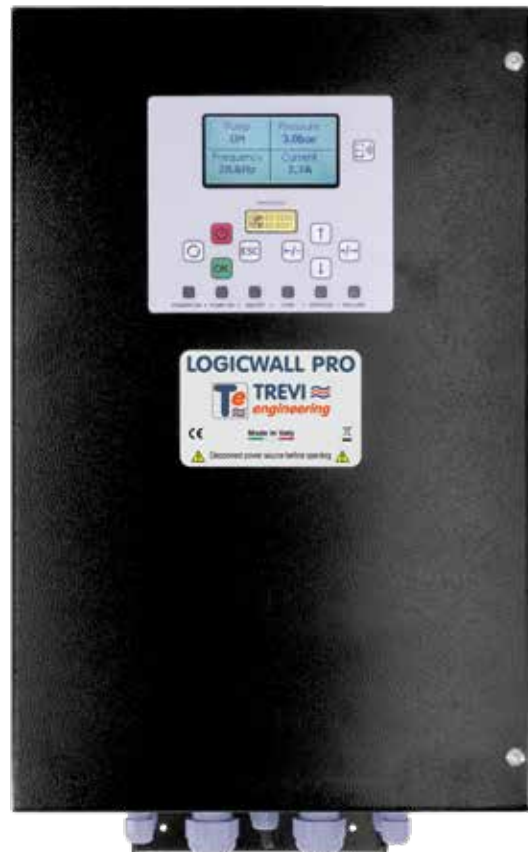




Made in Italy

LOGICWALL / LOGICWALL PRO

AIR COOLED VARIABLE FREQUENCY DRIVE FOR CONTROL AND PROTECTION OF THE PUMP

Logicwall M can control either single-phase pumps up to 3 HP or three-phase pumps 230V up to 4 HP.

Logicwall T and Logicwall PRO can control three-phase 400V pumps up to 20 HP.

It can be wall-mounted or installed directly on the pipe system.

Varies the number of motor revolutions of the pump depending to the water withdrawal from the system in order to maintain constant pressure and flow rate.

Allows to regulate the system pressure and the restart pump pressure.

Stops the pump in case of water shortage and protects it from dry running.

Is equipped with automatic restart in case of failure and anti-jamming function.

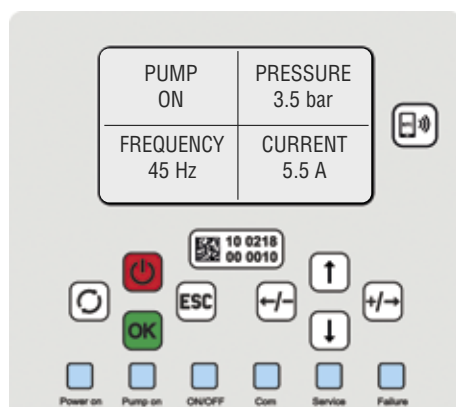
Ensures energy saving.

Can be installed on surface and submersible pumps.

Standardly supplied with a stainless steel 16 bar pressure sensor.

CONTROL AND SETTINGS PANEL

Setting up and starting the LOGICWALL is extremely easy and intuitive thanks to the large and bright display that shows the information and the keyboard that allows to quickly enter and change the operating parameters of the pump.

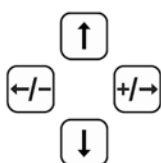


In the figure, clockwise, an example of visualization of the information divided into 4 quadrants:

- 1 - Pump status
- 2 - Real system pressure
- 3 - Working frequency of the inverter
- 4 - Absorbed current in Ampere



- ON/OFF BUTTON** Starts and stops the pump
- ESC BUTTON** To exit the programming screen
- OK BUTTON** To access programming and confirm data entry
- RESTART BUTTON** For manual resetting in the event of a fault



- UP ARROW** Menu scroll upwards
- RIGHT ARROW** Menu scrolling to the right and to increase parameter values
- DOWN ARROW** Menu scrolling downwards
- LEFT ARROW** Menu scrolling to the left and to decrease parameter values

- ☐ **Power on** Presence of voltage
- ☐ **Pump on** Pump is running
- ☐ **ON/OFF** Inverter on or off
- ☐ **Com** Communication between devices active
- ☐ **Service** Request for maintenance
- ☐ **Failure** Operating fault



- Serial number and data matrix of the device



- Data transmission with NFC technology. Download our APP and place the mobile phone near the icon to transfer the information from the inverter to your smartphone.

To save energy, the display turns off one minute after the last operation. To turn the display back on, simply press any button on the keypad.

The LEDs indicating the main phases of the device's operation remain lit even when the display turns off to allow the user to always have the status of the system under control.

OPERATING MODE

The Logicwall has three selectable operating modes:

> RESIDENTIAL

Standard operation.

Ideal for domestic installations and the realization of pressure booster sets.

> IRRIGATION

Allows to set two different operating and restart pressures of the pump.

Ideal for residential, public irrigation and agriculture.

> SWIMMING POOL/INDUSTRY

Allows to set up to two different fixed pump operating speeds.

Ideal for residential, public swimming pools and industry.

INSTALLATION AND STARTUP

Install the device on a wall near the pump (fig.1, 3) or directly on the pipe system (fig.2).

Connect the supplied pressure sensor, make the electrical connections and energize.

Arrange the use of an expansion tank sized according to the hydraulic characteristics of the system.

To start the pump, follow the instructions that will appear in sequence on the display of the device.

In case of a temporary blackout, the device will automatically rearm once the electricity returns.

AUTOMATIC RESTARTS

In case of stopping due to a water shortage, the device will automatically make 10 double attempts to rearm over the 24 hours following the failure, each lasting approximately 5 seconds to allow the pump and the system to reload if possible.

The user can try to rearm the device at any time by pressing the Restart button.

ANTI-JAMMING FUNCTION

If for any reason the pump remains idle for 24 consecutive hours, the device will start the pump for about 5 seconds.

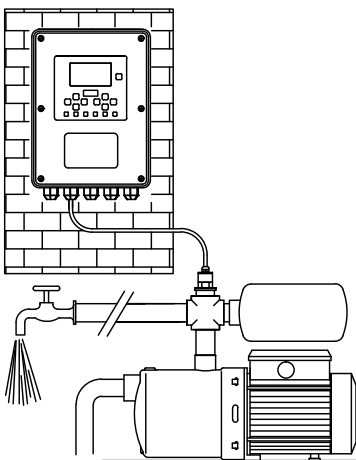


FIG.1

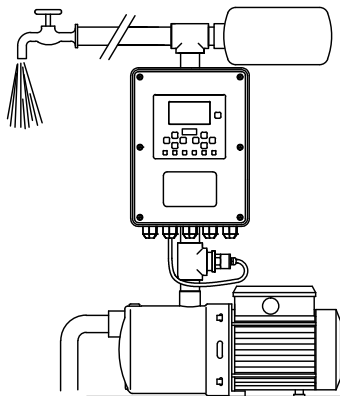


FIG.2

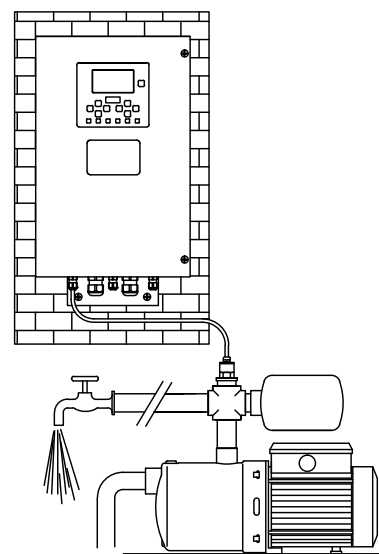
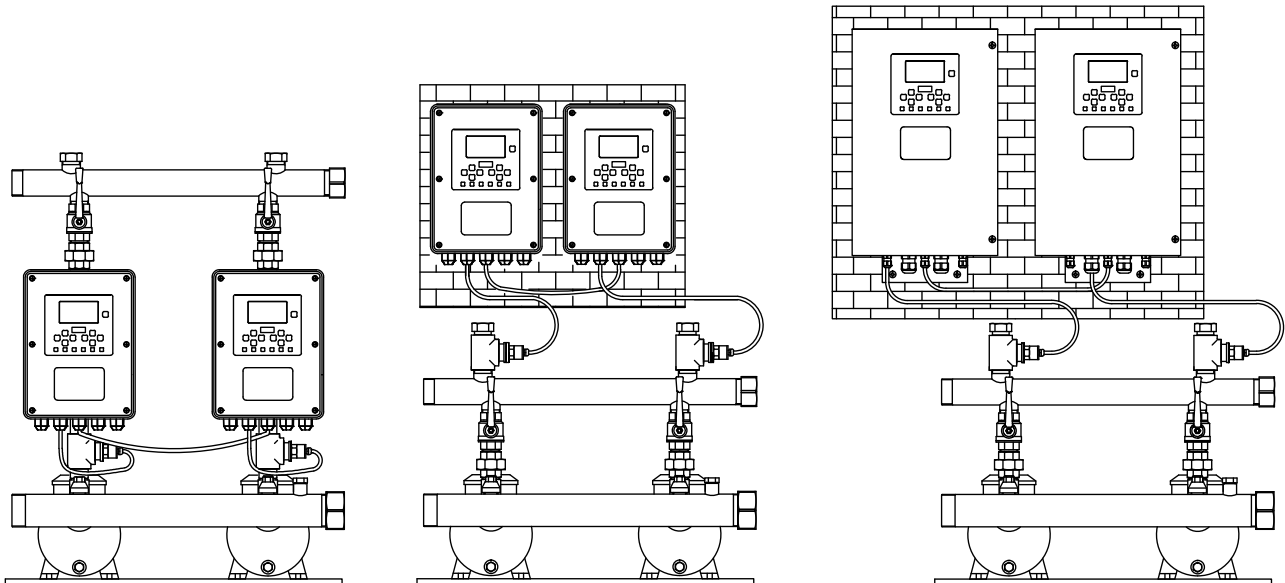


FIG.3

BOOSTER SETS

Logicwall allows the assembly of booster sets with up to 4 pumps.



INSTALLATION AND STARTUP

Connect the devices together using the serial port.

Program the Logicwall selected as Master following the instructions on the display.

Enable communication on the Master Logicwall that automatically will transfer the data to the other connected Logicwall units that will act as Slave devices. You can now start the booster set.

To change the system pressure value and restart pressure value, only act on the Master device even if the pump is running.

The system pressure value and restart pressure value set on the Master device will be automatically transferred to the Slave devices.

OPERATION

The Master device controls the Slave devices and determines the group operation.

Initially, the pump on which the Master device is installed starts first, but if the water demand is such that this pump is not able to maintain the set system pressure value, the second pump on which the Slave device is installed automatically starts.

Every time the pumps stop, the second and/or third, fourth pump start depending on how many pumps are installed, to return to the Master device and so on. The starting alternation and operation of the pumps of the pressure set ensures uniform wear of the pumps, which results in a longer life of the booster set.

In case of a temporary blackout, the pressure set will automatically rearm once the electricity returns.

PUMPS ALTERNATION DURING CONTINUOUS OPERATION

If for any reason one or more pumps are working continuously, in order to guarantee uniform wear of the pumps, every sixty minutes of continuous operation of a pump, a forced exchange will be made with another pump on stand-by.

The changeover respects the alternating sequence of all the devices.

VARIABLE MASTER

In case of malfunctioning of the Master device, the system will transfer the operation to the Slave device immediately following the Master.

If the original Master device has been reset, it will automatically be reintegrated into the system as a Slave device.

AUTOMATIC RESTARTS

In case of stopping due to a water shortage, the devices will automatically make 10 double attempts to rearm over the 24 hours following the failure, each lasting approximately 5 seconds to allow the pump and the system to reload if possible.

The user can try to rearm the devices at any time by pressing the Restart button.

ANTI-JAMMING FUNCTION

If for any reason the pumps remains idle for 24 consecutive hours, the device will start the pump for about 5 seconds without affecting the normal operation of the booster set.

MODELS AND TECHNICAL FEATURES

LOGICWALL

	LOOKWALL			
	SINGLE-PHASE /	SINGLE-PHASE THREE-PHASE		THREE-PHASE /
MODELS	M 8,5	M 11	M 13	T 6
Mains voltage	1 ~ 230 Vac	1 ~ 230 Vac	1 ~ 230 Vac	3 ~ 400 Vac
Acceptable voltage fluctuations	+/- 15%	+/- 15%	+/- 15%	+/- 15%
Frequency (automatic recognition)	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Single-phase pump motor	1 ~ 230 V	1 ~ 230 V	1 ~ 230 V	-
Three-phase pump motor	3 ~ 230 V Δ	3 ~ 230 V Δ	3 ~ 230 V Δ	3 ~ 400 V Y
Maximum pump motor current	8,5 A	11 A	13 A	6 A
Maximum single-phase pump motor power	1,1 kW - 1,5 HP	1,5 kW - 2 HP	2,2 kW - 3 HP	-
Maximum three-phase pump motor power	1,9 kW - 2,5 HP	2,2 kW - 3 HP	3 kW - 4 HP	2,2 kW - 3 HP
Motor soft start	Yes	Yes	Yes	Yes
Motor cable length up to 80 m	Yes	Yes	Yes	Yes
Maximum operating pressure	25 bar	25 bar	25 bar	25 bar
Adjustable system pressure	2 ÷ 25 bar	2 ÷ 25 bar	2 ÷ 25 bar	2 ÷ 25 bar
Adjustable restart pressure	1 ÷ 24 bar	1 ÷ 24 bar	1 ÷ 24 bar	1 ÷ 24 bar
Adjustable minimum flow	Yes	Yes	Yes	Yes
Maximum operating temperature	50 °C	50 °C	50 °C	50 °C
Protection degree*	IP65	IP65	IP65	IP65
Digital manometer	Yes	Yes	Yes	Yes
Digital ammeter	Yes	Yes	Yes	Yes
Dry running protection	Yes	Yes	Yes	Yes
Automatic restart	Yes	Yes	Yes	Yes
Anti-jamming function	Yes	Yes	Yes	Yes
Protection fuse	Yes	Yes	Yes	Yes
Irrigation mode (double pressure)	Yes	Yes	Yes	Yes
Pool/Industry mode (fixed speed)	Yes	Yes	Yes	Yes
Short-circuit protection between phases	Yes	Yes	Yes	Yes
Short-circuit protection between phases and earth	Yes	Yes	Yes	Yes
Amperometric protection	Yes	Yes	Yes	Yes
Voltage surge protection	Yes	Yes	Yes	Yes
Over-temperature protection	Yes	Yes	Yes	Yes
Pressure sensor fault detection	Yes	Yes	Yes	Yes
Flow switch connection	Yes	Yes	Yes	Yes
BMS protocol connection	Yes	Yes	Yes	Yes
Integrated NFC data transfer system	Yes	Yes	Yes	Yes
Connection for float switch and level probe	Yes	Yes	Yes	Yes
Remote ON/OFF connection	Yes	Yes	Yes	Yes
Remote “Pump on” connection	Yes	Yes	Yes	Yes
Remote alarm connection	Yes	Yes	Yes	Yes
Communication between devices	Yes	Yes	Yes	Yes
Overall dimensions (L x H x W) and weight	200 x 275 x 125 - 8 kg			200 x 275 x 125 - 8 kg

* Device protection degree IP65, cooling fan IP20.

➤ Note: The minimum and maximum values of the system pressure and the restart pressure vary according to the pressure sensor used.

➤ Three-phase 230V versions with power up to 27 Ampere are available on request.

LOGICWALL PRO

[illegible]

A 16 bar stainless steel pressure sensor is standardly supplied.