Speed Switch (IFMR-1) Programming Procedure

PROBLEM: Replacing the speed switch or re-calibrating start signal of conveyor.

(for details consult the specification bulletin)

Program the Speed Switch to: Operating Mode 1 (trip on overspeed, auto reset) and trip frequency to 25 Hz (all others to factory default).

Safety Item: CAUTION, the speed switch is located near exposed high voltage terminals on the power transformer. Use CAUTION!

A. Read the Operating Mode:

- Moving DIP switch # 4 to up (on) enters the program mode for OPERATING MODE. The Green Input Led blinks (½ sec on ½ sec off) 1 to 9 times to indicate the operating mode followed by a 2 sec pause. The operating Mode should be set to 1. (½ sec on and 2 sec off).
  Note: If you have difficulty with this step try changing the operating mode to 3 and then back to 1 using the procedure in the next step. The blinks and pauses will be more evident.

- Set the OPERATING MODE (if not already set to 1) Turn the Rotary switch to 1. *The setting of the rotary switch determines what Operating Mode is to be programmed.* Move Dip switch #4 to up (the green LED blinks the present mode). Press the push-button once (green LED blinks rapidly indicating access). Press the push-button again (new operating mode of 1 is indicated by ½ sec blink and a 2 sec pause). Return DIP switch #4 to the down position.

B. Set The Trip Frequency: Dip Switch #4 & 6 up. Note that:

- Read the frequency: (Moving DIP switch #4 and 6 to up enters the program mode for SET TRIP FREQUENCY). The green LED begins blinking the set frequency:
  - Θ blink (½ sec on ½ sec off) indicates a number
  - Θ total number of blinks (1 to 9) = a digit
  - Θ flash (0.04 sec on & 1 sec off) = a zero
  - Θ 2 sec pause = end of a digit
  - Θ 4 sec pause = end of a 6 digit value

  The first 5 digits of the value indicate the frequency in Hz. The 6th digit of the value is the number of decimals places from the right. The default setting is 10,000 Hz represented by the value 100000. The LED will indicate: 4 sec pause + blink + 2 sec pause + flash + flash + flash + flash + flash + 4 sec pause (then repeat the readout).

- Set the new trip frequency at 25 Hz. This can be set as:
  250003 which means: 25.000 Hz or **02500**2 which means: 025.00 Hz
  or
  002501 which means: 0025.0 Hz or **00025**0 which means: 00025 Hz
  ⇑ The last number is the number of decimal places
  ⇑⇑⇑⇑⇑ The first 5 numbers are the frequency value

- The new frequency of 00025 Hz is set as follows:

  Set DIP switch 4 & 6 to up
  Turn the rotary switch to 0
  Press push-button once (access for first number, green LED blinks rapidly)
  Press push-button once (enters first number = 0)
  Press push-button once (enters 2nd number = 0)
  Press push-button once (enters 3rd number = 0)
  Set the rotary switch to 2
  Press push-button once (enters 4th number = 2)
  Set the rotary switch to 5
  Press push-button once (enters 5th number = 5)
  Set the rotary switch to 0
  Press push-button once (enters 6th number = 0) (number of decimal places)

  If the numbers have been entered correctly the LED blinks the new value: Flash + Flash + Flash + Blink + Blink + Pause 2 sec + Blink + Blink + Blink + Blink + Blink + pause 2 sec + Flash + Pause 4 sec, Repeats the new Value.

  Note: if you are having difficulty reading this value go back and read the definitions of a blink, flash, 2 sec pause and 4 sec pause.

  Set DIP switch 4 & 6 to down (exits program mode)

  - Test the new trip frequency: When the encoder that senses press speed is turned very slowly by hand the red LED output light should turn on.

C. Set DIP Switches: #1 = Off, #2 = On, #3 = On.