

inoréa **Automatismes & Industrie**




FREQUENCY INVERTER VFR-013 **MULTI-SPEED PILOTAGE**

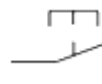
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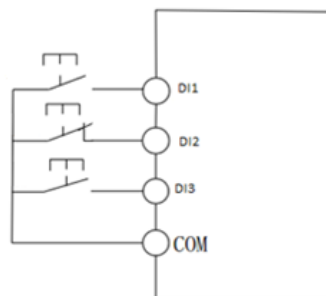
 Contact Normally Open (NO) maintained.

 Push-button Normally Open (NO) not maintained

 Push-button Normally Closed (NC).

Inputs terminals DI1 to DI16 are multifunction terminals inputs of the inverter.
COM terminal is the power supply terminal linked with DI1 to DI16

- Connection example of the inverter inputs by push-buttons



1. DESCRIPTION OF THE MULTI SPEED FUNCTION

The multi speed function allows obtaining up to 16 instructions speed values pre-programmed, from different combinations of 4 inputs.

2. ACTIVATION OF THE MULTI SPEED FUNCTION

This parameter allows applying as a speed instruction the value corresponding to the combination.

F0.02=5

3. MAXIMUM USE FREQUENCY SECTION

This parameter in Hz is equal to 100% of the maximum speed and afterward allows calculating in % different speed value in Hz for the table in the 6th chapter.

By default: F0.08=50Hz

4. ACTIVATION OF THE MULTI SPEED INPUTS

To obtain the combination of the different speed, you have to report the N° of the desired inputs terminals for this action.

Parameter	Function	Chose your value	Function
F1.00	Terminal block input DI1	12	Multi speed terminal 1 (active)
F1.01	Terminal block input DI2		
F1.02	Terminal block input DI3	13	Multi speed terminal 2 (active)
F1.03	Terminal block input DI4		
F1.04	Terminal block input DI5	14	Multi speed terminal 3 (active)
		15	Multi speed terminal 4 (active)

5. SETTING OF THE SPEED INSTRUCTIONS ACCORDING TO THE INPUT COMBINATIONS

Multi speed terminal 4	Multi speed terminal 3	Multi speed terminal 2	Multi speed terminal 1	Parameter (in % of the maximum speed)
OFF	OFF	OFF	OFF	E1.00
OFF	OFF	OFF	ON	E1.01
OFF	OFF	ON	OFF	E1.02
OFF	OFF	ON	ON	E1.03
OFF	ON	OFF	OFF	E1.04
OFF	ON	OFF	ON	E1.05
OFF	ON	ON	OFF	E1.06
OFF	ON	ON	ON	E1.07
ON	OFF	OFF	OFF	E1.08
ON	OFF	OFF	ON	E1.09
ON	OFF	ON	OFF	E1.10
ON	OFF	ON	ON	E1.11
ON	ON	OFF	OFF	E1.12
ON	ON	OFF	ON	E1.13
ON	ON	ON	OFF	E1.14
ON	ON	ON	ON	E1.15

6. SETTING EXAMPLE

Setting for 4 speed (50Hz, 40Hz, 25Hz et 10Hz) by 2 contacts DI4 and DI5.

DI5	DI4	Speed in Hz
0	0	50
0	1	40
1	0	25
1	1	10

Parameters:

F0.02 = 5 (Activation of the multi speed pilotage)

F0.08 = 50.00 (Maximum frequency)

F1.03 = 12 (Multi speed terminal 1)

F1.04 = 13 (Multi speed terminal 2)

E1.00 = 100 (50Hz)

E1.01 = 80 (40Hz)

E1.02 = 50 (25Hz)

E1.03 = 20 (10Hz)

