

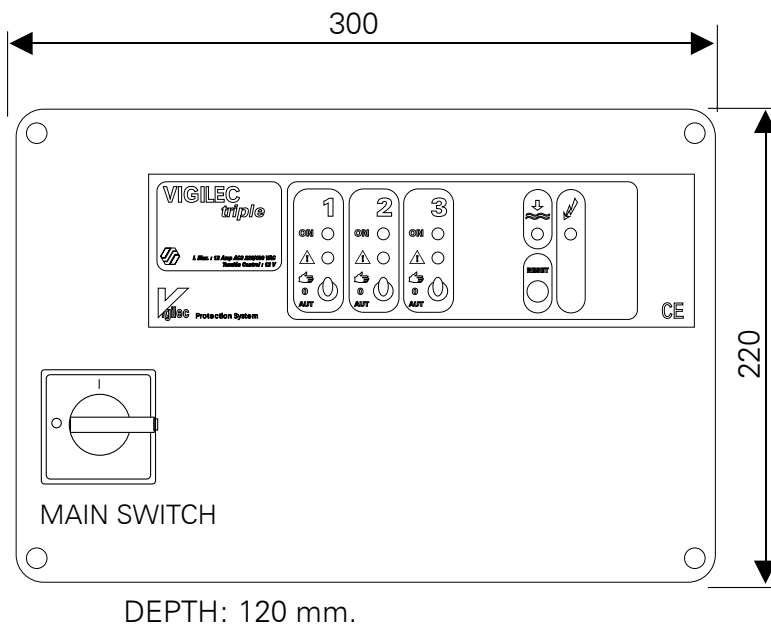
CONTROL AND PROTECTION FOR 3 PUMPS TYPE V3P



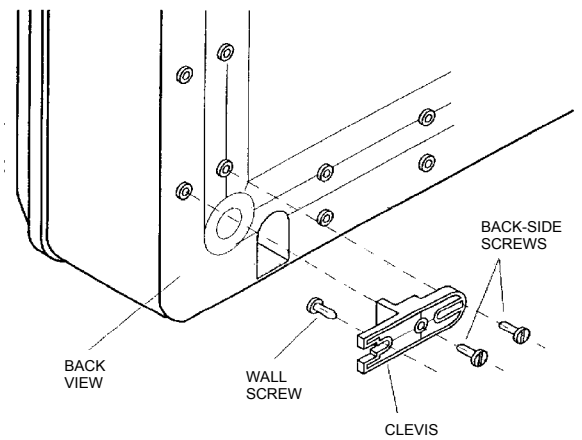
Owner's manual

INSTALLATION AND OPERATION INSTRUCTIONS

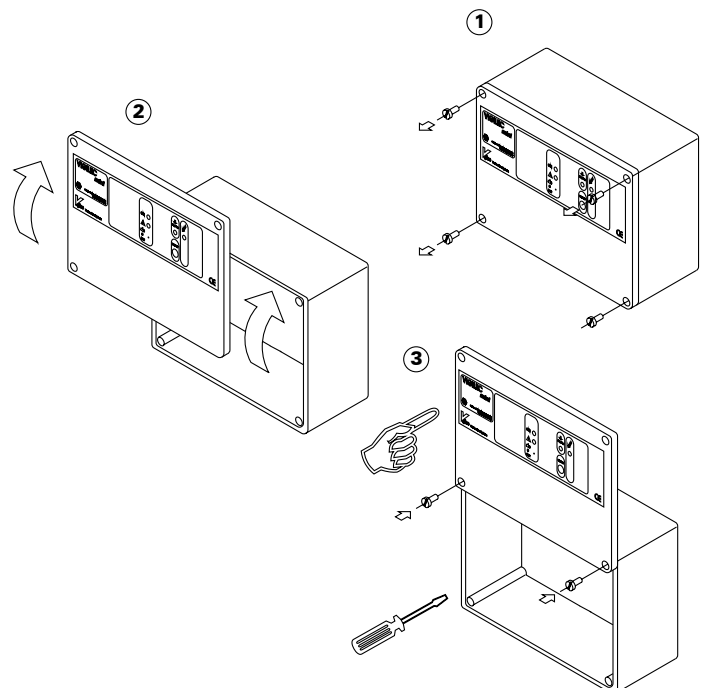
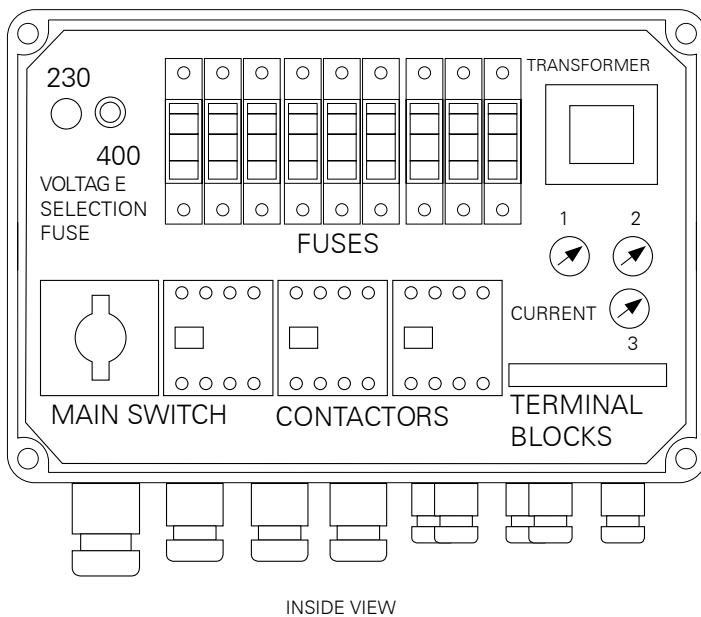
Dimensions and Main Configuration



Wall mounting hardware



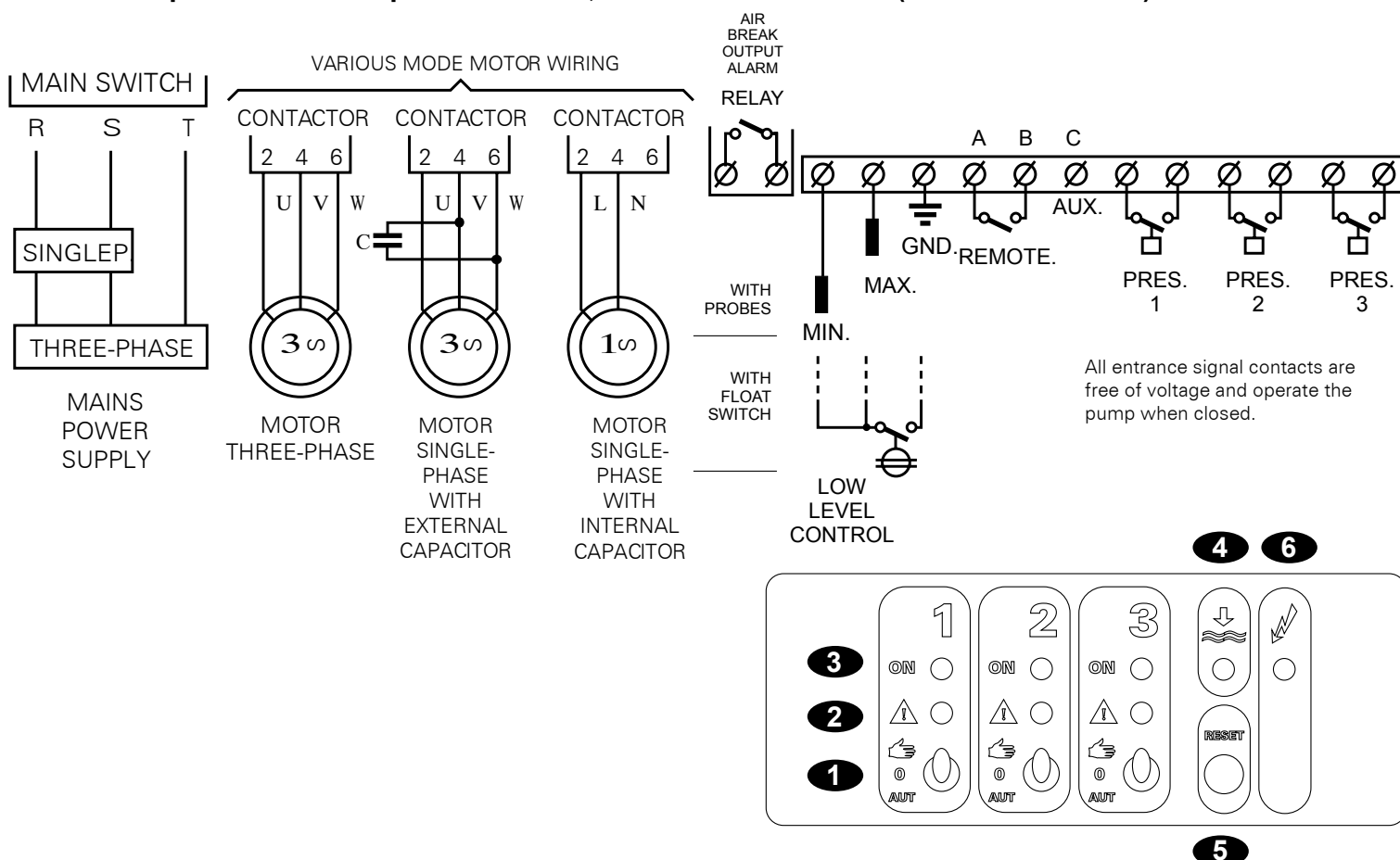
Front opening procedure for wiring and adjustment (fig.A).



Electrical wiring

We recommend to connect individual connectin tag wires to the terminal block (up to 4 mm²).

- Turn-off the MAIN SWITCH (Position "0")
- Open and slide the front cover and put on position fig.A.
- Connect POWER SUPPLY directly to MAIN SWITCH terminals.
- Connect MOTORS (pumps) directly to the respective CONTACTORS terminals.
- Connect the pressure switches to the respective TERMINALS (Pres.1, Pres.2, Pres.3). These input contacts there must be free of voltage and turn-on the pump when closed.
- Connect probes or float switch, following diagram in respective terminal blocks. **If this input is not used, it must be linked: MIN, MAX and GND.**
- The unit provides an auxiliary AIR BREAK ALARM contact, closed when alarm status.
- Also, terminals REMOTE and AUX can be connected to a remote control device. Terminals A and B = program timer, etc; terminals A, B and C = level controller up to 6 km. (see model TEI-TX).
Important: if this input is not used, it must also be linked (terminals A and B).



- 1 Selector switch mode: **HAND** pos. (pump running when pressed). Selector releases to his original position when liberated, to avoid unattended operations, **0** (No starting possible in any circunstance) and **AUT** (The unit works automatically with control and protections).
- 2 Indicator lights (red) **OVERLOAD/UNDERLOAD MOTOR**.
- 3 Indicator lights (green) **ON/OFF MOTOR**.
- 4 Indicator light of **LOW LEVEL** (ambar) or **AIR BREAK** (flashing ambar). Light-off again when normal level.
- 5 **RESET** button. Restart the unit when OVERCURRENT or AIR BREAK.
- 6 Indicator light **VOLTAGE** : lights when MAIN SWITCH is ON and AC with supply presence.

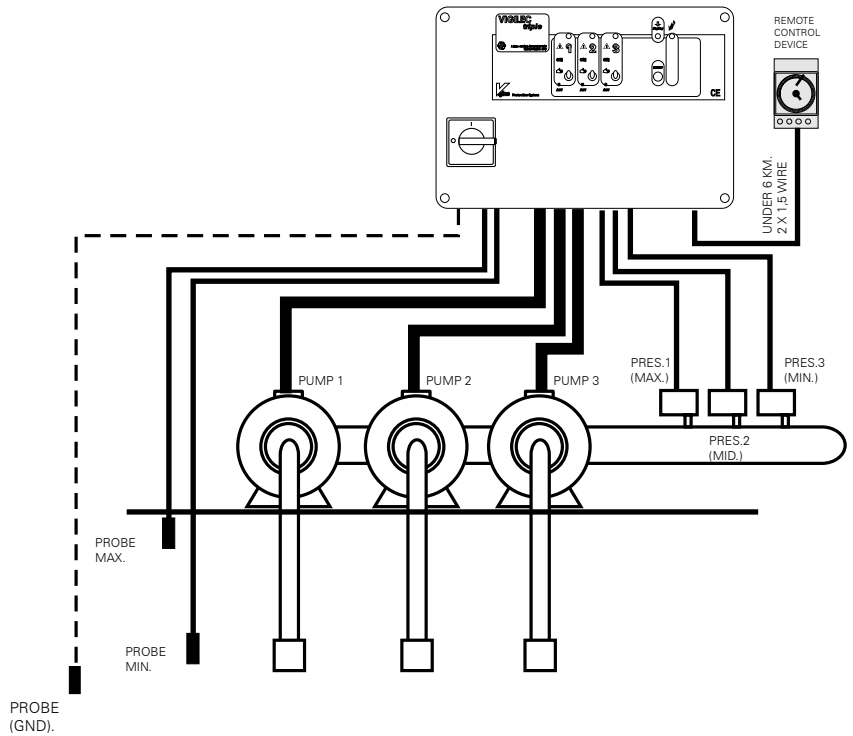
Level probes operation mode

Low level probe must be installed just over the pump intake.

High level probe must be installed depending the volume of the tank/well at the appropriate level for the optimal performance.

Third electrode (GND, install at bottom of tank) be essential if tank or pipes its made of isolant material (plastic, polyester, etc.).

Pump will start when level reaches high probe and will stop when level descends under low probe.



Overcurrent Adjustment.

A good calibration adjustmente allows the Vigilec unit to protect the motor-pump against OVERCURRENT. It is very important follow carefully these steps by adjusting with an screwdriver in the inside potentiometers.

IMPORTANT : The unit will works only if motor is connected to the contactors. Otherwise the alarm (UNDERLOAD) indicator will lights.

1 Turn right to the limit.

(inside adjust)

1 ON (front-side)

- Motor 1 on.

Wait 1 minute

2 Turn slowly to the left, until...

1 ON

- Alarm indicator flashing red.

3 Turn slightly to the right.

1 ON

- Indicator light of alarm turn off.

4 - If alarm indicator light flashing more than 7 sec., the pump will stops and the alarm indicator will lights red. In this case, push RESET and repeat step 3.

Lets the pump running 5 to 10 minutes

if... **1** ON

- Adjustment is correct.

if... **1** ON

- Repeat steps 3 y 4.

when... ON **1** ON

Pump works in a good running order. Repeat the same procedure with pump n° 2 and 3.

Indicator light on Indicator light off

Important: While calibrating pump 1, selector of pump 2 must be in pos. "0", to avoid undesired starts if the pump in calibration it's alarmed.

Pressure tank air break alarm adjustment.

If the unit detects a pump abnormality such a loss of air in the pressure tank, the AIR BREAK ALARM indicator will lights flashing ambar and the respective output contact will closed.

You can use this output contact to start/stop a compressor to air injection.

This output works only while one of three pumps are running.



MIN
Alarm with more than 300 startings/hour



MED.
Alarm with more than 8 startings/hour



MAX.
Alarm with more than 4 startings/hour

If pumps works in a good running order, the alarm will be disabled automatically.

Features



Max Power	4 Hp / 230 VAC III - 7.5 Hp / 400 VAC III 2 Hp / 230 VAC II
Voltage	210-230 or 380-400 V (selectable) 50/60Hz
Permissible voltage fluctuations	+10% -15%
Maximum current	12 A (by pump) AC3
Overcurrent adjustment	1-13 A
Low current trip (underload)	< 0,5 A
Probe operating voltage	12 Vac - 500uA
Sensitivity	60 Kohm
Remote control and pressure switch connection	12 Vcc / 50 mA
Terminal blocks for pressure switches and remote control	4 mm ²
Input connection (power)	Direct to MAIN SWITCH
Output connection (motor)	Direct to contactor
Mounting	Clevis wall mounting
Weight	3,5 Kg
Size	300 x 220 x 120 mm
Environmental protection	IP56
Operating temperature range	-10 +55 °C
Order code	V3P

Troubleshooting

 Problem	 Cause	 Actuation
The equipment does not work and the voltage light is off even when the system is connected to a power source.	- Incorrect input connection in case of single-phase installation. - Failure of one phase. - Fused control fuse.	- Check connections and power voltage at input main switch. - Check phases status. - Check and replace control fuse (5x20 / 0,3 A) and verify the correct position (230/400V).
The equipment works but the contactors do not.	Voltage selection fuse incorrectly positioned.	- Select the correct position according to the entry voltage.
The motor alarm lights on.	- Inside overcurrent adjustment very low or critical. - Mains phase failure. - Motor underload (less than <0,5A) - Motor over load.	- Check the overcurrent adjustment. - Check the three phases. - Check the pump (dry well, dead head, etc.). - Check the pump (jammed impeller, over/under voltage conditions, overcharge, etc.)