

Goodrive27-EB 灵巧型变频器快速使用指南

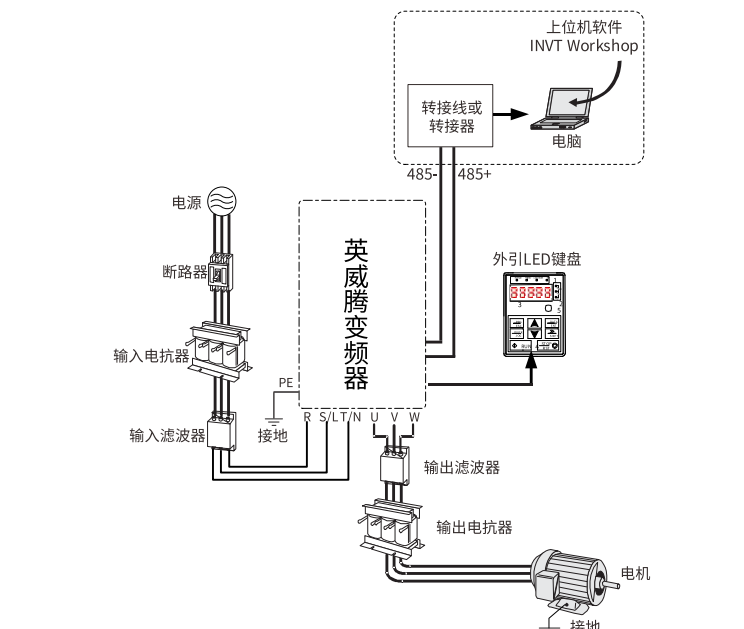
本指南简要介绍了 GD27-EB 灵巧型变频器的外围接线、端子、键盘、快速运行、常用功能参数设置、常见故障及对策、产品尺寸和能效数据。

拨打服务热线 400-700-9997 或访问 www.invt.com.cn 获取更多信息及资源下载。

警告
● 本指南仅包含基本的安装调试信息。若不遵守相关文档中的安全说明和安装调试说明，可能导致设备损坏、人身伤害、甚至人员死亡等事故。

危险
● 禁止在电源接通的情况下进行接线、检查或更换器件等作业。进行这些作业前，须确认所有输入电源已断开，并等待不短于变频器上标注的时间。

1 外围接线



2 端子

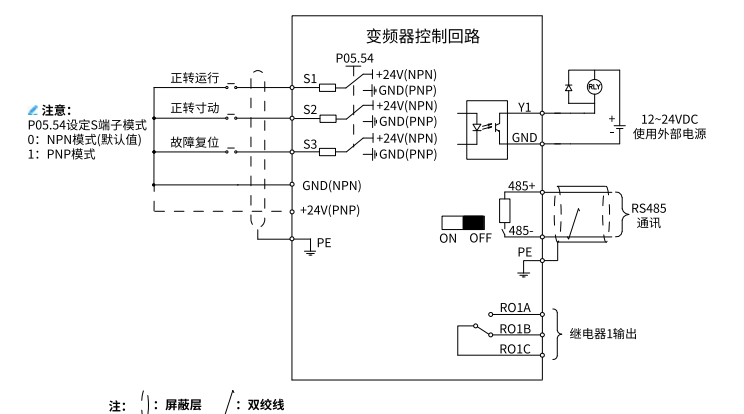
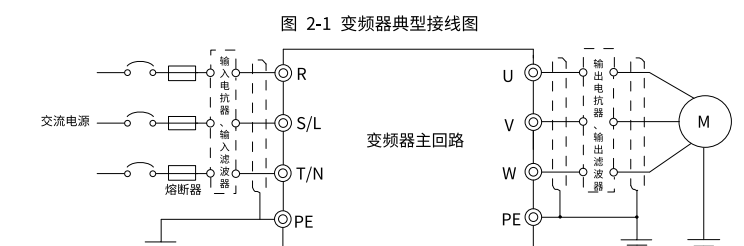


Table with 2 columns: 端子标识 (Terminal Marking) and 功能说明 (Function Description). Lists terminals R, S, T, U, V, W and their functions.

Table with 2 columns: 端子标识 (Terminal Marking) and 功能说明 (Function Description). Lists terminals RO1A, RO1B, RO1C, Y1, 485+, 485-, S1-S3 and their functions.

3 键盘

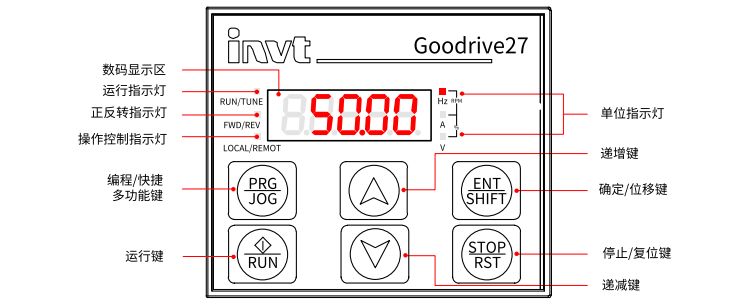


Table titled 'LED键盘显示区对应内容' (LED Keyboard Display Area Correspondence). Lists characters and their corresponding functions.

Table with 3 columns: 指示灯 (Indicator Light), 状态 (Status), and 含义 (Meaning). Describes the status of various indicators like RUN/TUNE, FWD/REV, LOCAL/REMOTE, and unit indicators.

Table with 2 columns: 按键 (Key) and 作用 (Function). Lists keys like PROG JOG, ENT/SHIFT, STOP/RST, and their functions.

Table with 2 columns: 按键 (Key) and 作用 (Function). Lists keys like 递减键, 运行键, and 停止/复位键.

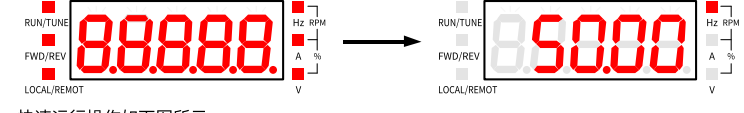
4 快速运行

4.1 上电前检查

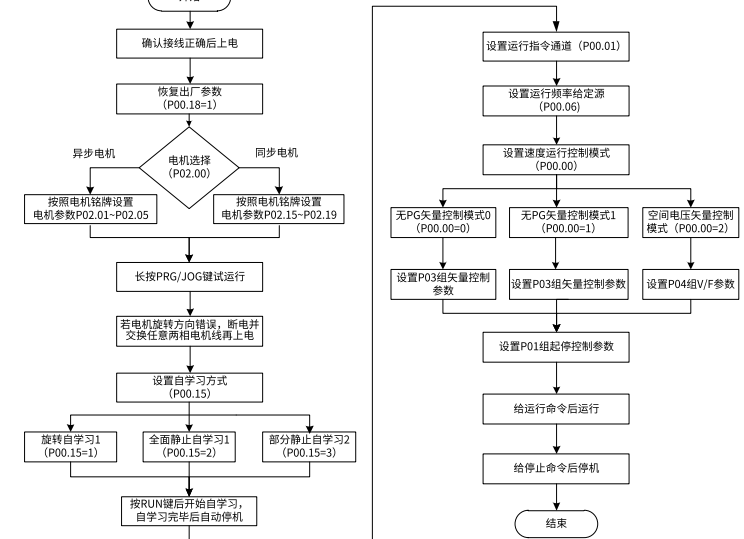
- 请确认所有的端子已正确紧固连接。
● 请确认电机与变频器功率匹配。

4.2 首次上电操作

接线及电源检查确认无误后，合上变频器输入侧交流电源的空气开关，给变频器加电。



快速运行操作如下图所示。



5 常用功能参数设置

下述功能参数仅列出部分常见功能参数，并进行了简要描述、列举典型取值。
“○”：表示该参数的设定值在变频器处于停机、运行状态下，均可更改；
“●”：表示该参数的设定值在变频器处于运行状态下，不可更改；
“●”：表示该参数的数值是实际检测记录值，不能更改；

Table with 4 columns: 功能码 (Function Code), 名称 (Name), 说明 (Description), 缺省值 (Default Value), and 更改 (Change). Lists various parameters like P00.00 to P11.00.

Table with 4 columns: 功能码 (Function Code), 名称 (Name), 说明 (Description), 缺省值 (Default Value), and 更改 (Change). Lists parameters P00.18 to P02.00.

Table with 4 columns: 功能码 (Function Code), 名称 (Name), 说明 (Description), 缺省值 (Default Value), and 更改 (Change). Lists parameters P02.01 to P03.10.

Table with 4 columns: 功能码 (Function Code), 名称 (Name), 说明 (Description), 缺省值 (Default Value), and 更改 (Change). Lists parameters P03.11 to P04.09.

Table with 4 columns: 功能码 (Function Code), 名称 (Name), 说明 (Description), 缺省值 (Default Value), and 更改 (Change). Lists parameters P04.10 to P05.02.

Table with 4 columns: 功能码 (Function Code), 名称 (Name), 说明 (Description), 缺省值 (Default Value), and 更改 (Change). Lists parameters P05.03 to P06.01.

Table with 4 columns: 功能码 (Function Code), 名称 (Name), 说明 (Description), 缺省值 (Default Value), and 更改 (Change). Lists parameters P06.02 to P11.00.

Table with 4 columns: 功能码 (Function Code), 名称 (Name), 说明 (Description), 缺省值 (Default Value), and 更改 (Change). Lists parameters P14.00 to P14.02.

6 常见故障及对策

Table with 4 columns: 故障代码 (Fault Code), 故障类型 (Fault Type), 可能的原因 (Possible Causes), and 故障解决方法 (Fault Solution). Lists faults E4 to E27.

Table with 4 columns: 故障代码 (Fault Code), 故障类型 (Fault Type), 可能的原因 (Possible Causes), and 故障解决方法 (Fault Solution). Lists faults E28 to E35.

7 产品尺寸

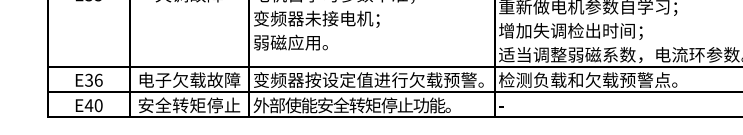


图 7-1 外形结构 A、B 的尺寸和孔位

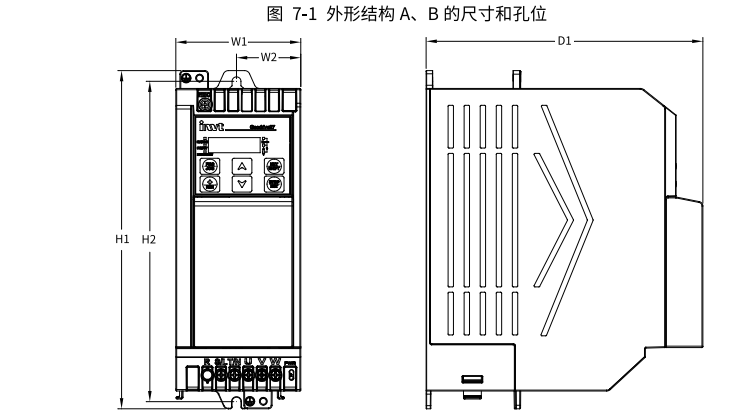


图 7-2 外形结构 C 的尺寸和孔位

Table with 4 columns: 产品型号 (Product Model), 外形结构 (External Structure), 外形尺寸 (mm) (External Dimensions), 安装孔位 (mm) (Mounting Holes), and 安装孔径 (mm) (Mounting Hole Diameter).

Table with 4 columns: 产品型号 (Product Model), 外形结构 (External Structure), 外形尺寸 (mm) (External Dimensions), 安装孔位 (mm) (Mounting Holes), and 安装孔径 (mm) (Mounting Hole Diameter).

Table with 4 columns: 产品型号 (Product Model), 外形结构 (External Structure), 外形尺寸 (mm) (External Dimensions), 安装孔位 (mm) (Mounting Holes), and 安装孔径 (mm) (Mounting Hole Diameter).

Table with 2 columns: 产品型号 (Product Model) and 能效等级 (Efficiency Class). Lists models like GD27-0R4G-S2-EB and their efficiency classes.

表 A-2 额定规格

Table with 4 columns: 产品型号 (Product Model), 额定功率 (kVA) (Rated Power), 额定输出功率 (kW) (Rated Output Power), 额定输出电流 (A) (Rated Output Current), 最高工作温度 (°C) (Maximum Operating Temperature), 额定电压 (V) (Rated Voltage).

表 A-1 能耗和 IE 等级

Table with 2 columns: 产品型号 (Product Model) and IE 等级 (IE Class). Lists models and their corresponding IE classes.

能效数据 (Efficiency Data) section including tables for efficiency classes and rated specifications, and a barcode.

Goodrive27-EB Smart VFD Quick Start Guide

This guide briefly describes the external wiring, terminals, keypads, quick running, common function parameter settings, common faults and solutions, product dimensions, and energy efficiency data of GD27-EB smart variable-frequency drive (VFD).

Visit www.invt.com for more information and source download.

Warning

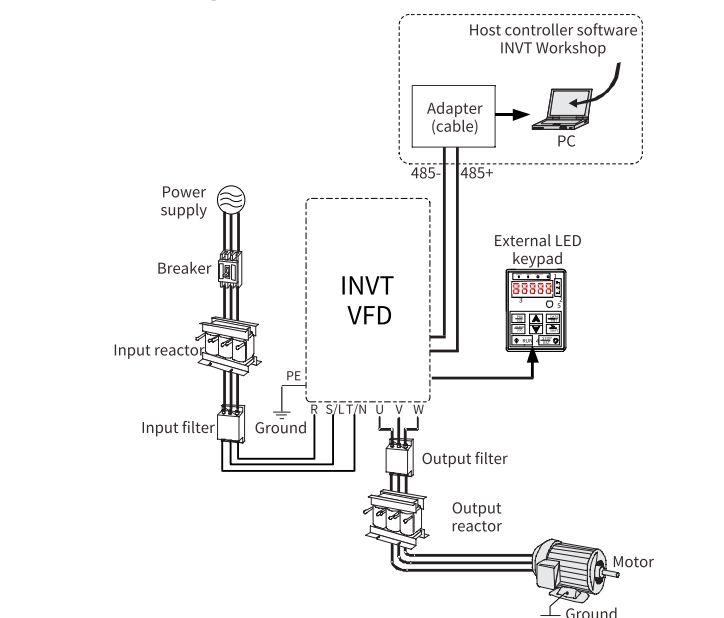
- This guide only provides the basic installation and commissioning information. Failure to comply with the safety instructions and installation and commissioning instructions in the relevant documentation may result in accidents such as equipment damage, personal injury, or even death.

Danger

- Do not perform any operations including wiring, inspection, or component replacement when power supply is applied. Before performing these operations, ensure all the input power supplies have been disconnected, and wait for at least the time designated on the VFD.

Table with 2 columns: Minimum waiting time, VFD model. Values: 5 minutes, 1PH 220V 0.4~2.2kW; 3PH 380V 0.75~7.5kW

1 External wiring



2 Terminal

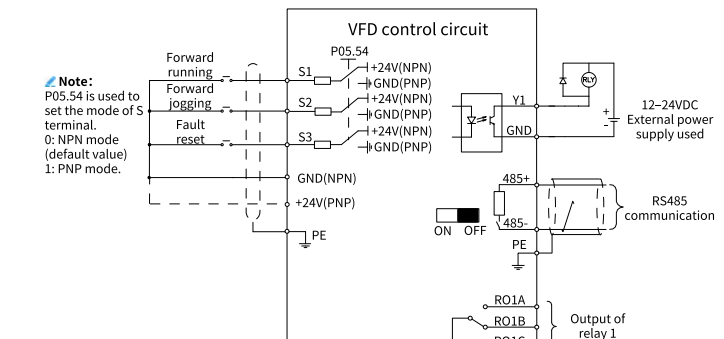
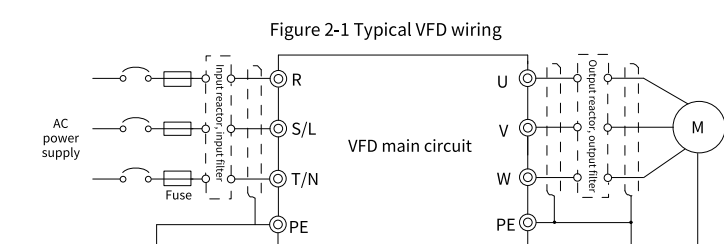


Table 2-1 VFD terminal description

Table with 2 columns: Terminal, Description. Lists main circuit terminals (R, S, T, U, V, W) and their connections to the grid and motor.

Table with 2 columns: Terminal, Description. Lists control circuit terminals like PE, RO1A, RO1B, RO1C, GND, Y1, 485+, 485-, and S1-S3.

3 Keypad

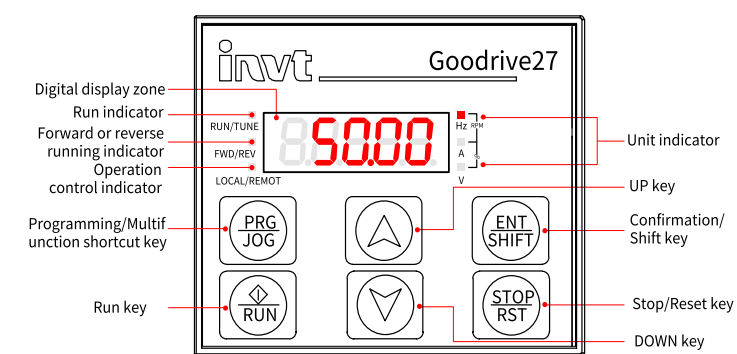


Table titled 'Digital display on LED keypad' with columns for Display, Means, and alphanumeric characters.

Indicator Status Meaning table. Lists indicators like RUN/TUNE, FWD/REV, LOCAL/REMOTE, and Unit indicator with their status and meaning.

Key Function table. Lists keys like Run key and Stop/Reset key with their functions.

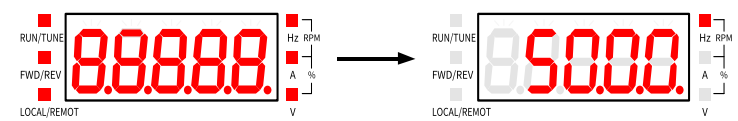
Key Function table. Lists keys like Confirmation shift key, Up key, Down key, Run key, and Stop/Reset key with their functions.

4 Quick running

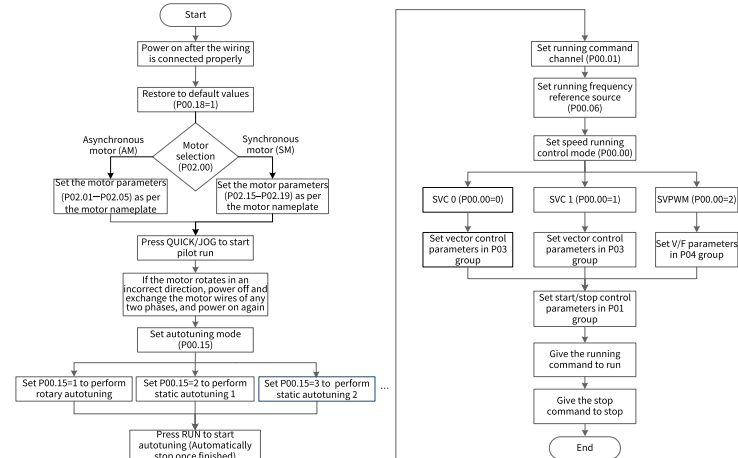
- Check before power-on: Ensure all terminals have been securely connected. Ensure that the motor power matches the VFD power.

4.2 Operating upon first power-on

After confirming the wiring and power are correct, close the air switch of the AC power at the VFD input side to power on the VFD.



The quick startup flowchart is as follows:



5 Common function parameter setup

The following briefly describes only some common function parameters and typical values. '○' indicates that the value of the parameter can be modified when the VFD is in stopped or running state.

Table with 5 columns: Function code, Name, Description, Default, Modify. Lists parameters for speed control mode, channel of running commands, max output frequency, etc.

Table with 5 columns: Function code, Name, Description, Default, Modify. Lists various function codes like P00.07 (Setting channel of B frequency command), P00.10 (Frequency set through keypad), etc.

Table with 5 columns: Fault code, Name, Description, Default, Modify. Lists fault codes like P04.10 (Low-frequency oscillation control factor of motor 1), P05.01 (Function of S1), etc.

Table with 4 columns: Fault code, Fault type, Possible cause, Solution. Lists faults like E9 (Energizing during constant speed running), E10 (Bus undervoltage fault), etc.

Table with 4 columns: Fault code, Fault type, Possible cause, Solution. Lists faults like E34 (Speed deviation fault), E35 (Mal-adjustment fault), etc.

7 Product dimensions

Figure 7-1 Dimensions and hole positions for VFDs in frames A and B

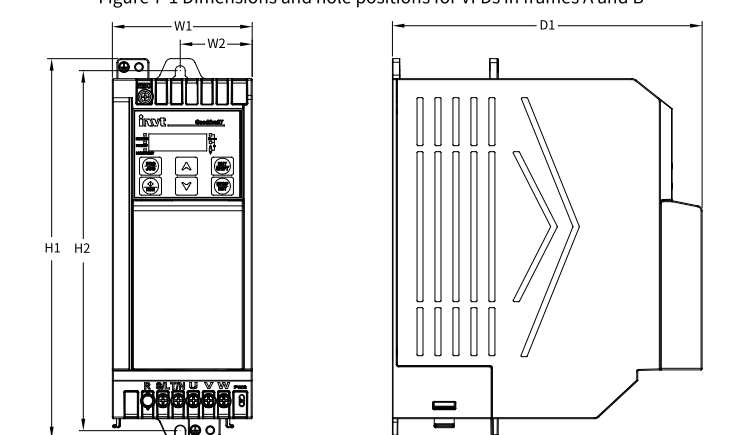


Table 7-1 Dimensions and hole positions for VFDs in frames A and B

Table with 5 columns: Model, Frame, Outline dimensions (mm), Mounting hole distance (mm), Mounting hole diameter (mm). Lists models like GD27-0R4G-S2-EB, etc.

Figure 7-2 Dimensions and hole positions for VFDs in frame C

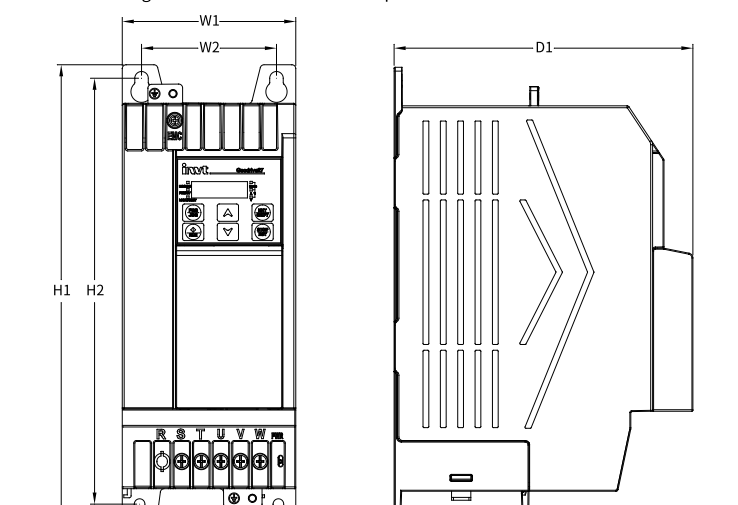


Table 7-2 Dimensions and hole positions for VFDs in frame C

Table with 5 columns: Model, Frame, Outline dimensions (mm), Mounting hole distance (mm), Mounting hole diameter (mm). Lists models like GD27-5R5G-4-EB, etc.

Appendix A Energy efficiency data

Table A-1 Power losses and IE class

Table with 11 columns: Model, Relative loss (%), Stand by loss (W), IE class. Lists models like GD27-0R4G-S2-EB and their efficiency data.

Table A-2 Rated specifications

Table with 7 columns: Model, Apparent power (kVA), Rated output power (kW), Rated output current (A), Max. working temperature (°C), Rated power frequency (Hz), Rated power voltage (V). Lists models like GD27-0R4G-S2-EB.