



Company profile

2012

www.galletti.it

Galletti
AIR CONDITIONING

GALLETTI.IT - The company

1906. Ugo Galletti settles down the first production facility. In the beginning the production was mainly devoted to the manufacture of ice mould and light carpentry.

1950. The production and technical evolution leads the company to become a supplier of important car and motor-bike manufacturers such as: Ferrari, Ducati ,Lamborghini, Morini.

1960. Galletti faces a big historical change: from manufacturing of components as a sub-supplier for other companies to its own production of finished goods branded Galletti destined for end users. Galletti starts the manufacturing of heating units such as convector with copper/aluminium coils, and fan heaters for industrial application.

1975. Galletti starts the manufacturing of fan coil units; this is the first approach to the air conditioning field.

1986. Begin of a 15 years cooperation with a Japanese leading company in air conditioning. Galletti becomes the reference point of split systems in the Italian market.

1994. Galletti is one of the first companies in Europe to get the Eurovent certification.

1995. Galletti establishes a new factory focused on the production of finned pack heat exchangers. First production of air condensed water chillers with cooling capacity from 6 to 180 kW.

1996. New production line of fan coils with a capacity of 700 units a day.

2001. Galletti founds a new company to approach the market of high technology air conditioning applications: this represents another milestone towards the Galletti air conditioning globalisation.

2003. Extension of the Bentivoglio factory area with a new 7.000 m² building, including a new logistic centre and training facilities.

2006. A century of history for an enterprise that can today boast 1,700,000 fan coils sold, over 250,000 split air conditioners installed and 15,000 water chillers and heat pumps.

2012. Thanks to the creation of 2 new manufacturing units dedicated to air treatment, dehumidification and controlled mechanical ventilation, the Galletti group consolidates its position on a European level with 4 factories, 460 employees in over 60,000 m² of total surface area and cutting-edge research and development laboratories.





BLDC TECHNOLOGY
(brushless direct current motors)

BLDC synchronous motors are characterised by a constant rotation speed which is linked to the frequency defined by the inverter.

Advantages:

they are “brushless” because they do not require induction in the stator windings and therefore are not subject to the associated losses
they have no rotor currents => no rotor losses.

A BLDC motor has “sliding contacts” => no maintenance needed.

BLDC technology is used in:

- **Modulating fans of indoor units to ensure quiet, cost-effective operation.**
- **Modulating compressors:** wide operating ranges for heat pumps (outdoor air -15°C with water at +55°C), with energy savings of about 25% per year, no phase shifts, no inrush current, adaptability to actual needs = maximum efficiency all the time.
- **Modulating pumps** for adapting the flow rate to actual system requirements, with a reduction in pumping costs of about of 60% per year.



CONTROL AND MANAGEMENT SYSTEMS

The in-house development of highly advanced controls for indoor units and low cost, high capacity supervision systems, the importance of measuring ambient parameters and of serial communication are the basis that has led us to develop a common platform for controlling:

- **hydronic indoor units**
- **chiller/heat pump units**
- **domestic dehumidifiers**
- **air handling units**
- **integrated system management**



IAQ

Bioxygen®

All hydronic indoor units can use the Bioxygen system to sanitise the interior and the unit itself.

The BIOXIGEN device delivers a flow of active oxygen ions generated by an oscillating electric field.

The benefits in terms of reducing microbial contamination and mould and restoring a correct ion balance have been verified by the Department of Environmental Medicine and Public Health of the University of Padua and the Department of Food Sciences of the University of Udine.



TOTAL HEAT RECOVERY MULTI-PURPOSE HEAT PUMPS

The total recovery technology applied to reversible heat pumps enables simultaneous production of hot and cold fluid on call by either user, with dissipation into air or water only when necessary.

Exploiting all thermal flows allows great energy savings to be achieved: In 2-pipe systems it is capable of simultaneously producing cooling and DHW (without cycle reversal) with total recovery of heat dissipated or producing DHW only, without having to simultaneously produce heating or cooling as well. In 4-pipe systems, simultaneous demands are satisfied in the final recovery phase.



DOUBLE CYCLE REVERSAL

Heat exchanges are more efficient when they take place in a countercurrent mode, thanks to a higher logarithmic mean temperature difference. The majority of reversible units have a concurrent flow configuration after being switched from the chiller to heat pump mode, resulting in a decrease in thermodynamic performance. By introducing a 4-way valve in the user water circuit (inside the unit) it is possible to reverse the direction of flow of the water over the exchangers at the same time the flow of refrigerant is reversed, thus maintaining the countercurrent. The direction of the water flow toward / from the system obviously does not change.



ELECTRONICALLY CONTROLLED ELECTRIC EXPANSION VALVE

If correctly parameterized by the software, this device has the capacity to render the operation of the cooling circuit very efficient, the final result being to reduce the power absorbed by the system.

It operates with lower pressure reductions than a mechanical valve. It enables finer adjustment thanks to the adoption of an electric stepper motor. Transients are handled in a shorter time, as the point of equilibrium is reached more quickly (meaning higher global efficiency). The use of this valve makes it possible to reduce compressor energy consumption.

GALLETTI.IT - Total heat recovery multi-purpose heat pumps

MCP



Total heat recovery multi-purpose package air/water heat pumps

- > 14 models from 7 to 41 kW
- > DHW production year round
- > Integrated COP up to 6.5
- > Integrated hydronic kits
- > Monobloc unit for outdoor installation: minimal space occupied in the equipment room, sources of noise completely outside

HIWARM



Total heat recovery multi-purpose air/water heat pumps, split version

- > 3 models from 2 to 33 kW
- > DHW production year round
- > BLDC inverter compressor for maximum efficiency and total modulation of the power delivered
- > Integrated COP up to 6.5
- > Split configuration: no risk of freezing, minimal weight to be placed outside



STORAGE

Tanks

- > 11 models from 300 to 800 l
- > Boilers for domestic hot water storage
- > Thermal storage tanks for system water with coil for the production of DHW
- > Thermal storage tanks for system water with external unit for the production of DHW
- > Available with additional coils for solar heat and high temperature sources

LCP



Total heat recovery multi-purpose package air/water heat pumps

- > 16 models from 50 to 320 kW
- > Models for 2-pipes systems + DHW or 4-pipes system
- > 2 independent cooling circuits
- > Alternating defrost cycles
- > Integrated hydronic kits



LEP



Total heat recovery multi-purpose water/water heat pumps

- > 19 models from 40 to 420 kW
- > Models for 2-pipes systems + DHW or 4-pipes system
- > 2 independent cooling circuits, up to 3 compressors per circuit
- > Hydronic kits available as an optional



GALLETTI.IT - Water chillers and heat pumps

MSHRT



Reversible compact air/water heat pumps

- > 3 models from 6 to 9 kW
- > Compact dimensions
- > Extremely low noise levels
- > Integrated hydronic kit (pump and expansion tank)



MSHTJ



Air to water heat pumps, high temperature heating only

- > 2 models from 14 to 20 kW
- > Compact dimensions
- > Extremely low noise levels
- > Production of hot water up to 65°C
- > Outdoor air up to -16°C
- > Integrated hydronic kit (pump and expansion tank)

MPI DC



Water chillers and heat pumps with BLDC inverter compressor

- > 3 models from 10 to 27 kW
- > BLDC inverter compressor for high efficiency
- > Production of hot water up to 60°C in heating mode
- > Working range from -15 to +48°C
- > Integrated hydronic kits



MXE



High efficiency air/water heat pump

- > 5 models from 7 to 21 kW, specially developed for heating operation
- > Integrated hydraulic kit available for all models and versions
- > Standard and low noise execution
- > Autoadaptive set point to operate with low water content and to adapt to ambient temperature
- > Plug & Play solutions with integrated hydraulic kit



MFE



Air condensed water chillers and heat pumps for radiant floor

- > 7 models from 5 to 23 kW
- > Plug & Play solutions with integrated hydraulic kit
- > Wide summer and winter operative range
- > Autoadaptive set point to operate with low water content and to adapt to ambient temperature
- > Electronic expansion valve as standard features
- > Partial heat recovery available as option



MCE



Air condensed water chillers and heat pumps for comfort applications

- > 11 models from 9 to 39 kW
- > Autoadaptive set point to operate with low water content and to adapt to ambient temperature
- > Plug & Play solutions with integrated hydraulic kit
- > Very quiet operation
- > Ready for ergo solution



GALLETTI.IT - Water chillers and heat pumps

MPE



“PERFORMA” air condensed water chillers and heat pumps

- > 25 models from 4 to 76 kW
- > Double compressor on a single refrigerant circuit for high ESEER
- > Wide summer and winter operative range
- > Autoadaptive set point to operate with low water content and to adapt to ambient temperature
- > Plug & Play solutions with integrated hydraulic kit
- > Very quite operation
- > Ready for ergo solution



LCE



Air condensed water chillers and heat pumps with scroll compressor

- > 18 models in 6 different version from 40 to 360 kW
- > Efficiency pack for high EER/COP and high ESEER/COP
- > Integrated hydraulic kit available for all models and versions
- > Reduced foot print for high value of kW/m²
- > Standard, low noise execution and super low noise execution
- > Free cooling available in standard and low noise execution
- > Heat recovery system and antifreeze kit available on request



LSE



Air condensed water chillers and heat pumps with scroll compressors

- > 12 models in 4 different version from 360 to 1060 kW
- > Efficiency pack for high EER/COP and high ESEER/COP
- > Integrated hydraulic kit available for all models and versions
- > Standard, low noise execution and super low noise execution
- > Free cooling available in standard and low noise execution



MCC



Air condensed water chillers and heat pumps for indoor installation

- > 10 models in 2 different version from 6 to 40 kW
- > Forward curved blades centrifugal fan directly coupled to the electric motor
- > Pressostatic condensation control standard in all models
- > Integrated hydraulic kit available for all models and versions
- > Heat recovery system and low water temperature kit available on request



LCC



Air condensed water chillers and heat pumps for indoor installation

- > 10 models in 6 different version from 50 to 150 kW
- > Backward curved blades centrifugal fan directly coupled to the electric motor
- > Integrated hydraulic kit available for all models and versions
- > Standard and low noise execution
- > Free cooling available in standard and low noise execution
- > Heat recovery system and antifreeze kit available on request

GALLETTI.IT - Water chillers and heat pumps

MCW



Water condensed water chillers and heat pumps

- > 11 models in 4 different version from 5 to 40 kW
- > Integrated hydraulic kit available for all models and versions
- > Standard and low noise execution
- > Dry-cooler available as options

MCR



Motor driven evaporating units

- > 11 models in 4 different version from 5 to 34 kW
- > Integrated hydraulic kit
- > Standard and low noise execution
- > Remote condenser available as option

LEW



Water/water chillers and heat pumps

- > 19 models from 50 to 450 kW, standard or low noise execution
- > Reversible heat pumps or heating mode only
- > 2 independent cooling circuits, up to 3 compressors per circuit
- > Hydronic kits available as an optional



LER



Motor driven evaporating units

- > 19 models from 42 to 380 kW, standard or low noise execution
- > 2 independent cooling circuits, up to 3 compressors per circuit
- > Remote condenser available as option



HYDRONIC MODULES

Hydraulic module for multi-purpose water/water units

- > 4 sizes to accommodate a wide range of pump configurations
- > Inverter pumps and uprated pumps which are specific for each associated unit size
- > Low noise execution
- > Reverse cycle valve

ESTRO2012



Fan coil units with centrifugal fan

- > 20 models from 1 to 11 kW
- > 9 different models, cabinet and recess mounted
- > 3 motor configurations: 3 speed, 6 speed, brushless
- > Wide range of controls for regulating operation based on temperature/humidity/time
- > Sanitised with the BIOXIGEN system
- > Can be integrated into the ERGO system

FLAT



Design fan coil units

- > 7 models from 2 to 4.6 kW
- > Design cabinet, wall installation
- > Exceptionally low noise levels
- > Same design as 2x1 and KAIMAN

2X1



Indoor units for air conditioning system

- > 4 models from 1 to 4 kW
- > Convector operation in heating mode
- > Fan coil operation in cooling mode
- > 4 models
- > Same design as KAIMAN and FLAT

IWC



Cassette fan coils

- > 6 models from 2 to 10 kW
- > Available with wired controller and infrared remote control
- > 4-speed motors
- > 4X2 valves for high performance in 4-pipe systems
- > Sanitised with the BIOXIGEN system
- > Can be integrated into the ERGO system

WH



High wall-mounted fan coil units

- > 3 models from 2 to 4.3 kW
- > Infrared remote controller
- > ON-OFF valve kit available as option

KAIMAN



Static convectors

- > 6 models from 1 to 2 kW
- > 4 and 6 rows heat exchanger to operate with low water temperature
- > Air outlet flap with microswitch (option) connected to regulation water valve
- > Same design as 2x1 and FLAT

PWN



Ducted thermoventilating unit

- > 9 models from 2.5 to 10 kW
- > Horizontal installation in false ceiling
- > Standard 7 speed motors

UTN



High pressure fan coil units

- > 12 models in 2 different versions from 2.5 to 18 kW
- > 1 heat exchanger (2 -pipe systems) horizontal/vertical mounted
- > 2 heat exchangers (4 -pipe systems) horizontal/vertical mounted

RGS



Heat recovery units

- > 8 models from 300 to 4000 m³/h
- > Aluminium profile structure
- > Sheet metal panels with injected polyurethane, thickness 25 mm
- > Electric water reheating coil available as an optional feature

REKO CF



Air change and heat recovery units

- > 5 models from 900 to 3300 m³/h
- > Integrated reversible heat pump
- > Usable heating capacity up to 11.5 kW
- > Cooling circuit outside air flow for quieter operation
- > Microprocessor control

CTA



Air handling units

- > 39 models up to 100,000 m³/h
- > Modular structure with aluminium profiles and panels, 25 / 50 mm, with thermal break
- > Plug fans with inverter control as an optional feature
- > Vast range of sections, components and options

AREO



Air conditioning fan heaters

- > 18 models from 3 to 98 kW
- > All units can operate both with chilled and hot water
- > Multi speed motor: 2 for 400V and 3 for 230V power supply
- > Ceiling mount option with operation in heating mode

AREO H



Fan heaters

- > 6 models from 11 to 95 kW
- > Vertical plumbing attachments enabling rapid replacement
- > Multi speed motor

S80



Suspended fan heaters

- > 16 models for ceiling installation from 11 to 110 kW
- > All models can operate with hot and superheated water
- > 9 models for steam operation
- > Drain pan available as option for chilled water operation

DST



Air destratifiers

- > 6 models from 1400 to 9500 m³/h
- > Regulation thermostat
- > Overload cut-out



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