

## JAGUAR CUB INVERTER INSTRUCTIONS

### Keypad and Potentiometer Operation

The Jaguar Cub drive can be programmed to operate in a number of ways. This section explains how to operate the drive using the keypad for start and stop functions and the potentiometer to vary the motor speed. The parameters listed below are just a few of those available to change to obtain the best results from the drive for your particular application. We have included, where appropriate, the factory default setting and a brief description of the parameter's function.

There are a number of parameters that require changing for the inverter to function with the keypad and potentiometer.

The parameter menu is accessed as follows:

- a) Ensure the drive has power and that the motor has stopped
- b) Press the PRG/RESET Key - this will change the display to F00 (or the last parameter setting that was changed)
- c) By pressing the up and down arrows on the keypad the display will change accordingly
- d) Once the required parameter has been found press the FUNC/DATA button to access this parameter - the display will change to the currently set parameter value
- e) To amend the parameter value, press the up and/or down arrow to change the value, then press the FUNC/DATA button to save this change.
- f) This will bring you back to the parameter menu - so if you need to amend further parameters repeat c) to e).
- g) To leave the parameter menu press the PRG/RESET button

### **Parameter F01 - Drive Input for Frequency**

This tells the drive what input to expect. The factory default is 4 and for Keypad/Potentiometer control this is the required value. If the drive is not responding to any key presses check that this value is 4.

### **Parameter F02 - Drive Input for Direction**

This tells the drive in which direction to run. The factory default is 2. Should the motor be running in the wrong direction instead of swapping cables over you can change this setting to 3.

### **Parameter F03 - Maximum Output Frequency**

This sets the maximum frequency that the drive will turn the motor. The factory default is 50Hz. Customers can change this to any value from 0 to 120Hz but must be aware of the application they are running. Note parameter F15 will also need amending if the factory default is changed.

### **Parameter F07 - Acceleration Time**

This setting determines the time taken for the motor to attain the frequency selected by the potentiometer in a controlled "acceleration ramp". The factory default is 6 seconds. If set to 0.00 the drive defaults to 0.01.

#### **Parameter F08 - Deceleration Time**

This setting determines the time taken for the motor to stop in a controlled "deceleration ramp". The factory default is 6 seconds. If set to 0.00 the drive defaults to 0.01 - DC Injection braking is available by setting parameter F22 - please consult IMO instruction manual.

#### **Parameter F11 - Current Limit to activate Thermal overload**

This sets the thermal overload to operate at between 20% and 135% of the rated drive current. This should be set so to equal the current given on the motor rating plate.

#### **Parameter F15 - Maximum Frequency Limit**

This sets the maximum upper limit the potentiometer will turn to. The factory default is 70Hz .If this is set higher than the value in parameter F03, parameter F03 takes precedent.

#### **Parameter F16 - Minimum Frequency Limit**

This sets the lower limit the potentiometer will turn to. The factory default is 0Hz. If this is set higher than the value in parameter F03, no lower limit is activated. This should be set as the minimum allowable speed your application warrants.

#### **Values shown on Keypad Display**

When the motor is running the display will show either frequency or current supplied by the drive this can be toggled using the FUNC/DATA button.

#### **Remote Forward/Reverse Switch**

If a remote forward/reverse switch is required the following changes are required:

- a) ***BEFORE SWITCH IS CONNECTED*** change parameter F02 = 0 - if a switch is connected parameter F02 can not be altered
- b) Connect the switch as per attached drawing.

**Full Instructions available from IMO web-site <http://www.imopc.com/>**