

VERSION : 1.1



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G series Quick Installation Guide

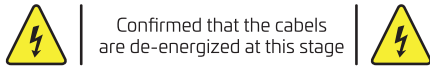


This guide supplements the product manual, providing quick steps for installation, wiring, and parameter configuration. Improper wiring and operation may lead to personal injury and property damage. Follow the **wiring instructions** in this guide and refer to the product manual for the **correct setup**.

1. Connecting Power & Motor to the VFD

Ensure you have acquired the appropriate VFD by verifying the information on the VFD's nameplate. An illustration of the VFD specification plate is presented in the VFD model section.

Refer to the wiring diagrams below for accurate mains input power connections to the VFD. Ensure that the cables are de-energized during the wiring process.

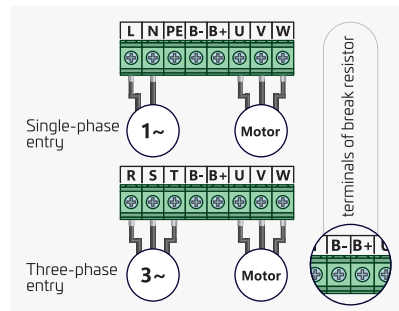


Confirmed that the cables are de-energized at this stage

The diagram below illustrates the correct wiring procedure for connecting the input power of both single-phase (L, N) and three-phase (R, S, T) VFDs. Additionally, the outputs of the VFD (U, V, W) are linked to the motor.

If necessary, terminals B+ and B- connect the brake resistor, and terminal PE is used to ground the VFD. (In the absence of terminal PE, utilize the body of the VFD for grounding.)

The power input/output wires of the device, particularly the motor wires, carry current, voltage, and high frequency and may interfere with the command wires of the device. To mitigate this potential interference, route the control wires as far away as possible from the power cables.



Motor Winding:

Ensure that the motor winding is proportionate to the VFD voltage.

Mode One:

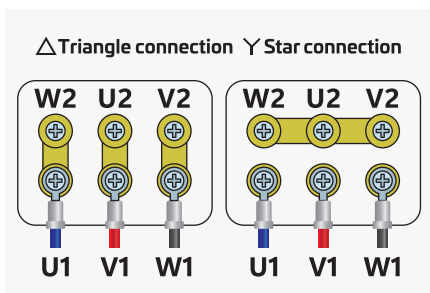
When connecting the motor with a 220/380V star/delta plate to a single-phase VFD (220V), the motor winding must be configured in a triangular pattern. Failure to do so may result in a significant reduction in engine power.

Mode Two:

When connecting the motor with the 220/380V star/delta to the three-phase (380V) VFD, the motor winding must be connected in a star configuration. Otherwise, there is an elevated risk of engine and device failure, or an overcurrent error may occur.

Mode Three:

For the motor connected with 380/660V star/delta to the VFD with three-phase input (380V), the motor winding must be configured in a triangular pattern. Failing to do so may result in a significant reduction in engine power.

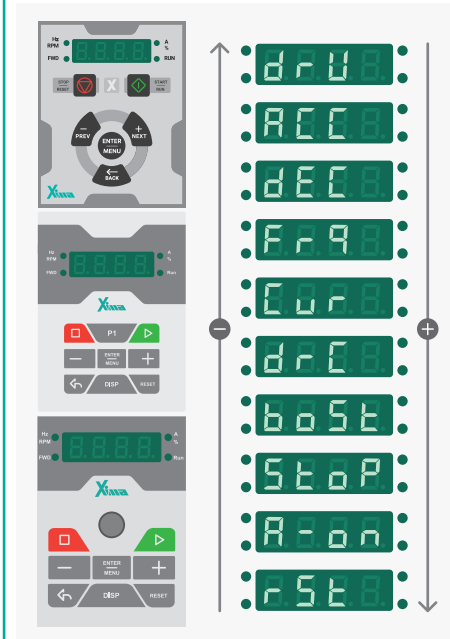


Incorrect winding connections may lead to potential failure, increased motor temperature, and an overload or overcurrent error in the VFD.

2. Quick Device Setup and Parameter Configuration:

Once the input power is connected and the device is powered on, the VFD's software version and default reference frequency (10 Hz) will be displayed. Subsequently, the screen will show $rEd9$, indicating that the VFD is prepared, and the device will await the start command.

To access the Quick Start menu, hold the ENTER key for 5 seconds. Use the + and - keys to navigate between parameters within this menu. Press ENTER to select a parameter, and use the + and - keys to input the desired value for each parameter. Press ENTER again to save the values.



Below are the introduced parameters in this menu, along with their explanations:

Parameters Explanation:

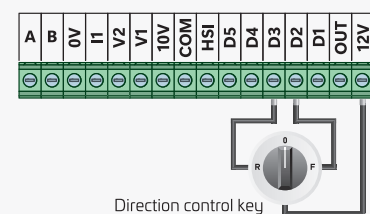
- drU — Method for commanding the VFD using digital terminals
- ACC — Acceleration time in seconds
- dEC — Stop time in seconds
- $Fr9$ — Selection of frequency and speed setting for the motor
- Cur — Motor's rated current
- drC — Default motor direction
- $boSt$ — Engine torque boost at the start of movement (in percent)
- $StOP$ — Method for stopping the engine
- $R-on$ — Automatic restart of VFD after power cycle
- rSt — Restore settings to factory defaults

Additional details and value options for each parameter are provided in the last table.

VFD Start-Stop Setting:

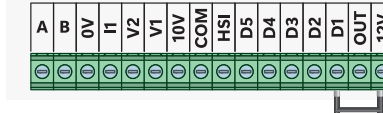
1- Using Command Terminals with a Multi-Position (1-0) Switch:

To operate the VFD, set parameter drU to $1B$. The wiring for this configuration is shown in the diagram below. A Normally Open (N.O.) switch should be installed between terminals D3, D2, and 12V. When terminals D2 and 12V are connected, the motor will rotate in the forward direction. When terminals D3 and 12V are connected, the motor will rotate in the reverse direction. If D2 and D3 are both connected to 12V simultaneously, the motor will not operate. You can also use a single switch between D2 and 12V to start the motor in the forward direction.



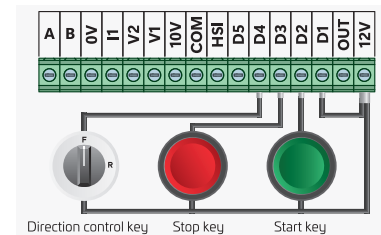
2. Using the VFD Keypad Start and Stop Keys:

First, set parameter drU to 14 . As shown in the diagram, connect the 12V terminal to terminal D1. You can then start and stop the VFD using the inverter keypad or the detachable keypad. To change the motor rotation direction in this mode, if the VFD is in RUN mode, press and hold the green ($\frac{START}{RUN}$) key for 3 seconds; the rotation direction will change. (In this mode, if the 12V terminal is not connected to D1, the message rnh will be displayed on the VFD screen.)



3. Using Terminals with Start/Stop Push Buttons and Direction Selector Switch:

For 3-wire operation of the VFD, set parameter drU to $2B$. As shown in the diagram, first connect terminal 12V to D1. For START and STOP, two separate push buttons must be used: The START push button must include one N.O. (Normally Open) contact connected between terminals 12V and D2. The STOP push button must include one N.C. (Normally Closed) contact connected between terminals 12V and D3. To select the rotation direction, install a suitable two-position selector switch with an N.O. contact between terminals 12V and D4. Note that the FWD/REV key only selects the rotation direction. If motor operation in only one direction is required, the direction selector switch may be omitted.



Setting the Reference Frequency (Speed)

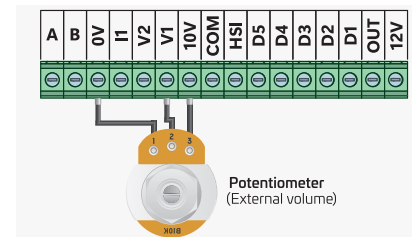
Adjustment Method:

1- Via VFD Keypad:

If you want to use the + and - keys on the VFD keypad to adjust the frequency applied to the motor, set parameter $Fr9$ to 4 . By default, frequency adjustment is performed through the keypad.

2- Via Potentiometer (External Volume Control):

If using a potentiometer to adjust motor speed, set parameter $Fr9$ to 0 . The potentiometer wiring to the VFD terminals is shown in the diagram below. Connect the middle (wiper) terminal of the potentiometer to V1, and connect the other two terminals to 0V and 10V.



• Automatic Start on Power-Up:

If you want the VFD to start automatically after a power interruption and restoration, provided that a RUN command is present, enter 1 in parameter $R-on$, then press ENTER. If this function is not required, do not change this parameter.

• Restore Factory Settings:

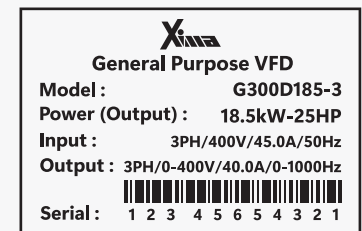
To restore the VFD to factory default settings, enter 1 in parameter rSt , then press and hold the ENTER key for 5 seconds. When the message $Lo3d$ appears on the VFD display, all parameters will be reset to the factory default settings.

3. Table of Values and Parameters:

Parameter	Explanation and Values
drU	14 : Setup through VFD keypad $1B$: Starting through the command terminal $2B$: VFD operation via Start and Stop push buttons (3-wire)
ACC	This parameter defines the duration of the increase to 50 Hz output
dEC	This parameter defines the duration of the reduction to 50 Hz output
$Fr9$	0 : Analog input V1 for potentiometer (external volume) 4 : Frequency adjustment through keypad
Cur	This parameter corresponds to the rated current of the motor at its rated load, as indicated on the motor nameplate
drC	This parameter defines the default motor direction. 0 : Forward 1 : Reverse
$boSt$	This parameter sets the motor torque amplification at the start of movement as a percentage. Caution: Excessive increase may lead to engine damage.
$StOP$	This parameter determines the motor stopping method. 0 : Deceleration stop 1 : Coast to stop (free-run stop)
$R-on$	If you want the VFD to restart automatically after a power interruption and restoration, set this parameter to 1 . Otherwise, do not change this parameter. 0 : Disabled 1 : Active
rSt	1 : Reset (By entering 1 and holding the ENTER key for 5 seconds, the settings will be restored to their default values.)

VFD Model

Ensure the correct VFD is purchased by verifying the information on the VFD's nameplate. Refer to the figure below for an example of the VFD specification plate.



Important Notes

- Confirm that the applied voltage aligns with the permissible voltage on the nameplate.
- Ensure the VFD's output power is equal to or greater than the power of the connected motor.

Adhere to recommended installation and environmental conditions for optimal VFD lifespan. The product manual provides detailed information on installation requirements, dimensions, and weight for each VFD. Access power and control terminals by removing the front terminal cover.

