

FNX 650 & FNX 800 - Inverter Parameter Settings

I. Getting Started

Power on. The inverter panel lights will illuminate. Do not press the start button on the machine when setting parameters!

II. Operation Panel Method

Press PRG to enter parameter setting mode. Use the UP/DOWN arrows to adjust the code. Press the SHF key to move the cursor between parameter digits, then use the UP/DOWN arrows to adjust the parameter value. Press ENT after setting each parameter. Press PRG to return to other interfaces or the initial operation interface.

III. Operation

1. Motor Parameter Settings (Refer to the motor nameplate for parameters)

F08.00 = Motor Rated Power

F08.01 = Motor Rated Voltage

F08.02 = Motor Rated Current

F08.03 = Motor Rated Frequency

F08.04 = Motor Rated Speed

F08.06 = 1 Stationary Self-learning (F08.06=2 Rotational Self-learning. Use this if stationary self-learning fails; the machine head must be lifted).

Press PRG twice to return to the initial interface. Press RUN; "tunE" will appear, indicating self-learning has started. (If nothing happens after pressing RUN, set F00.11 = 0 to enable operation via the operation panel). After a while, when the panel display flashes again, it indicates motor self-learning is complete.

After motor self-learning is complete, set the following parameters:

F00.01 = 2 Motor Control Mode, Vector Control Mode, press ENTER

F00.06 = Inverter Maximum Output Frequency (55Hz = 1650 RPM), press ENTER

F00.08 = Upper Limit Operating Frequency, i.e., the frequency required for maximum speed (55Hz = 1650 RPM), press ENTER

F00.10 = 3 External Potentiator for Speed Control, press ENTER

F00.11 = 1 External Terminal for Start/Stop, press ENTER

F00.17 = 0 or 1, Motor Forward/Reverse. The FNX650 design requires the motor to reverse. Observe the rotation direction of the motor fan and select 0 or 1 to adjust it to reverse.

F02.13 = 1 Free-Stop, press ENTER

F15.02 = 4 DI3 Stop - Three-Wire Control, press ENTER

F15.16 = 3 Three-Wire Control Mode, press ENTER

F15.20 = 2 Start Fan after Inverter Runs, press ENTER

F18.02 = 11 Display Speed during Operation, press ENTER

F18.08 = 12 Display Voltage during Stop, press ENTER

F19.21 = 180 Current Limit Level (i.e., 1.8 times the rated current), press ENTER

IV. Common Fault Handling

1. **Displaying codes E0001, E0002, E0003** indicates an overcurrent fault. Check the cables from the inverter output terminals U, V, W to the motor terminal box for looseness or damaged insulation. Measure if the motor cables are shorted to ground.
2. **Displaying fault E0009** indicates inverter overheating. Check the value in parameter d00.39. A value greater than 85 indicates poor heat dissipation, which could be due to the fan not running (check if the inverter fan is running during operation) or prolonged overload operation. If the value is less than 85, it might be a false alarm; contact the manufacturer.
3. **Displaying fault E0014** indicates an inverter current detection fault. Contact the manufacturer.
4. **Displaying fault E0015** indicates a missing phase in the input power. Check the cables from the site power supply to the inverter input terminals L1, L2, L3 for looseness, and verify if the site power supply is indeed missing a phase.
5. **Displaying faults E0017 and E0019** indicates motor overload. The motor has been operating above 150% of its rated current for an extended period. Please reduce the load.