



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 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 5.4 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





Performance



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 m³/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

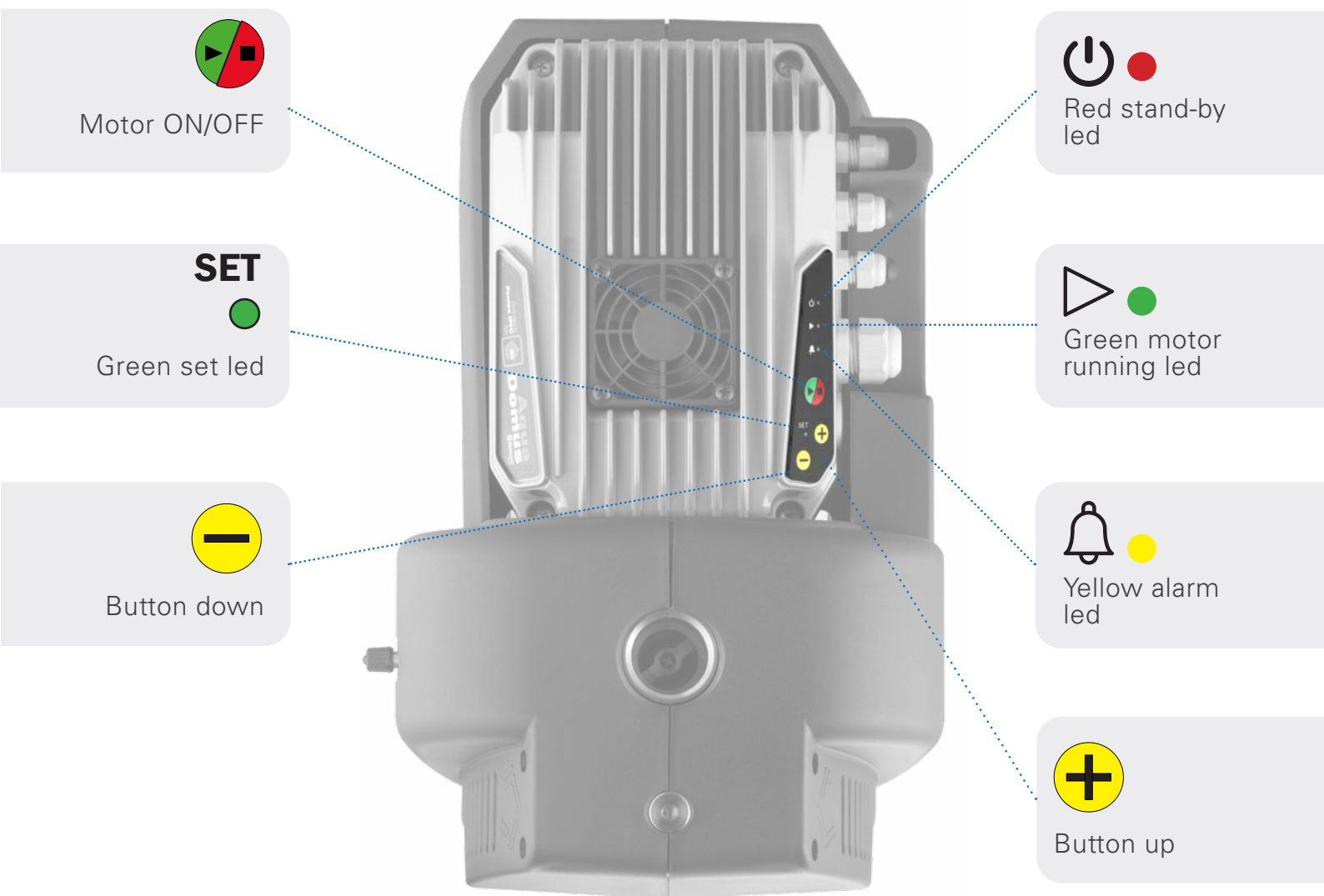


Description

1	Input / Output cable glands	6	Discharge plug
2	E-IPFC control panel	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



Pulsante / Led

Red stand-by led

Green motor running led

Yellow alarm led

Motor ON/OFF

Green set led

Up/down buttons

Parameter adjustable (Button) / indicated (Led)

Supply voltage

Working state of the engine (whether running or stationary)

Frequency varies according to the type of alarm

Starting and stopping the engine

Possibility to modify a working parameter

Increase or decrease of a set value

Technical data sheet

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

Applications



Domestic



Residential -
Commercial

Allowed fluids

Clean water, non aggressive, without suspension solids



Tech data

Liquid temperature	-5 ÷ +35 °C
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Rated pressure	max 7 bar
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4 poles synchronous motor with permanent magnet	4200 RPM
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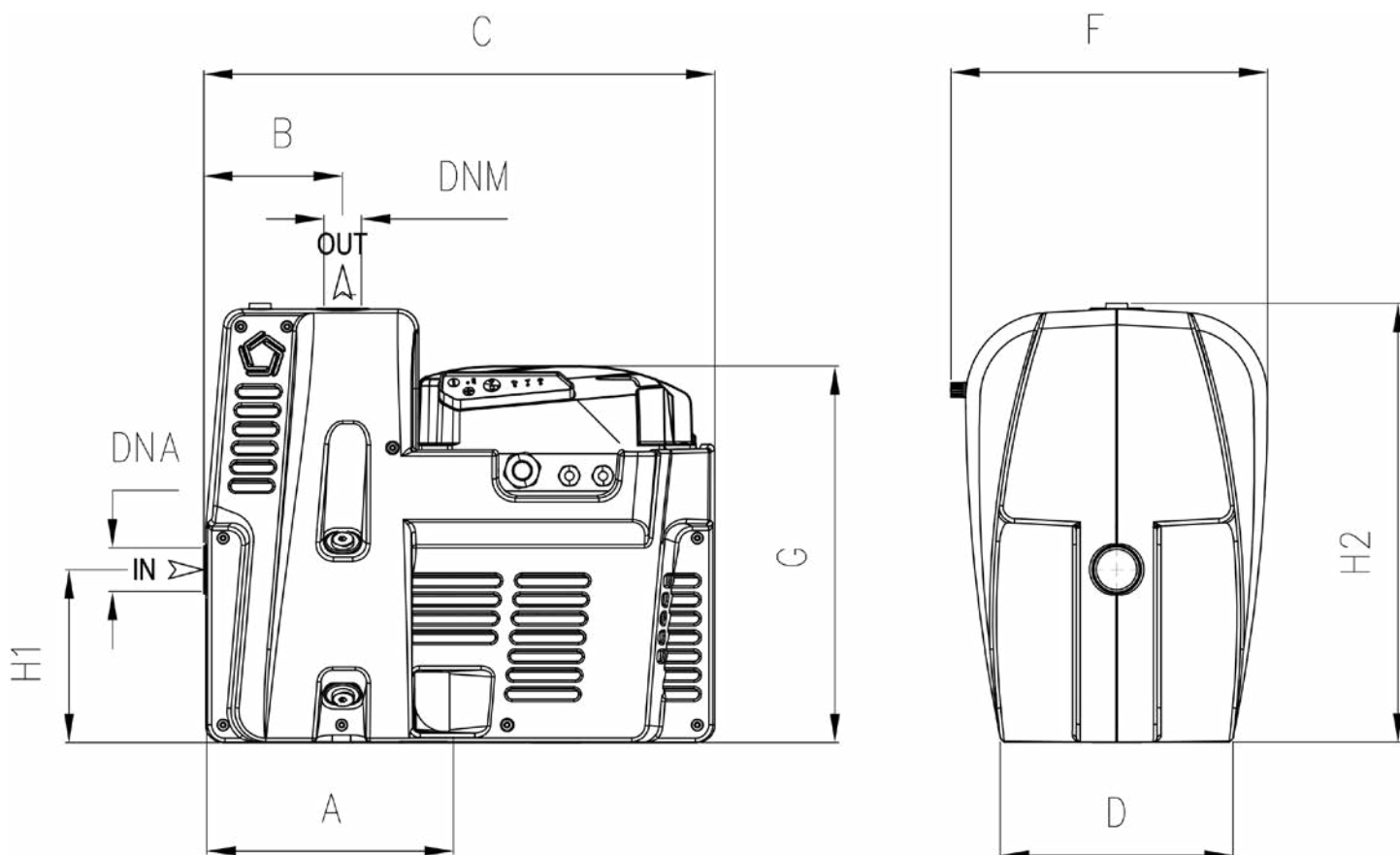
Input voltage	1 ~ 230V-50Hz 1 ~ 220V-60Hz
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Insulation class	F
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Protection degree	IP44
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Technical data sheet

Dimensions



Dimensions (mm)

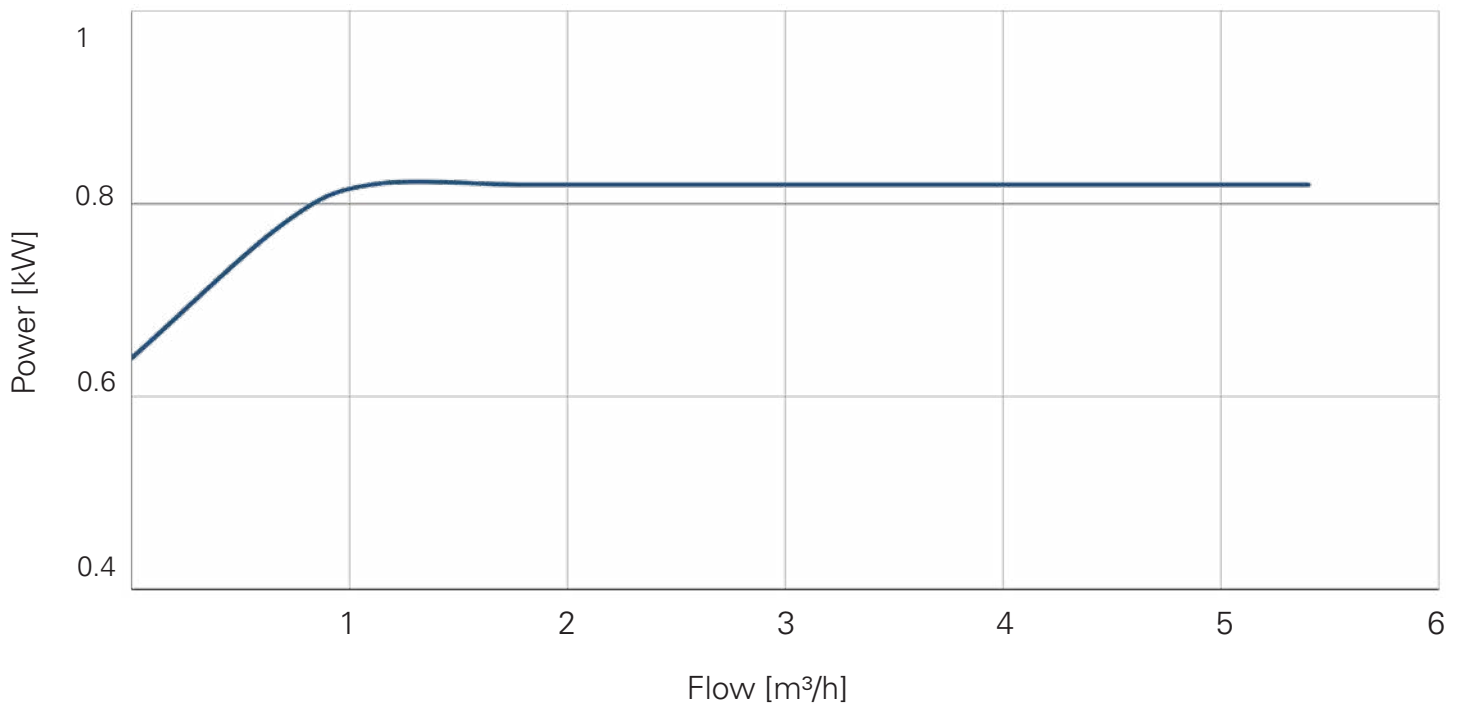
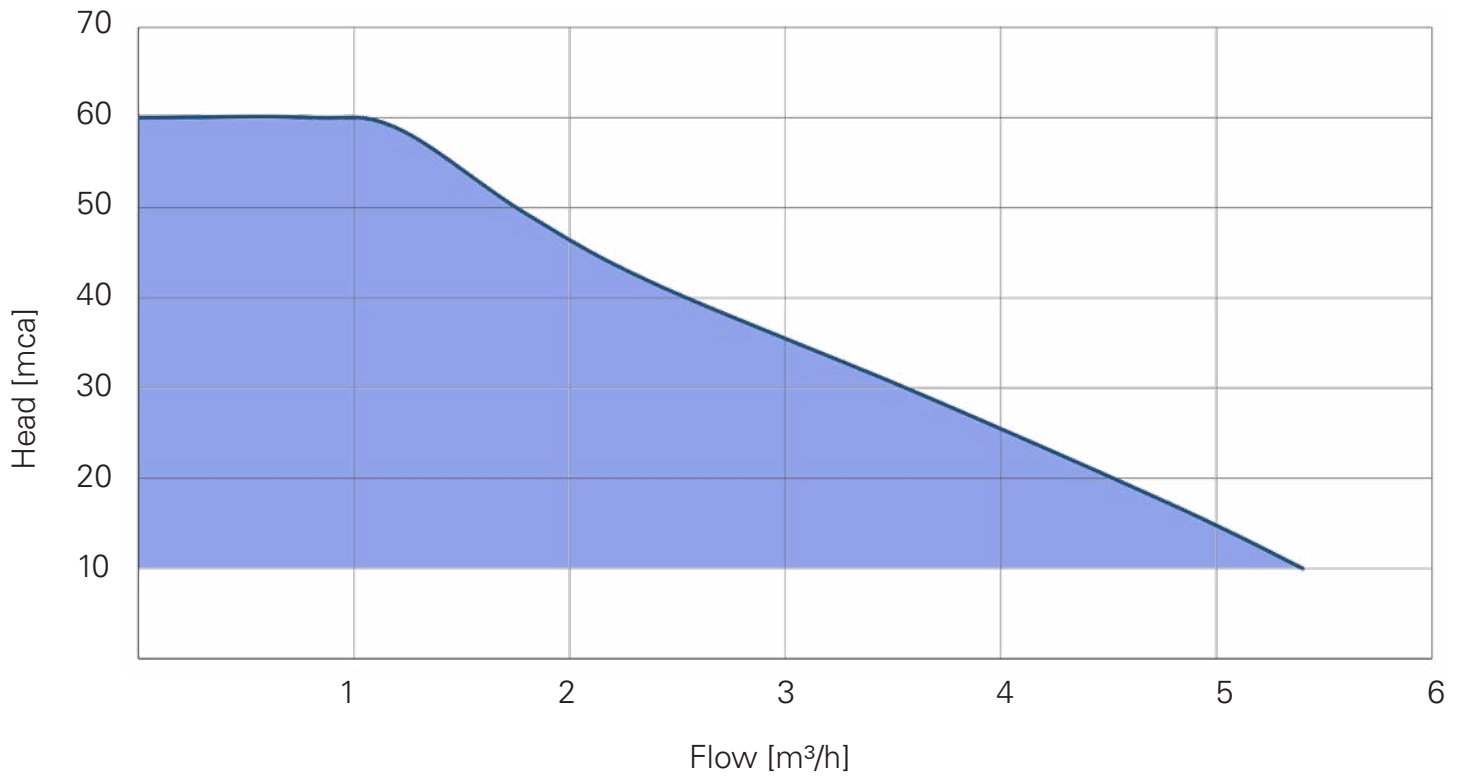
A	B	C	D	F	G	H1	H2	DNA	DNM	Kg
166,8	103	377	173	235	280	128	325	1" G	1" G	



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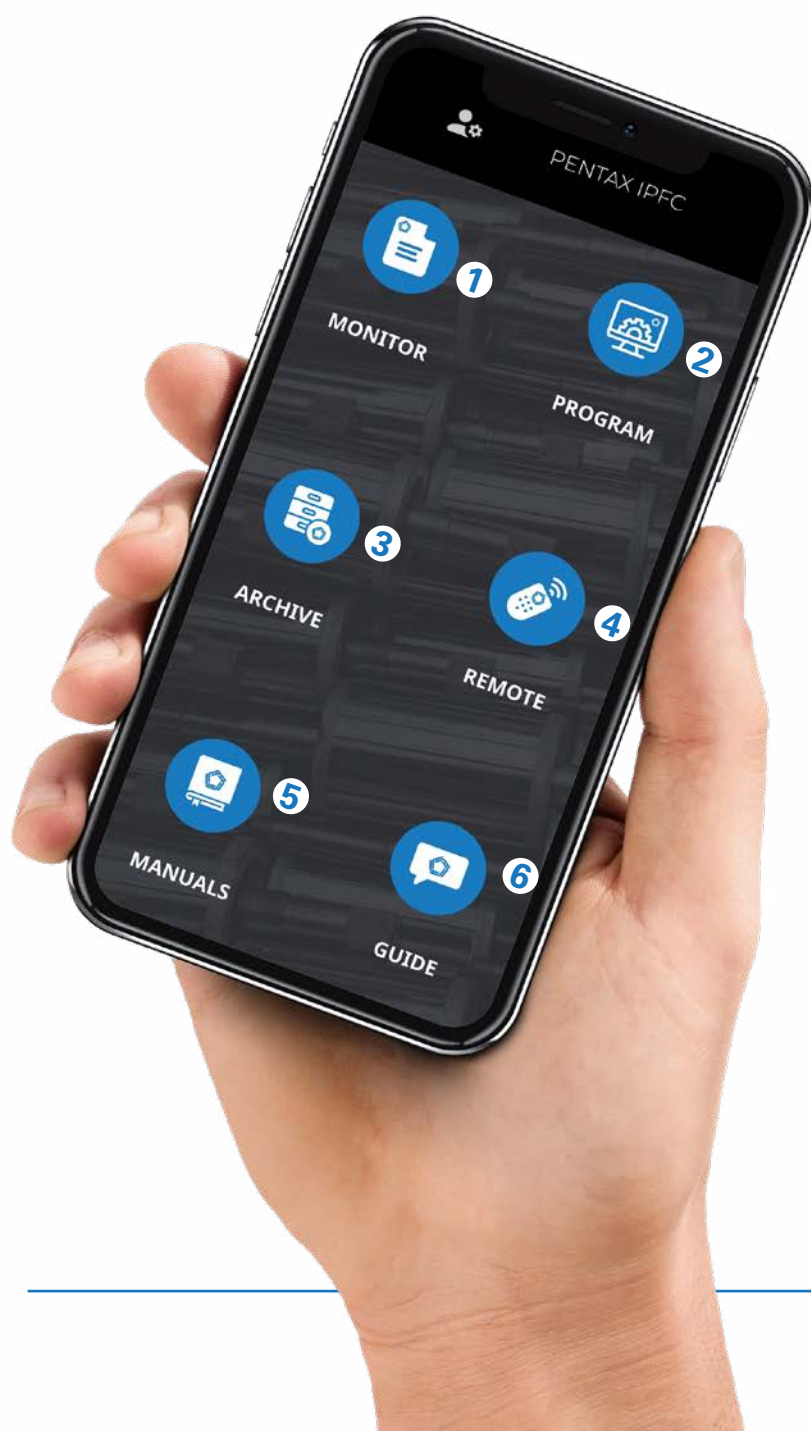
Technical data sheet

Performance



Pentax IPFC

Dedicated app for control and programming of Aquadomus



App Functionality

1 Monitor

Monitoring several operative parameters.
Obtaining energy consumption statistics and check alarm history

2 Program

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 Remote

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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