

The energetic solutions of Parkair

General catalogue 2016



Parkair offers a wide range of energy solutions to meet the needs of your projects.



Ongoing innovation with cutting-edge products



Over 30 years of experience



Production 100% Made in Italy



Guaranteed support and spare parts



Support in design



Documentation for incentives



Two-year guarantee



Free training course



Company profile

Parkair, Italian company set up in the 1970s has established itself as a market leader, supplying high quality and reliable products; it entered the conditioning sector in 2001 devoting special attention to designing and producing water-condensed and low energy consumption conditioning appliances. In a short time it developed a wide range of products, unique in range and reliability, that establish themselves on the market as successful Italian products.

While maintaining the positive features of Italian handicraft firm, always with an eye to detail, producing customised products that meet any requirement, Parkair is today a small industrial concern, that has been on the market for over 30 years and boast significant experience in the air handling sector.

These years of experience have led the company to respecting very clearly defined values:



Low energy consumption systems

Use of clean energy

Use of environmentally-friendly cooling gases

ZERO direct CO2 emissions in the environment

Parkair operates in a strongly impacting sector in the energy field, and its primary objectives include committing resources to continuous technological research and improvement of production processes, with the aim of streamlining products and raise users' awareness on the actual soundness of ensuing energy savings.

Furthermore, in perfect harmony with the requirements of the European Community, Parkair products only and exclusively use R410A and R134A environmentally-friendly gas.

The sales office, production facility and warehouse are located just 5km from Milan, and this assures spare parts are always available, products are in stock and promptly and easily delivered nationally as well as abroad.



Index of the General Catalogue 2016

- 04 | Why choosing a Parkair water split system?
- 05 | Water natural cycle
- 06 | Let's get to know a Heat Pump
- 07 | Geothermal
- 08 | Energy Policy and the Erp directive

Heat pumps for domestic hot water production

- 12 | Compact systems Water-to-Water WALLY Acqua
- 14 | Compact systems Air-to-Water WALLY Aria
- 16 | Monoblock systems Air-to-Water HPA
- 18 | Split systems Air-to-Water HPA-S

Direct Expansion systems

- 22 | Water condensing units ACW Monosplit Cooling and Heat Pump Water-to-Air
- 24 | Water condensing units ACW Multisplit Only Cooling Water-to-Air
- 26 | Wall mounted split units WI-G
- 28 | Ducted split units DI-M
- 30 | Cassette split units KI-M
- 32 | Floor and Ceiling split units FI-M

Hydronic systems

- 36 | Chillers and Heat Pump Water-to-Water RCW
- 38 | Heat Pump Air-to-Water RCA
- 40 | Wall fancoils FCW
- 41 | Ducted fancoils FCD
- 42 | Recessed fancoils FCI
- 43 | Cassette fancoils FCK

- 44 | Functionality legend
- 46 | Remote controllers RC-G, RC-M
- 47 | Notes

The choice of water as renewable energy

Why choosing a Parkair water split system?

Parkair's ACW Water Condensing Units offer an alternative to traditional air conditioning systems, replacing the outer unit with compact-sized units and with no need to make any holes on the façade of the building.

The unit may be installed in any room in a building, the only requirement being that of providing a water inlet and drain like a normal sink. This feature allows it to be installed in the event of architectural, planning, aesthetic and building regulations constraints.

They are therefore ideal also for architecturally valuable buildings, whose façades cannot be spoiled by an air conditioning unit or for all those buildings whose regulations does not allow installation.

They are the ideal solution for all those who until now thought they would not be able to install an air conditioning unit in their house or business.

They are also excellent for all those who wish to reap the maximum possible savings. In fact, in addition to assuring savings and reducing consumption, water also makes it possible to achieve greater efficiency than conventional air systems.

Water condensation systems assure the best performance in any environmental condition as water temperature is subject to minimal variations compared to air.

In addition to water taken from the municipal water mains, all Parkair ACW Water Condensing Units are suited to operation with well or table water, and in closed loop systems.

When should one use our ACW split systems?

- ✓ **When you wish to have considerable cost savings thanks to the use of water which assures better performance with lower energy consumption.**
- ✓ **When there is no external space available.**
- ✓ **If the building regulations forbid application on the façade or balconies of conventional external motors.**
- ✓ **To avoid quarrelling with the neighbours due to the noise level of external motors.**
- ✓ **Or to safeguard the aesthetics of building façades.**

One of the cleanest and most efficient energy sources in the world, clean and renewable

Water's natural cycle

The continuous availability of water in its various forms is due to the existence of a natural cycle, complex yet perfect, sustained by solar energy and the force of gravity.

In this framework water is cyclically purified by effect of evaporation, the ground's filtering power and biological self-purification mechanisms of water bodies.

The sun is the water cycle's engine. Its heat causes the evaporation of the large masses of water in seas and oceans, which then condense and fall back on the ground as rain or snow. In this way glaciers, snowfields, streams, rivers, lakes and aquifers will be fed. The water flows into the sea again and initiates a new cycle.

During the cycle only pure water evaporates, in fact the minerals and other substances dissolved in it are deposited, thus causing the saltiness of seawater: the process is therefore a sort of distillation powered by the sun, which has the effect of purifying water.

As this process is continuously renewed, water represents a renewable energy source.



A technology that contributes to environmental sustainability

Let's get to know a Heat Pump

The heat pump is able to meet all the needs of a room's conditioning and heating, assuring the comfort and well-being of the people living or working there.

The heat pump is in fact a machine able to transfer energy from a low temperature environment to a higher temperature system.

With the same procedure through which a pump raises a fluid from a lower level to a higher one, the heat pump, using a single system, heats and cools the rooms in a home or workplace, in addition to producing domestic hot water for the daily requirements.

A heat pump system is therefore able to meet all the air conditioning and heating requirements of a room, assuring the comfort and well-being of the people living or working there.

It is a technology that contributes to environmental sustainability and the reduction of energy consumption, with cost savings in electricity bills and a return on investment in the short term, thanks to government incentives and advantages one is able to benefit from.

One may say that, from the energy point of view, the process at the basis of a heat pump is always cost effective: 1 kWh of electricity yields up to 5 kWh thermal energy. The energy obtained is therefore always greater than the one used.

A heat pump system, finally, increases the market value of the building, also for the aims of property sale, as it contributes to increasing the building's energy class.

Low cost, clean energy

Heating, cooling and domestic hot water at low costs

Geothermal

The ground contains an inexhaustible source of heat: the temperature, as you go deeper underground, increases thanks to geothermal energy directed toward the surface from the earth's core; the ground also absorbs nearly half the energy it receives from the sun.

As a result only a few metres below the earth's surface, the ground maintains a constant temperature throughout the year and this allows us to extract heat in winter to heat a room and release heat during the summer to cool the same room in a natural and clean manner, using a free and renewable heat source.

Such heat exchange is carried out with heat pumps combined with geothermal or ground water probes which, exploiting these principles, allow our homes to be heated and cooled, retrieve hot water for domestic use with a single system and with low electricity consumption.

Parkair's GEO heat pump is the efficient, effective and environmentally friendly alternative to completely replace a conventional system.

The probes in deep contact with the ground receive or release energy depending on the time of year and the production demand, providing to the heat pump what it needs to operate the system and achieve the desired result.

Room heating (20/22°C), Cooling (26°C) and Domestic Hot Water production throughout the year.

The advantages in using GEO?

- ✓ It makes you independent from oil and gas prices
- ✓ Environmentally friendly since it does not emit CO2 and there are no external units
- ✓ Quiet
- ✓ Perfectly integrated with other conventional heating systems or renewable energies
- ✓ Assures high yield
- ✓ Installation costs are amortised in less than 5 years

Savings up to 40% for heat production

Eliminates maintenance costs

Our commitment for a better energy



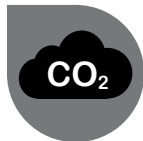
Energy policy for the “20-20-20” plan

The aim is obviously to counter climate change and foster the use of renewable energy sources through binding objectives for member States.

Parkair has a duty to supply high performance products to reduce the environmental impact, adapting to results in view of the European 2020 efficiency target.

Parkair’s catalogue is in fact able to meet the requirements of all European Regulations currently in force.

-20%



Reducing Greenhouse Gas emissions

+20%



Raising the share of energy produced from renewable sources

-20%



Reducing Energy Consumption

**There must be a better way to make the
things we want, a way that doesn't spoil
the sky, or the rain, or the land
Paul McCartney**

For intelligent, sustainable and inclusive growth



The ErP directive: new values for consumptions

The 2009/125/EC Directive Energy-related-Products - ErP – also known as Eco-design – is a re-formulation of Directive 2005/32/EC (Energy-Using-Products - EuP) and is in actual fact a framework directive that will govern the eco-design requirements for all products that use energy - except those intended for the transport sector - through specific implementing regulations.

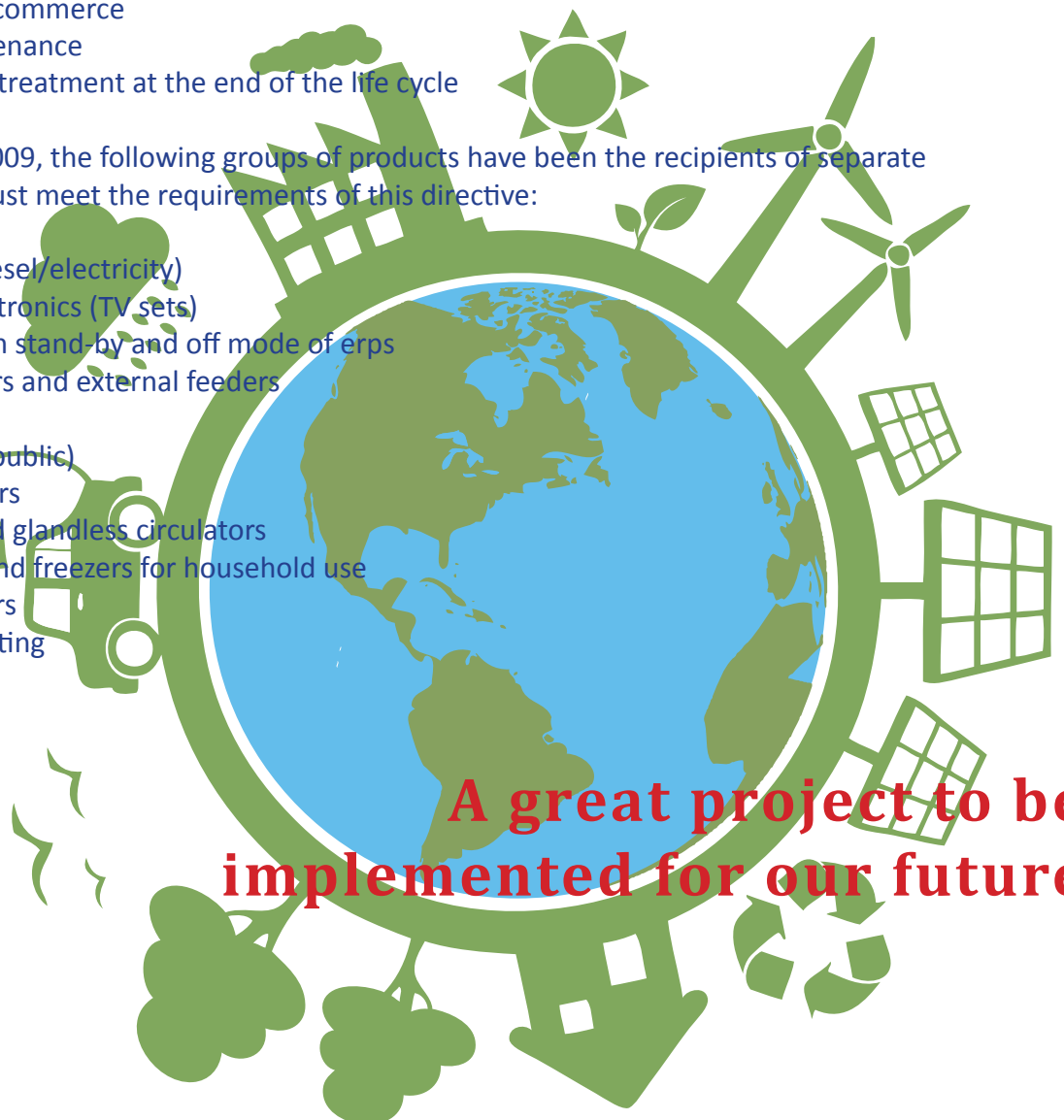
This directive represents the most important initiative undertaken by the EU to improve energy efficiency by 20% by the year 2020.

This is the first directive that regards the entire product's life cycle, in fact it includes requirements for the following sectors of products and services:

- Acquisition of raw materials
- Production
- Transport and commerce
- Use and maintenance
- Reuse/recycle/treatment at the end of the life cycle

As of November 2009, the following groups of products have been the recipients of separate regulations and must meet the requirements of this directive:

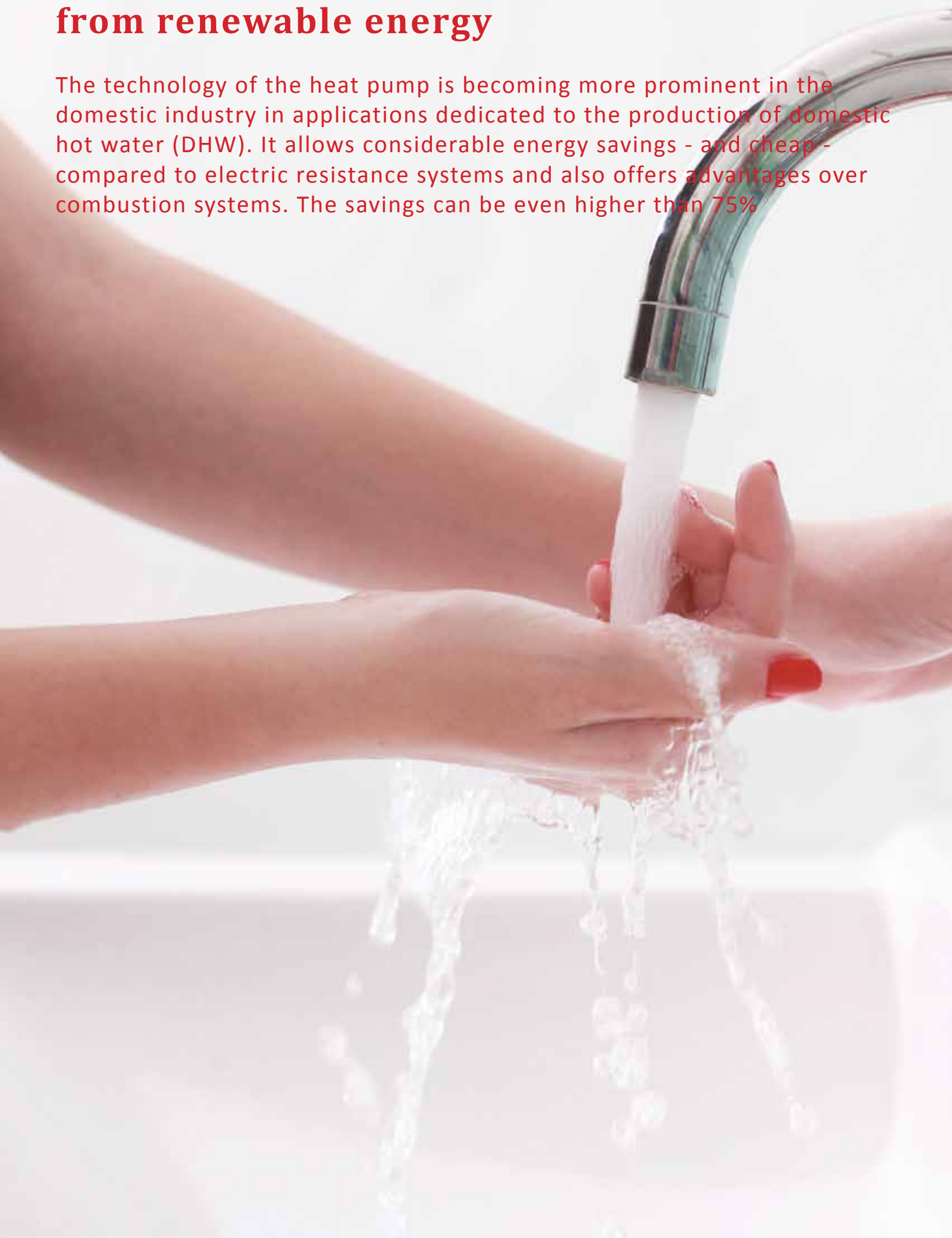
- Boilers (gas/diesel/electricity)
- Consumer electronics (TV sets)
- Energy losses in stand-by and off mode of erps
- Battery chargers and external feeders
- Office lighting
- Road lighting (public)
- Electrical motors
- Standalone and glandless circulators
- Refrigerators and freezers for household use
- Simple decoders
- Household lighting



A great project to be implemented for our future

Low cost hot domestic water from renewable energy

The technology of the heat pump is becoming more prominent in the domestic industry in applications dedicated to the production of domestic hot water (DHW). It allows considerable energy savings - and cheap - compared to electric resistance systems and also offers advantages over combustion systems. The savings can be even higher than 75%





Heat Pump for Domestic Hot Water Production

WALLY Acqua

Compact systems Water-to-Water

WALLY Aria

Compact systems Air-to-Water

HPA

Monoblock system Air-to-Water

HPA-S

Split system Air-to-Water

BHP

Buffer tanks for DHW using the Heat Pumps HPA-S

Heat Pump for DHW production

WALLY Acqua

Compact system Water-to-Water wall or floor application



R134A

EUROPEAN
PATENT
PENDING

MONOBLOCK

CAPACITY FROM 30LT UP TO 120LT

WITHOUT EXTERNAL UNITS OR CONNECTIONS

EASY INSTALLATION

LOW NOISE

COMPACT DESIGN

ANTILEGIONELLA CYCLE

Functional specs



Main features

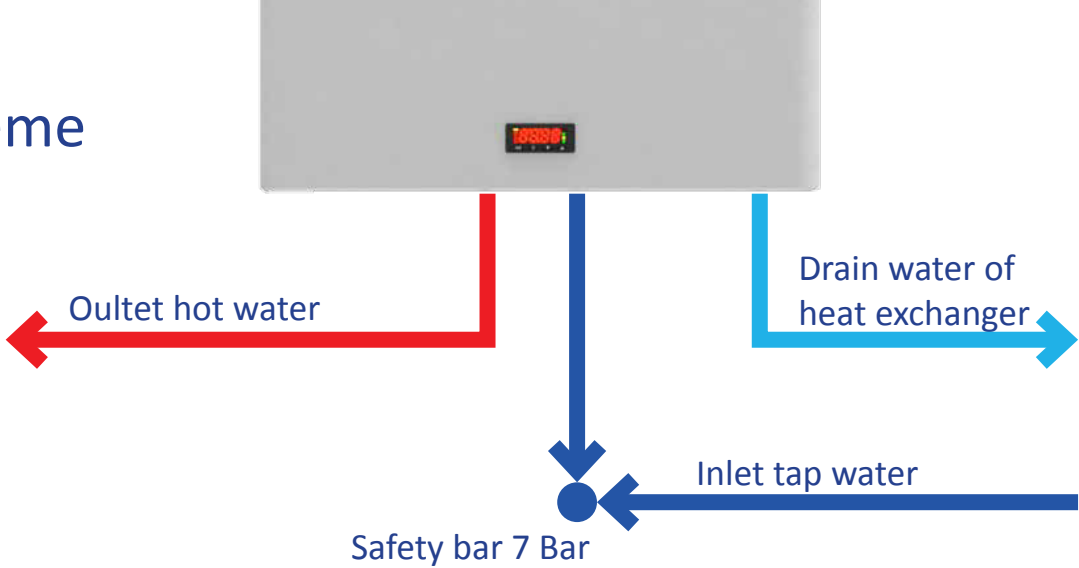
It efficiently produces domestic hot water using the well established heat pump technology together with water condensation. The high performance makes it possible to obtain significant benefits with the lowest environmental and economic impact. In fact thanks to COP 3.9 electrical consumption is over 75% lower than conventional water boilers.

Installing the DHW heat pump WALLY Acqua is easy and far from demanding. The ease of installation, quiet and reliable operation and moderate maintenance requirements complement the advantages of this very environmentally-friendly and economic system.

The machine's control periodically activates high temperature sanitising cycles to prevent the formation of hazardous bacteria for human health.

The coolant fluid used in the heat pump is R134A which thanks to high thermodynamic features assures optimum performance. Furthermore, it is not harmful to the ozone layer, it contains no chlorine, it is neither toxic nor flammable, to the advantage of safety both for the user and installer.

Functional scheme



Where to install it?

Bathroom



Kitchen



Laundry



Some additional information...

75%



The energy saving compared to a classic electric water heater.

60°C



Maximum water temperature.

35%



The energy saving compared to a classic condensing boiler.

COP=3.9



Energy efficiency among the highest in the market for heat pump water heaters.

GAS R134A



Ecological refrigerant guarantees high yields.

Technical data

Compact systems for DHW production Water-to-Water WALLY Acqua									
Model		WALLY-30WSK	WALLY-30WS	WALLY-50WS	WALLY-70WS	WALLY-80WS	WALLY-120WS	Kit KF-30WS	Kit KF-80WS
Code	-	175016	175015	175020	175025	175030	175035	175036	175037
Capacity	litri	30	30	50	70	80	120	-	-
Number of accumulations	Nr	1	1	1	1	2	2	-	-
Heating capacity (electrical resistance)	kW	0,85	0,85	0,85	0,85	0,85	0,85	-	-
Heating capacity (compressor)	kW	1,30	1,30	1,30	1,30	1,30	1,30	-	-
Total heating capacity	kW	2,15	2,15	2,15	2,15	2,15	2,15	-	-
Maximum absorption PDC	kW	0,58	0,58	0,58	0,58	0,58	0,58	-	-
Average power consumption	kW	0,49	0,49	0,49	0,49	0,49	0,49	-	-
Dimensions (WxDxH)	mm	320x480x850	327x310x1160	327x310x1560	327x310x1940	600x320x1310	600x320x1710	327x310x250	600x320x250
Weight (Net/Gross)	Kg	48/78	42/72	52/102	60/130	72/152	88/207	-	-
Maximum water pressure	bar	7	7	7	7	7	7	-	-
Maximum water temperature	°C	35,00	35,00	35,00	35,00	35,00	35,00	-	-
Minimum water temperature	°C	5	5	5	5	5	5	-	-
Nominal water flow	mc/h	0,23	0,23	0,23	0,23	0,23	0,23	-	-
Maximum water flow	mc/h	0,46	0,46	0,46	0,46	0,46	0,46	-	-
Power supply	V-Hz	230 V 50Hz	230 V 50Hz	230 V 50Hz	230 V 50Hz	230 V 50Hz	230 V 50Hz	-	-
Protection class	-	IP X4	IP X4	IP X4	IP X4	IP X4	IP X4	-	-
Sound power Lw (A)	dB(A)	58	58	58	58	58	58	-	-
Legionella system	70°C	Automatic						-	-
Operating mode	-	Auto-Eco-Boost						-	-
Heating time (according to EN 16147)	hh:mm	01:12	01:12	01:58	02:44	03:12	05:20	-	-
Heating time w/ BOOST mode (according to EN 16147)	hh:mm	Unit testing						-	-
Copt (according to EN 16147)	-	3,5	3,5	3,6	3,7	3,9	3,9	-	-

Performances referred to the following conditions: Water inlet temperature 15°C, the storage room temperature boiler 20°C, heating water from 10°C up to 55°C.

Heat Pump for DHW production

WALLY Aria

Compact system Air-to-Water wall or floor application



MONOBLOCK

CAPACITY FROM 30LT UP TO 120LT

WITHOUT EXTERNAL UNITS OR CONNECTIONS

EASY INSTALLATION

LOW NOISE

COMPACT DESIGN

ANTILEGIONELLA CYCLE

Functional specs



Main features

It efficiently produces domestic hot water using the well established heat pump technology together with water condensation. The high performance makes it possible to obtain significant benefits with the lowest environmental and economic impact. In fact thanks to COP 3.4 electrical consumption is over 75% lower than conventional water boilers.

Installing the DHW heat pump WALLY Aria is easy and far from demanding. The ease of installation, quiet and reliable operation and moderate maintenance requirements complement the advantages of this very environmentally-friendly and economic system.

The machine's control periodically activates high temperature sanitising cycles to prevent the formation of hazardous bacteria for human health.

The coolant fluid used in the heat pump is R134A which thanks to high thermodynamic features assures optimum performance. Furthermore, it is not harmful to the ozone layer, it contains no chlorine, it is neither toxic nor flammable, to the advantage of safety both for the user and installer.

Functional scheme



Where to install it?

Bathroom



Kitchen



Laundry



Some additional information...

75%



The energy saving compared to a classic electric water heater.

60°C



Maximum water temperature.

35%



The energy saving compared to a classic condensing boiler.

COP=3.4



Energy efficiency among the highest in the market for heat pump water heaters.

GAS R134A



Ecological refrigerant guarantees high yields.

Technical data

Compact systems for DHW production Air-to-Water WALLY Aria								
Model		WALLY-30AS	WALLY-50AS	WALLY-70AS	WALLY-80AS	WALLY-120AS	Kit KF-30AS	Kit KF-80AS
Code	-	175115	175120	175125	175130	175135	175136	175137
Capacity	litri	30	50	70	80	120	-	-
Number of accumulations	Nr	1	1	1	2	2	-	-
Heating capacity (electrical resistance)	kW	0,85	0,85	0,85	0,85	0,85	-	-
Heating capacity (compressor)	kW	1,00	1,00	1,00	1,00	1,00	-	-
Total heating capacity	kW	1,85	1,85	1,85	1,85	1,85	-	-
Maximum absorption PDC	kW	0,350	0,350	0,350	0,320	0,320	-	-
Average power consumption	kW	0,270	0,270	0,270	0,270	0,270	-	-
Dimensions (WxDxH)	mm	327x310x1160	327x310x1560	327x310x1940	600x320x1310	600x320x1710	327x310x250	600x320x250
Weight (Net/Gross)	Kg	48/78	55/105	62/132	76/156	91/211	-	-
Maximum water pressure	bar	7	7	7	7	7	-	-
Maximum air temperature	°C	37	37	37	37	37	-	-
Minimum air temperature	°C	7	7	7	7	7	-	-
Nominal airflow	mc/h	130	130	130	130	130	-	-
Cubic environment requirement	mc	15	15	15	15	15	-	-
Power supply	V-Hz	230 V 50Hz	231 V 50Hz	232 V 50Hz	233 V 50Hz	233 V 50Hz	-	-
Protection class	-	IP X4	IP X5	IP X6	IP X7	IP X7	-	-
Sound power Lw (A)	dB(A)	58	58	58	56,2	56,2	-	-
Legionella system	70°C	Automatic					-	-
Operating mode	-	Auto-Eco-Boost					-	-
Heating time (according to EN 16147)	hh:mm	01:43	02:57	04:18	04:34	06:46	-	-
Heating time w/ BOOST mode (according to EN 16147)	hh:mm	0:52	01:27	03:03	02:33	03:31	-	-
Copt (according to EN 16147)	-	2,70	2,70	2,70	2,70	2,70	-	-

Performances referred to the following conditions: Air inlet temperature 7°C, R.H. 87%, storage room temperature boiler 20°C, heating water from 10°C up to 55°C.

Heat Pump for DHW production

HPA

Monoblock systems Air-to-Water



MONOBLOCCO

COMPRESSORE AD ALTA EFFICIENZA

INTEGRAZIONE AL FOTOVOLTAICO

RISPARMIO ECONOMICO ED ENERGETICO

FACILE INSTALLAZIONE

ELEVATA SILENZIOSITÀ

DESIGN COMPATTO

CICLO ANTILEGIONELLA

Functional specs



Main features

Produce in modo efficiente acqua calda sanitaria utilizzando la consolidata tecnologia delle pompe di calore. Le prestazioni elevate consentono di ottenere importanti benefici con il minor impatto ambientale ed economico. Infatti grazie ai COP fino al 3.1 i consumi elettrici si riducono di oltre il 75% rispetto ai tradizionali scaldabagni.

Installare uno scaldacqua monoblocco a pompa di calore HPA è facile e non impegnativo. La facilità d'installazione, il funzionamento silenzioso ed affidabile e la moderata esigenza di manutenzione completano i vantaggi di questo sistema altamente ecologico ed economico.

Il controllo della macchina attiva periodicamente cicli di sanificazione ad alta temperatura per prevenire la formazione di batteri pericolosi per la salute umana.

Il fluido refrigerante utilizzato nella pompa di calore è l'R134A che grazie ad elevate caratteristiche termodinamiche garantisce ottimi rendimenti. Inoltre non è dannoso allo strato di ozono, non contiene cloro, non è tossico né infiammabile, a tutto vantaggio della sicurezza sia per l'utilizzatore che per l'installatore.

Where to install it?

Nel mobile bagno



Garage



Locale tecnico



Lavanderia



The serie HPA



Technical data

Monoblock systems for DHW production Air-to-Water HPA				
Model		HPA-90	HPA-200	HPA-260
Code	-	175065	175070	175075
Capacity	litri	90	200	260
Installation	-	Hanging	Floor	Floor
Heating capacity (electrical resistance)	kW	1,2	1,5	1,5
Average electrical power matched	kW	0,21	0,37	0,37
Heating capacity (compressor)	kW	1,0	1,6	1,6
Total heating capacity	kW	2,2	3,1	3,1
Maximum absorption PDC	kW	0,27	0,50	0,50
Average power consumption	kW	0,21	0,37	0,37
Absorption PDC w/ electrical resistance	kW	1,47	2,0	2,0
Dimensions (Diameter x Height)	mm	500x1380	600x1710	600x2000
Weight (Net/Gross)	Kg	46/136	100/300	120/375
Maximum water pressure	bar	7	7	7
Maximum air temperature	°C	43,0	43,0	43,0
Minimum air temperature	°C	4,0	4,0	4,0
Nominal airflow	mc/h	130	350	350
Cubic environment requirement	mc	15	-	-
Power supply	V-Hz	230 V 50Hz	231 V 50Hz	232 V 50Hz
Protection class	-	IP X4	IP X5	IP X6
Refrigerant	-	R134A	R134A	R134A
Charge of refrigerant	gr	530	900	900
Sound power inside Lw (A)	dB(A)	60	59	59
Sound power outside Lw (A)	dB(A)	55	57	57
Legionella system	70°C	Automatic		
Operating mode	-	Auto-Eco-Boost		
Heating time (according to EN 16147-2011)	hh:mm	05:30	07:16	09:44
Heating time w/ BOOST mode (according to EN 16147-2011)	hh:mm	02:25	03:48	04:57
Copt (according to EN 16147)	-	2,8	2,8	3,1
Coil (condenser) wrapped	-	YES	YES	YES
Internal coil for solar	-	NOT	YES	YES

Performances referred to the following conditions: Air inlet temperature 20°C (15°C max), the storage room temperature boiler 20°C, heating water from 10°C up to 55°C.

Heat Pump for DHW production & Buffer Tanks

HPA-S

Split systems Air-to-Water



SISTEMA AUTO-DEFROSTING

GAS ECOLOGICO R134A

FACILE INSTALLAZIONE

ELEVATA SILENZIOSITÀ

DESIGN COMPATTO

CICLO ANTILEGIONELLA



Functional specs



Main features

The Heat Pump HPA-S is the innovative treatment unit to combine with an external storage to renew the central production of sanitary hot water, ideal in renovation projects.

HPA-S is equipped with two temperature probes to be inserted in the accumulation remote.

The electronic control of the HPA-S is also programmed to drive a circulation resistance.

Buffers

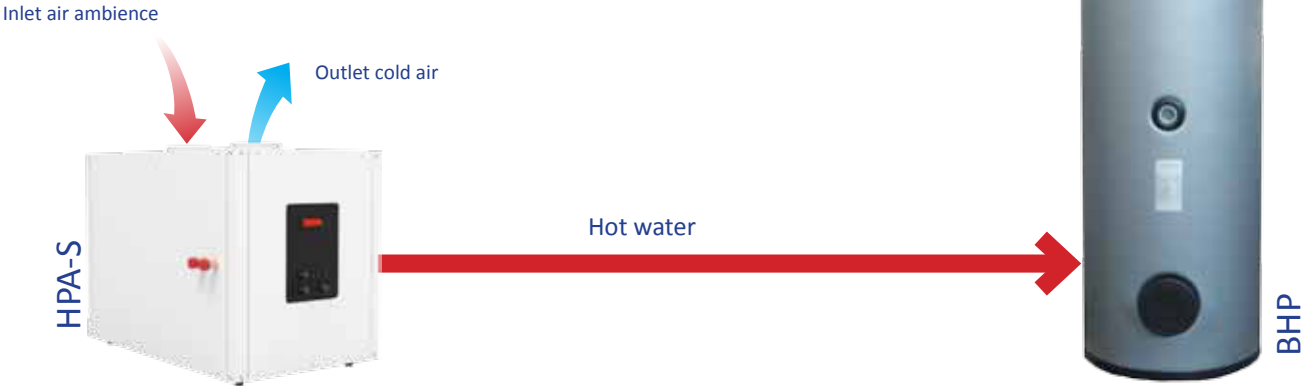
The BHP series boilers are designed with large exchange surface coil enamelled to obtain large production of hot water. The long life of the tank is ensured by the opal glass at about 850°C made according to DIN 4753 and magnesium anode to corrosion.

The polyurethane foam insulation of 50mm thick CFC and HCFC-free, ensures excellent insulation. The outer cover is made by wrapping the tank with a cape with vinyl, PVC or PE wire.

The tanks are equipped with the following attacks:

- Side flange 110mm, for inspection and possible installation of the heating unit;
- Connection for recirculation;
- Connection $\varnothing 1 / 2$ "g for eventual installation of the heating unit;
- Connection $\varnothing 1 / 2$ "g for installation of previously thermostat;
- Connection $\varnothing 1 / 2$ "g for insertion thermometer.

Functional scheme



Technical data

Split systems for DHW production Air-to-Water HPA-S			
Model		HPA-S2	HPA-S3
Code	-	175080	175085
Maximum power of the electrical resistance (NOT INCLUDED)	kW	1,5	1,5
Average electric power input	kW	0,43	0,67
Heating capacity	kW	1,9	2,9
Dimensions (WxDxH)	mm	680x500x496	680x500x496
Weight	kg	30	37
Maximum water pressure	bar	7	7
Maximum air temperature	°C	38	38
Minimum air temperature	°C	-7	-7
Nominal airflow	mc/h	350/500	550/700
Power supply parameters	V - Hz	230V 50Hz	230V 50Hz
Protection class	-	IP X4	IP X4
Sound power inside Lw (A)	dB(A)	60	60
Operating mode	-	Auto-Eco-Boost	Auto-Eco-Boost
Automatic cycle legionella	-	YES	YES
Heating time (according to EN 16147-2011)	hh:mm	08:29	05:44
Copt (according to EN 16147-2011)	-	2,9	2,8
Refrigerant	-	R134A	R134A
Refrigerant charge	Kg	0,57	0,66
Recirculation pump	-	NOT	NOT
Temperature probes for external accumulation	-	2 included	

Buffer tanks for DHW production BHP						
Model		BHP-150	BHP-200	BHP-200-DS	BHP-300	BHP-300-DS
Code	-	175090	175092	175093	175094	175095
Buffer volume	litri	150	200	200	300	300
Maximum operating pressure	Bar	10	10	10	10	10
Maximum operating temperature	°C	95	95	95	95	95
Production water DT = 35 °C (80/60 - 10/45)	mc/h	0,4	0,7	0,7	0,9	0,9
Extent necessary to coil	mc/h	0,6	1,1	1,1	1,6	1,6
Surface coil exchange	mq.	0,6	1,1	1,1	1,5	1,5
Total height	mm	995	1265	1265	1710	1710
External diameter (with insulation)	mm	610	610	610	610	610
Inner diameter (without insulation)	mm	500	500	500	500	500
Cold water	"	1"	1"	1"	1"	1"
Heating return	"	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4
Heating probe	"	1/2"	1/2"	1/2"	1/2"	1/2"
Heating flow	"	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4
Recirculation	"	3/4"	3/4"	3/4"	3/4"	3/4"
Hot water	"	1"	1"	1"	1"	1"
Electrical resistance	"	1" 1/2	1" 1/2	1" 1/2	1" 1/2	1" 1/2
Thermometer	"	1/2"	1/2"	1/2"	1/2"	1/2"
Serpentine integration solar system	-	NO	NO	SI	NO	SI

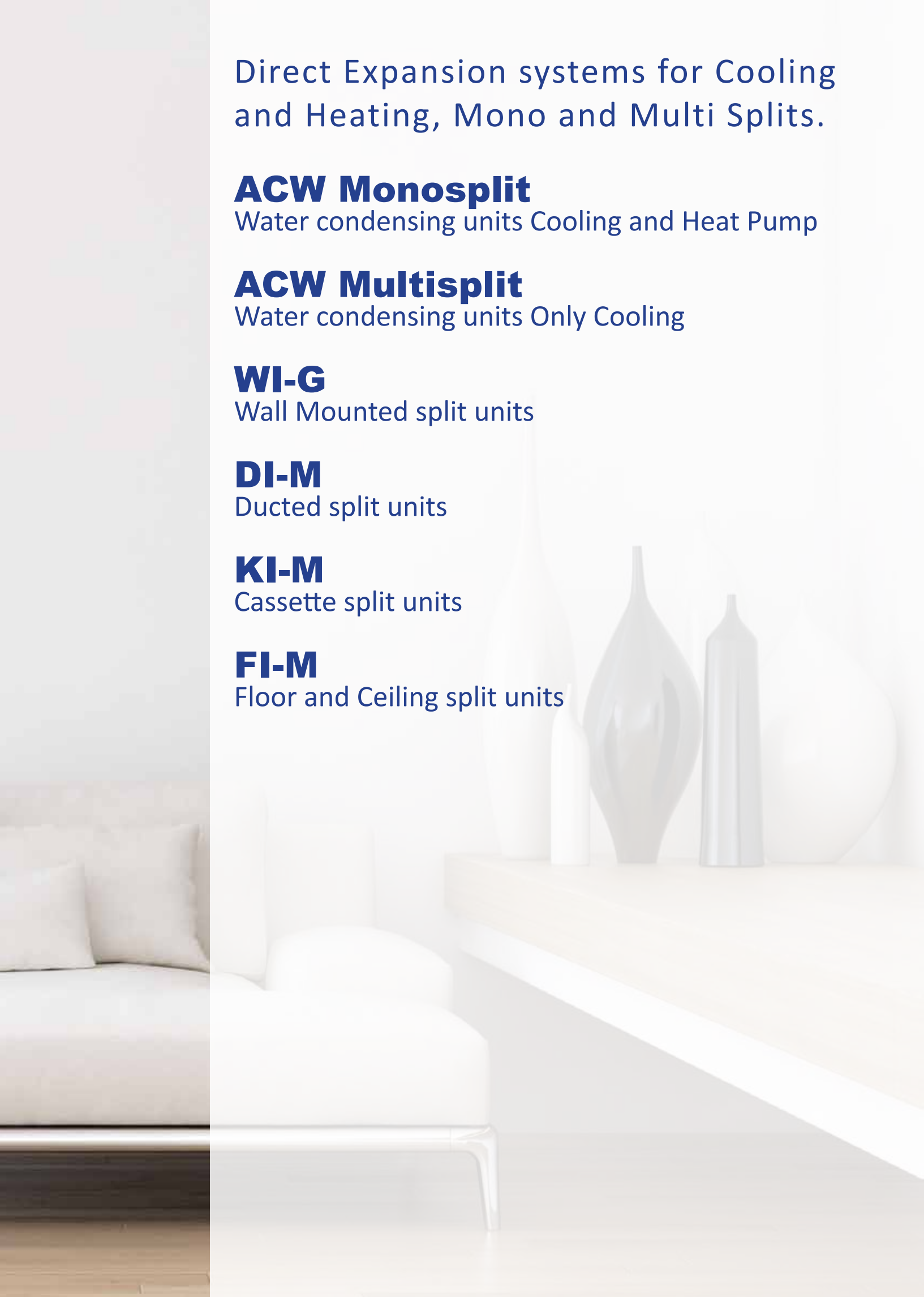
Performances referred to the following conditions: Air inlet temperature 20°C (15°C max.), storage room temperature boiler 20°C, heating water from 10°C up to 55°C.

The tests were carried out on a 260 liter tank with coil with an area of 1 m2, 50mm of insulation.

Cooling and Heating without any external units and without any external links or holes in facade.

The ideal solution for all those who believed until today to be not able to install an HVAC system in their home or business.





Direct Expansion systems for Cooling and Heating, Mono and Multi Splits.

ACW Monosplit

Water condensing units Cooling and Heat Pump

ACW Multisplit

Water condensing units Only Cooling

WI-G

Wall Mounted split units

DI-M

Ducted split units

KI-M

Cassette split units

FI-M

Floor and Ceiling split units

Cooling and Heat Pump

ACW Monosplit

Water condensing units in direct expansion Water-to-Air



H₂O-INVERTER SYSTEM

RANGE FROM 3KW TO 23KW

ONLY COOLING OR HEAT PUMP

ECO FRIENDLY GAS R410A

LOW NOISE



Functional specs



Main features

H₂O Inverter system

All the models are provided with with modulating valve for limiting water consumption and equipped with a PLC (Programmable Logic Controller) for the automatic control of all functions.

quiet operation

Thanks to the use of panels with thermal and acoustic insulation units are particularly silent even if installed in close proximity to domestic environments.

Simple and compact design

The structure is made from a multiple housing sheet steel painted with epoxy powder color “Pure White” and removable side panels covered with soundproofing material.

Easy installation and system management

The front inspection panel allows easy access to internal components and a quick link to the appropriate service valve gauges for measuring pressures making it easier handling, installation and any subsequent action.

Where to install it?

Bathroom



Kitchen



Ceiling



Understairs



Componenti

Electronic controller PLC



Modulating valve



Compressors R410A Rotativi & Scroll



Technical data

Water Condensing Units ACW - Monosplits - Only Cooling										
Model		ACW-9	ACW-12	ACW-18	ACW-24	ACW-30	ACW-32T	ACW-40T	ACW-50T	ACW-60T
Code	-	190000	190005	190010	190015	190020	190025	190030	190035	190040
Cooling capacity	BTU/h	8.970	12.654	17.737	27.288	28.500	32.916	37.521	54.440	63.922
	kW	2,63	3,71	5,20	8,00	8,35	9,65	11,00	15,96	18,74
Power supply	V	230	230	230	230	230	400	400	400	400
Power consumption	kW	0,67	0,84	1,15	1,80	1,90	2,62	2,70	3,48	4,16
EER	kW/kW	3,93	4,42	4,52	4,44	4,39	3,68	4,07	4,58	4,50
Water flow (15 ° C)	mc/h	0,14	0,19	0,28	0,38	0,50	0,50	0,63	0,79	0,94
Water flow (Temp. Ev.) (29-34 ° C)	mc/h	0,48	0,63	0,95	1,20	1,60	1,60	2,10	2,60	3,10
Water connections (G)	"	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Refrigerant pipe ø (Liquid/Gas side)	"	1/4-3/8	1/4-1/2	1/4-1/2	3/8-5/8	3/8-5/8	3/8-3/4	3/8-3/4	3/8-3/4	3/8-3/4
	mm	6,35-9,52	6,35-12,7	6,35-12,7	9,52-15,9	9,52-15,9	9,52-19,0	9,52-19,0	9,52-19,0	9,52-19,0
Max. length refrigerant connection	mt.	15	15	15	15	25	25	25	25	25
Max. height difference w/ splits	mt.	5	5	8	8	10	10	10	10	10
Refrigerant	-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Sound level	dbA	49	50	51	52	51	51	52	52	52
Weight	Kg	34	35	37	42	63	63	65	66	66
Dimensions (WxDxH)	mm	460x420x450	460x420x450	460x420x450	460x420x450	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550

Water Condensing Units ACW - Monosplits - Heat Pump										
Model		ACW-9H	ACW-12H	ACW-18H	ACW-24H	ACW-30H	ACW-32TH	ACW-40TH	ACW-50TH	ACW-60TH
Code	-	190500	190505	190510	190515	190520	190525	190530	190535	190540
Cooling capacity	BTU/h	8.970	12.654	17.737	27.288	28.500	32.097	36.565	53.143	62.421
	kW	2,63	3,71	5,20	8,00	8,35	9,65	11,00	15,96	18,74
Heating capacity	BTU/h	11.256	15.758	21.830	32.063	34.792	42.603	46.935	66.002	77.566
	kW	3,30	4,62	6,40	9,40	10,20	12,49	13,76	19,35	22,74
Power supply	V	230	230	230	230	230	400	400	400	400
Power consumption	kW	0,75	0,98	1,33	1,98	2,28	3,21	3,30	4,29	5,17
EER	kW/kW	3,93	4,42	4,52	4,44	4,39	3,68	4,07	4,59	4,50
COP	kW/kW	4,40	4,71	4,81	4,74	4,47	3,89	4,17	4,51	4,40
Water flow - cooling	mc/h	0,14	0,19	0,28	0,38	0,50	0,50	0,63	0,79	0,94
Water flow - heating	mc/h	0,48	0,63	0,95	1,20	1,60	1,60	2,10	2,60	3,10
Water connections (G)	"	3/4	3/4	3/4	3/4	1	1	1	1	1
Refrigerant pipe ø (Liquid/Gas side)	"	1/4-3/8	1/4-1/2	1/4-1/2	3/8-5/8	3/8-5/8	3/8-3/4	3/8-3/4	3/8-3/4	3/8-3/4
	mm	6,35-9,52	6,35-12,7	6,35-12,7	9,52-15,9	9,52-15,9	9,52-19,0	9,52-19,0	9,52-19,0	9,52-19,0
Max. length refrigerant connection	mt.	15	15	15	15	25	25	25	25	25
Max. height difference w/ splits	mt.	5,00	5,00	8,00	8,00	10,00	10,00	10,00	10,00	10,00
Refrigerant	-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Sound level	dbA	49	50	51	52	51	51	52	52	52
Weight	Kg	34	35	37	42	63	63	65	66	66
Dimensions (WxDxH)	mm	460x420x450	460x420x450	460x420x450	460x420x450	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550

Performances refer to the following conditions: COOLING: Temp. 27°C ambient air B.S., 19°C B.U. / Inlet water temperature 15°C - HEATING: Air temp. 20°C. / IN-OUT water temperature 12-7°C. The cooling capacity and the electric absorption indicated are given at 5°C and 40°C condensation evaporation. Min water temperature in heat pump operation 10°C. The sound pressure is measured at 1 mt. away from the external surface of the unit in open field. See the table Corrosion Resistance contained in the booklet ACW instructions (download from our website) to verify the employment eligibility according to water quality. The flow rate of water with cooling tower is calculated with values of temperature 29/34°C.

Only cooling **ACW Multisplit**

Water condensing units in direct expansion Water-to-Air



H2O-INVERTER SYSTEM
RANGE FROM 3KW TO 16KW
UP TO 4 INDOOR UNITS
ECO FRIENDLY GAS R410A
LOW NOISE



Functional specs



Main features

H2O Inverter system

All the models are provided with with modulating valve for limiting water consumption and equipped with a PLC (Programmable Logic Controller) for the automatic control of all functions.

quiet operation

Thanks to the use of panels with thermal and acoustic insulation units are particularly silent even if installed in close proximity to domestic environments.

Simple and compact design

The structure is made from a multiple housing sheet steel painted with epoxy powder color “Pure White” and removable side panels covered with soundproofing material.

Easy installation and system management

The front inspection panel allows easy access to internal components and a quick link to the appropriate service valve gauges for measuring pressures making it easier handling, installation and any subsequent action.

Where to install it?

Bathroom



Kitchen



Ceiling



Understairs



Componenti

Electronic controller PLC



Modulating valve



Compressors R410A Rotativi & Scroll



Technical data

Water Condensing Units ACW - Dual splits - Only Cooling											
Model		9/9	12/12	9/9 BC	9/12 BC	9/18 BC	9/24 BC	12/12 BC	12/18 BC	12/24 BC	18/18 BC
Code	-	191000	191005	191500	191505	191520	191525	191530	191535	191540	191545
Cooling capacity	BTU/h	12.654	17.737	17.940	21.624	26.707	36.258	25.308	30.391	39.942	35.474
	kW	3,71	5,20	5,26	6,34	7,83	10,63	7,42	8,91	11,71	10,40
Power supply	V	230	230	230	230	230	230	230	230	230	230
Power consumption	kW	0,84	1,15	1,34	1,51	1,82	2,47	1,68	1,99	2,64	2,30
EER	kW/kW	4,42	4,52	3,92	4,20	4,30	3,64	4,42	4,48	4,44	4,52
Portata acqua (15°C)	mc/h	0,19	0,28	0,14+0,14	0,14+0,19	0,14+0,28	0,14+0,38	0,19+0,19	0,19+0,28	0,19+0,38	0,28+0,28
Water flow - Cooling tower	mc/h	0,63	0,95	0,48+0,48	0,48+0,63	0,48+0,95	0,48+1,2	0,63+0,63	0,63+0,95	0,63+1,2	0,95+0,95
Water connections (G)	"	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Refrigerant pipe ø (Liquid/Gas side)	"	1/4-3/8	1/4-1/2	1/4-3/8	1/4-3/8+1/4-1/2	1/4-3/8+1/4-1/2	1/4-3/8+3/8-5/8	1/4-1/2	1/4-1/2	1/4-1/2+3/8-5/8	1/4-1/2
	mm	6,35-9,52	6,35-12,7	6,35-9,52	6,35-9,52+6,35-12,7	6,35-9,52+6,35-12,7	6,35-9,52+9,52-15,9	6,35-12,7	6,35-12,7	6,35-12,7+9,52-15,9	6,35-12,7
Max. length refrigerant connection	mt.	20	20	15+15	15+15	15+15	15+15	15+15	15+15	15+15	15+15
Max. height difference w/ splits	mt.	5	5	5	5	5	5	5	5	5	8
Refrigerant	-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Sound level	dbA	50	51	50	50	51	52	51	51	52	51
Weight	Kg	36	38	52	53	54	56	54	55	56	56
Dimensions (WxDxH)	mm	460x420x450	460x420x450	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550

Water Condensing Units ACW - Dual, Trial, Quadri splits - Only Cooling											
Model		18/24 BC	24/24 BC	9/9/9	9/9/12	9/9/18	9/12/12	12/12/12	9/9/9/9	9/9/12/12	12/12/12/12
Code	-	191550	191555	192000	192005	192015	192020	192025	193000	193005	193010
Cooling capacity	BTU/h	45.025	54.576	21.624	25.308	30.391	26.707	30.391	25.308	30.391	35.474
	kW	13,20	16,00	6,34	7,42	8,91	7,83	8,91	7,42	8,91	10,40
Power supply	V	230	230	230	230	230	230	230	230	230	230
Power consumption	kW	2,95	3,60	1,51	1,68	1,99	1,82	1,99	1,68	1,99	2,30
EER	kW/kW	4,47	4,44	4,20	4,42	4,48	4,30	4,48	4,42	4,48	4,52
Portata acqua (15°C)	mc/h	0,28+0,38	0,38+0,38	0,19+0,14	0,19+0,19	0,19+0,28	0,14+0,28	0,28+0,19	0,19+0,19	0,19+0,28	0,28+0,28
Water flow - Cooling tower	mc/h	0,95+1,2	1,2+1,2	0,63+0,48	0,63+0,63	0,63+0,95	0,48+0,95	0,95+0,63	0,63+0,63	0,63+0,95	0,95+0,95
Water connections (G)	"	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Refrigerant pipe ø (Liquid/Gas side)	"	1/4-1/2+3/8-5/8	3/8-5/8	1/4-3/8	1/4-3/8+1/4-1/2	1/4-3/8+1/4-1/2	1/4-3/8+1/4-1/2	1/4-1/2	1/4-3/8	1/4-3/8+1/4-1/2	1/4-1/2
	mm	6,35-12,7+9,52-15,9	9,52-15,9	6,35-9,52	6,35-9,52+6,35-12,7	6,35-9,52+6,35-12,7	6,35-9,52+6,35-12,7	6,35-12,7	6,35-9,52	6,35-9,52+6,35-12,7	6,35-12,7
Max. length refrigerant connection	mt.	15+15	15+15	20+15	20+15	20+15	20+15	20+15	20+20	20+20	20+20
Max. height difference w/ splits	mt.	8	8	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00
Refrigerant	-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Sound level	dbA	52	52	50	51	51	51	51	51	51	52
Weight	Kg	58	63	53	54	56	55	56	55	58	59
Dimensions (WxDxH)	mm	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550	485x505x550

Performances refer to the following conditions: COOLING: Temp. 27°C ambient air B.S., 19°C B.U. / Inlet water temperature 15°C. The cooling capacity and the electric absorption indicated are given at 5°C and 40°C condensation evaporation. Min water temperature in heat pump operation 10°C. The sound pressure is measured at 1 mt. away from the external surface of the unit in open field. See the table Corrosion Resistance contained in the booklet ACW instructions (download from our website) to verify the employment eligibility according to water quality. The flow rate of water with cooling tower is calculated with values of temperature 29/34°C.

Wall mounted split units **WI-G**

RANGE FROM 2,7KW UP TO 8KW

NEW MODERN DESIGN

ECO FRIENDLY GAS R410A

LOW NOISE



Functional specs



Main features

Elegant and essential design

A perfect balance of aesthetics and functionality, soft and neat lines that stylishly complement any internal setting. The unit stands out for the quality of the materials and superior level of finishes such as the hidden display.

Sleep Care

The Sleep Care function is a precise and intelligent technology for the night. It provides different setting modes for every type of users, such as adults, children and the elderly. Thanks to this function your sleep will certainly improve.

Low noise

Thanks to quiet operation, the unit distributes air in the room in an almost imperceptible manner, emitting minimal noise at a level of 20 dB(A). In addition to the possibility of controlling the air flow output volume, a larger diameter fan reduces the internal unit's noise level thus further reducing fan speed and optimising the air flow.

Design



Remote controller
RC-G
(included)

Special notes

Backlit Display



Easy Interface



Double design surface



Ideal applications

Residences



Offices



Shops



Bars & restaurants



Technical data

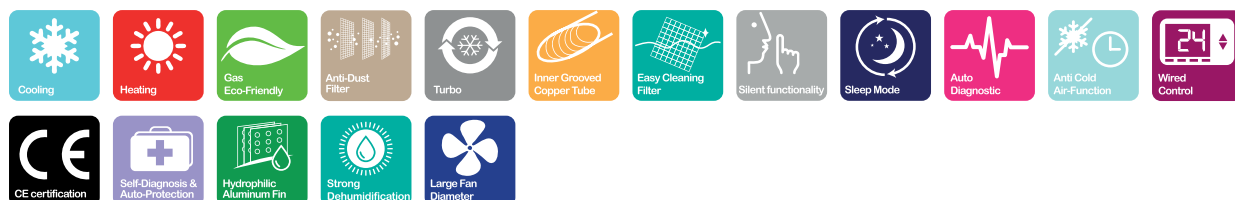
Wall mounted split units WI-G					
Model		WI9-G	WI12-G	WI18-G	WI24-G
Code	-	220000	220005	220010	220015
Power supply	V-ph-Hz	230 - 1 - 50	230 - 1 - 50	230 - 1 - 50	230 - 1 - 50
Cooling capacity	Btu/h	9210	11939	15350	24218
	KW	2,70	3,50	4,50	7,10
Heating capacity	Btu/h	9721	12962	17055	26606
	KW	2,85	3,80	5,00	7,80
Input Power	w	33	35	50	85
Fan Motor Speed (Hi/Med/Lo)	r/min	1250/1050/930	1330/1220/1170	1300/1150/1000	1270/1150/1050
Air flow (Hi/Med/Lo)	m3/h	450/400/320	500/450/380	850/700/650	1100/980/880
Noise level (Hi/Med/Lo)	dB(A)	40/37/34	40/37/34	43/40/37	50/46/43
Unit dimensions (WxDxH)	mm	805x290x210	805x290x210	860x292x205	1080x330x220
Packing dimensions (WxDxH)	mm	870x365x280	870x365x280	930x365x280	1165x405x330
Weight (Net/Gross)	kg	10/11,5	10/11,5	11/13	15/20
Drainage water pipe dia.	mm	17	17	17	17
Refrigerant pipe dia. (Liquid side/Gas side)	mm	6,35/9,52	6,35/12,7	6,35/12,7	9,52/15,88
	"	1/4 - 3/8	1/4 - 1/2	1/4 - 1/2	3/8 - 5/8
Controller	Kind	Remote controller			

Ducted split units **DI-M**

RANGE FROM 3,5KW UP TO 16KW
COMPACT DESIGN
ECO FRIENDLY GAS R410A
MULTY AIR INLET



Functional specs



Main features

Compact Design

The unit is extremely compact (only 210 mm height for the 12Kw model) thus making it possible to install it in rooms with little false ceilings space. Furthermore the internal units sized 18Kw and 24Kw are only 920mm wide.

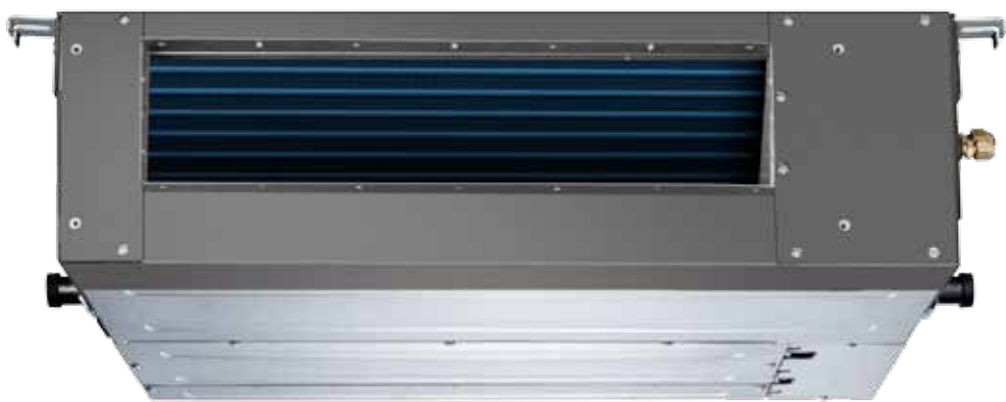
Flexible Air Intake Ways

Air inlet from back standard and from bottom optional. The size of the plate from bottom and flange from back is the same, it's easy for installer to change the air inlet from back to bottom.

"Fresh Air" inlet

The "Fresh Air" intake is standard supplied and it is extremely easy to connect it to the outdoor air with a through hole in order to add outdoor air into the room.

Design



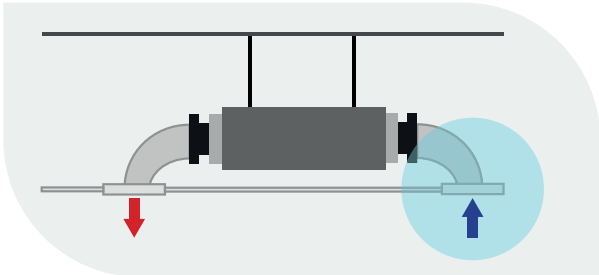
Wired controller
WC-M
(included)



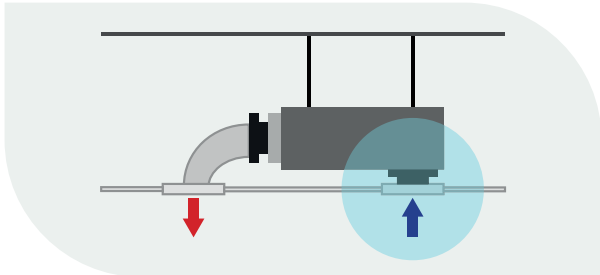
Remote controller
RC-M
(optional)

Special notes

Air inlet from the back (standard)



Air inlet from bottom (as option)



Ideal applications

Residences



Offices



Shops



Bars & restaurants



Technical data

Ducted split units DI-M								
Model		DI12-M	DI18-M	DI24-M	DI30-M	DI40-M	DI50-M	DI60-M
Code	-	210005	210010	210015	210020	210025	210030	210035
Power supply	V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50	220~240-1-50	220~240-1-50	220~240-1-50	220~240-1-50
Cooling capacity	Btu/h	12000	18000	24000	30000	36000	48000	55000
	KW	3,52	5,28	7,04	8,80	10,55	14,07	16,12
Heating capacity	Btu/h	13200	19000	26000	32000	39600	55000	60000
	KW	3,87	5,57	7,62	9,38	11,61	16,12	17,59
Input Power	w	68/57/51	107/65/52	163/93/75	227/142/115	291/168/138	356/201/152	355/223/173
Fan Motor Speed (Hi/Med/Lo)	r/min	1220/1010/880	1150/800/700	1000/750/680	935/700/620	1070/790/710	1070/750/650	1080/830/710
Air flow (Hi/Med/Lo)	m3/h	624/485/400	816/546/-	1260/808/-	1556/1008/-	1848/1103/-	2282/1439/-	2275/-/-
External Static Pressure - Nominal	Pa	25	25	25	37	37	50	50
External Static Pressure (Min/Max)	Pa	0-60	0-60	0-80	0-80	0-80	0-100	0-120
Noise level (Hi/Med/Lo)	dB(A)	43/37/31	44/37/33	44/37/34	50/44/42	46/38/35	50/45/40	47/40/38
Unit dimensions (WxDxH)	mm	700x635x210	920x635x210	920x635x270	1140x775x270	1140x775x270	1200x865x300	1200x865x300
Packing dimensions (WxDxH)	mm	915x655x290	1135x655x290	1135x655x350	1355x795x350	1355x795x350	1405x920x373	1405x920x373
Weight (Net/Gross)	kg	18.3/22.6	24/28	26.5/32	37/43	36.5/44	44.5/53	47/55
Drainage water pipe dia.	mm	25	25	25	25	25	25	25
Refrigerant pipe dia. (Liquid side/Gas side)	mm	6.35/12.7	6.35/12.7	9.52/15.9	9.52/19	9.52/19	9.52/19	9.52/19
	"	1/4 - 1/2	1/4 - 1/2	3/8 - 5/8	3/8 - 3/4	3/8 - 3/4	3/8 - 3/4	3/8 - 3/4
Controller	Kind	Wired controller						

Cassette split units **KI-M**

RANGE FROM 3,4KW UP TO 16KW

COMPACT DESIGN

ECO FRIENDLY GAS R410A

360° AIR DISTRIBUTION

Functional specs



Main features

360° air distribution

The innovative 360 Air Flow panel assures even more efficient air distribution. In addition to greater efficiency, the air flow is distributed to the room even more consistently, hence the perceived temperature is constant.

Ease of maintenance

Thanks to the tilting inspection panel the unit's cleaning and maintenance is even easier.

Super compact

Models KI40-M, KI50-M, KI60-M have a super compact design thanks to the thickness less than 25 cm (28cm for KI60-M) that make installation easier even in the most challenging settings.

Built-in drain pump

All models are fitted with built-in drain pump able to lift condensation water up to maximum gradient of 75 cm.

Design



KI12,18,24-M



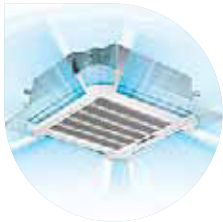
KI40,50,60-M



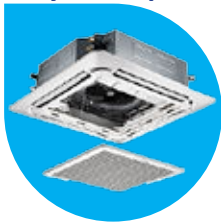
Remote controller
RC-M
(included)

Special notes

360° Air-Flow



Easy clean panel



Ideal applications

Residences



Offices



Shops



Bars & restaurants



Technical data

Cassette split units KI-M					
Model		KI12-M	KI18-M	KI24-M	KI40-M
Code	-	211005	211010	211015	211025
Power supply	V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50	380-415-3-50
Cooling capacity	Btu/h	11.500	18.000	24000	36000
	KW	3,37	5,28	7,04	10,55
Heating capacity	Btu/h	12000	19500	26400	40000
	KW	3,52	5,72	7,74	11,73
Input Power	w	47.1/37.8/31.1	80/65/46	91/80/70	174/145/121
Fan Motor Speed (Hi/Med/Lo)	r/min	780/670/540	1000/875/710	580/510/430	690/610/540
Air flow (Hi/Med/Lo)	m3/h	680/600/400	800/710/560	1200/1050/900	1800/1600/1400
Noise level (Hi/Med/Lo)	dB(A)	42/39/35	45/41/38	48/46/41	51/47/43
Unit dimensions (WxDxH)	mm	570x570x260	570x570x260	840x840x205	840x840x245
Packing unit dimensions (WxDxH)	mm	655x655x290	655x655x290	900x900x225	900x900x265
Panel dimensions (WxDxH)	mm	647x647x50	647x647x50	950x950x55	950x950x55
Packing panel dimensions (WxDxH)	mm	715x715x123	715x715x123	1035x1035x90	1035x1035x90
Unit weight (Net/Gross)	kg	15/18	17.5/20	23/27	25/28.5
Panel weight (Net/Gross)	kg	2.5/4.5	2.5/4.5	5/8	5/8
Drainage water pipe dia.	mm	25	25	32	32
Refrigerant pipe dia. (Liquid side/Gas side)	mm	6.35/12.7	6.35/12.7	9.52/15.9	9.52/19
	"	1/4 - 1/2	1/4 - 1/2	3/8 - 5/8	3/8 - 3/4
Controller	Kind	Remote control	Remote control	Remote control	Remote control

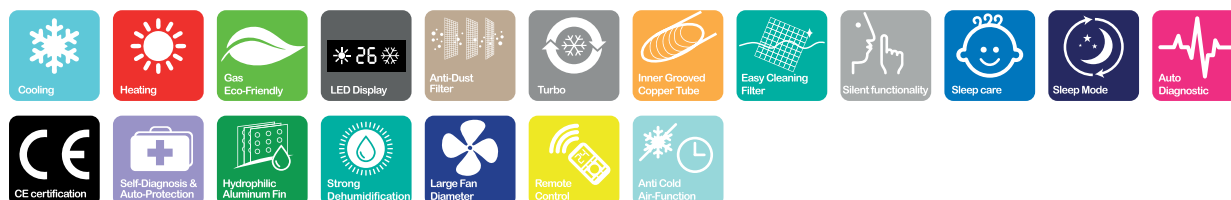
Floor and Ceiling split units

FI-M

ELEGANT AND COMPACT DESIGN
RANGE FROM 5KW UP TO 17KW
ECO FRIENDLY GAS R410A
LOW NOISE



Functional specs



Main features

Floor split units are easy to install, versatile and powerful, ideal for all settings.

Its typical application is for offices but its neat and elegant design allows it to be used in residential settings as well or public spaces such as shops or public establishments.

Universal spare parts

More than 60% of components (such as fans, shells and other metal parts) are universal for the 3 different cases of the FI-M series, which makes spare parts and maintenance easier and cheaper.

Wide Air Distribution Radius

All Parkair Ceiling/Floor units are equipped with a technology able to distribute the air flow in a remarkably even manner, thus assuring the utmost comfort for the user.

Maximum Installation Flexibility

The unit may be installed horizontally on the ceiling or vertically against a wall.

Design



Remote controller
RC-M
(included)

Special notes

Backlit Display



Easy Interface



Curved shape



Ideal applications

Sailing



Offices



Shops



Bars & Restaurants

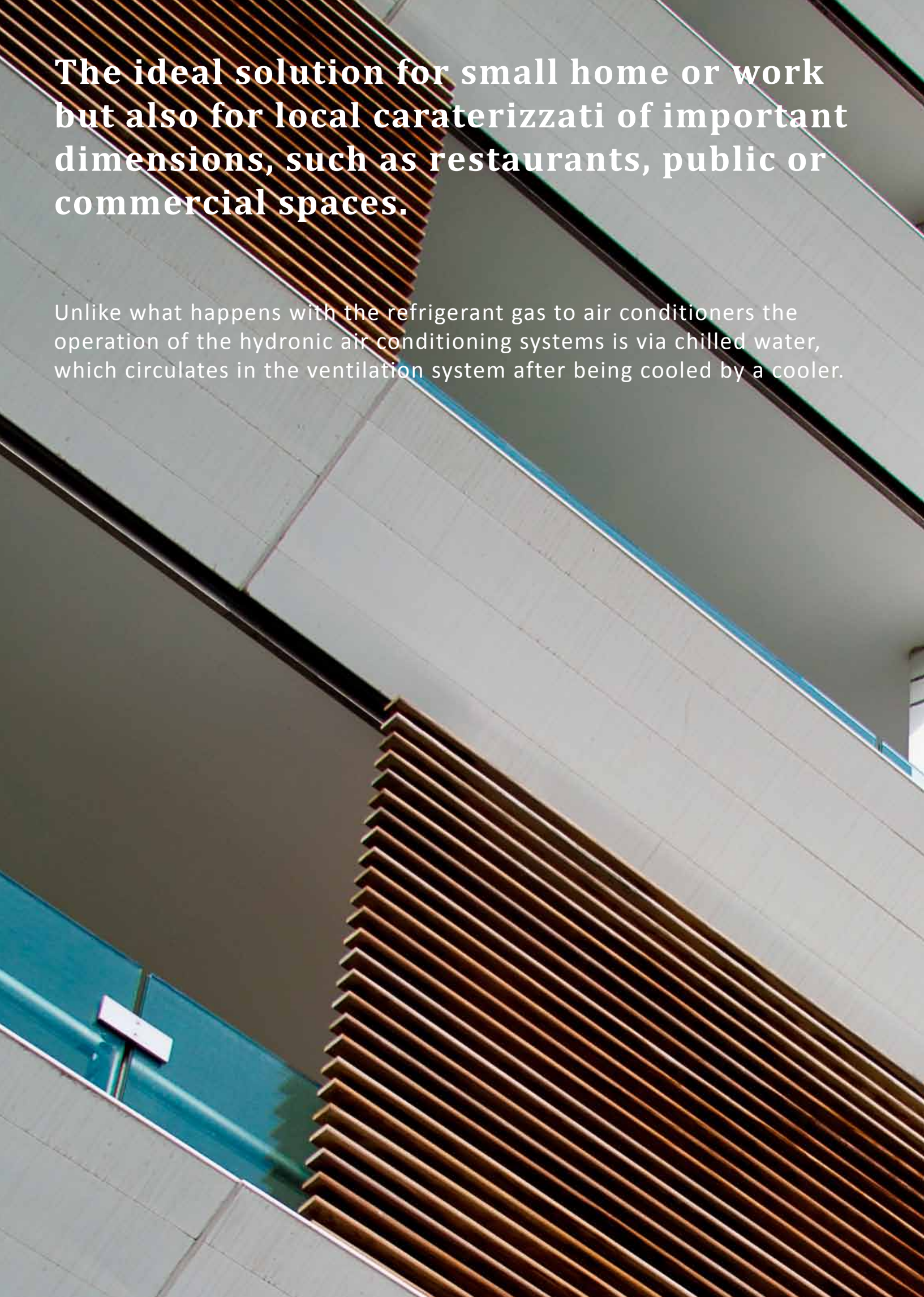


Technical data

Floor and Ceiling split units FI-M				
Model		FI18-M	FI24-M	FI36-M
Code	-	212010	212015	212025
Power supply	V-ph-Hz	220~240-1-50	220~240-1-50	220~240-1-50
Cooling capacity	Btu/h	18000	24000	36000
	KW	5,28	7,04	10,55
Heating capacity	Btu/h	19000	26000	39500
	KW	5,57	7,62	11,58
Input Power	w	125/105/85	125/105/85	148/131/122
Fan Motor Speed (Hi/Med/Lo)	r/min	1310/1190/1040	1310/1190/1040	1370/1300/1225
Air flow (Hi/Med/Lo)	m3/h	1300/1050/900	1400/1200/1000	1750/1400/1250
Noise level (Hi/Med/Lo)	dB(A)	52/46/41	53/48/42	53/48/44
Unit dimensions (WxDxH)	mm	1068x675x235	1068x675x235	1285x675x235
Packing dimensions (WxDxH)	mm	1145x755x313	1145x755x313	
Weight (Net/Gross)	kg	24/29	24/29	29/36
Drainage water pipe dia.	mm	25	25	25
Refrigerant pipe dia. (Liquid side/Gas side)	mm	6.35/12.7	9.52/15.9	9.52/19
	"	1/4 - 1/2	3/8 - 5/8	3/8 - 3/4
Controller	Kind	Remote controller		

The ideal solution for small home or work but also for local caraterizzati of important dimensions, such as restaurants, public or commercial spaces.

Unlike what happens with the refrigerant gas to air conditioners the operation of the hydronic air conditioning systems is via chilled water, which circulates in the ventilation system after being cooled by a cooler.





Hydronic systems

RCW

Chillers and Heat pumps Water-to-Water

RCA

Heat pumps Air-to-Water

FCW

Wall mounted fancoils

FCD

Ducted fancoils

FCI

Recessed fancoils

FCK

Cassette fancoils

Chillers and Heat Pump

RCW

Hydronic systems Water-to-Water



H₂O-INVERTER SYSTEM
UP TO 4 INDOOR UNITS
RANGE FROM 3KW TO 22KW
ECO FRIENDLY GAS R410A
LOW NOISE



Functional specs



Main features

Unlike coolant gas conditioners, hydronic conditioning systems operate with chilled water, which circulates in the ventilation system after being chilled by a refrigerator.

The body is made with a modular epoxy-powder painted sheet metal case (Pure White RAL 9003), with base in galvanised sheet metal and removable side panels lined with soundproofing mat.

The front inspection panel allows easy access to internal components and rapid connection of pressure gauges to suitable service valves for measuring operating pressures.

Where to install it?

Garage



Technical room



Laundry



Understairs



Components

Electronic controller PLC



Modulating valve



compressors R410A Rotativi & Scroll



Recirculation pump



Technical data

Chillers Water-to-Water RCW									
Model		RCW-12	RCW-18	RCW-24	RCW-30	RCW-32T	RCW-40T	RCW-50T	RCW-60T
Code		149000	149005	149010	149015	149016	149020	149025	149030
Cooling capacity	BTU/h	12.621	17.737	27.288	28.482	32.916	37.521	54.440	63.922
	kW	3,7	5,2	8	8,35	9,65	11	15,96	18,74
Power supply	V/Ph/Hz	230-1-50	230-1-50	230-1-50	230-1-50	400-3f+n	400-3f+n	400-3f+n	400-3f+n
Power consumption	Kw	0,84	1,15	1,8	1,9	2,62	2,7	3,48	4,16
EER	Kw/Kw	4,42	4,52	4,44	4,39	3,68	4,07	4,58	4,5
COP	Kw/Kw	---	---	---	---	---	---	---	---
Sound level	dbA	49	54	54	51	51	52	52	52
Number of compressors	NR	1	1	1	1	1	1	1	1
Cooling circuits	NR	1	1	1	1	1	1	1	1
Exchanger (evaporator)		Plates	Plates	Plates	Plates	Plates	Plates	Plates	Plates
Water flow	mc/h	0,6	0,9	1,2	1,6	1,6	2	2,5	3
Pressure drop	KPa	0,8	1,6	2,8	5,2	5,2	7,4	11,5	15
Exchanger (condenser)		Plates	Plates	Plates	Plates	Plates	Plates	Plates	Plates
Water flow of the hydraulic network (15°C)	mc/h	0,19	0,29	0,38	0,5	0,5	0,6	0,79	0,94
Water flow of cooling tower (29-35°C)	mc/h	0,6	0,9	1,2	1,6	1,6	2	2,5	3
Water connections	"	3/4M	3/4M	3/4M	1M	1M	1M	1M	1M
Weight	Kg.	43	44	49	73	73	75	78	82
Dimensions (WxDxH)	cm.	600x420x450	600x420x450	600x420x450	600x420x760	600x420x760	600x420x760	600x420x760	600x420x760

Heat Pumps Water-to-Water RCW-H									
Model		RCW-12H	RCW-18H	RCW-24H	RCW-30H	RCW-32TH	RCW-40TH	RCW-50TH	RCW-60TH
Code		149500	149505	149510	149515	149516	149520	149525	149530
Cooling capacity	BTU/h	12.621	17.737	27.288	28.482	32.916	37.521	54.440	63.922
	kW	3,7	5,2	8	8,35	9,65	11	15,96	18,74
Heating capacity	BTU/h	15.759	21.830	32.063	34.792	42.603	46.935	66.003	77.430
	kW	4,62	6,4	9,4	10,2	12,49	13,76	19,35	22,7
Power supply	V/Ph/Hz	230-1-50	230-1-50	230-1-50	230-1-50	400-3f+n	400-3f+n	400-3f+n	400-3f+n
Power consumption	Kw	0,98	1,33	1,98	2,28	3,21	3,3	4,29	4,7
EER	Kw/Kw	4,42	4,52	4,44	4,39	3,68	4,07	4,58	4,5
COP	Kw/Kw	4,71	4,81	4,74	4,47	3,89	4,17	4,51	4,4
Sound level	dbA	49	54	54	51	51	52	52	52
Number of compressors	NR	1	1	1	1	1	1	1	1
Cooling circuits	NR	1	1	1	1	1	1	1	1
Exchanger (evaporator)		Plates	Plates	Plates	Plates	Plates	Plates	Plates	Plates
Water flow	mc/h	0,6	0,9	1,2	1,6	1,6	2	2,5	3
Pressure drop	KPa	0,8	1,6	2,8	5,2	5,7	7,9	12	15,5
Exchanger (condenser)		Plates	Plates	Plates	Plates	Plates	Plates	Plates	Plates
Water flow of the hydraulic network (15°C)	mc/h	0,19	0,29	0,38	0,5	0,5	0,6	0,79	0,94
Water flow of cooling tower (29-35°C)	mc/h	0,6	0,9	1,2	1,6	1,6	2	2,5	3
Water connections	"	3/4M	3/4M	3/4M	1M	1M	1M	1M	1M
Weight	Kg.	45	47	52	73	73	75	78	82
Dimensions (WxDxH)	mm	600x420x450	600x420x450	600x420x450	600x420x760	600x420x760	600x420x760	600x420x760	600x420x760

Performances refer to the following conditions. COOLING: Water inlet temperature condenser side 15°C; Water temperature evaporator side in/outlet 12-7°C. HEATING: Water temperature evaporator side in/outlet 15-10°C. Water temperature condenser side in/outlet 40-45° C. Sound pressure levels measured at 1 m from the unit in free field conditions according to ISO 3746. See table corrosion resistance contained in the instruction booklet RCW (download from our site) to check the suitability of employment in depending on water quality.

Heat Pumps

RCA

Hydronic systems Air-to-Water



OPERATION FROM -15° TILL +46°C
FULL DC INVERTER TECHNOLOGY
RANGE FROM 5KW UP TO 17KW
COOLING AND HEATING

Functional specs



Main features

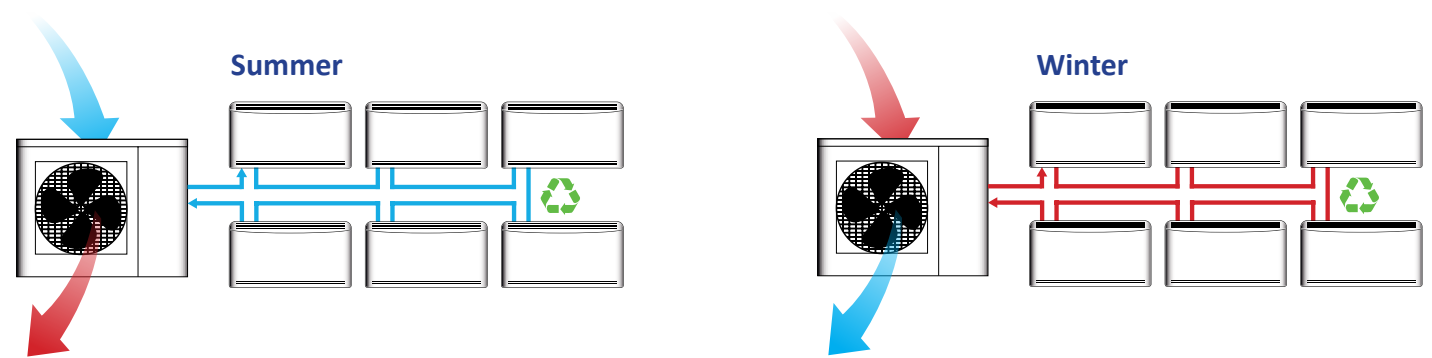
Series RCA air-cooled chillers with heat pump are designed and manufactured to meet the cooling and heating needs of medium and small users in residential or commercial buildings.

The machine is suited to control both water circuits (evaporator condenser) and may therefore be used as water chiller as well as for producing hot water. The summer winter switching takes place via the cooling circuit.

The units feature extremely quiet operation and high efficiency and reliability, thanks to the use of exchangers with high exchange surface and scroll compressors with high performance and low noise level.

They are available in various set-ups to meet the needs of a wide variety of installation solutions: base or with water pump and integrated water buffer. Condensing unit versions without buffer evaporator are also available.

Working scheme



Components

Recirculation pump



Expansion vessel



Compressors in R410A Full DC Inverter



Technical data

Heat Pumps Air-to-Water RCA							
Model		RCA-18H	RCA-24H	RCA-36H	RCA-40H	RCA-48H	RCA-52H
Code	-	215000	215005	215010	215015	215020	215025
Cooling capacity	BTU/h	17.055	23.877	35.816	40.932	47.754	52.871
	kW	5,00	7,00	10,50	12,00	14,00	15,50
Heating capacity	BTU/h	18.761	27.288	40.932	45.025	52.529	57.987
	kW	5,50	8,00	12,00	13,20	15,40	17,00
Power supply	V	220~240-1-50	220~240-1-50	220~240-1-50	400-3f+n	400-3f+n	400-3f+n
Power consumption - Summer season	kW	1,55	2,25	2,95	3,38	3,90	4,53
Power consumption - Winter season	kW	1,70	2,50	3,14	3,27	4,25	4,85
Maximum power consumption	kW	2,80	3,00	4,80	5,00	5,20	5,40
EER	kW/kW	3,23	3,12	3,56	3,55	3,59	3,42
COP	kW/kW	4,16	3,91	4,37	4,83	4,86	4,41
EER - Recovery values for 65%	kW/kW	5,17	4,29	4,40	5,18	4,85	4,49
COP - Recovery values for 65%	kW/kW	4,16	3,91	4,37	4,83	4,86	4,41
Water connections	"	1	1	1 - 1/4	1 - 1/4	1 - 1/4	1 - 1/4
Refrigerant	-	R410A	R410A	R410A	R410A	R410A	R410A
Sound level	dbA	58	58	59	59	60	60
Exchanger Gas-Water	Tipo	Braze Plate Heat, Stainless Steel					
Water flow	mc/h	0,86	1,20	1,72	1,92	2,15	2,49
Pressure drop - water side	KPa	15,00	15,00	18,00	18,00	18,00	19,00
Maximum pressure - water side	KPa	500,00	500,00	500,00	500,00	500,00	500,00
Operating Limits	Estate	-5°C ; +46°C	-5°C ; +46°C	-5°C ; +46°C	-5°C ; +46°C	-5°C ; +46°C	-5°C ; +46°C
Outside temperatures	Inverno	-15°C ; +27°C	-15°C ; +27°C	-15°C ; +27°C	-15°C ; +27°C	-15°C ; +27°C	-15°C ; +27°C
Operating temperature limits	Estate	+4°C ; +20°C	+4°C ; +20°C	+4°C ; +20°C	+4°C ; +20°C	+4°C ; +20°C	+4°C ; +20°C
Liquid product	Inverno	+30°C ; +55°C	+30°C ; +55°C	+30°C ; +55°C	+30°C ; +55°C	+30°C ; +55°C	+30°C ; +55°C
Weight	Kg	81	81	110	110	110	110
Dimensions (WxDxH)	mm	990x354x966	990x354x966	970x400x1327	970x400x1327	970x400x1327	970x400x1327

Performances refer to the following conditions. COOLING: cooled water inlet 12°C; Outlet 7°C - External air temperature 35°C dry bulb. HEATING: Water temperature inlet 40°C; outlet 45°C - External air temperature 7°C dry bulb; 6°C wet bulb. The sound pressure values refer to measurements made in semi-reverberant environment with tool placed at 1 m from the source of the noise.

Wall mounted fancoils

FCW

Hydronic systems

- COMPACT DESIGN
- RANGE FROM 2.4KW UP TO 4.6KW
- MODERN DESIGN
- LOW NOISE



Functional specs

- Cooling
- Heating
- Auto Restart
- Remote Control
- Wired Control
- Turbo
- CE certification
- Low Noise
- Large Fan Diameter
- Auto Diagnostic



Remote controller TCW (optional)

Main features

Wall mounted fancoils FCW				
Model		FCW-20	FCW-30	FCW-40
Code	-	160101	160106	160111
Cooling capacity (12.7°C) - Total	kW	2,38	2,67	4,6
Cooling capacity (12.7°C) - Sensible	kW	1,79	2,03	3,69
Heating capacity (45-40°C)	kW	2,5	3	3,8
Air flow (Hi/Med/Lo)	mc/h	410/330/270	485/390/320	860/753/592
Sound Level (Hi/Med/Lo)	dB(A)	39,5/36,5/29,5	41/37,5/32	48/45,9/40,2
Dimensions (WxDxH)	mm	795x195x283	795x195x283	940x200x298
Weight	kg	8,5	8,5	13
Weight with packaging	kg	15	15	17
Water flow (heating)	l/h	441	541	677
Pressure losses (heating)	kPa	9,85	14,2	29
Water flow (cooling)	l/h	409	460	793
Pressure losses (cooling)	kPa	10,6	13,2	45
Water connections	"	1/2"M	1/2"M	1/2"M

Performances refer to the following conditions. Cooling: Air temperature 27°C w.b., 19°C w.b. - Water temperature IN 7°C, Water temperature OUT 12°C. Heating: Air temperature 20°C - Water temperature IN 45°C, Water temperature OUT 40°C. Sound pressure levels measured in free field 2 meters away.

Ducted fancoils

FCD

Hydronic systems

IDEAL FOR LARGE ROOMS
COMPACT DESIGN
RANGE FROM 6KW UP TO 15KW
LOW NOISE



Functional specs



Wired controller
CR11 (optional)

Main features

Ducted fancoils FCD							
Model		FCD-60	FCD-75	FCD-85	FCD-100	FCD-130	FCD-150
Code	-	160701	160706	160711	160716	160721	160726
Cooling capacity (max) - total	kW	6	7,5	8,6	10,3	12,9	15
Cooling capacity (max) - Sensible	kW	4,5	5,6	6,1	8,1	9,9	11,1
Heat capacity (45-40°C)	kW	6,5	7,9	8,3	11,7	14,4	15,2
Air flow - Maximum	mc/h	880	960	920	1680	1840	1760
Static pressure available	Pa	60	60	60	60	60	60
Power supply	V	230	230	230	230	230	230
Sound level (Min/Max)	dB(A)	37-49	38-50	38-50	45-52	46-53	46-53
Dimensions (WxDxH)	mm	800x575x250	800x575x250	800x575x250	1200x575x250	1200x575x250	1200x575x250
Weight (whole set)	kg	34	35	37	48	50	53
Water flow (heating)	l/h	1127	1359	1428	2012	2477	2614
Pressure losses (heating)	kPa	26,6	32,9	23,4	21,1	32,1	20
Water flow (cooling)	l/h	1034	1287	1477	1772	2219	2580
Pressure losses (cooling)	kPa	28,7	37,8	32,2	21	33	25
Water connections	"	3/4	3/4	3/4	3/4	3/4	3/4
Pipe of condensation	mm	20	20	20	20	20	20

Performances refer to the following conditions. Cooling: Air temperature 27°C w.b., 19°C w.b. - Water temperature IN 7°C, Water temperature OUT 12°C. Heating: Air temperature 20°C - Water temperature IN 45°C, Water temperature OUT 40°C. Sound pressure levels measured in free field 2 meters away.

Recessed fancoils

FCI

Hydronic systems

- INVISIBLE SOLUTION
- COMPACT DESIGN
- RANGE FROM 2KW UP TO 9.6KW
- LOW NOISE



Wired controller
CR11 (optional)

Functional specs

- Cooling
- Heating
- Auto Restart
- Remote Control
- Wired Control
- Turbo
- CE certification
- Low Noise
- Large Fan Diameter
- Auto Diagnostic

Main features

Recessed fancoils FCI							
Model		FCI-20	FCI-30	FCI-40	FCI-60	FCI-75	FCI-90
Code	-	160501	160506	160511	160516	160521	160526
Cooling capacity (max) - total	kW	2	3	4,2	6,4	7,5	9,6
Cooling capacity (max) - Sensible	kW	1,6	2,4	3,4	5,2	6,4	8,2
Heat capacity (45-40°C)	kW	2,1	3	4,5	6,5	8,4	10,4
Air flow - Maximum	mc/h	360	440	660	1000	1430	1900
Sound level (Min/Max)	dB(A)	28-38	29-40	30-42	32-43	37-49	38-50
Dimensions (WxDxH)	mm	670x220x520	870x220x520	1070x220x520	1270x220x520	1470x220x520	1670x220x520
Weight (whole set)	kg	24,5	30,4	39,5	46,7	52,5	59,3
Water flow (heating)	l/h	373	528	792	1172	1464	1816
Pressure losses (heating)	kPa	14,9	22,7	14,3	21,7	35,9	37,7
Water flow (cooling)	l/h	344	520	732	1105	1296	1652
Pressure losses (cooling)	kPa	16,3	28,2	15,6	24,7	36,1	40
Water connections	"	1/2	1/2	1/2	1/2	1/2	1/2
Pipe of condensation	mm	20	20	20	20	20	20

Performances refer to the following conditions. Cooling: Air temperature 27°C w.b., 19°C w.b. - Water temperature IN 7°C, Water temperature OUT 12°C. Heating: Air temperature 20°C - Water temperature IN 45°C, Water temperature OUT 40°C. Sound pressure levels measured in free field 2 meters away.

Cassette fancoils FCK Hydronic systems

EASY INSTALLATION
COMPACT DESIGN
RANGE FROM 2.45 KW UP TO 11KW
MODERN DESIGN
LOW NOISE



Functional specs



Wired controller
CR11 (optional)



Remote controller TCW
(optional)

Main features

Cassette fancoils FCK							
Model		FCK-20	FCK-40	FCK-50	FCK-60	FCK-80	FCK-110
Code	-	160601	160606	160611	160616	160621	160626
Cooling capacity (max) - total	kW	2,45	4,2	5,35	5,9	7,9	11
Cooling capacity (max) - Sensible	kW	2	3,2	3,95	4,4	5,8	8,4
Heat capacity (45-40°C)	kW	2,91	4,59	5,34	5,98	8,74	11,48
Power supply	V-ph-hz	230-1+N+PE-50					
Power consumption	W	75,3	98,4	112,3	126,7	130	180
Maximum consumption	A	0,36	0,46	0,52	0,58	0,65	0,92
Air flow (Hi/Med/Lo)	mc/h	660/590/520	680/510/455	770/510/455	980/570/455	1260/1050/930	2040/1800/1560
Sound level (Hi/Med/Lo)	dB(A)	39-37-34	41-32-31	44-32-31	46-35-31	48-42-32	51-49-44
Dimensions (WxDxH)	mm	255x575x575	255x575x575	255x575x575	255x575x575	342x825x825	342x950x950
Weight (net)	kg	19,1	20,6	20,6	20,6	44	46
Water flow (heating)	l/h	420	733	920	1015	1353	1890
Pressure losses (heating)	kPa	7,9	20,1	31,7	38,7	39	41
Water flow (cooling)	l/h	420	733	920	1015	1353	1890
Pressure losses (cooling)	kPa	7,9	18,9	28,5	33,9	39	41
Water connections	"	3/4M	3/4M	3/4M	3/4M	3/4M	3/4M

Performances refer to the following conditions. Cooling: Air temperature 27°C w.b., 19°C w.b. - Water temperature IN 7°C, Water temperature OUT 12°C. Heating: Air temperature 20°C - Water temperature IN 45°C, Water temperature OUT 40°C. Sound pressure levels measured in free field 2 meters away.

Key to functions

H2O Inverter



Thanks to Parkair's Inverter H2O technology the costs of energy and water are further reduced. It is an electronic water flow and operating pressure control system that thanks to a modulating valve regulates the water flow based on the actual requirements thus reducing consumptions.

Turbo



The Turbo Function helps reaching the set temperature in the shortest time possible.

Sleep Care



The Sleep Care function is a precise and intelligent technology for the night. It provides different setting modes for every type of users, such as adults, children and the elderly. With the Sleep Care function your comfort while asleep will certainly be improved.

Easy Cleaning Filter



The internal unit's filters may be removed just by pressing a button, so they may be cleaned to assure healthy air is diffused in the room.

Sleep Mode



With the Sleep mode, the set temperature automatically increases (in cooling) by 1 ° C or decreases (in heating) by 2 ° C every hour in the first two hours from starting up. You will thus have the ideal temperature throughout your sleep as well as cost savings.

Anti Cold Air-Function



In heat pump mode the internal unit's fan only starts operating when the evaporator temperature is high enough in order to avoid cold air output.

Innver Groover Copper Pipe



Special copper pipes assure faster cooling gas flow improving the thermal exchange efficiency up to 30-50% compared to conventional copper pipes.

Strong Dehumidification



Only used on rainy days or in any case in very humid periods, with this mode the ideal room humidity level may be reached without reducing room temperature.

Hydrophilic Aluminum Fin



Improves the evaporating unit's cooling efficiency, allowing unlimited condensation flow between the exchange fins.

Large Fan



In addition to the possibility of controlling the air flow output volume, a larger diameter fan reduces the internal unit's noise level thus further reducing fan speed and optimising the air flow.

Auto Restart



In case of switching off this function will let you save the same temperatures and functions when the unit is switched back on.

Self-Diagnosis & Auto-Protection



With the self-diagnosis function, errors are detected by the microchip and displayed by the internal unit's LED for easy diagnosis and providing error data to support centres.

Anti-Dust Filter



This type of filters assures room air purification to protect from the many polluting agents (dusts, pollen etc.).

Low Noise

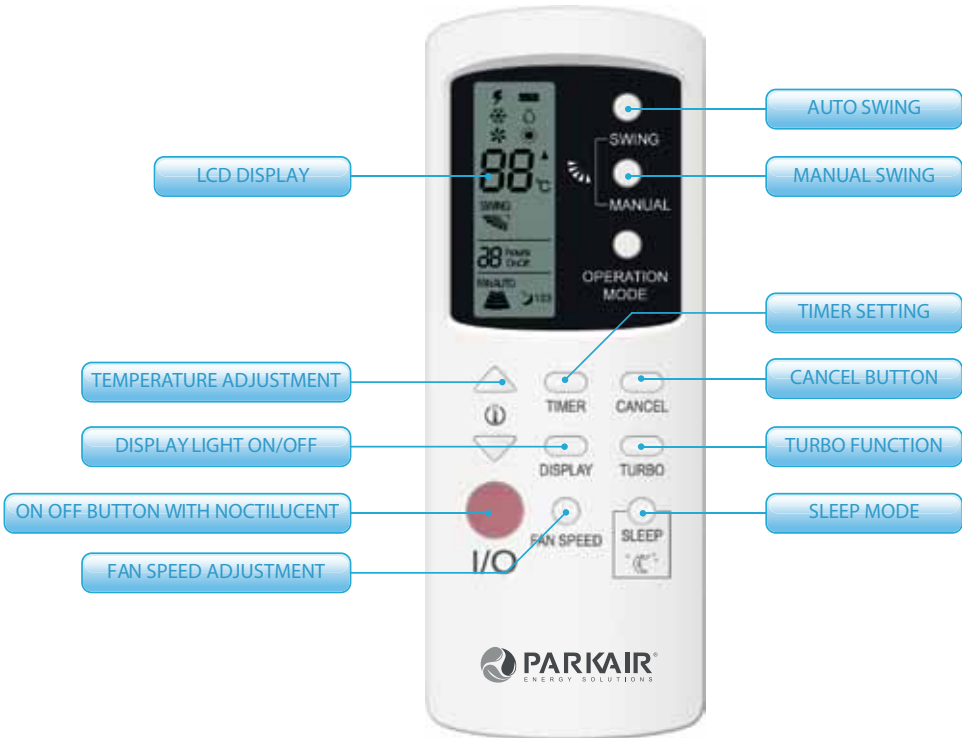


Thanks to the high quality standard of components these products assure extremely low noise levels.

Remote controller

RC-G

Infrared remote control for the serie WI-G



Remote controller

RC-M

Infrared remote control for the series FI-M, DI-M, KI-M



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Notes:

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Feel free to contact us to receive further information about our products and energy solutions.



Parkair offers a wide range of energy solutions to meet the needs of your projects.



Ongoing innovation with cutting-edge products



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Production 100% Made in Italy



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Support in design



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Rel. 09/2016 - The technical data in this document are not binding.

Parkair reserves the right to introduce at any time whatever modifications deemed necessary for improving the product.

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