

Operating Instruction & Manual

Alagonia Pump unit



Version 1.3
2017 February



Contents

1. Pre-face	2
1.1 Product purpose.....	2
2. Device Overview.....	2
2.1 Alagonia internal design.....	3
2.2 Requirement.....	3
2.3 Specification – 230 VAC.....	3
2.4 Specification – 110 VAC.....	3
2.5 Performance diagram.....	4
2.6 Operation	4

1. Pre-face

Stand-alone pump for supply of either air under pressure or vacuum – **not both at the same time!**

1.1 Product purpose

- Pump for supply of air under pressure.
- Pump for supply of vacuum.

2. Device Overview

The Alagonia is a standard product designed and manufactured by www.pumpcell.com

Alagonia is housed in a Hephaestus U2 cabinet. The front panel is equipped with:

1. 110-230 VAC power inlet, IEC standard male **with ground**, max 1 amp fuse
2. 8 mm PVC hose one-touch fitting for pressure
3. 8 mm PVC hose one-touch fitting for vacuum

Important procedure to follow before any Power-On, start-up:

1. Insure correct power cabling with correct ground from wall plug to Alagonia
2. Insure the combined intake filter / noise damper is mounted on the free port fitting.
3. Never start-up under pressure. Release pressure on both sides of pump before start-up.

General precautions:

- Newer block rear panel in order to avoid blocking of the ventilation like against a wall.
- If Alagonia is used as a vacuum source then the pressure port is to be equipped with a noise damper fitted onto the 8 mm one-touch fitting
- If Alagonia is used for supplying pressure then the vacuum port is to be equipped with a noise damper fitted onto the 8 mm one-touch fitting.

2.1 Alagonia internal design

Important components inside Alagonia are

- One www.electroad.es model EVO10 dual rubber diaphragm pump driven by a fixed RPM asynchronous motor for either 110 or 230 VAC. Don't mix up the voltages !!!
- For temperature control one constant operating Sunon 70 m3/hour MagLev magnetic bearing axial ventilator.

2.2 Requirement

The system must be properly installed and connected in accordance with the specifications. Make in particular sure that the wall plug has a **ground connection** fully functional.

2.3 Specification – 230 VAC

Product specifications pn 14323

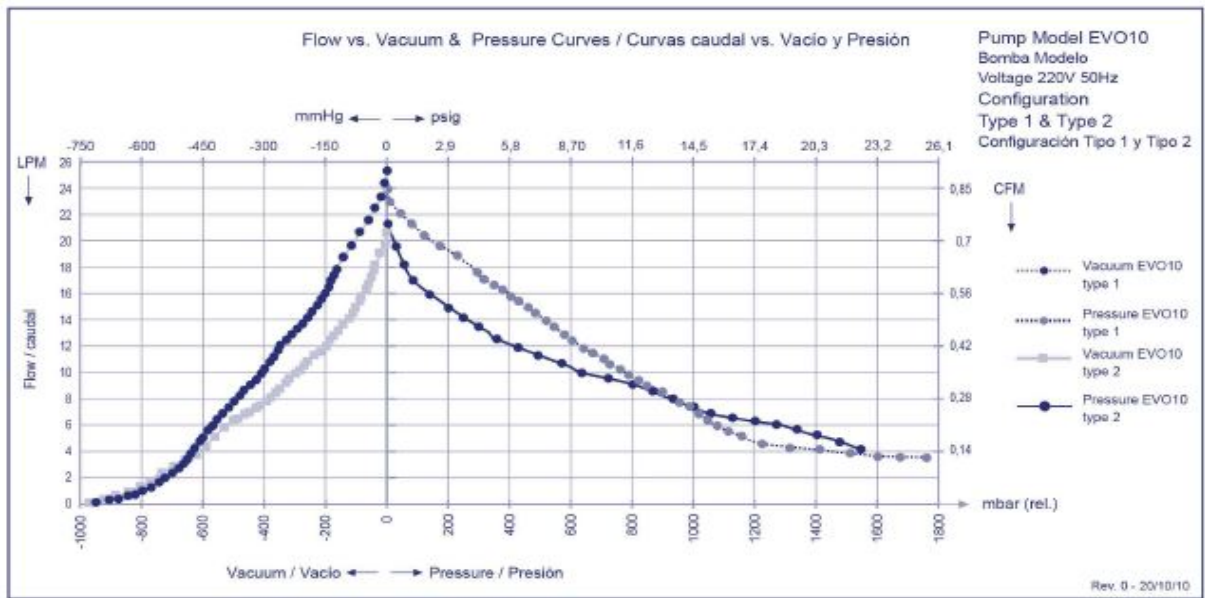
Product, model name	Alagonia
Purpose	Vacuum or pressure
Max capacity, nl/min/ + 0.1 Bar	24
Rated capacity, nl/min/+ 0.5 bar	12
Drive gas pressure	Maximum 1,1 Bar
Drive gas vacuum source	<0.1 bar absolute
Rated capacity, nl/min/- 0.5 bar	8
Power supply	230 VAC, 0.4 amp, 50 Hz, 100 watt
Noise level, dBa	<70
Duty cycle	100%
Orientation	any
Life time, estimated, hours	20,000
Cabinet size and material	U2 – AISI304
Weight, kilo	6.5

2.4 Specification – 110 VAC

Product specifications pn 14311

Product, model name	Alagonia
Purpose	Vacuum or pressure
Max capacity, nl/min/ + 0.1 Bar	24
Rated capacity, nl/min/+ 0.5 bar	12
Drive gas pressure	Maximum 1,1 Bar
Drive gas vacuum source	<0.1 bar absolute
Rated capacity, nl/min/- 0.5 bar	8
Power supply	110 VAC, 0.9 amp, 50-60 Hz, 100 watt
Noise level, dBa	<70
Duty cycle	100%
Orientation	any
Life time, estimated, hours	20,000
Cabinet size and material	U2 – AISI304
Weight, kilo	6.5

2.5 Performance diagram



Pressure relative to volume for the EVO10 pump inside Alagonia. NOT operating both pressure and vacuum at the same time! Pressure cannot be delivered if the pump cannot suck in air!

2.6 Operation

Assuming a correct assembly of all systems, connections, instruments, the 1,0 bar over-pressure safety regulator, etc. Alagonia operate with a minimum of vibrations and noise.



Alagonia and Sarpedon are designed to interconnect. If both vacuum source and pressure is needed two Alagonia must be connected via tubing to one Sarpedon units. The needed brass over-pressure safety regulator set at 1,0 bar is visible on Sarpedon.

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