

Quick-Start X5 Fixed Speed

Getting a Quick Start

The following basic procedure is for operators using simple applications who would like to get started quickly.

Follow all precautions and procedures in “Chapter 3: Receiving and Installation” in the X5 AC Drive User’s Manual.

Install the power wiring per “Chapter 4: Connections” in the X5 AC Drive User’s Manual.

Use “Procedure for changing Parameters in the Vacon X5”.

CAUTION

IMPROPER EQUIPMENT COORDINATION Verify that proper voltage is connected to the drive before applying power. **Failure to observe this instruction can result in injury or equipment damage.**

1. Find the motor nameplate, and using parameters **509 (Rated Mtr Volt)**, **510 (Rated Mtr FLA)**, **511 (Rated Mtr RPM)**, and **515 (Power Factor)**, set up the motor parameters appropriately.
2. Auto Start after power loss, **802 (Start Options)**. To enable Auto Start after power loss, scroll to Parameter 802 and set to “AutoStart”.
3. Apply AC power to the Drive. For about 2 seconds the display will show all segments active. The display then changes to zeros.
4. The factory settings are for keypad-only operation in the forward direction—that is, the REV key is disabled. Press the **FWD** key, which causes the FWD indicator to illuminate.
5. Press the **INC** key to increase the desired running frequency. When the display gets to **0.1 Hz**, the drive starts to produce an output.
6. When the motor starts to turn, check the rotation. If the motor is turning in the wrong direction, **press STOP, remove AC power, and wait for all indicators to go out.** After the STATUS indicator has gone out, reverse any two of the motor leads at T1/U, T2/V, or T3/W.
7. The X5 drive is preset to run a typical NEMA B 4-pole induction motor to a maximum speed of **60.0 Hz** with both acceleration and deceleration times set to **5.0 seconds**.
8. Use the **INC** and **DEC** keys to set the proper running speed of the motor and the **FWD** and **STOP** keys to control its operation.

Note that the X5 external cooling fans operate continuously for the first five minutes of power-up time; after this point, they operate only as needed to control the operating temperature of the drive.

1. Check the speed needed to achieve required flow rate.
 - a. **First make sure that all valves are fully open.**
 - b. Using the INC button, increase the speed of the pool pump until the flowmeter shows required flow rate for the pool.
 - c. **Are the filters clean or dirty? If clean, will want to add about 5% to the measured value to ensure enough flow when the filters are dirty.**

This will run the pump at fixed speed 24 hours a day.