

# iNORéA

## Automatismes & Industrie



### FREQUENCY INVERTER VFR-091/092

#### MULTI-SPEED PILOTAGE

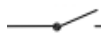
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### INFORMATIONS

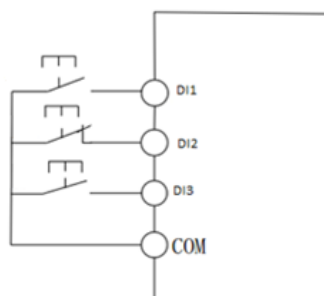
 Contact Normally Open (NO) maintained.

 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



By pushed buttons

## 1. DESCRIPTION OF THE MULTI-SPEED FUNCTION

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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

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

**F0.03=6**

## 3. MAXIMUM USE FREQUENCY SECTION

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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 6<sup>th</sup> chapter.

**settings: F0.19=50Hz**

## 4. ACTIVATION OF THE MULTI-SPEED INPUTS

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

Parameter	Function	Choose 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
F1.05	Terminal block input DI6		
F1.06	Terminal block input DI7	15	Multi-speed terminal 4 active
F1.07	Terminal block input DI8		

## 5. SETTINGS OF 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 DI5 and DI6.

DI6	DI5	Speed in Hz
0	0	50
0	1	40
1	0	25
1	1	10

### Parameters of wiring:

F0.03 = 6 (Activation of the multi speed pilotage)	E1.00 = 100 (50Hz)
F0.19 = 50.00 (Maximum frequency)	E1.01 = 80 (40Hz)
	E1.02 = 50 (25Hz)
F1.04 = 12 (Multi speed terminal 1)	E1.03 = 20 (10Hz)
F1.05 = 13 (Multi speed terminal 2)	

