

# ***FlexMax***

with DigiMax FM-100



## **Connections:**

- 1) Connect AC input to DigiMax per the manual. Be sure to connect both input ground and DigiMax ground to drive ground.
- 2) The DigiMax frequency output goes to the XFR (resolver) sub-D connector on the *FlexMax* drive:
  - a. Use shielded cable. Connect shield to drive connector shell as per *FlexMax* manual
  - b. Connect TB1-pin 8 on DigiMax to pin 6 on *FlexMax* XFR connector, and TB1-pin 11 to pin 5 on *FlexMax*
    - i. The DigiMax FM-100 provides a differential pulse output between pins 8 & 11
  - c. Wrap several turns of the 2 signal wires around the clamp-on suppression core (included). Locate as close as possible to drive.
- 3) On the DigiMax, jumper TB1-10 to TB2-11 and TB1-11 to TB2-12
  - a. The *FlexMax* cannot currently provide actual speed to the DigiMax, therefore the displayed “actual speed” will be the output frequency
- 4) Connect other inputs to DigiMax per manual as required

## **DigiMax set-up:**

- 1) Following instructions in manual, set Parameter 5, “Feedback PPR”, to 2400
- 2) Set other parameters as required per manual instructions

## ***FlexMax* set-up:**

- 1) Using WinPX or keypad, set parameter #20023, “Drive configuration” in menu *10-Drive parameters* to “Els”. You must save parameter and reset drive before drive configuration changes become active.
- 2) In menu *120-Encoder repetition*, make sure parameter #20035 is set to “Off”.
- 3) In menu *180-Electrical Line Shaft*:
  - a. set parameter #32000, “ELS Puls rev mast” to “600”
  - b. set parameter #32009, “ELS Master Sel” to “encoder”
- 4) In menu *181-Elect L Shaft Ratio*, set parameter #32001, “ELS Ratio[0]” to “-1.000000”
  - a. This will give CW motor rotation with a 1:1 ratio
  - b. You can adjust the ratio, i.e. for 2:1 use “-2.000000”
  - c. For CCW rotation, use a positive ratio, i.e. “1.000000”
  - d. Set the other 3 preset ratios as desired
- 5) In menu *203-System/Reserved*, set parameter #18111 to “A=up B=dir”
- 6) Save all parameters and reset drive