



Fuji Ace Inverter Instructions

Phase Converter, Soft Starter, up to 4 Speed Inputs

2-10-2025

Refer to the Fuji Manual for more details

Wiring Main Input Power

L-1 connect 3/Phase, 1/Phase Power

L-2 connect 3/Phase Power only

L-3 connect 3/Phase, 1/Phase Power



connect to an Earth Ground off the Power

Wiring Motor Output Power

U- connect to 3/Phase Motor

V- connect to 3/Phase Motor

W- connect to 3/Phase Motor



- connect to the 2nd one the Motor Ground

Check Pump Motor Rotation if wrong swap “U motor wire” with “V motor wire”

Control Inputs Wiring Green Control Terminals

For Toggle or Rotary Switches and Float Probes or Multistep Connections

Run Command - Install Jumper between Terminals FWD & CM ***Note if Jumper is on while programing some Parameters cannot be set***

Connect the following and isolate with a dry contact switch or relay

You can use 1 or all 3 depending on your application, as long as the corresponding Parameter is programed to your desired Speed in HZ.

Speed 1 - (30 Hz example) X1 terminal & CM

Speed 2 - (45 Hz example) X2 terminal & CM

Speed 3 - (60 Hz example) X3 terminal & CM

Phase Converter, Soft Starter with a 5K Potentiometer

Green Control Terminals

Inputs

Run Command - Install Jumper between Terminals FWD & CM

Potentiometer Speed Control - View from the Top Knob Side, Left Solder Tab to Inverter Terminal #11. Center Solder Tab to Inverter Terminal #12. Right Solder Tab to Inverter Terminal #13. Shield Drain wire to Terminal CM.

Note: Must use Twisted Cable with overall Shield on the Potentiometer and avoid being near other power cables.

Programing

Press the PRG/RESET Key followed by pressing the FUNC/DATA Key, to enter the Parameters.

If just powering up the Inverter, it should be at Parameter" F00". Use the Up-arrow Key to find your first parameter to set.

Then press the FUNC/DATA Key to enter the Parameter. Use the ">>" Key to shift to the proper digit to change it.

When the setting you entered is showing press the FUNC/DATA Key to save and go the next Parameter.

When done Programing press the PRG/RESET Key to return to the Main Screen.

Note* these Fuji Ace Drives are not Programed the following Parameters need to be programed to function.

H101 = 5 for USA (Factory set at 3 = Asia) press & hold "Stop" key and press Up key or Down key to select for USA to change. Must be done first.

F01 = 0 - For Keypad Operation (Already set if brand new)

F02 = 1 - For Run Command Terminals **Note: Must have one leg off to set certain Parameters**

F07 = 6 - Acceleration speed (set the Soft Start to what best suits the system)

F08 = 6 - Deceleration speed (set the Soft Start to what best suits the system)

F11 = User - Name plate current of electric motor ***See section on this on the last page**

F15 = 60 - Maximum Speed in HZ

F6= 0 HZ – Factory setting for Minimum Speed.

- H06 = 1 - Auto Fan
- H96 = 1 - Disable ER-6 Fault Alarms
- H98 = For Single Phase input set at 81 and use Input Terminals L1 & L3, for 3 Phase input set at 83

The Following is from the Fuji Ace Manual

Chapter 3 OPERATION USING THE KEYPAD

3.1 Names and Functions of Keypad Components

The keypad allows you to run and stop the motor, display various data, configure function code data, and monitor I/O signal states, maintenance information and alarm information.

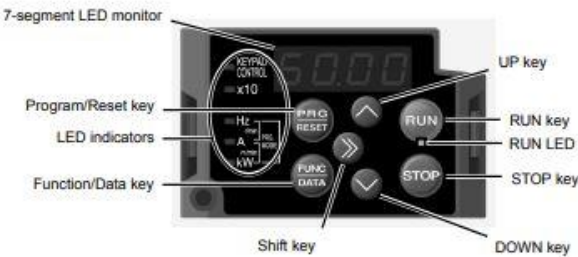


Table 3.1-1 Overview of Keypad Functions

Item	LED Monitor, Keys, and LED Indicators	Functions
LED Monitor		Four-digit, 7-segment LED monitor which displays the followings according to the operation modes. ■ In Running mode: Running status information (e.g., output frequency, current, and voltage) When a light alarm occurs, $L - A_L$ is displayed. ■ In Programming mode: Menus, function codes and their data ■ In Alarm mode: Alarm code, which identifies the alarm factor that has activated the protective function.
Operation Keys		Program/Reset key which switches the operation modes of the inverter. ■ In Running mode: Pressing this key switches the inverter to Programming mode. ■ In Programming mode: Pressing this key switches the inverter to Running mode. ■ In Alarm mode: Pressing this key after removing the alarm factor resets the alarm and switches back to Running mode.
		Function/Data key which switches the operations you want to do in each mode as follows: ■ In Running mode: Pressing this key switches the information to be displayed concerning the status of the inverter (output frequency (Hz), output current (A), output voltage (V), etc.). When a light alarm is displayed, holding down this key resets the light alarm and switches back to Running mode. ■ In Programming mode: Pressing this key displays the function code or establishes the data entered with and keys. ■ In Alarm mode: Pressing this key displays the details of the problem indicated by the alarm code that has come up on the LED monitor.
		RUN key. Press this key to run the motor.
		STOP key. Press this key to stop the motor.
		UP and DOWN keys. Press these keys to select the setting items and change the function code data displayed on the LED monitor.
		Shift key. Press this key to shift the cursor to the right for entry of a numerical value.

Note* The following Parameters are not Programed and depending on If using a Switch or a Probe the following needs to be programed to function your Input Devices and Run Commands.

For Toggle or Rotary Switches (ON-OFF-ON-OFF-ON) Parameters are as followed

C05 = Speed 1 HZ - (30 Hz) X1 terminal (set to HZ desired)

C06 = Speed 2 HZ - (45 Hz) X2 terminal (set to HZ desired)

C08 = Speed 3 HZ - (60 Hz) X3 terminal (set to HZ desired)

For Float Probes or Multistep Connections (ON-ON-ON) Parameters are as followed

C05 = Speed 1 HZ - (30 Hz) X1 terminal (set to HZ desired)

C07 = Speed 2 HZ - (45 Hz) X2 terminal (set to HZ desired)

C011 = Speed 3 HZ - (60 Hz) X3 terminal (set to HZ desired)



***For Single Phase Power it is important to set the following parameter.**

Set F11- to the name plate current of the Device Connected. Not doing so can result in Inverter and the Device connected to break down if overloaded. The typical load should be no larger than half the nameplate current of the Inverter Output Rating.

Example: 10HP 230V 1 Phase System.

Has a 20HP Inverter in the package with parameter F11 set at 59.4 amps

Motor on system should be a 10HP 230V

E-Zee Hyundai Triton 10HP 230V with name plate current rating of 28.2 amps

At 208V and 25.6 at 230V Line Voltage.

Parameter F11 should be set to the correct Nameplate current rating.

Not setting this will then have the system set as much as 50% higher than the current draw that it can handle on single phase Power.

Check the Dip Switch positions are as shown below, SW 2 = Off & SW 8 is down ↓ these are found under the Keypad.

	SW1	SW2	SW3	SW4	SW5	SW6	SW7
Factory default -C	SINK 	OFF 	IC1 	AI 	FWV 	OFF 	FMV2 

