# Why Vaillant?

Because warm water is our business for more than 135 years.



atmoMAG turboMAG



# Innovative Ideas for warm water -

# Vaillant Gas Water Heaters atmoMAG and turboMAG



Since the beginning of modern heating technology and warm water production Vaillant has been shaping the progress in this area by developing innovative warm water and heating appliances. Vaillant Gas Water heaters (the revolutionary Vaillant Geysers) have been around since 1894. They were the first devices for hygienic hot water generation and even able to adjust the water temperature. Since then we have continuously improved these appliances, lots of innovative and convincing developments have been invented. Today Vaillant is market leader for heating system technology. 135 years after the first Geyser Vaillant offers you a new generation of gas water heaters, our new atmoMAG and turboMAG series which meet all demands thanks to their consequent Premium quality, modern design, high reliability, userfriendly handling and longevity. Today - just as generations ago - the decision to buy a Vaillant gas water heater means choosing the highest possible level of quality, outstanding convenience, maximum efficiency and safety.

# Tradition for your comfort

# Chose the best option for you



## Ideas for water heating with gas

There are many good reasons for hot water generation with gas. Thus gas water heaters give high warm water comfort: The instantaneous water heater principle and the preliminary temperature adjustment ensure steady warm water outflow. Gas water heaters always supply the requested hot water flow rate at the desired temperature even in case of large tapping points such as tub and shower. This makes the system efficient.

#### Clean, reliable, economical

Gas has the highest calorific value and the lowest emissions of all natural energy sources. And the Vaillant brand name stands out for maximum reliability. This makes the MAG Gas Water Heaters the most economical choice for hot water convenience.

## Independent on principle

MAG Gas Water Heaters can be placed directly near the point of use or at a distance of the tap point, they supply hot water anywhere, independently of any other system.

### Flexibility as a built-in standard

Installing an atmoMAG is done in a jiffy - particularly when you replace an old appliance. Whether you want to refurbish or modernize older property or use it for new constructions - the atmoMAG will fit in any space, whatever the structural layout. With the new atmoMAG mini model even for extremely reduced space there is a gas water heater to fit. This is ensured by the compact design and the low surface temperature. And whenever habits change: each turboMAG easily accomodates to new conditions. Up-to-date-technology, high performance materials and perfect workmanship guarantee many years of trouble-free hot water convenience.

#### Low water pressure

If you are facing low water inlet pressures we also offer an solution: Vaillant Gas Water Heaters start to operate at a very low water inlet pressure (please see technical data in the following).

# Best in class:

# the Vaillant Gas Water Heater range



### Reliable and well tried

Vaillant Gas Water Heaters of the atmoMAG series are appliances especially developed for hot water generation. The latest atmoMAG line is the result of decades of continuous advancement and represents the state-of-the-art. They are constantly put to test and thus stand guarantor for highest warm water comfort, extraordinary efficiency and a long life.

# Convincing warm water comfort thanks to intelligent solutions OPTI MOD Function

Vaillant Gas Water Heaters atmoMAG owe their high warm water comfort to their integrated OPTI-MOD function.

It ensures highest comfort with utmost efficiency. With two simple steps the users can adapt the atmoMAG to their individual requirements. OPTI... refers to the preselection of the appliances' water output between approx. 50% and 100%. As a rule the inlet water flow through the tap determines the outlet temperature. This method offers advantages with high inlet water temperatures. Since the incoming water is preheated, less gas is needed to reach the outlet temperature. This saves a lot of energy. ...MOD: keeps the water temperature constant independently of how far the tap is opened. The burner flame adjusts itself automatically, thus the minimum gas rate required is used to heat the water up to the desired temperature chosen by the user.



# atmoMAG



## The best starting system for every requirement

All atmoMAG with OPTI-MOD function show the same high warm water comfort. However, their ignition systems may differ.

The piezo ignition of the MAG XZ represents a perfect standard solution which has proven itself for decades. With increasing requirements on energy savings, the MAG XI is the one to count on. Its electronic ignition works with main connector or batteries. Giving up the permanent pilot flame leads to a remarkable saving of energy without interference in the various stages of operation. The batteries, if used, can easily be replaced at the front of the appliance. Their durability is a minimum of one year.

#### atmoMAG pro for basic requirements

Our model especially designed to meet basic requirements - please see our technical data.

#### Ask your local dealer

He will be pleased to advise you and tell you exactly which MAG is most suitable for your needs.

### atmoMAG at a glance:

- Fastest warm water generation
- Easy replacement of old appliances
- Applicable for direct outlet of other configurations
- Constant outlet temperature due to OPTI-MOD
- Low operational noise
- Easy handling and maintenance
- Energy and water saving
- High efficiency of 88%
- Low NOx emissions
- Easily accessible components for service and handling
- Long life
- Please kindly see technical details on page 8

## Different installation types -

# high quality level for everyone -



#### Easy to install - the turboMAG

The turboMAG is equipped with a room-sealed combustion chamber and is thus independent of ambient air. The air/flue duct is a fan-assisted version. Therefore the turboMAG does not need to be connected to a chimney and can be installed anywhere - irregardless of the size of the available space and as well outside. No matter whether to an outer wall (balanced flue) or with roof penetration: the turboMAG can be installed everywhere.

## Maximum comfort - maximum safety

The turboMAG incorporates an automatic ignition device and a monitoring system for the main burner. The ignition works with a novel, sensible flow rate sensor (impeller with electronic sensor) which starts the appliance operation already at small water flow rates. You won't find any better! And thanks to its low noise level the turboMAG can be placed in the living area without problems.

### Intelligent control: the outlet temperature

The turboMAG possesses an electronically controlled outlet temperature adjustment enabling the user to easily adjust the outlet temperature at a pushbutton.

Once the temperature has been adjusted, it is held contant within the maximum appliance output range. At the same time, turboMAG simultaneously adapts the gas rate depending on the water flow rate. In case less water or a lower temperature is needed, turboMAG automatically reduces the burner output. The water heater constantly modulates between 30% and 100% of its output and thus - producing as much heat as required with the minimum energy needed - it perfectly combines efficiency and comfort.

#### Flexibility from top to bottom

Thanks to a wide selection of air and flue gas accessories turboMAG is suited to meet all installation demands. Its vario elbow helps to easily level out an offset of up to 56 mm. Air and flue gas tubes are available at 60/ 100 mm diameter.



# the turboMAG



## turboMAG at a glance:

- Independent of surrounding air thanks to room-sealed combustion chamber
- Electronically adjusted water flow rate
- Electronically controlled output
- Electronic ignition and control system
- Ideal for single, decentralised or group use
- Appropriate for direct tapping as well as remote taps
- Low noise level
- Easy and flexible installation
- Connection to horizontal and vertical roof duct extensions, balancedflue connections (outer wall) and U- or SE duct systems
- Starting from 0,2 bar pressure or higher
- Fully equipped including electronic water flow sensor, water outflow regulator, temperature preselection, NTC-sensor and ventilation
- Air/Flue systems for all installation needs
- Aluminium inner pipe
- Simple height extension
- Concentric air/flue pipes, 60/100 mm diameter
- Tube length up to 5 m
- Please kindly see technical details on page 8

## Technical data Gas water heaters

| atmoMAG                      |                       | unit    | 11-0/0<br>pro Z | 11-0/0<br>pro ZN | 11-0/0<br>mini XZ | 11-0/0<br>mini XI | 14-0/0<br>XZ | 14-0/0<br>XI |
|------------------------------|-----------------------|---------|-----------------|------------------|-------------------|-------------------|--------------|--------------|
| Rated output                 |                       | kW      | 19,2            | 19,2             | 19,2              | 19,2              | 24,4         | 24,4         |
| Min. rated output            |                       | kW      | 10              | 10               | 7,7               | 7,7               | 9,8          | 9,8          |
| Warm water flow rate:        |                       |         |                 |                  |                   |                   |              |              |
| on position "hot"            |                       | I/min   | 4,0 - 5,5       | 4 - 11*          | 2,2 - 5,5         | 2,2 - 5,5         | 2,8 - 7      | 2,8 - 7      |
| on position "warm"           |                       | I/min   | 9,2 - 11,0      | -                | 4 - 11            | 4 - 11            | 5,9 - 14     | 5,9 - 14     |
| Minimum water pressure       |                       |         |                 |                  |                   |                   |              |              |
| temperature selector:        |                       |         |                 |                  |                   |                   |              |              |
| in position "hot"            |                       | bar     | 0,30            | 0,20             | 0,12              | 0,15              | 0,15         | 0,17         |
| in position "warm"           |                       | bar     | 1,00            | -                | 0,20              | 0,20              | 0,30         | 0,35         |
| Maxium water pressure        |                       | bar     | 10              | 2                | 13                | 13                | 13           | 13           |
| Water connection             | n: cold               | inches  | 3/8" BSP        | 3/8" BSP         | 3/4"              | 3/4"              | 3/4"         | 3/4"         |
|                              | warm                  | inches  | 1/2" BSP        | 1/2" BSP         | 3/4"              | 3/4"              | 3/4"         | 3/4"         |
| Gas connection:              | LPG                   | inches  | 3/4" BSP        | 3/4" BSP         | 1/2"              | 1/2"              | 1/2"         | 1/2"         |
|                              | Natural gas           | inches  | 3/4" BSP        | 3/4" BSP         | 1/2"              | 1/2"              | 1/2"         | 1/2"         |
|                              | LPG                   | kg/h    | 1,8             | 1,8              | 1,8               | 1,8               | 2,2          | 2,2          |
|                              | Natural gas           | m3/h    | 2,3             | 2,3              | 2,3               | 2,3               | 3,0          | 3,0          |
| Nominal gas pres             | Nominal gas pressure: |         |                 |                  |                   |                   |              |              |
|                              | LPG                   | mbar    | 28 - 37         | 28 - 37          | 28 - 37           | 28 - 37           | 28 - 37      | 28 - 37      |
|                              | Natural gas           | mbar    | 20              | 20               | 20                | 20                | 20           | 20           |
| Flue connection              |                       | mm dia. | 110             | 110              | 110               | 110               | 130          | 130          |
| Height                       |                       | mm      | 634             | 634              | 580               | 580               | 680          | 680          |
| Width                        |                       | mm      | 310             | 310              | 310               | 310               | 350          | 350          |
| Depth, ** = depth with knobs |                       | mm      | 230 (272**)     | 230 (272**)      | 243 (256**)       | 243 (253**)       | 259 (272**)  | 259 (269**)  |
| Weight                       |                       | kg      | 10              | 10               | 12                | 12                | 14           | 14           |
| * no temperature             | e selector            |         |                 |                  |                   |                   |              |              |

|                                      |             |         |          | 1        |  |
|--------------------------------------|-------------|---------|----------|----------|--|
| turboMAG                             |             | unit    | 11-2/0   | 14-2/0   |  |
| Nominal output                       |             | kW      | 19.2     | 23,7     |  |
| Minimum output                       |             | kW      | 8,6      | 8,6      |  |
| Warm water flow                      | rato        | I/min   | 7        | 8        |  |
|                                      |             | 1/11111 | 1        | 0        |  |
| Warm water temp<br>range (adjustable |             | °C      | 38 - 63  | 38 - 63  |  |
|                                      | -           | C       | 50 05    | 30 03    |  |
| Water pressure at the heater starts  |             | bar     | 0,20     | 0,20     |  |
| Maximum water p                      |             | bar     | 13       | 13       |  |
| Water connection                     |             | inches  | 3/4"     | 3/4"     |  |
|                                      | warm        | inches  | 3/4"     | 3/4"     |  |
| Gas connection:                      | LPG         | inches  | 12 x 1   | 12 x 1   |  |
|                                      | Natural gas | inches  | R 1/2"   | R 1/2"   |  |
|                                      | LPG         | kg/h    | 1,78     | 2,12     |  |
|                                      | Natural gas | m3/h    | 2,34     | 2,84     |  |
| Electrical connect                   | tion        | V / Hz  | 230 / 50 | 230 / 50 |  |
| Minimum gas pre                      | ssure:      |         |          |          |  |
|                                      | LPG         | mbar    | 28 - 37  | 28 - 37  |  |
|                                      | Natural gas | mbar    | 20       | 20       |  |
| Flue connection                      |             | mm dia. | 60/100   | 60/100   |  |
| Height                               |             | mm      | 682      | 682      |  |
| Width                                |             | mm      | 352      | 352      |  |
| Depth                                |             | mm      | 266      | 266      |  |
| Weight                               |             | kg      | 21,4     | 21,4     |  |

atmoMAG pro



atmoMAG battery (XI)



atmoMAG Piezo (XZ)



turboMAG

Your local partner for Vaillant products: