



# 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 change.

Thus Aquadomus is operated only when and as long as needed to avoid any useless waste of energy and, as consequence, to extend the life of the components connected to the system.

# How it works





**AquaDomus** is operated **only when and as long as needed to avoid any useless waste of energy.**



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 starts 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 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 provides the user with 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 and guarantees substantial energy savings. In addition, **AquaDomus** is equipped with a power limiter so, in its various duty points, the unit will never absorb a power higher than 800W thus not exceeding the limit of the domestic energy supply.



## Easy installation

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





## 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 "Pentax IPFC" dedicated app available for Androids and IOS; this app makes possible to monitor, protect, programme (even remotely) the AquaDomus and to show 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 pressurization groups without any additional interface control.

# Details



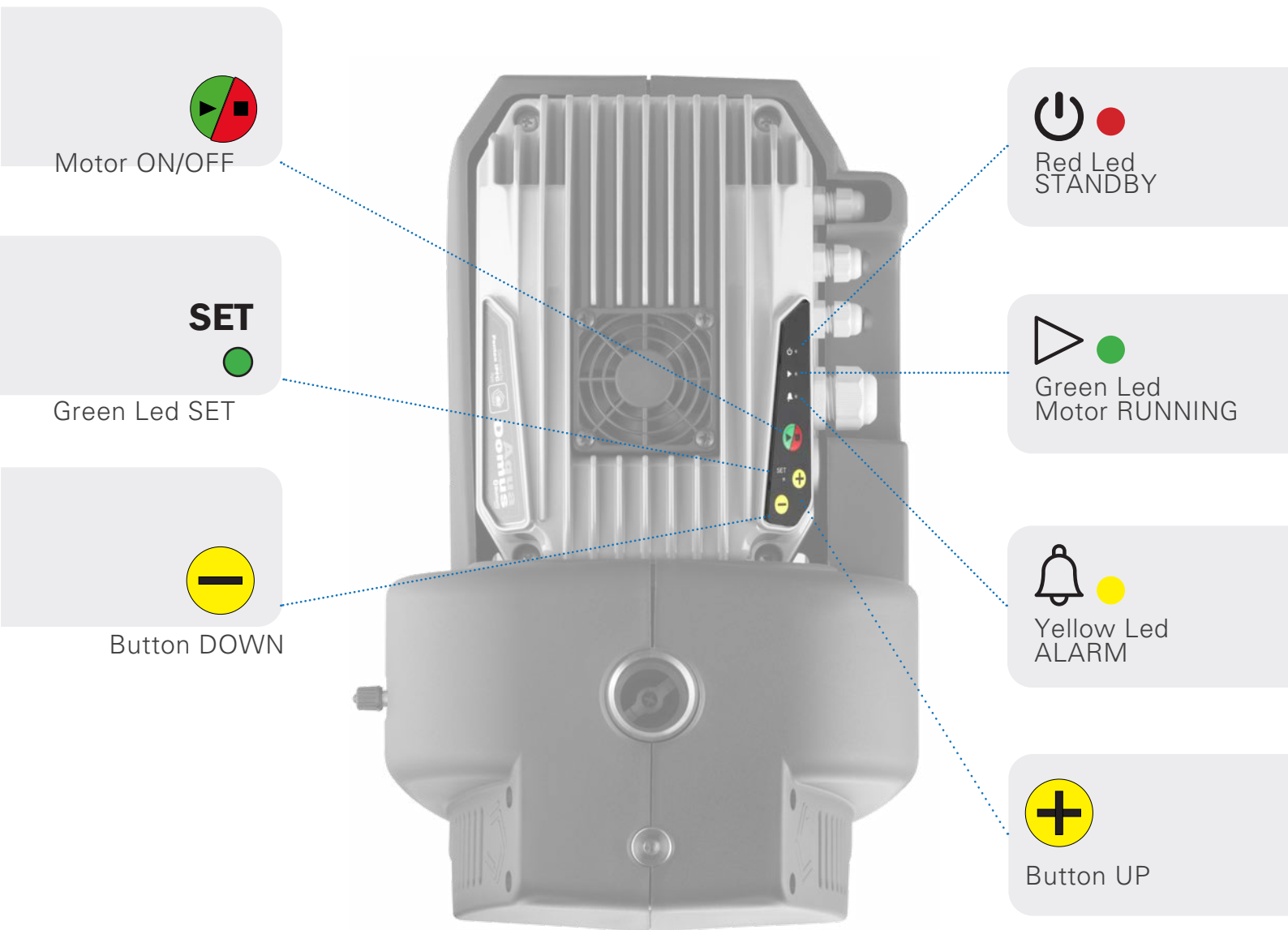
## Description

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 data



### 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 and not aggressive water without suspension solids



### Technical data

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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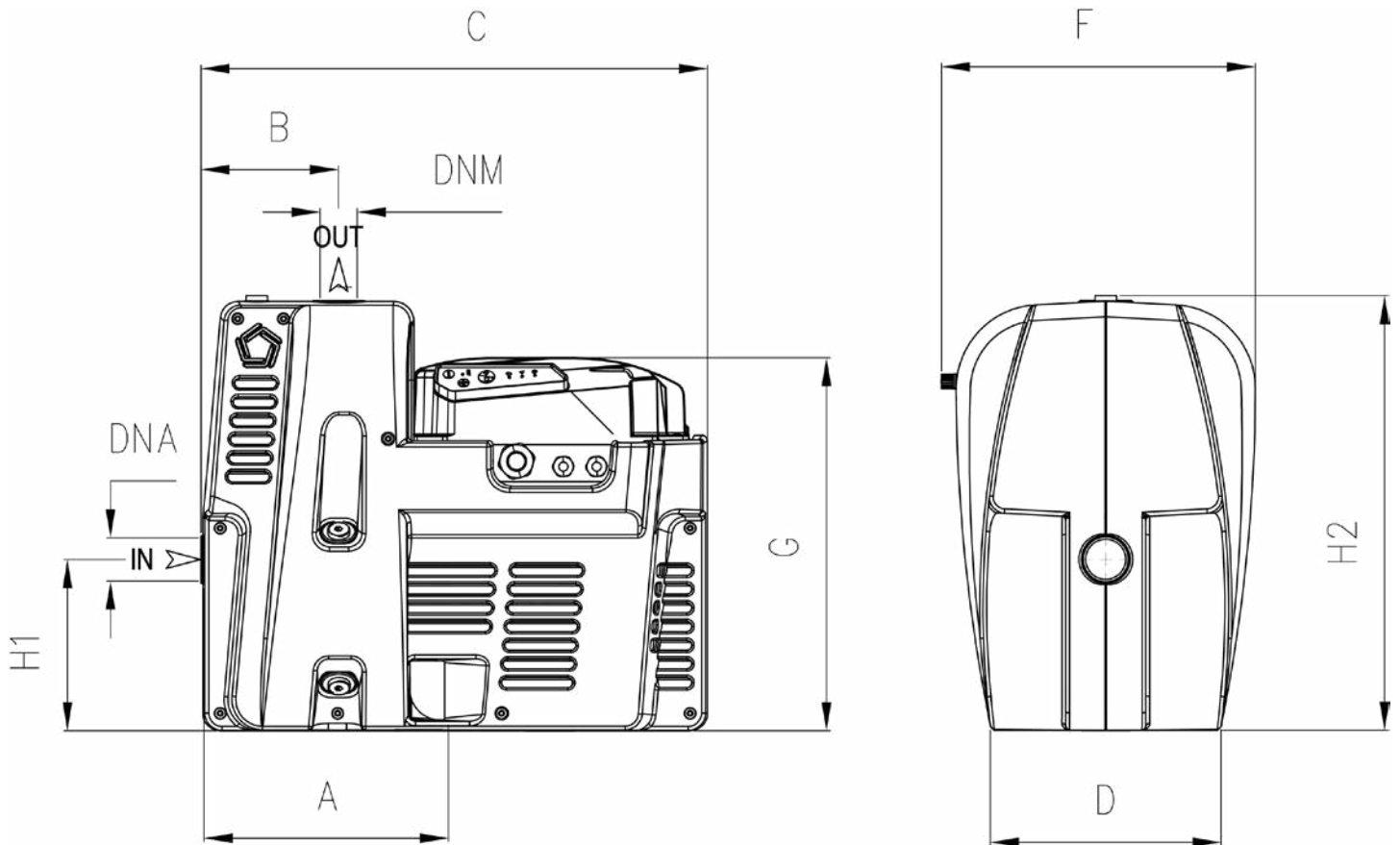
Input voltage	1~ 230V-50Hz
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Insulation Class	F
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Protection grade	IP44
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# Technical Features

## Dimensions

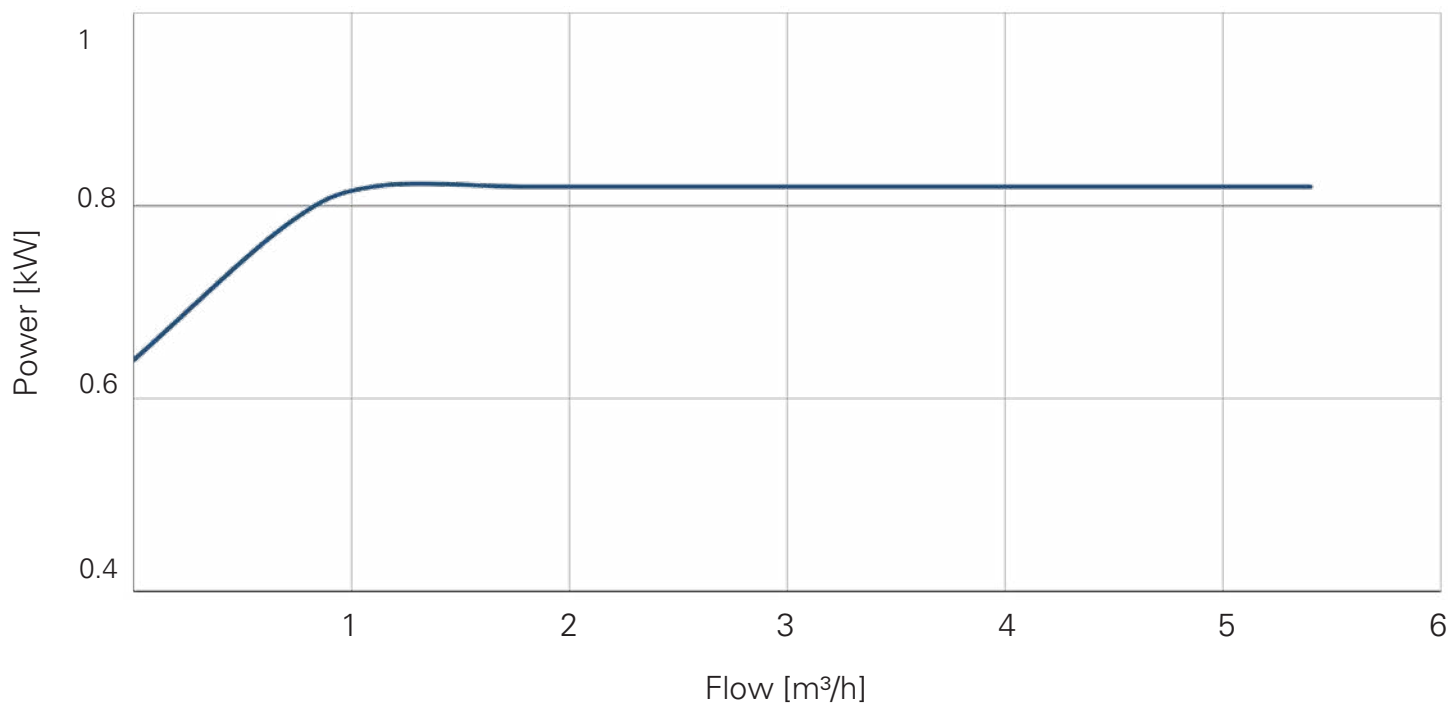
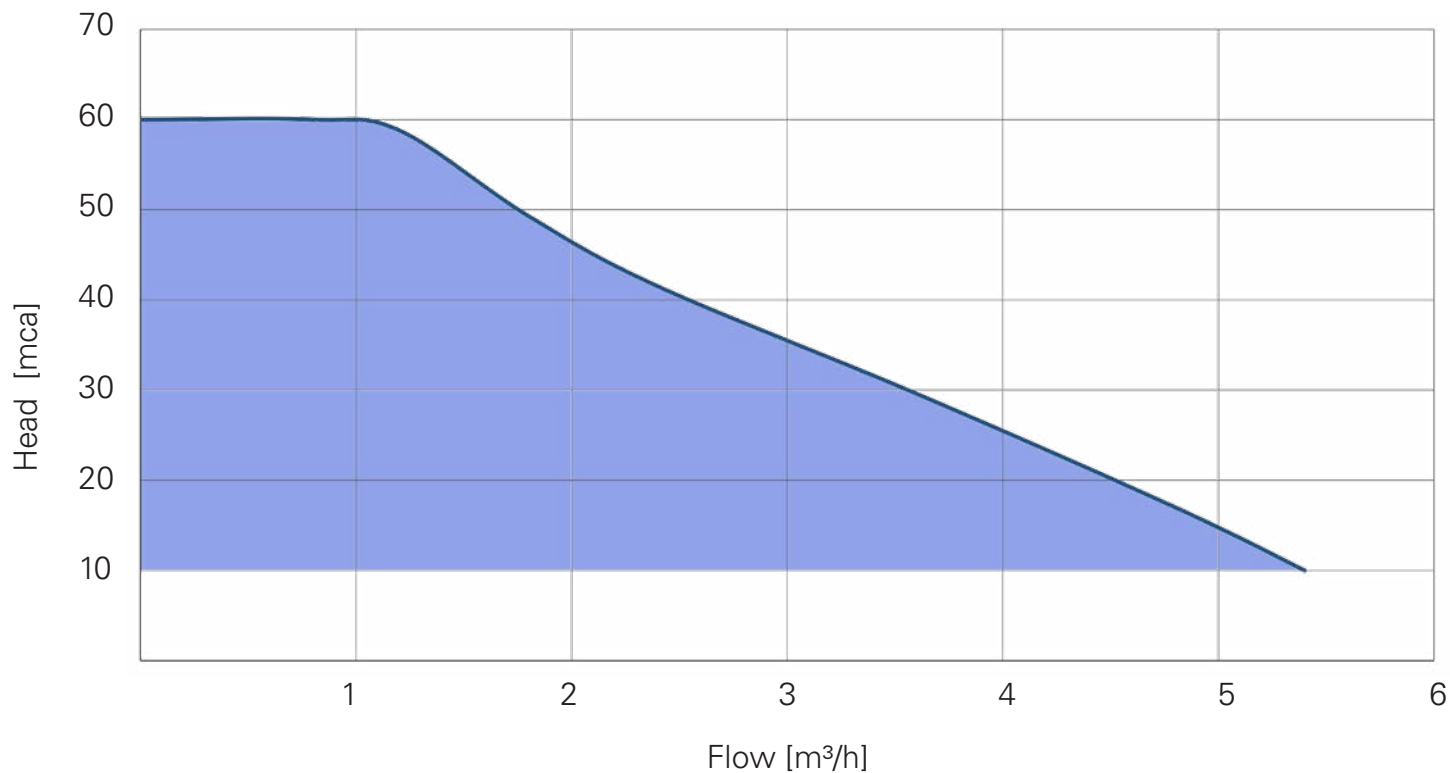


### Dimensions (mm)

A	B	C	D	F	G	H1	H2	DNA	DNM	Kg
166,8	103	377	173	235	280	128	325	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 checking alarm history.

### 2 Programming

Creating programs, saving them in the archive, copying them to other devices and sharing them among multiple users.

### 3 Archive

Creating reports with the ability to insert notes, images and sending them by e-mail or keeping them in the digital archive.

### 4 Remote Control

Remotely controlling 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

Receiving online assistance on parameters and alarms



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