



# AquaDomus

Integrated pressurization system for residential  
commercial and domestic application

# 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 no return valve and a pressure sensor.

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

Thus Aquadomus is only operated when and what is needed avoiding useless energy waste

and extending life of the components connected to the system.

# How it works





**AquaDomus** is only operated **when and what is 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 a 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 for maintaining 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 a flow of 5.4m<sup>3</sup>/h .



## Energy saving

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



## Easy installation

the extreeme compactness of the unit allows the user to install in any domestic place, the dedicated app allows the user to set up and control continously the units





## Performances

Thanks to the frequency control, the multistage pump of **AquaDomus** group is able to cover a wide range of performances with flow up to 5.4 m<sup>3</sup>/h and head up to 6 bars



## Dedicated app

**AquaDomus** group can be driven and controlled by a dedicated app "Pentax IPFC" available for Androids and IOS, allowing the possibility to monitor, protect, programming (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 groups without any additional interface card .

# Details



## Description

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

# Control Panel

E-IPFC PENTAX



Motor ON/OFF

**SET**



Green Led SET



Button DOWN



Red Led  
STANDBY



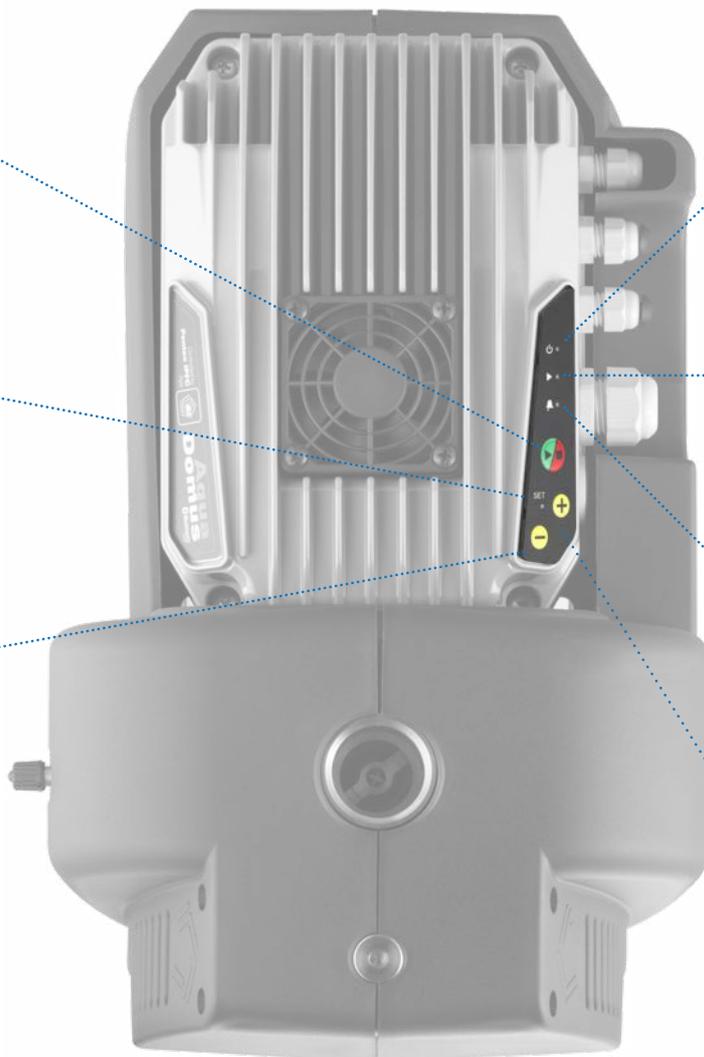
Green Led  
Motor RUNNING



Yellow Led  
ALARM



Button UP



# Technical Features

## Technical datas



### Description

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

### Application



Domestic



Residential-  
Commercial

### Allowed fluids

Clean water, non aggressive, without suspension solids



### Dati Tecnici

Fluid temperature	-5 ÷ +35 °C
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Rated pressure	max 7 bar
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4 poles synchronous motor with permanent magnet	max speed 4200 RPM
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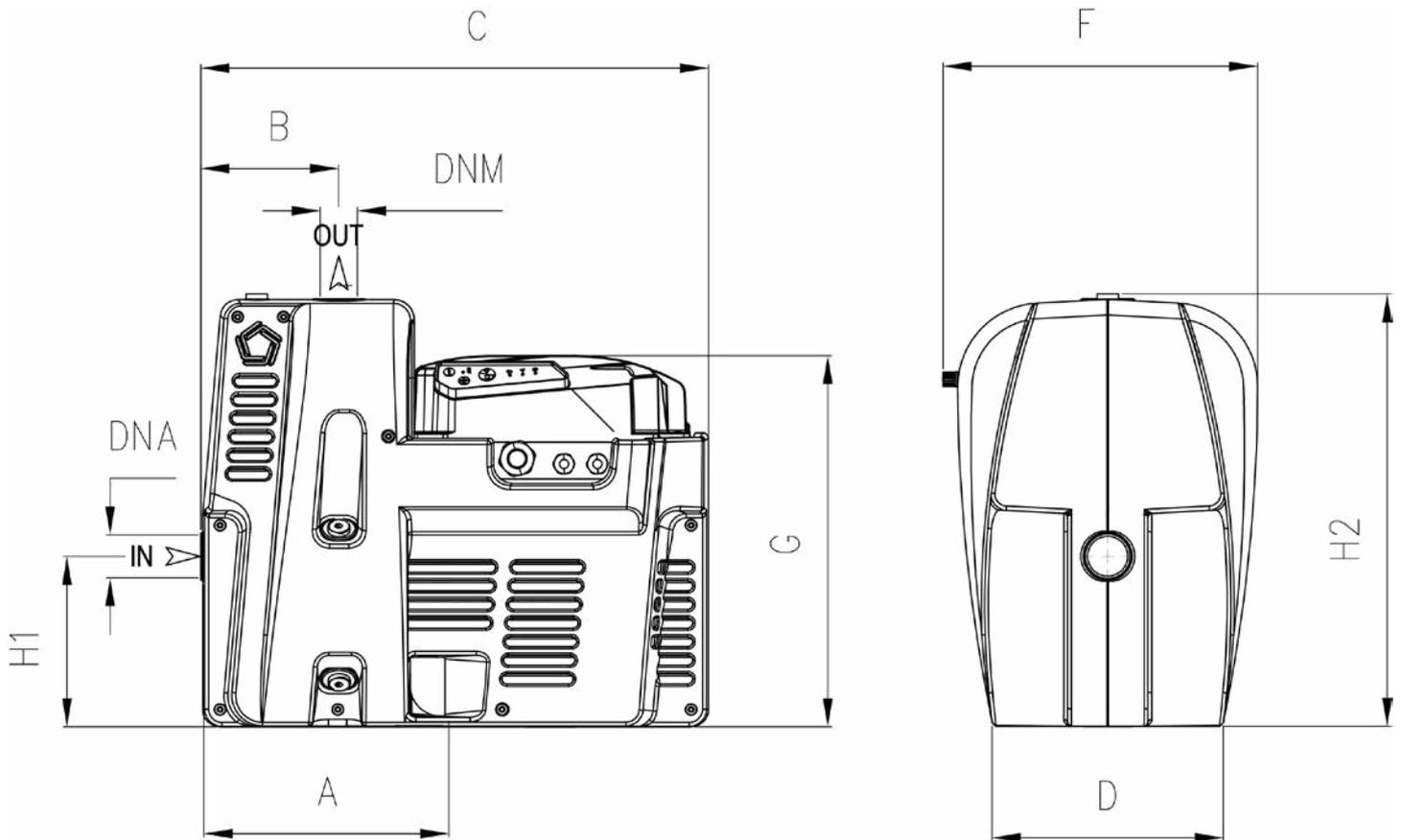
Input voltage	1~ 230V-50Hz
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Insulation Class	F
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Protection grade	IP44
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# Technical Features

## Dimensions

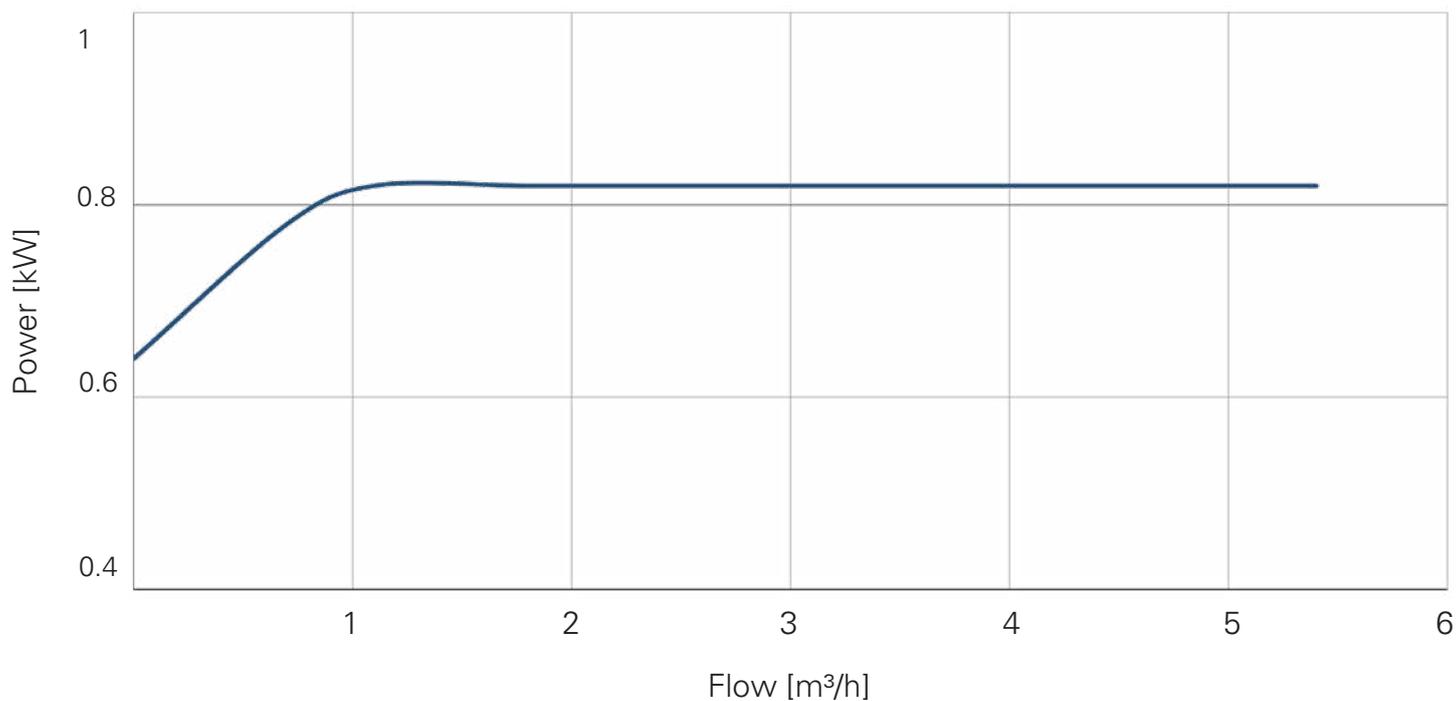
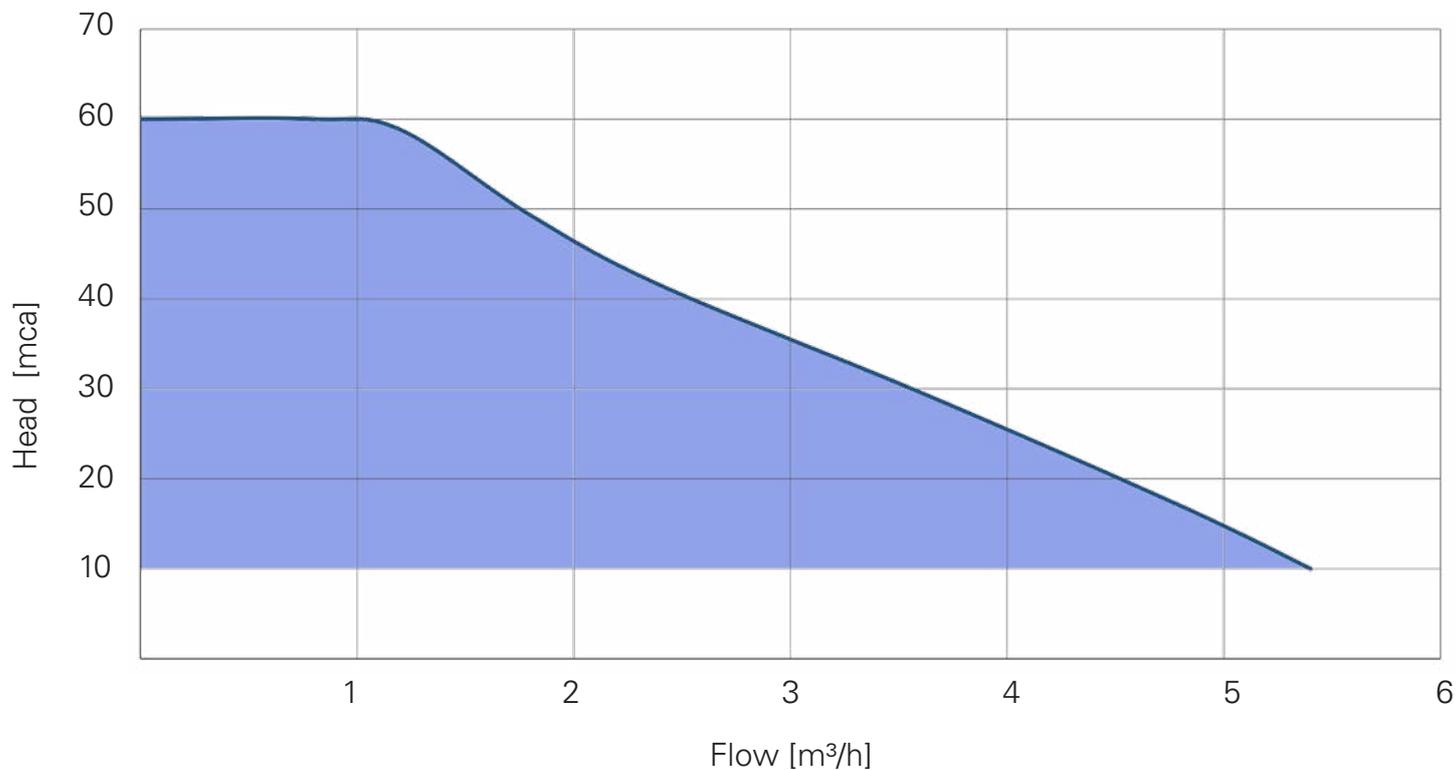


### Dimensions (mm)

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

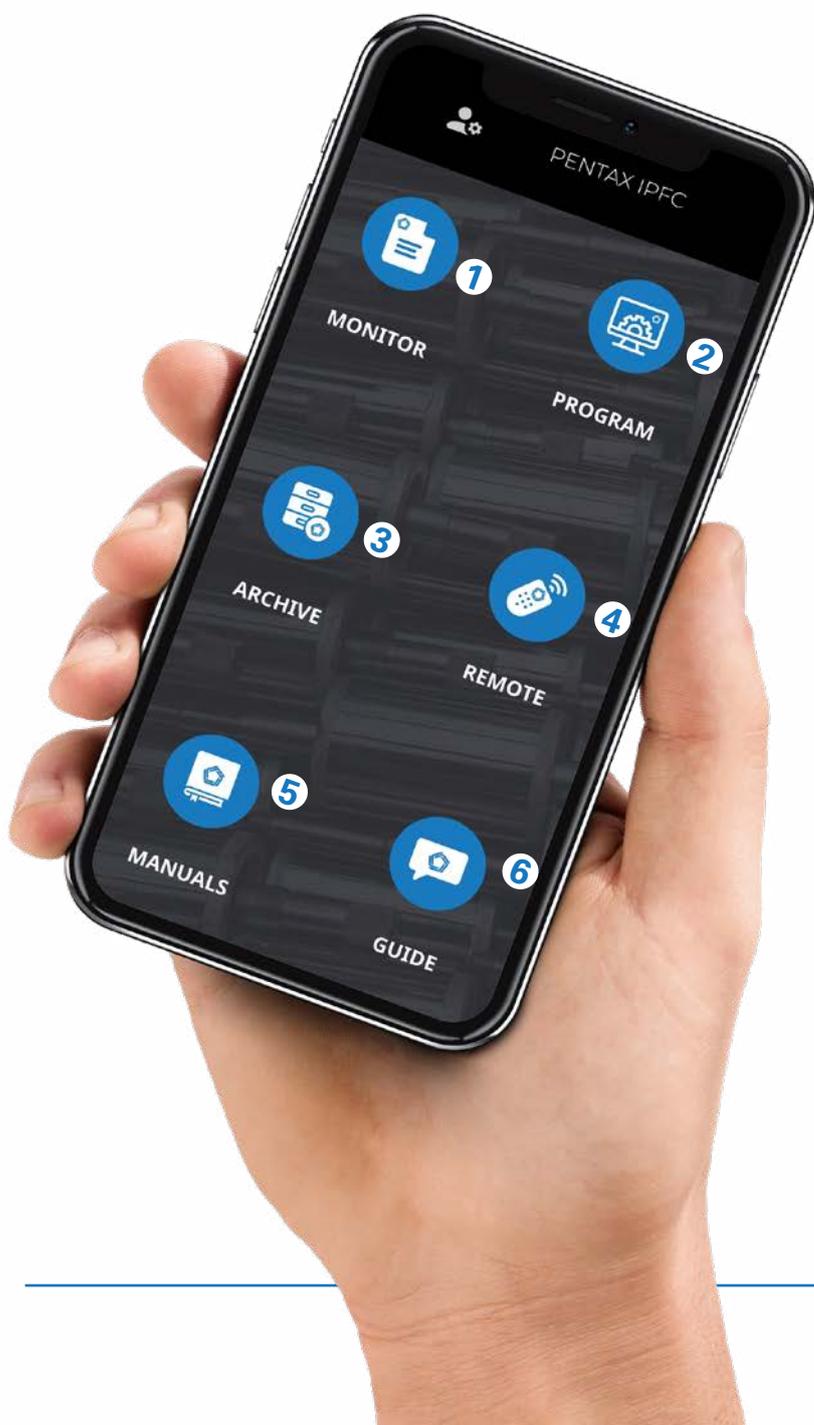
# Technical Features

## Performance



# Pentax IPFC

A dedicated app to control and setting Aquadomus



## App Functionality

### 1 Monitoring

Monitoring several operative parameters.

Obtaining energy consumption statistics and check alarm history.

### 2 Programming

Create programs, save them in the archive, copy them to other devices and share them among multiple users.

### 3 Archive

Create reports with the ability to insert notes, images and send them by e-mail or keep them in the digital archive.

### 4 Controllo Remoto

Remotely control an **AquaDomus** via wi-fi or GSM by using a nearby smartphone as a modem

### 5 Manuals

Access manuals and supplementary technical documentation

### 6 Guide

Receive online assistance on parameters and alarms



Company with certified quality,  
environment, health and safety at work systems

**ISO 9001**: Certificate No 50 100 3634

**ISO 14001**: Certificate No 50 100 12552

**OHSAS 18001**: Certificate No 18-104-807



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