

ELECTRICAL PANELS DESIGNED TO BE INSTALLED IN THE PUMPING SYSTEMS OF RESIDENTIAL AND IRRIGATION BUILDINGS.

DISTANCE IS NOT AN ISSUE FOR US!!

# ELECTRIC CONTROL PANEL TYPE **VANGUARD N-M** BUILT MICROPROCESSOR, WITH AMPEROMETRIC PROTECTION, TO CONTROL A BORE HOLE MONOPHASE ELECTRIC PUMP

Electric control panels of the third generation

The electric control panel type VANGUARD-M microprocessor is constructed in order to command and protect in an intelligent way monophase electric pumps with fixed condensers inserted. In addition there is also the possibility to visualise on the display all the parameters of the pump. The functions of the electrical control panel are: The filling of a tank under command pressure by means of an electric pump from a pressure switch, or the filling of a bathtub not under pressure by means of an electric pump operated by a float. The interruption of the operating of the pump due to lack of water (PROTECTION AGAINST THE DRY RUNNING OF THE BORE HOLE PUMP) occurs when the water level is below the set value, or cos-fi is inferior to the set up value, or the current absorbed by the pump is lower than the set value, therefore the electrical control panel does not require probes to be used should this happen (three ways of working). Electrical panel designed for the future, significantly reducing environmetal emission, at rest only 0,3 W/h.

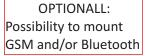
## THE ELECTRICAL CONTROL PANEL COMPRISES:

- Box in plastic material IP 55
- O Card mother in glass-reinforced plastic
- O Line switch
- Motor fuse block
- Fuse block with fuses for auxiliary
- O S.M.P.S Input 100-240 Vac 50/60 Hz.
- RS-485 interface IC for modbus serial communication
- Amperometric transformer (ammeter)
- Voltmeter (transformer)
- O Power relè for pump command
- Selector AUT-0-MAN
- O Pump Button ON
- O Pump Button OFF
- Buzzer to sound any alarm
- O Led line, white
- O Led march pump, green
- O Led generic alarms, red
- O OLED display 16x2 characters
- O Push-buttons membrane to organize the data
- Frontal card of the electrical control panel for data processing
- O Terminal block
- Terminal block for the pump
- O Cable glands

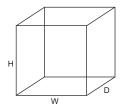
### **USE CONDITIONS**

O Degree of protection : IP55

• Field of operation  $:-15^{\circ}\text{C} + 40^{\circ}\text{C}$ 







Dime of implantation H= 194mm W=140mm

CODE	CONTROL PANEL TYPE	MAX. POWER TO	230V. MONOPHASE	MAX. CURRENT(ADJUSTABLE)	DIMENSIONS IN mm.			WEIGHT
		KW	HP	A	Н	W	D	Kg
700320	VNM 50-200	1,5	2	0÷25A	259	195	120	2,5
700321	VNM 300	2,2	3	0÷25A	259	195	120	2,5

## ELECTRIC CONTROL PANEL TYPE **VANGUARD N-T** BUILT MICROPROCESSOR, WITH AMPEROMETRIC PROTECTION, TO CONTROL A BORE HOLE THREE-PHASE ELECTRIC PUMP

Electric control panels of the third generation

The electric control panel type VANGUARD N-T microprocessor is constructed in order to command and protect in an intelligent way submerged three-phase electric pumps. In addition there is also the possibility to visualise on the display all the parameters of the pump. The functions of the electrical control panel are :The filling of a tank under command pressure by means of an electric pump from a pressure switch, or the filling of a bathtub not under pressure by means of an electric pump operated by a float. The interruption of the operating of the pump due to lack of water **(PROTECTION AGAINST THE DRY RUNNING OF THE BORE HOLE PUMP)** occurs when the water level is below the set value, or cos-fi is inferior to the set up value, or the current absorbed by the pump is lower than the set value, therefore the electrical control panel does not require probes to be used should this happen. (three ways of working) **Electrical panel designed for the future, significantly reducing environmetal emission, at rest only 0,3 W/h.** 

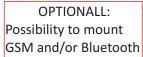
## THE ELECTRICAL CONTROL PANEL COMPRISES:

- O Box in plastic material IP 55
- Card mother in glass-reinforced plastic
- O Line switch
- Motor fuse block
- Fuse block with fuses for auxiliary
- O S.M.P.S Input 300-480 Vac 50/60 Hz.
- O RS-485 interface IC for modbus serial communication
- O Amperometric transformer (ammeter)
- O Voltmeter (transformer)
- O Power relè for pump command
- O Selector AUT-0-MA
- O Pump Button ON
- O Pump Button OFF
- O Buzzer to sound any alarm
- O Led line, white
- O Led march pump, green
- O Led generic alarms, red
- O OLED display 16x2 characters
- O Push-buttons membrane to organize the data
- O Frontal card of the electrical control panel for data processing
- Terminal block
- Terminal block for the pump
- Cable glands

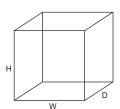
## **USE CONDITIONS**

O Degree of protection : IP55

O Field of operation :  $-15^{\circ}\text{C} + 40^{\circ}\text{C}$ 







Dime of implantation
H= 194mm W=140mm

CODE	CONTROL PANEL TYPE	MAX. POWER TO	400V THREE-PHASE	MAX. CURRENT(ADJUSTABLE)	DIMENSIONS IN mm.		WEIGHT	
		KW	HP	А	Н	W	D	Kg
700322	VNT 50÷400	3	4	0÷25A	259	195	120	2,5
700323	VNT 550÷750	5,5	7,5	0÷25A	259	195	120	2,5
700324	VNT 1000	7,5	10	0÷25A	259	195	120	2,7