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**.

G series

Quick Installation Guide

For technical advice, contact us at:
(+91) 85300 65100
info@datis.in

THE WAY YOU PREFER

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.

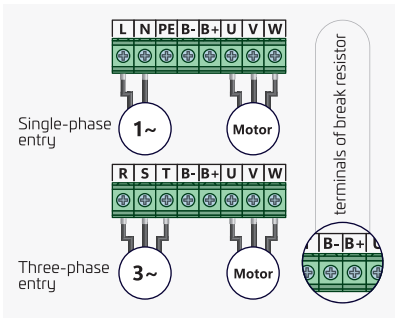
Refer to the wiring diagrams below for accurate mains input power connections to the VFD. Ensure that the cables are de-energized during the wiring process.

Confirmed that the cabels 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 or PE is used to ground the VFD. (In the absence of terminal , 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:

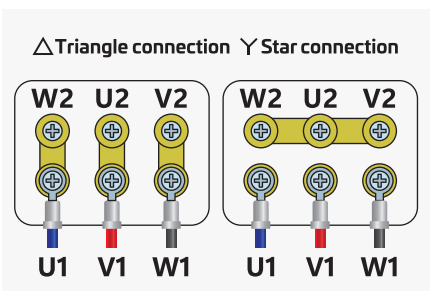
When connecting the motor with a 220.380V star/delta plate to a single-phase VFD (220V), the motor winding must be configured in a triangular pattern. Failure to do so may result in a significant reduction in engine power.

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.

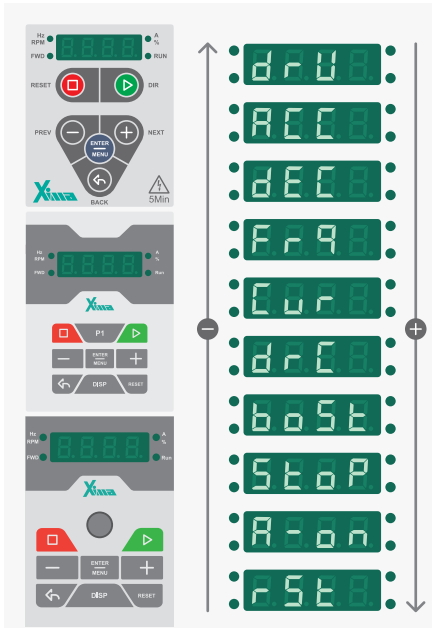


Incorrect winding connections may lead to potential failure, increased motor temperature, and an overload or overcurrent error in the VFD.

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 rEdY , 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:

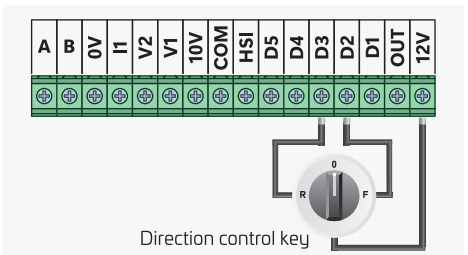
- drU — Method for commanding the VFD using digital terminals
- ACC — Acceleration time in seconds
- dEC — Stop time in seconds
- Fr9 — Selection of frequency and speed setting for the motor
- Cur — Motor's rated current
- drC — Default motor direction
- boSt — Engine torque boost at the start of movement (in percent)
- StoP — Method for stopping the engine
- A-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.

Setting Start-Stop VFD:

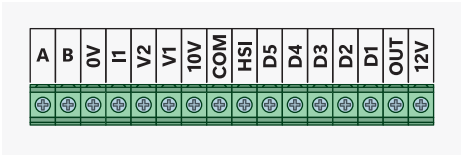
1. Using Command Terminals with Multi-Mode Switch (Zero-One)

Set the parameter to 18 to start the VFD. The wiring for this mode is shown in the picture below. Install a Normally Open (N.O) switch between terminals D2, D3, and 12V. The connection between D2 and 12V starts the motor forward, while the connection between 12V and D3 starts the motor in reverse. Simultaneous connection of D2 and D3 to 12V will prevent motor operation. Alternatively, a switch between 12V and D2 can VFD the motor forward



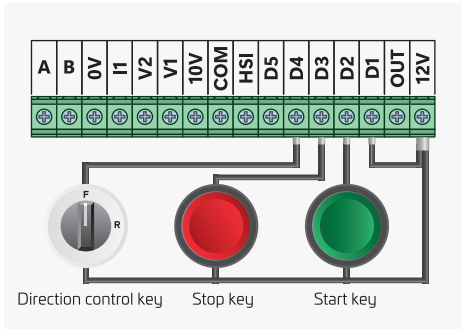
2. Using VFD Keypad Start and Stop Keys

12V terminal to the Connect the .14 Set the parameter to terminal. Use the VFD keyboard or detachable keypad D1 to start and stop the VFD. To change motor rotation seconds while in 3 direction, hold the green key (DIR) for will ,12V terminal is not connected to D1 If the) .Run mode (.be displayed on the VFD screen



3.Using Terminal with Start, Stop, and Direction Change Keys

Set drU the parameter to 14. Connect the 12V terminal to the D1 terminal. Use the VFD keyboard or detachable keypad to start and stop the VFD. To change motor rotation direction, hold the green key (DIR) for 3 seconds while in Run mode. (If the 12V terminal is not connected to D1, will be displayed on the VFD screen.)



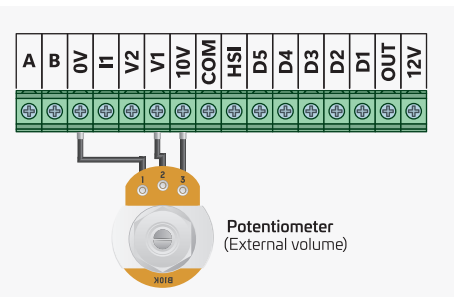
Setting Reference Frequency (Speed) Change Method:

1. Through VFD Keypad

Set Fr9 the parameter to 4 if you want to use the + and keys on the VFD keypad to adjust the frequency applied to the motor. By default, the frequency is changed through the keypad.

2. Through Potentiometer (External Volume)

Set Fr9 the parameter to 0 to use a potentiometer (external volume) to adjust the speed. Connect the potentiometer as shown in the diagram. Connect the middle end to V1 and the other two ends to 0V and 10V.



- **Automatic Start on Power Connection**

To enable automatic operation on power reconnection despite the RUN command, set A-on the parameter to 1, then press ENTER. To disable this feature, leave this parameter unchanged.

- **Restoring Factory Settings**

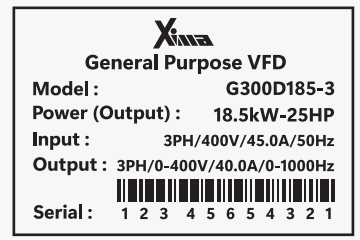
To revert the VFD settings to factory defaults, enter 1 in the rSt parameter, then hold ENTER for 5 seconds. Once Load it is displayed on the VFD, all parameters will reset to their factory default state.

3. Table of Values and Parameters:

Parameter	Explanation and Values
drU	14: Setup through VFD keypad 18: Starting through the command terminal 20: Setup through thumb start and stop (three-wire) (Additional modes detailed in the product manual)
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 method of stopping the engine 0: Stop with deceleration 1: Stop with deceleration
A-on	If you wish for the VFD to initiate automatic motion following a power disconnection and reconnection, set this parameter to a value of one. Otherwise, leave this parameter unchanged 0: Disabled 1: Active
rSt	5 and hold the Enter key for "1" To reset, input seconds

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.