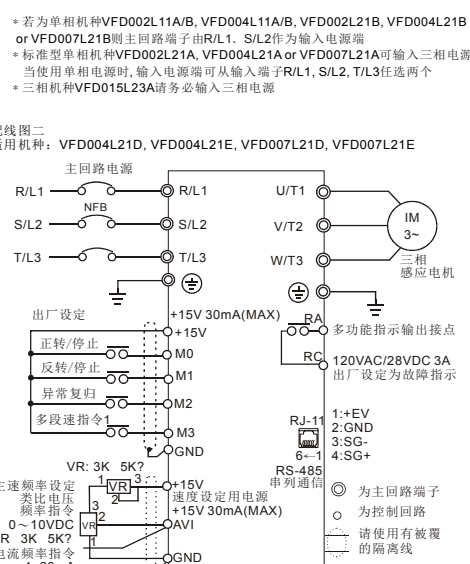
### 基本配线图

交流电机驱动器配线部份，分为主回路及控制回路。用户必须依照下列的配线回路确实连接。下图为 VFD-L 出厂时交流电机驱动器的标准配线图。若仅用数位控制面板操作时，只有主回路端子配线。

配线图一  
适用机种：VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD007L21A, VFD007L21B, VFD015L21W, VFD015L23A, VFD022L21W

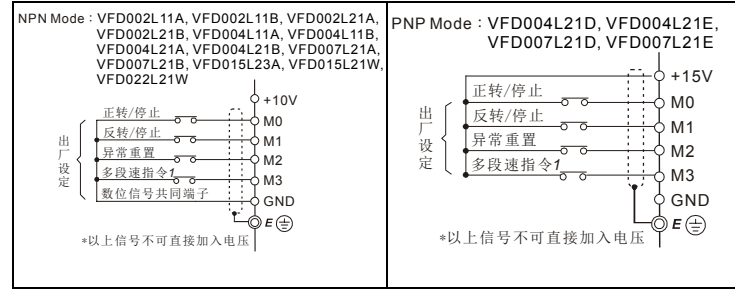


配线图二  
适用机种：VFD004L21D, VFD004L21E, VFD007L21D, VFD007L21E



\* 若为单相机种 VFD002L21E, VFD004L21E 则主回路端子由 R/L1、S/L2 作为输入电源端  
\* 标准型单相机种 VFD004L21D 或 VFD007L21D 可输入三相电源。当使用单相电源时，输入电源端可从输入端子 R/L1, S/L2, T/L3 任选两个

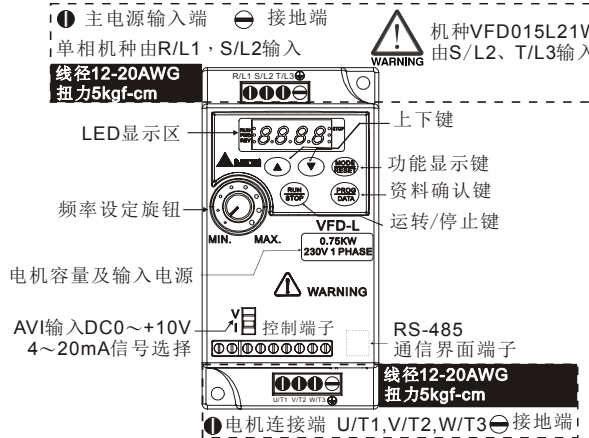
## NPN 模式及 PNP 模式的接线



## 主回路配线

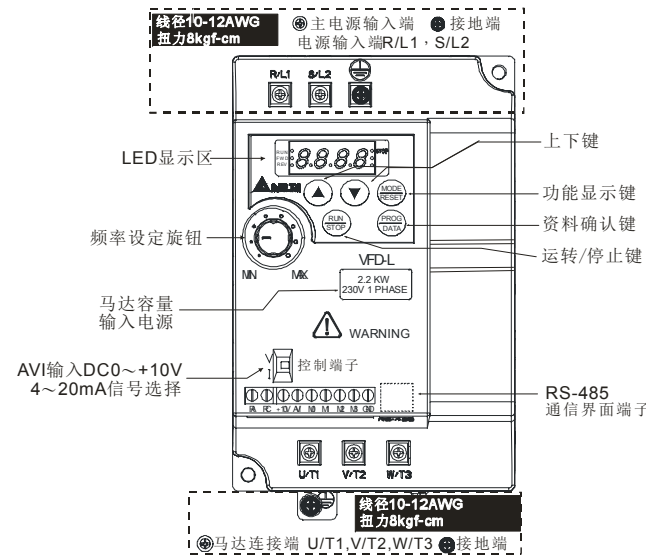
主回路配线图一

适用机种：VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD004L21E, VFD007L21A, VFD007L21B, VFD007L21D, VFD007L21E, VFD015L21W, VFD015L23A



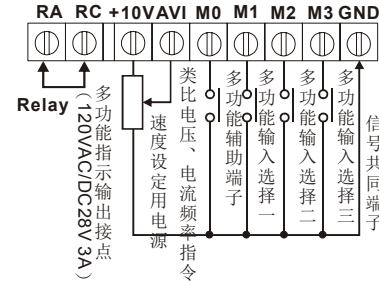
主回路配线图二

适用机种：VFD022L21W

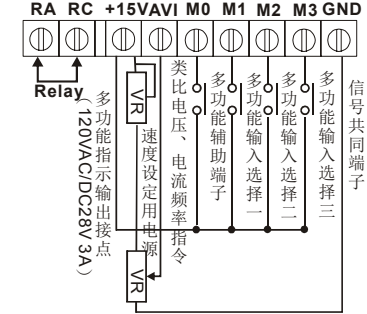


## 控制回路配线

适用机种：VFD002L11A, VFD002L11B, VFD002L21A, VFD002L21B, VFD004L11A, VFD004L11B, VFD004L21A, VFD004L21B, VFD007L21A, VFD007L21B, VFD015L21W, VFD015L23A, VFD022L21W  
端子台规格：扭力：5Kg-f-cm, 线径：No.10-22AWG, 种类：Copper



适用机种：VFD004L21D, VFD004L21E, VFD007L21D, VFD007L21E  
端子台规格：扭力：5Kg-f-cm, 线径：No.10-22AWG, 机种：Copper



## 配线注意事项

- 请勿连接 AC 输入至 U/T1, V/T2, W/T3 任一端子以避免造成变频器损坏。
- 配线时，配线线径规格的选定，请依照电工法规的规定施行配线，以策安全。
- 三相交流输入电源与主回路端子 (R/L1, S/L2, T/L3) 之间的连线一定要接一个无熔丝开关及保险丝。最好能另串接一电磁接触器 (MC) 以在交流电机驱动器保护功能动作时可同时切断电源。(电磁接触器的两端需加装 R-C 突波吸收器)。
- 输入电源 R/L1, S/L2, T/L3 并无相序分别，可任意连接使用；接地端子 以第三种接地方式接地。(接地阻抗 100Ω 以下)
- 交流电机驱动器接地线不可与电焊机、大马力电机等大电流负载共同接地，而必须分别接地。接地配线必须愈短愈好。
- 数台交流电机驱动器共同接地时，勿形成接地回路。参考下图：
- 确定供电电源系统的电压及可供应的最大容量。
- 当“数位操作器”显示时，请勿连接或拆卸任何配线。
- 请将减速时间加长以避免驱动器跳过电压保护。
- 不可将交流电源连接至交流电机驱动器出力侧端子 U/T1, V/T2, W/T3。
- 主回路端子的螺丝请确实锁紧，以防止因震动松动产生火花。
- 主回路与控制回路的配线必需分离，以防止发生误动作。如必需交错请作成 90° 的交叉。
- 若交流电机驱动器出力侧端子 U/T1, V/T2, W/T3 有必要加装杂讯滤波器时，必需使用电感式 L-滤波器，不可加装进相电容器或 L-C、R-C 式滤波器。
- 控制配线请尽量使用隔离线，端子前的隔离网剥除段请勿露出。
- 电源配线请使用隔离线或线管，并将隔离层或线管两端接地。
- 如果交流电机驱动器的安装场所对于干扰相当敏感，则请加装 RFI 滤波器，安装位置离交流电机驱动器越远越好。PWM 的载波频率越低，干扰也越少。
- 交流电机驱动器若有加装一般漏电断路器以作为漏电故障保护时，为防止漏电断路器误动作，请选择感度电流在 200mA 以上，动作时间为 0.1 秒以上者。使用交流电机驱动器专用漏电断路器时，请选择感度电流在 30mA 以上。

## 4 参数一览表

用户参数 0		↗ 运转中可设定		
参数	参数功能	设定范围	出厂值	
0-00	机种识别 (仅供读取)	d1: 40W d2: 100W d3: 200W d4: 400W	d5: 750W d6: 1.5KW d7: 2.2KW	工厂设定
0-01	额定电流显示 (仅供读取)	40W: d0.4A 100W: d0.8A 200W: d1.6A 400W: d2.5A	750W: d4.2A 1.5KW: d7.0A 2.2KW: d11.0A	工厂设定
0-02	参数重置设定	d10: 参数回复工厂设定		d0
↗ 0-03	开机显示	d0: F (频率指令) d2: U (使用者定义) d1: H (输出频率) d3: A (输出电流)		d0
↗ 0-04	定义多功显示内容	d0: 显示使用者定义(u) d1: 显示计数内容(C) d2: 显示程序运转内容(1=tt) (显示目前运转的段数及该段剩余的运转时间) d3: 显示 DC-BUS 电压(U) d4: 显示输出电压(E)		d0
↗ 0-05	使用者定义比例设定	d0.1~d160		d1.0
0-06	软体版本	仅能读取		##
0-07	参数保护解码输入	d0 ~ d0: 无密码锁/正确密码已被输入 d999 d1: 参数已被锁定		d0
0-08	参数保护密码输入	d0 ~ d0: 未设定密码 d999 d1: 密码已设定成功		d0





