

# INERTIAL ACCUMULATOR FOR HEAT PUMPS

#### ART.2157



# Inertial accumulator for heat pump, right/left reversible and it can be wall mounted.

- Available in 40l and 80l versions
- Heat pump side connections 1" 1/4 M
- System side connections 1"M

#### It comes complete with:

- Insulation
- Brackets for wall mounting
- Temperature gauge
- Automatic air relief valve with non-return valve
- Magnetic insert with discharge valve
- Expansion vessel connection
- Set up for the connection of max. 2 booster units
- Set up for support heating elements
- Connection for temperature probe

# 1 DESCRIPTION

The inertial accumulator is designed to combine the function of an inertial tank, hydraulic separator and distribution manifold into a single component in systems with a heat pump.

Thanks to its compact size it can take advantage of the available space and adapt to different types of installation.

The inertial accumulator optimizes system output, limiting the on and off cycles of the heat pump and air bubbles and impurities that can damage the circuit components are eliminated by means of the internal separation system.

# CONSTRUCTION FEATURES

# SET UP FOR ELECTRIC HEATING ELEMENT (OPTIONAL - ART.2158)

1" 1/2 female connection that can be used for the optional application of an electric heating element.



### TEMPERATURE GAUGE

With a scale from 0 to  $120^{\circ}$  C it is used to easily read the temperature of the water inside the accumulator.

#### 1" FEMALE CONNECTION

The inertial accumulator is equipped with a 1" connection located on the lower side, which can be used, for example, for the installation of an expansion tank.

#### DRAIN VALVE

Located in the lower part of the accumulator, where the impurities are intercepted over time, it can be used to perform maintenance and to drain these impurities from the system.

#### 1/2" CONNECTION

Set up for a possible temperature probe.

#### **AUTOMATIC AIR RELIEF VALVE**

Placed at the highest point on the accumulator, it eliminates any air bubbles that may form in the circuit.

# INSULATING SHELL

The insulation shell allows the accumulator to avoid wasting heat and protects against the formation of any condensation

#### SUPPORT BRACKETS

The accumulator is supplied with brackets for wall mounting.



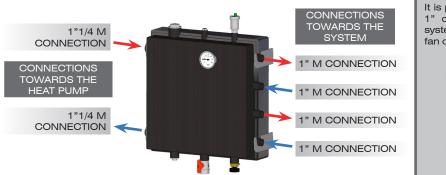
### REMOVABLE MAGNETIC INSERT

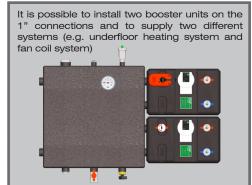
Draws ferrous impurities into the lower part of the accumulator where they can then be eliminated following the maintenance procedure.



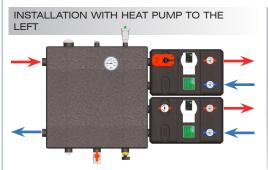


# INSTALLATION





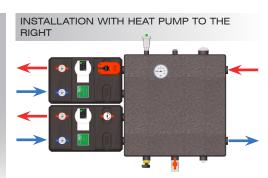
The inertial accumulator must always be installed in a vertical position, with the air relief valve facing upwards.



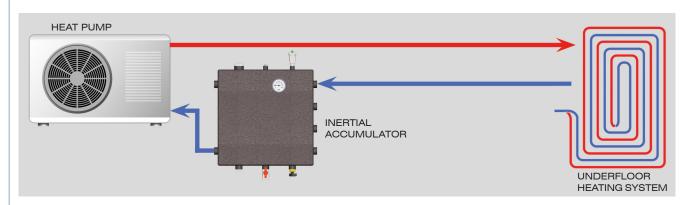
The accumulator is reversible, and the connections can be reversed to the right or to the left depending on your needs.

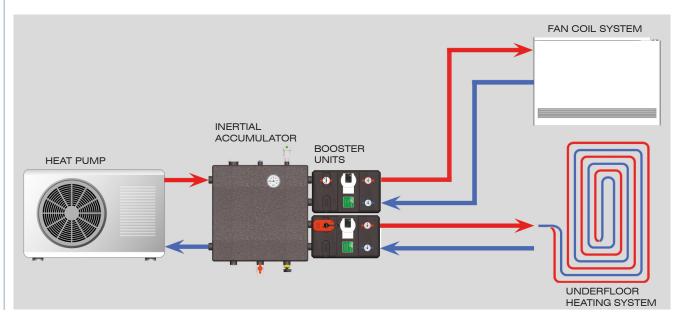
By installing the booster units on the accumulator, the directions of the water must be respected as shown in the two examples.

A thermometer connection is present on each side.

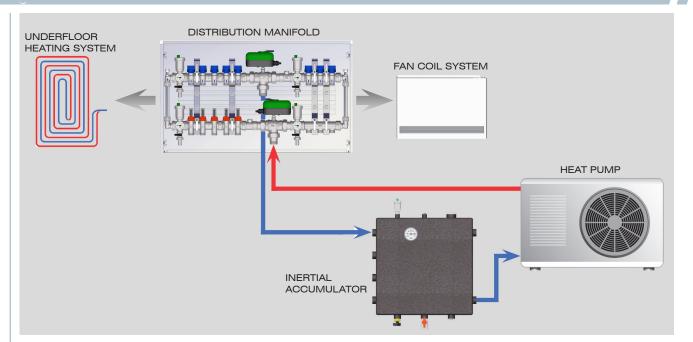


# 4 APPLICATION EXAMPLES

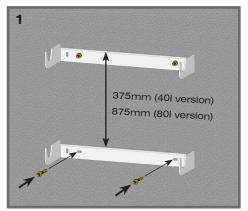




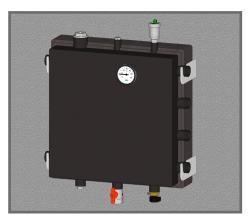




# 5 WALL MOUNTING







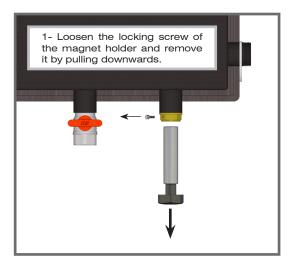
The inertial accumulator is supplied with brackets for wall mounting. Follow the illustrated procedure to install them.

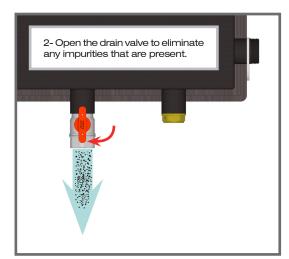
- 1 Fasten the upper bracket using common wall anchors (not supplied). Respecting the distances indicated in **figure 1**, fasten the second bracket.
- 2- Insert the accumulator into the appropriate locking slots (figure 2).

# 6 MAINTENANCE



**WARNING:** given the presence of magnetic parts, people with pacemakers are advised to stay a safe distance away during operation and maintenance. Also be careful when using electronic equipment near the magnets, as their operation could be compromised.





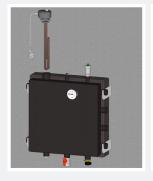


# ACCESSORIES



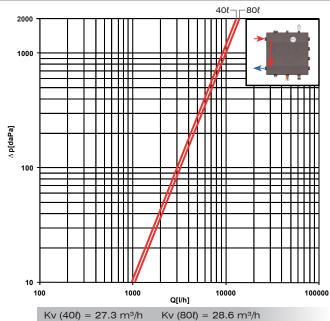
Electric heating element support kit with temperature regulator.

- Adjustable thermostat
- Overheating protection
- 1" 1/2 M connection
- Art. 2158 01 Power supply 230V Power 2000W
- Art. 2158 02 Power supply 400V Power 3000W

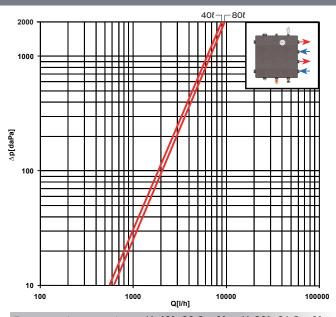




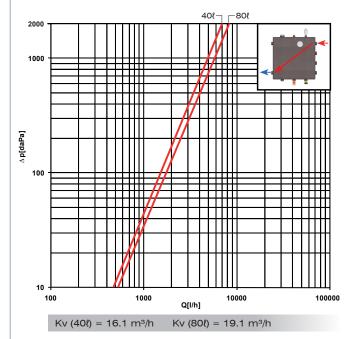
# FLUID DYNAMIC PROPERTIES



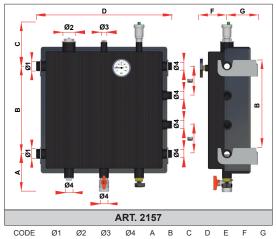




Booster unit connections:  $Kv40\ell=20.8 \text{ m}^3/h$   $Kv80\ell=21.8 \text{ m}^3/h$ 



# DIMENSIONS



	CODE	Ø1	Ø2	Ø3	Ø4	Α	В	С	D	Е	F	G
	2157 40	1"1/4	1"1/2	1/2"	1"	154	375	204	590	125	111	130
ſ	2157 80	1"1/4	1"1/2	1/2"	1"	154	875	204	590	125	111	130

# 10 TECHNICAL FEATURES

Max. operating pressure: 4 bar Max. operating temperature: 95°C

Compatible media: water, water and glycol

Temperature gauge scale: 0-120°C Accumulator body: painted steel

#### **INSULATION SHELL**

Material: PΕ

Thermal conductivity: 0,0452 W/mK Thickness: 0,02 m

Total area: (40l) 0,82 m<sup>2</sup> - (80l) 1,48 m<sup>2</sup>