



AquaDomus

Integrated pressurization system for residential
commercial and domestic application



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What is it



Aquadomus is an integrated
'Plug&Play' system to **manage
water pressurization for domestic
and residential applications.**

It consists of a Pentax multistage pump, a permanent magnet synchronous motor, an electronic inverter control, an expansion tank, a non-return valve and a pressure sensor.

The electronic control (E-IPFC) manages the operation of the system to maintain constant pressure even if the conditions of use change.

Thus Aquadomus is **only operated when and as much as needed, avoiding useless energy waste and extending life of the components** connected to the system.

How it works





Aquadomus is only operated **when and as much as needed, avoiding useless energy waste**

The pressure of the system is constantly monitored by the pressure sensor that sends the **control signal to the inverter in the Aquadomus**; in the event of water request, the sensor detects the simultaneous pressure drop of the system and activate the start of the pump to restore the set pressure.



Similarly, in the case of zero flow, the inverter detects an immediate and contextual pressure rise, slowing it down in order to maintain the set pressure, a process which, in the absence of water demand, continues until the Aquadomus stops.

Advantages



Adaptable performances

The extreme flexibility of the Aquadomus pressurization unit offers the user an **infinite combination of pressures and flows** within the working range with a maximum pressure of 6 bar and flow of 5.4 m³/h.



Energy saving

Thanks to the frequency modulation of the inverter, the unit **constantly supplies the specific water request**, guaranteeing substantial energy savings; in addition, Aquadomus is equipped with a power limiter so, in its various uses, the unit will never absorb a power of more than 800W for not having power exceeding the limit of the energy supply contract.



Easy installation

The extreme compactness of the unit allows the user to install in **any domestic place**; the dedicated app allows the user to set up and control continuously the units.





Performances

Thanks to frequency control, the multistage pump of Aquadomus group is able to cover a wide performance range with flow up to 5.4m³/h and head up to 6 bar.

Dedicated App

Aquadomus group can be driven and controlled by a dedicated app “**Pentax IPFC**” available for Android and IOS, allowing the possibility to monitor, protect, program (even remotely) the Aquadomus, showing on-line all the working parameters.

Pressurization system

A very simple electrical connection allows to put multiple Aquadomus set in parallel (up to 8 units) to create a pressurization group without any additional interface card.

Details

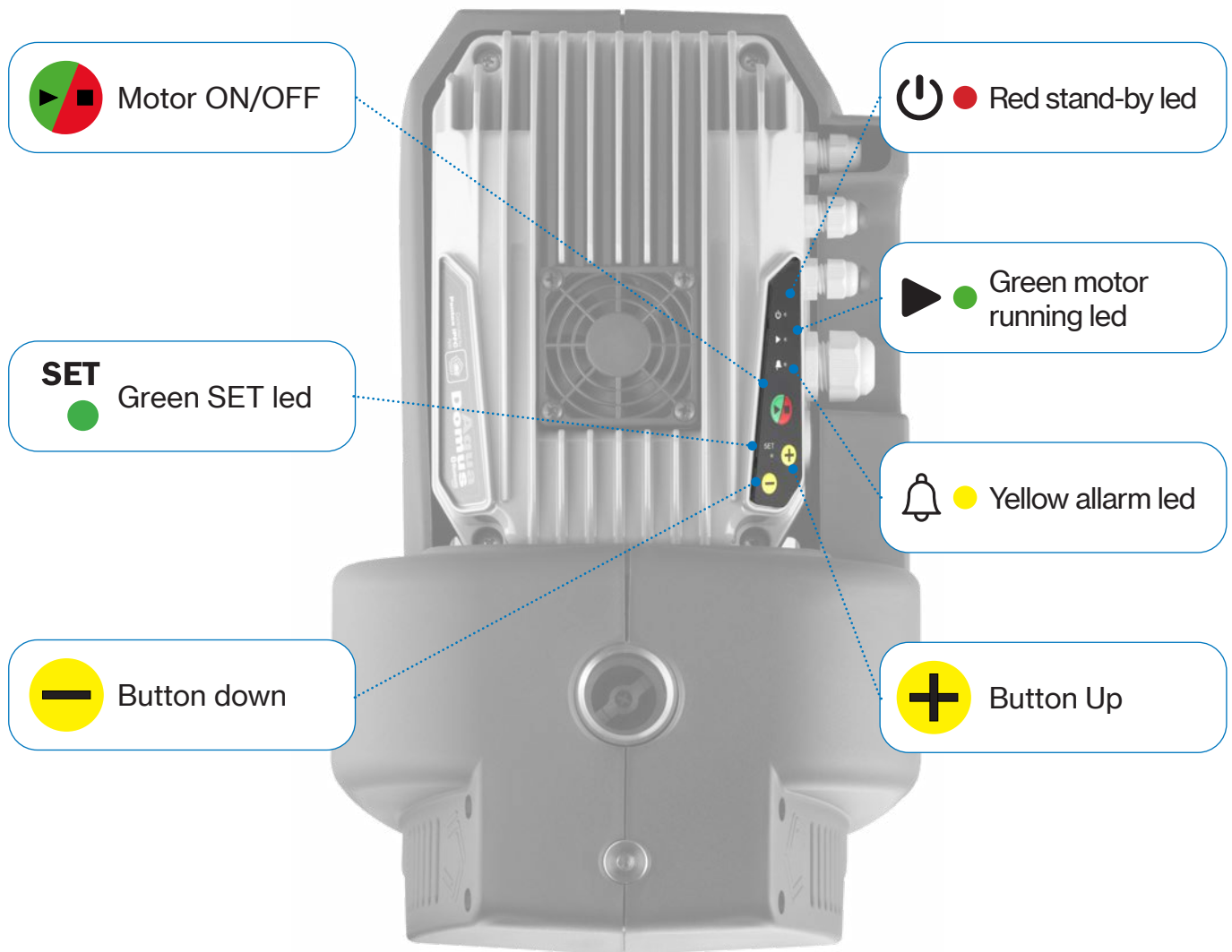


Description of the system

1	Input/Output cable glands	6	Discharge plug
2	E-IPFC control panel	7	Delivery pipe
3	Filling plug	8	Suction pipe
4	Pressure tank air connection	9	Power supply cable
5	Vent plug	10	Ground anchoring points

Control panel

E-IPFC Pentax



Button/Led

Adjustable parameter (Button) / indicated (Led)

Button/Led	Adjustable parameter (Button) / indicated (Led)
Red stand-by led	Power supply voltage
Green motor running led	Working state of the engine (whether running or stationary)
Yellow allarm led	Variable frequency according to the type of alarm
Motor ON/OFF	Starting and stopping the engine
Green SET led	Possibility to modify a working parameter
Up/down button	Increase or decrease of a set value

Technical data

Description

Water supply and pressurization system consisting of Pentax multistage pump, permanent magnet synchronous motor, electronic inverter control, expansion tank, non-return valve and pressure sensor.

Application fields



Domestic



Residential/
Commercial



Allowed fluids

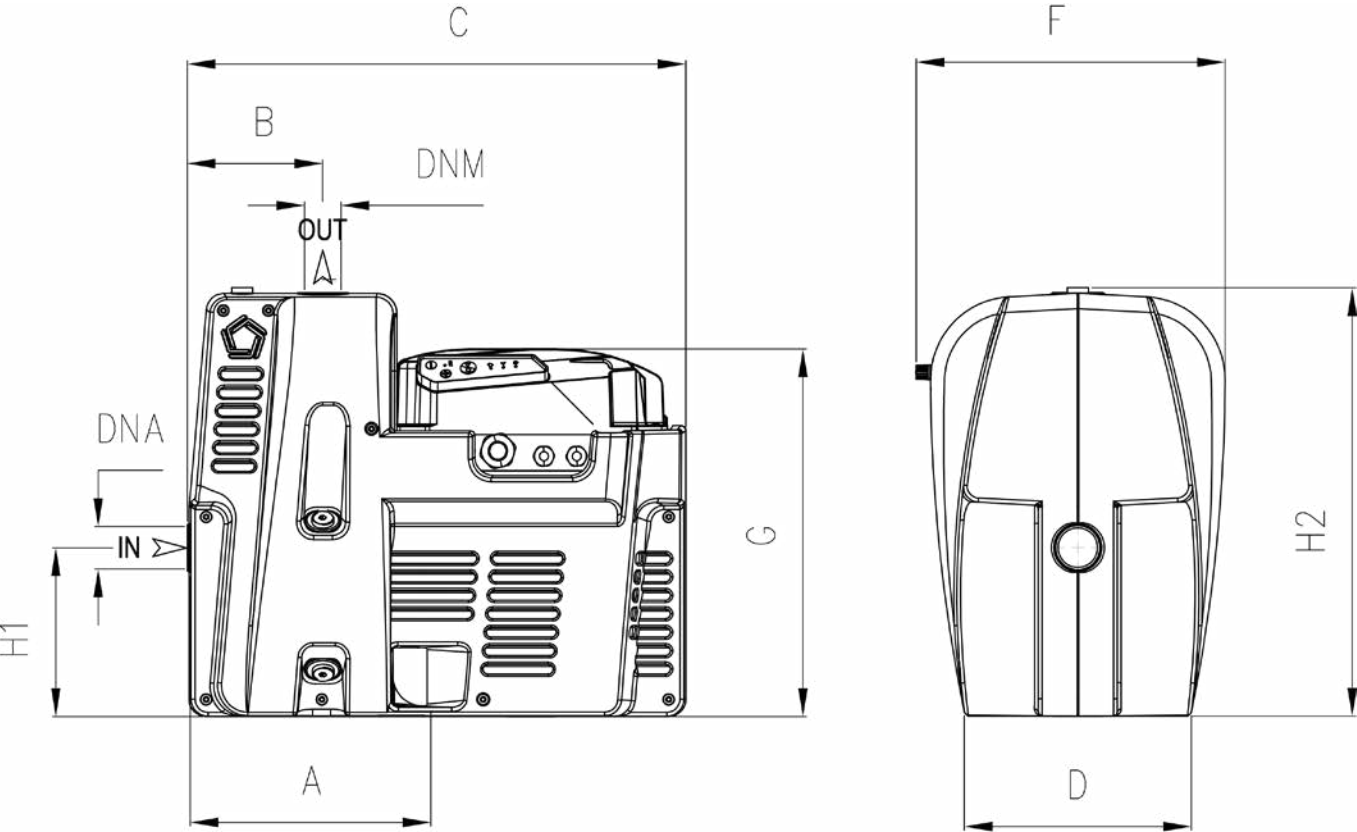
Clean, non-aggressive water, without suspension solids.



Technical data

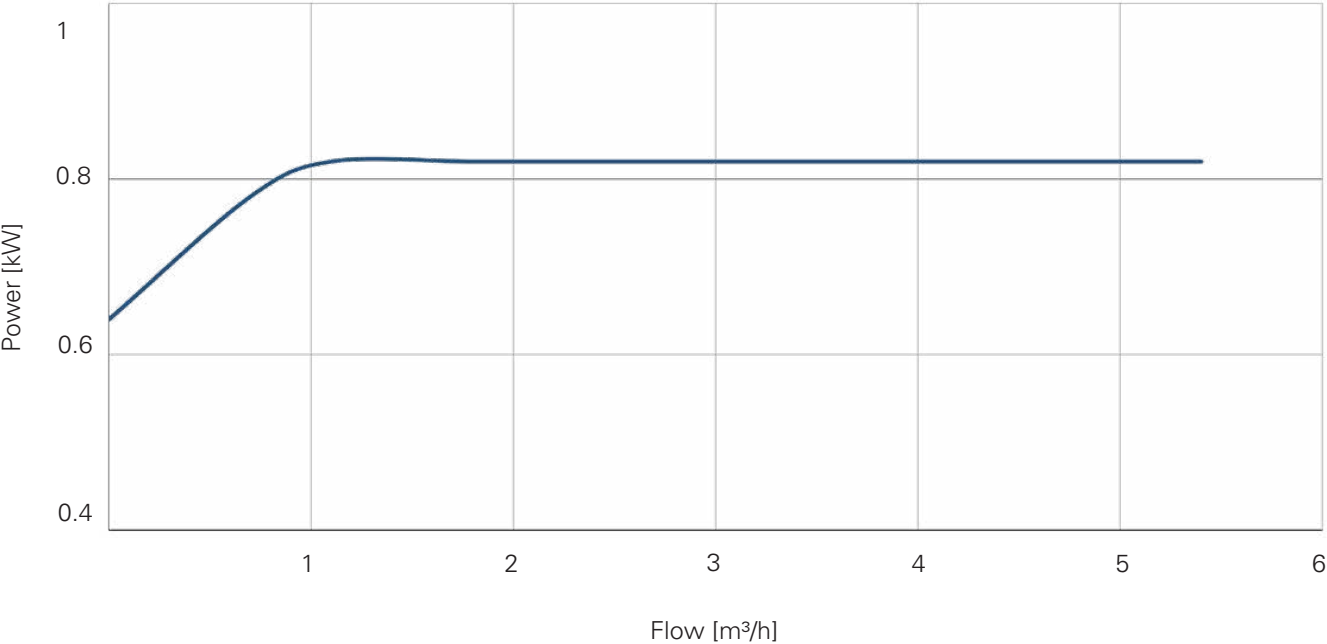
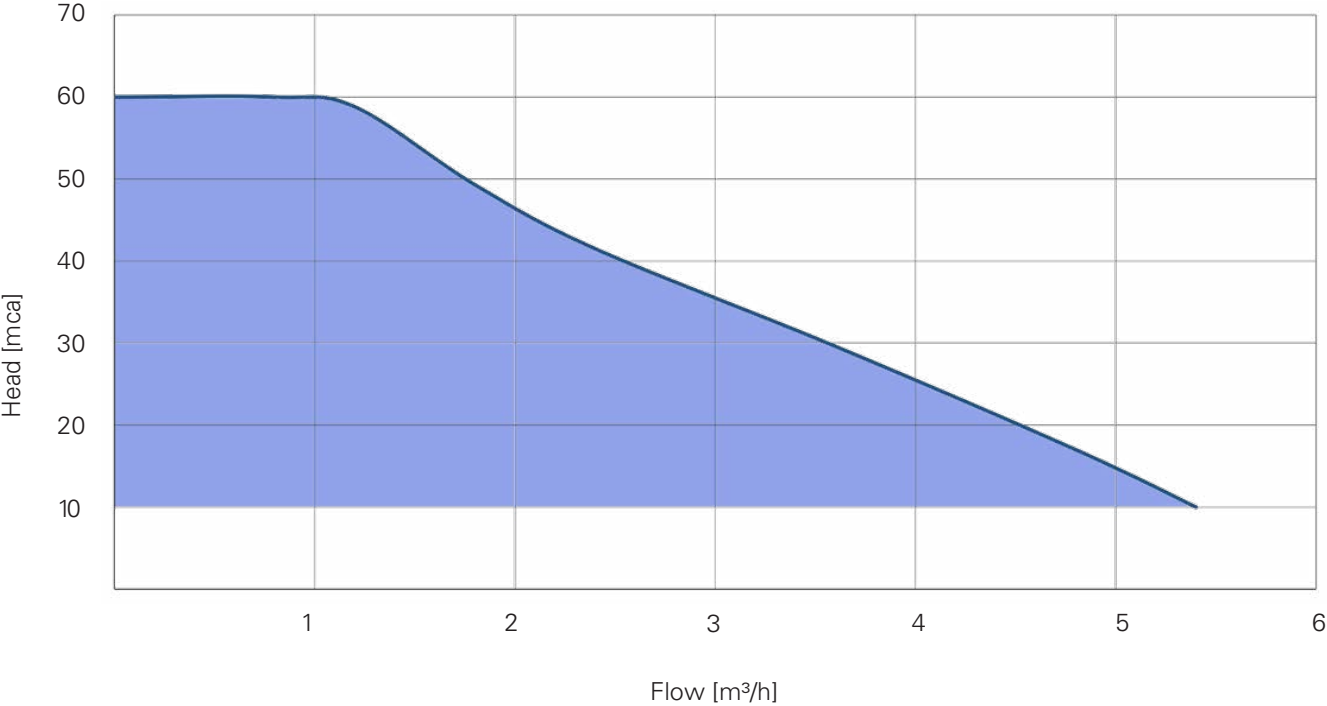
Liquid temperature	-5 ÷ +35 °C
Rated pressure	max 7 bar
4 poles synchronous motor with permanent magnet	4200 RPM
Input voltage	1~ 230V-50Hz 1~ 220V-60Hz
Insulation class	F
Protection degree	IPX4

Dimensions



DIMENSIONS (mm)										Kg
A	B	C	D	F	G	H1	H2	DNA	DNM	
166,8	103	377	173	235	280	128	129,5	1" G	1" G	11

Performance





Pentax IPFC

Dedicated app for control and programming of Aquadomus



App functionality

- **Monitor:** monitoring several operative parameters. Obtaining energy consumption statistics and check alarm history
- **Program:** create programs, save them in the archive, copy them to other devices and share them among multiple users
- **Archive:** create reports with the ability to insert notes, images and send them by e-mail or keep them in the digital archive
- **Remote:** remotely control an Aquadomus via wi-fi or GSM by using a nearby smartphone as a modem
- **Manuals:** access manuals and supplementary technical documentation
- **Guide:** receive online assistance on parameters and alarms



AquaDomus



COMPANY WITH QUALITY, ENVIRONMENT, HEALTH
AND SAFETY MANAGEMENT CERTIFIED SYSTEMS

ISO 9001: Certificate No. 50 100 3634

ISO 14001: Certificate No. 50 100 12552

ISO 45001: Certificate No. 50 100 14960



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