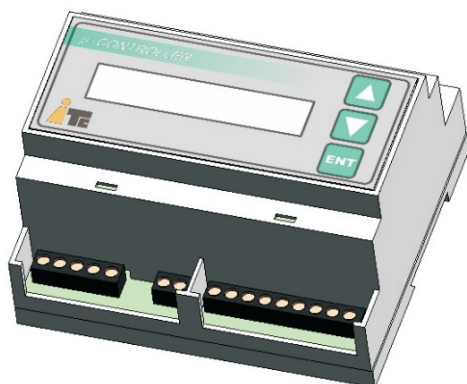
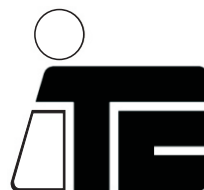




Management
System
ISO 9001:2008



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MICROCONTROLLER

ENGLISH

INDEX

1. - GENERAL DESCRIPTION	4
2. - TECHNICAL FEATURES	5
3. - OPERATION	7
4. - INSTALLATION	9
WARRANTY	10



SAFETY RULES

To avoid personal or enviromental damages and to guarantee a proper operation of the equipment, the staff in charge of the installation, set up and maintenance of the equipment must follow the instructions of this manual, specially those recommendations and warnings explicitly detailed. In addition, specific instructions for the chemical products to be dosed should be followed.



1. - GENERAL DESCRIPTION

Dosing controller for dosing pumps with pulse emitter. Having an input for pulses that gives the pump allowing to know at all times the dispensed volume and stop the pump once reached the required volume.

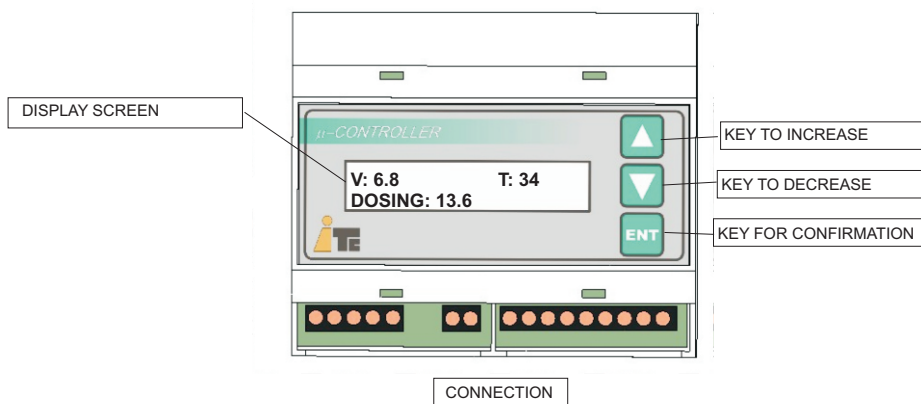
The controller can be activated using the keyboard or with an external signal.

It is provided to be installed inside an electrical control panel, or depending of the reference it includes all the protections of the dosing pump.

Applications

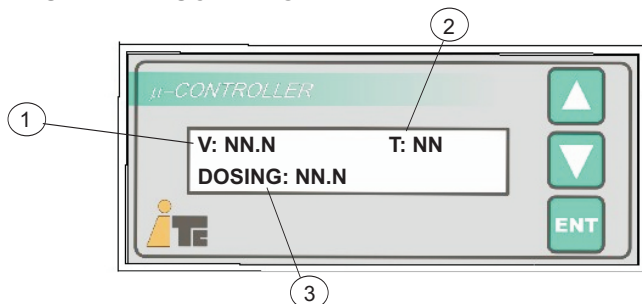
- Batch dosing
- Filling containers of a certain volume (bottles, cans, etc.), automatically with a dosing pump
- Proportional dosing of a pulse input as a flowmeter

1.2.- FRONT SIDE DESCRIPTION





1.3.- DISPLAY DESCRIPTION

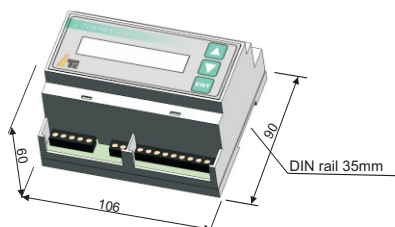


- ① **V: NN.N** Cycle volume
(Check page 8)
- ② **T: NN.N** Volume to be dosed
(multiples of the volume per metering cycle)
- ③ **START** Ready to dose
- DOSING: NN.N** Dosed volume

2.- TECHNICAL FEATURES

2.1 MICROCONTROLLER

Supply voltage: 24 VAC y 9-15 VAC
Maximum power: 46.5mA y 80mA respectively
Working temperature : 0 - 45 °C
Protect from weather and direct sunlight





2.2 COMPLETE MICROCONTROLLER WITH BREAKER

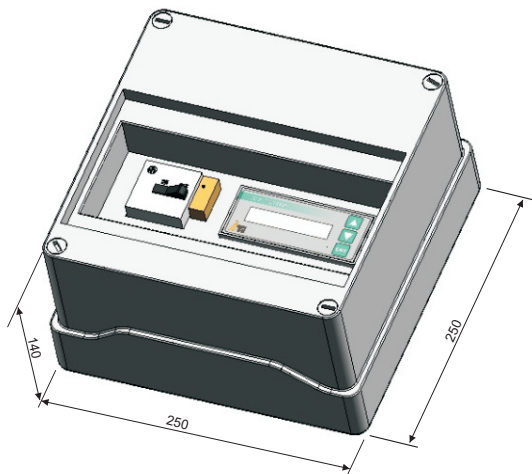
Supply voltage: Three-phase 400 / 220 VAC

Single-phase 220 / 120 VAC

Maximum power: See motor features

Working temperature: 0 - 45 °C

Protection: Ip65



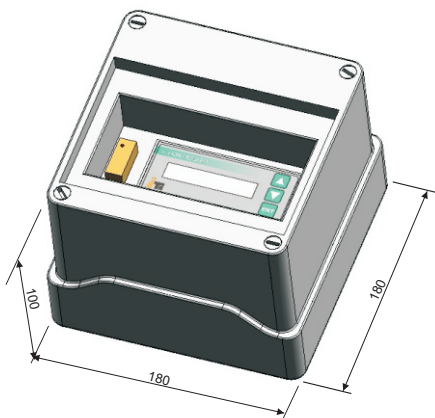
2.2 COMPLETE MICROCONTROLLER FOR FREQUENCY INVERTER

Supply voltage: Single-phase 220 / 120 VAC

Maximum power: 0.5 Amp

Working temperature: 0 - 45 °C

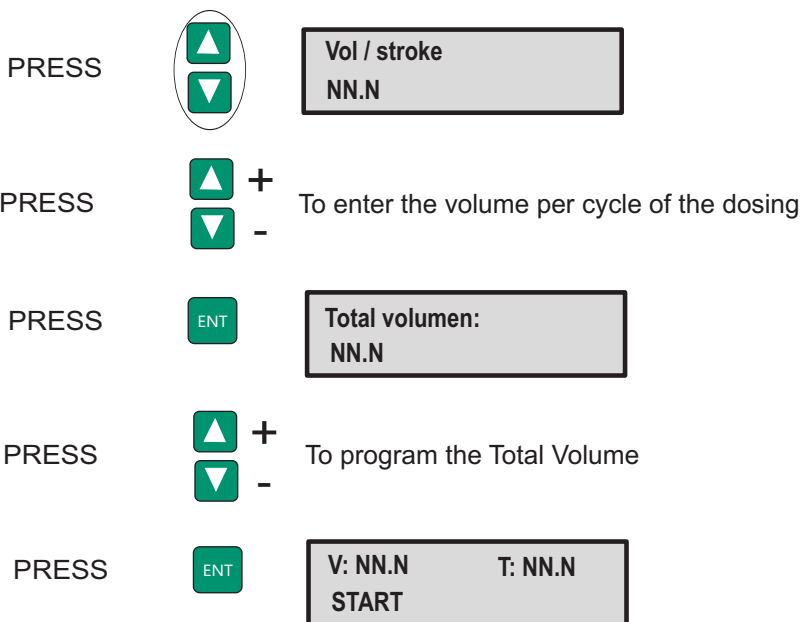
Protection: Ip65




3.- OPERATION



CONFIGURATION



OPERATION

Pressing  or through the external signal, the pump will start dosing, and the Microcontroller will show the product dosed.



Once it arrives to the dosed quantity programmed the dosing pump stops, waiting the next start signal.





VOLUME OF EACH CYCLE

The dosing pumps equipped with pulse emitter, emits a pulse for each cycle performed. The volume dosed per cycle will depend on the flow and regulation of the dosing pump.

Calculation of the cycle volume depends of the flow and frequency:

$$V_c = \frac{Q \times 100}{6 \times C}$$

V_c = Volume per cycle (cm³) (ml)

Q = Dosing flow (l / h)

C = n° cycles per minute (C / min)

Example:

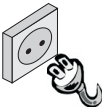
Dosing pump 71-LP④4-P110PPX

↑
Frequency 4 = 120 cycles / minute
Flow 1000l/h.

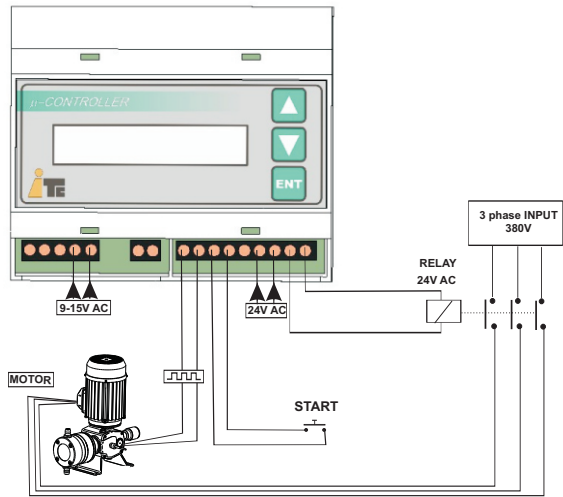
$$V_c = \frac{1000 \times 100}{6 \times 120} = 138,9$$

Volume per cycle is 138.9 ml

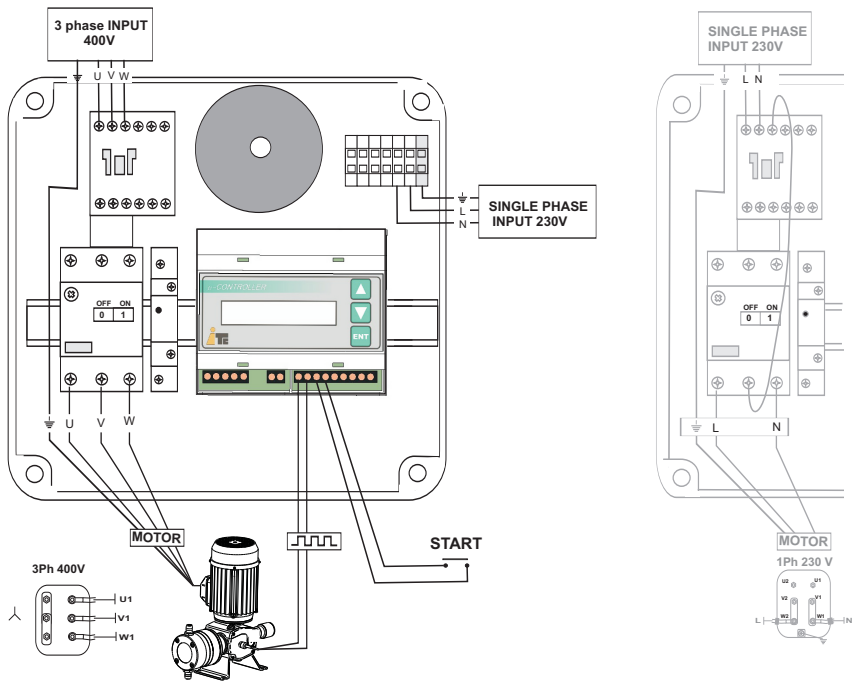
4.- INSTALLATION



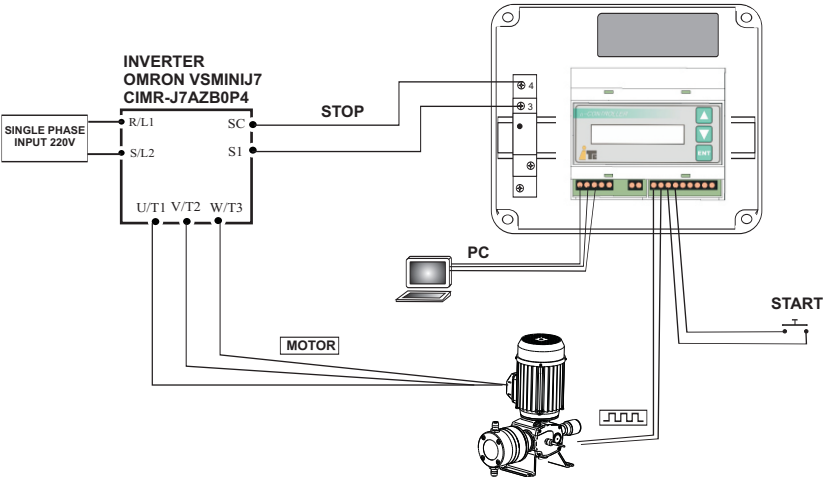
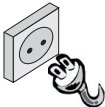
4.1 MICROCONTROLLER



4.2 CONNECTION BOX WITH MOTOR PROTECTION



4.3 BOX CONNECTIONS FOR FREQUENCY INVERTER





WARRANTY

I.T.C. S.L. warranties the product specified in this document by the period of 1 year from the date of buy, against any shortcoming of manufacture or material, whenever the installation, use and maintenance of the team have been the correct ones.

The system must be sent, freely from expenses, to our workshop or technical service of I.T.C. Accredited S.L. and his return will be carried out to due freights.

It will should accompany the system the document of guarantee with the date of buy and stamp of the selling establishment, or photocopy of the invoice of buy.

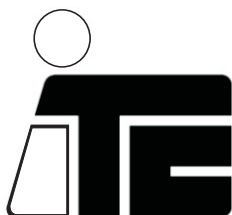
MODEL

SERIES N°

Date of buy and stamp of the
selling establishment

DATE: _____

Ed:06/11/15 An



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