



Read carefully before proceeding with product assembly and commissioning operations. For the electronic pump, refer to its manual.

## 1. APPLICATIONS AND OPERATION

The GENYO electronic controller commands the starting and stopping of single-phase electric water pumps whenever a tap or valve connected to the installation is opened or closed, respectively. When the pump is started, it keeps running as long as any connected tap remains open, supplying the network with the required flow at the related pressure.

## 2. CONSTRUCTION CHARACTERISTICS

- Inlet connection : R 1
- Outlet connection : R 1
- Non-water hammer check valve.
- Dry-running protection system.
- Pressure gauge.
- Manual start button (RESET).
- Power supply LED (POWER).
- Pump switch-on LED (ON).
- Safety system activation LED (FAILURE).

## 3. SPECIFICATIONS

- Power supply voltage : 1~ 220-240 V  
(Version 1~ 115-125 V upon request)
- Maximum current : 8 A
- Max pump power : 1500 W (2 HP) at 1~ 220-240V  
735 W (1 HP) at 1~ 115-125V
- Frequency : 50/60 Hz
- Protection class : IP 65 (\*)
- Ambient temperature : 0/+60° C (\*)
- Liquid temperature : 0/+60° C (\*)
- Max flow rate : 10,000 l/h
- Starting pressure : Model F12: 1.0 ± 0.2 bar  
Model F15: 1.6 ± 0.2 bar  
Model F22: 2.4 ± 0.2 bar
- Max operating pressure : 10 bar

(\*) Provided the cable glands and screws in cover 1 have been suitably tightened (for the cross section of the cable, see 5.3 Electrical Connection)

## 4. HANDLING AND PRELIMINARY INSPECTION

Handle with care.

Falls and collisions can damage the product.

Before proceeding with installation, make sure GENYO shows no visible signs of damage, otherwise contact the reseller.

## 5. INSTALLATION

GENYO must be assembled and installed by personnel qualified in accordance with the regulations locally in force.

### 5.1 Pressure gauge assembly (see Fig.1)

The pressure gauge is supplied in a kit for assembly.

Mount the pressure gauge using the two screws provided.

### 5.2 Water Connection (Fig.2)

GENYO must always be installed in the vertical position, with the arrows pointing upward, connecting the R1 threaded inlet to the pump's outlet and the R1 threaded outlet to the network.

Use flexible pipes for connection to the water network, protecting the appliance from any bending loads and vibrations, a ball tap to isolate the pumpset from the network, a tap (A) on the same level as GENYO and a foot valve (Fig.2).



Before starting up the unit, fill the suction circuit with water as specified in the pump's manual.

**WARNING.** The maximum height of the column of water between the pump and the highest point in the system will depend on the model installed. The maximum pressure of the pump (closing contact pressure) must exceed a value that depends on the model installed. Both these limits are specified in the table below.

MODEL	MAX. COLUMN OF WATER	MAX. PUMP PRESSURE GREATER THAN
MODEL F12	6 m	2 bar
MODEL F15	12 m	3 bar
MODEL F22	20 m	4 bar

### 5.3 Electrical Connection (Fig.3)



The connections must be made by qualified personnel.



Install a high-sensitivity differential switch (0.03 A) for protection against lethal electric shock. First of all, connect the ground conductor.

Make sure that the mains voltage corresponds to the rated voltage. Remove the cover 1 from the electronic board and make the electrical connection according to the instructions shown on the plate 2 GENYO can also be used with a single-phase pump with electrical input greater than 8 A, or a three-phase pump, using an auxiliary remote control switch (230 V coil). In this case the electrical connections must be made as shown in the diagram, Fig. 4.

**WARNING.** Power supply voltages other than those specified or improper connections can damage the electronic circuit irreparably.



H07RN - F 3G1 type cables (Ø 8 ± 0,7 mm) must be used in order to ensure IP 65 protection.

## 6. START UP

- 1) Check that the pump is primed properly, then partially open a tap in the user circuit.
- 2) Connect GENYO to the power mains; the power LED will light up (POWER).
- 3) The pump will start up automatically and within 20 to 25 seconds the system should reach approximately the maximum pressure delivered by the pump. While the pump is running, the corresponding LED (ON) will remain illuminated.
- 4) Close the tap mentioned under point 1). After 10-12 seconds the pump will stop running, but the power supply LED (POWER) will remain lit. Any malfunctions occurring after these operations will be caused by improper priming or failure to prime.

## 7. AUTOMATIC RESET FUNCTION

If the device goes into failure mode, this function will execute a series of automatic starts to attempt to restore operation without any manual intervention via the RESET button.

The system operates as follows: The appliance is in failure mode due to water failure, for example; after 5 minutes in this condition the system will do a 25-second RESET, attempting to prime the pump. If the system is able to prime the pump, the failure will disappear and the pump will be ready to operate without any problems. However, if the failure persists, the system will do another RESET after 30 minutes, and will continue in this manner systematically every 30 minutes for 24 hours. If the failure still persists after all these attempts, the system will remain in this condition until the problem has been resolved by manual intervention.

## 8. TROUBLESHOOTING

### 1.- THE PUMP DOES NOT STOP:

- A) Water loss exceeding 3 l/min. Make sure that all the taps along the pipeline are closed.
- B) Electronic board malfunction: replace the electronic board.
- C) The electrical connection is incorrect: refer to the instructions in Fig.3.

### 2.- THE PUMP DOES NOT START:

- A) The pump is not primed; the protection against dry running has stepped in and the FAILURE LED is on: prime the water pipe, drain the system water by opening tap (A) on the same level as GENYO to decrease the pressure of the water column over it (Fig.2), and check by pressing the manual start button (RESET).
- B) The pump has shut down: the safety system has stepped in and the FAILURE LED is on. If you press the manual start button (RESET) the LED (ON) lights up; if the pump does not start call customer service.
- C) Electronic board malfunction: disconnect the pump from the electrical mains and re-connect it; the pump should start, if it does not replace the electronic board.
- D) No power supply: check the electrical connections, the POWER LED must be illuminated.
- E) The pump delivers insufficient pressure, the safety system has stepped in and the corresponding LED (FAILURE) is illuminated: make sure that the pump pressure corresponds to the pressure value specified in the relevant table in the section titled "Water Connection".
- F) Air is entering the pump through the suction side: the pressure is much below normal, with constant fluctuations. The safety system will step in and stop the pump, the FAILURE LED will light up. Check the seal and connections in the suction pipe.

### 3.- THE PUMP KEEPS STARTING AND STOPPING:

There is a small leak in the delivery pipeline: check for any dripping taps or running toilets.

## 9. EC DECLARATION OF CONFORMITY

Lowara srl., with headquarters in Montecchio Maggiore - Vicenza - Italy, hereby declares that the following product:

**GENYO 8A / F12, F15, F22 in the versions with (out) 0.5 m cable and 1.5 m power cable and plug**

complies with the provisions of the following European Directives and with the regulations transposing them into national law:

- Low Voltage Directive 206/95/EC (Year of first use of the mark: 2006)
- Electromagnetic Compatibility Directive 2004/108/EC and complies with the following technical standards:
- EN 60730-2-6, EN 61000-6-2:2005, EN 61000-6-3:2001

Montecchio Maggiore, 9.3.2010

Amedeo Valente  
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