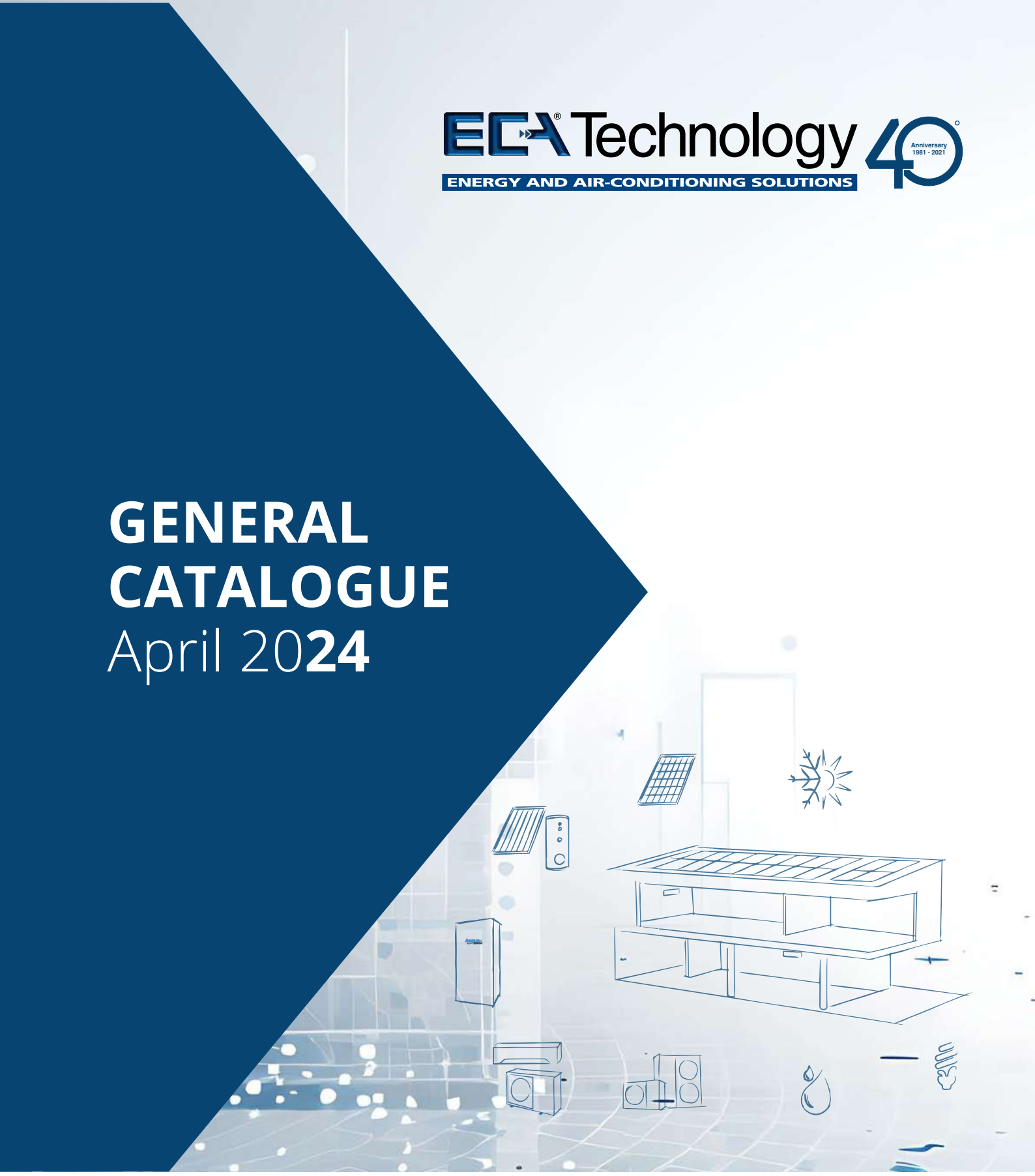
ECA® Technology

ENERGY AND AIR-CONDITIONING SOLUTIONS

40 Anniversary 1981 - 2021

GENERAL CATALOGUE

April 2024



Cutting edge **solutions** for **energy saving**

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Our **History**, your **Safety**

ECA Technology designs and manufactures innovative technologies for the production of electricity from renewable sources, air conditioning, domestic hot water and heating, providing innovative, customised solutions for sustainable and future-oriented construction.

We have been active for over 40 years in a variety of sectors in three divisions: **RESIDENTIAL**, **INDUSTRIAL**, **& TOURISM**, ensuring maximum performance and total reliability of the systems by designing and providing unique products on the market.

A **history** spanning **40 years**

1981	Climasystem: introduction of the new heat pump technology
1982	Commercial network development specialized in heat pump
1986	Introduction of heat pumps with INVERTER technology
1988	Design and patent of the integrated system for split predisposition
1989	New system of channels and accessories dedicated to split systems
1990	Construction and relocation of new headquarters
1991	ECA EUROPEAN AIR CONDITIONIG is founded
1992	EUROPEAN market capillaruty market
1996	ECA Technology SPA is founded
1998	Design and development of the first AERINVERTER
2000	ACQUAINVERTER® First trivalent heat pump
2003	Distribution network of dealers throughout Italy
2004	Presentation of the project "House with 0 energy cost"
2005	Start-up of the PHOTOVOLTAIC market
2009	SYNTEK Acquisition: development of tourism sector
2010	Construction of large photovoltaic systems
2011	ECA Technology SYSTEM: residential solution
2012	ECA Technology INDUSTRIAL system
2013	Development of LED lighting technology
2014	VRADIANT: new fan coil
2015	Construction of wind plants
2018	New FEEL PLUS line
2020	E·PURO air sterilizer
2021	New Acquainverter® SMART
2022	Electric car charging stations
2023	Acquainverter® Gas R32
2024	Gas R290 Introduction

ECA Technology is now in its **40th** year. This anniversary launches and confirms the values that we as a company stand for:

Reliability, Experience and Safety

In **1981** we set out to create our history, a history that has allowed us to step into thousands of homes, companies and organisations. Now, we continue unperturbed to innovate by researching and designing optimal solutions each day to meet all comfort requirements.

In these first 40 years, we have worked to promote respect for the environment by applying **technologies without the use of fossil fuels**. The products we have designed have had and continue to have a common denominator: High efficiency, Energy saving and Respect for the environment.

Today, we are working together with you to make the environment greener for us all and for future generations.

Our **MISSION** is to combine human well-being with environmental respect and energy saving. This dream becomes reality through a complete range of technological solutions capable of satisfying the energy needs of private homes, public buildings, tertiary sector structures and production plants.

Maximum **Performance**, total **Reliability**
The 3 ECA Technology Sectors

Energy efficiency in COMPANIES

Redevelopment and industrial energy saving: from energy audit to cost analysis in the company through innovative cutting-edge solutions.
Complete energy efficiency and long-term cost reduction in the company are achieved thanks to a customized range of essential components.

ECA Technology supports the customer in choosing the best solutions through targeted consultancy and projects, constant assistance and, in particular, post-sale monitoring, an essential activity for maximizing the results of the systems.

Comfort and energy saving at HOME

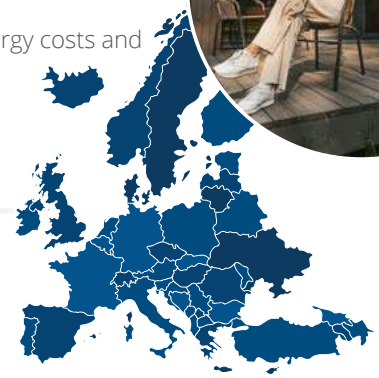
The primary objective is to contribute to the creation of homes whose energy needs are entirely satisfied by the exploitation of solar energy which, combined with heat pumps and innovative air conditioning products, offers maximum comfort and energy savings.

The complete system for energy saving in private homes, apartment buildings, traditional buildings and green building.
Thanks to all the products in the catalogue, ECA Technology creates a tailor-made domestic system that cuts energy costs.

Technologies for TOURIST STRUCTURES

Syntek is the ECA Technology line present in the tourism sector throughout Europe for over 30 years and offers the best of technology for optimal comfort in accommodation and prefabricated structures.

Products specifically designed for the specific needs of tourism to reduce energy costs and offer maximum well-being on holiday.



Integrated, Sustainable, Cutting-edge **Solutions**

INDUSTRIAL and **COMMERCIAL**

Starting from the left, 437.27 kWp photovoltaic system, 180 kWp photovoltaic system, 3 BWHE281 air-water heat pumps in cascade.

RESIDENTIAL

System with Acquainverter® heat pump model WM15 with 2 external units completed with a 200 liter WACN thermal flywheel for chilled and heating water and a 300 liter WBX domestic hot water thermal storage tank integrated with the solar thermal system. The system was integrated with 8.68 kWp solar photovoltaic.

TOURIST STRUCTURES

Luxury mobile home has included the installation of Syntek Shine model monosplit heat pump systems, extending comfort even in mid-seasons thanks to the use of the heating, cold and dehumidification functions.

Why choose **ECA Technology**?

With over 40 years experience, the company developed a large, reliable sales network that extends over the entire territory and provides qualified pre- and after-sales services. Further details:

Professional, direct-relationship **consultation**

Consultation in choosing a system and design solutions for an effective outcome is essential for ECA Technology. Consultation and attention to customer needs are the first step towards tailoring a project to meet expectations.

Products that are reliable, spare parts that are always available

The products that ECA Technology provides are designed and made available following months of testing in our technical and climatic chambers, to ensure reliability of product, installation and use.
In addition to a stock of products for immediate delivery, the company has a well-stocked spare parts warehouse.

Direct technical **support**

Guaranteeing a good product also means being ever-present in the after-sales stage. Technicians are available 7 days a week to answer all questions regarding both heating and plumbing systems and renewable energy systems. The in-house ECA Technology Operation & Maintenance division is responsible for the maintenance, monitoring and administrative aspects of photovoltaic systems – all with a view to optimising outcomes.

Extensive network of Agencies and Dealers

The strength of ECA Technology is in its agencies and dealerships that extend throughout the market in Italy – this allows us to spread far and wide and provide anyone with an opportunity to test our services and products. The Technical Support Centres allow us to respond promptly to requests in the entire network.

Direct supply with no intermediaries

The winning choice is not to provide ECA Technology products to wholesalers or retailers belonging to large-scale distribution: the sales policy, from the outset, developed directly in compliance with agencies or local dealerships who purchase directly from the headquarters.

Environmental respect and Sustainability

ECA Technology has always shared the company **VISION** for sustainable construction projected into the future with maximum respect for the environment.

Over the years there have been many initiatives in favor of the environment. These include various **projects to redevelop former landfills and asbestos reclamation**.

Among the latest initiatives, the collaboration with Beleafing stands out, a start-up of young urban planners and landscape architects supported by the IUAV university of Venice. With them we have allocated trees for the **reforestation** of areas that frequently exceed the maximum levels of fine particles in the atmosphere.

We like to think that the tree itself can represent a concrete and tangible gesture which, together with high-efficiency systems, contributes to optimizing **environmental improvement performance**, certifying the commitment that all of us, as a company, make.

Redevelopment of former landfill, Rimini
4,912 MWp photovoltaic system

Asbestos Remediation, Nuoro
6,250 MWp photovoltaic system

With the #ECAgreen project, we contribute to the achievement of 3 of the 17 UN objectives for sustainable development

11 Sustainable cities and communities | **4,6 Kg of particulate matter captured/year**

13 Fight against climate change | **6,4 tons of CO_2 absorbed/year**

15 Life on earth | **3.000 more bees**

LINEA CLIMATIZZAZIONE

Features

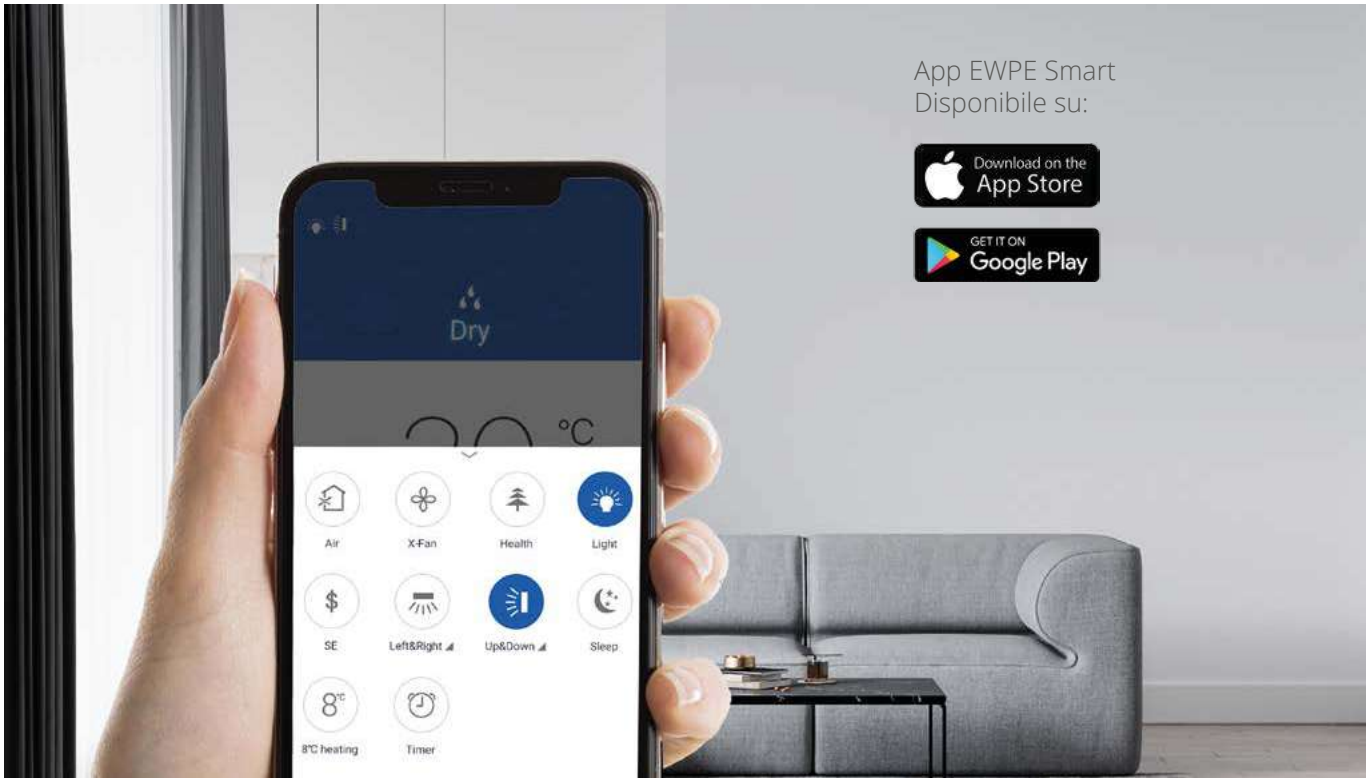
ECA Technology's air conditioning systems are distinguished by their high quality and energy efficiency, guaranteed by over 40 years of continual technological development.
The research and careful design of increasingly functional solutions has made it possible to create products that meet all needs regarding climatic comfort and environmental sustainability and that adapt to all residential, tourist and commercial spaces.

Cooling and Heating

ECA Technology air conditioners combine heating and cooling functions for all-round comfort in all seasons.

Dehumidification

Allows conditioned air to circulate optimally in a given environment.



Wi-Fi

ECA Technology* units are equipped with Smart Wi-Fi technology for the management of all air conditioner functions using the Ewpe Smart App, making your return even more pleasant.

Room Temp. Control

The remote control or wired control can be used to control the set internal room temperature and, where available, the external room temperature.

I Feel

The air conditioner regulates the temperature precisely where the remote control is positioned. This is to ensure climatic comfort wherever it is needed.

Light

Function to switch on/off the display illumination of the indoor unit.

Features

Cold air prevention

Air is only introduced into the room after reaching the comfort temperature to prevent the flow of cold air.

Cold Plasma Generator

Releases ions that neutralise bacteria, pollen, dust mites and pollutants to improve indoor air quality.

Sleep

Automatic night-time temperature control to make the room more comfortable.

Quiet

Reduces fan speed compared to the minimum speed and compressor power, making the machine even more silent.

Louvre swing

Uniform air distribution through horizontal and/or vertical louvres adjustable by remote control.

360° air delivery

360° air flow for optimal levels of comfort owing to the arrangement of the louvres.

Features

Automatic operation

Room temperature is detected such that the air conditioner automatically switches on in cooling or heating mode.

Self-Diagnostics

Automatic troubleshooting for easy maintenance.

Auto Restart

In the event of a power cut, the unit will automatically resume operation when the power supply returns.

Timer

Set automatic operation of the air conditioner by programming it according to your needs.

Ventilation speed

The ventilation range, which can be preset or automatic according to needs, begins with 1 and goes up to 5 (Syntek line) and 7 (Feel Plus+ line).

Intelligent Defrosting

Takes place only when required, reducing the energy waste associated with unnecessary defrosting procedures.

Self-cleaning (X-FAN)

Self-sanitising system that allows the fan to continue running for a few minutes after the indoor unit has been switched off in order to dry the coil and prevent the formation of mould.

Turbo

Allows the air conditioner to reach a set temperature in the shortest possible time.

New **functions** and **commands**

Central control unit

FUNCTIONS
Allows the management of up to 36 connected indoor units.
All CSV - DSV - FSV - HDSV indoor units must be equipped with the MODBUS Gateway to allow communication with the centralized control.

Wall control with weekly timer for FIV, FPVM, FIEV, FEVM, FCVM, FDVM, SKWIxx24

FUNCTIONS
Temperature set, on / off, MULTIPLE operating mode, Fan speed set, FLAP set, Daily / weekly / bi-weekly timer.

Standard wall control for FDVM ducted units

optional for FCVM cassette unit

FUNCTIONS
Set temperatures, on/off, fan speed setting, various modes setting, daily timer, WiFi.

Standard wall control for DSV ducted units

optional for FSV floor-ceiling units and CSV cassette

NEW

FUNCTIONS
Set temperatures, on/off, fan speed setting, various modes setting, daily timer, WiFi.

Standard wall control for HDSV high head units

FUNCTIONS
Set temperatures, turn on/off, set fan speed, set various modes, daily timer.

Modbus Gateway

FUNCTIONS
Communication module with MOBDUS protocol for connecting the CSV, DSV, FSV internal units to the centralized control.

Modbus Gateway Mini

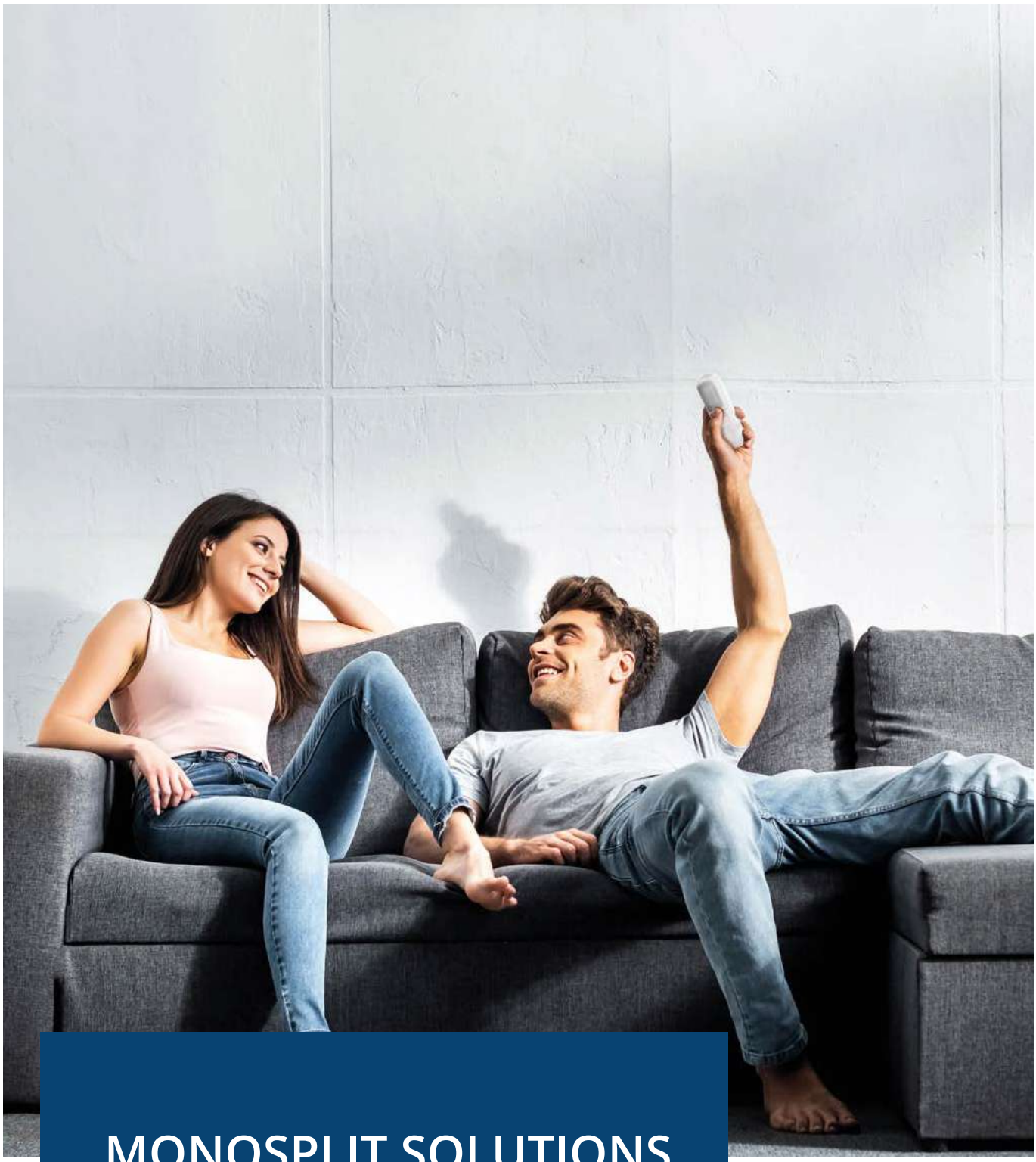
NEW

FUNCTIONS
Communication module with MOBDUS protocol for connecting HDSV internal units to centralized control.

Comparazione modelli

KEY
S as standard
ND not avaible
Optional optional

	MODEL	Mono / Multi Wall Syntek Shine		Mono / Multi Wall FeelPlus+	Mono / Multi Console FeelPlus+	Multi Cassette FeelPlus+	Multi Duct FeelPlus+	Double Duct Jolly Comfort	Mono Cassette FeelPlus+	Mono Duct FeelPlus+	Mono Floor/ ceiling FeelPlus+
	PRODUCT CODE	SKWIxx22	SKWIxx24	FIV / FPVM	FIEV / FEVM	FCVM	FDVM	SKU	CSV	DSV	FSV
MODE	Automatic operation	S	S	S	S	S	S	ND	S	S	S
	Cooling	S	S	S	S	S	S	S	S	S	S
	Heating	S	S	S	S	S	S	S	S	S	S
	Dehumidification	S	S	S	S	S	S	S	S	S	S
	Ventilation	S	S	S	S	S	S	S	S	S	S
FUNCTIONS	Ventilation speed (n.)	5	7	7	7	7	7	3	7	7	7
	Turbo	S	S	S	S	S	S	ND	S	S	S
	I Feel	S	S	S	S	S	Optional	ND	S	Optional	S
	Sleep	S	S	S	S	S	S	ND	S	S	S
	Flap swing	vertical	vertical horizotal	vertical horizontal	vertical	vertical	ND	vertical	vertical	ND	vertical
	Command block	S	S	S	S	S	S	ND	S	S	S
	Quiet	ND	S	S	S	S	S	S	S	S	S
	Timer	S	S	S	S	S	S	S	S	S	S
	Light	S	S	S	S	S	ND	S	S	ND	S
	Display temperature visualisation	S	S	S	S	S	ND	S	S	ND	ND
	360° air delivery	ND	ND	ND	ND	S	ND	ND	S	ND	ND
	Self cleaning (X-FAN)	S	S	S	S	S	S	ND	S	S	S
	Smart defrost	S	S	S	S	S	S	S	S	S	S
	Cold air prevention	S	S	S	S	S	S	ND	S	S	S
	Auto-restart	S	S	S	S	S	S	S	S	S	S
	Self diagnosis	S	S	S	S	S	S	S	S	S	S
	Antifreeze operation 8 °C	S	S	S	S	S	S	ND	S	S	S
ACCESSOIRES	Dual side cond. drain	S	S	S	S	ND	S (only natural)	ND	ND	S (only natural)	ND
	Condensate drain pump	ND	ND	ND	ND	S (pipe side only)	S (pipe side only)	S	S (pipe side only)	ND	ND
	Cold plasma generator	ND	ND	S	S	ND	ND	ND	ND	ND	ND
	WI-FI	Optional	S	S	S	Optional	S	Optional	Optional	S	Optional
	Wired controller weekly timer	ND	Optional	Optional	Optional	Optional	Optional	ND	ND	ND	ND
	Central control	ND	Optional	Optional	Optional	Optional	Optional	ND	Optional	Optional	Optional
	On-off remote control kit	ND	Optional	Optional	ND	Optional	Optional	ND	Optional	Optional	Optional
	Remote control	S	S	S	S	S	Optional	S	S	Optional	S
	Remote control door	S	S	S	S	Optional	Optional	ND	Optional	Optional	Optional



MONOSPLIT SOLUTIONS

Feel Plus+ Wall Air Conditioner

MONOSPLIT WALL AIR CONDITIONER DC INVERTER

Feel Plus+ Console Air Conditioner

MONOSPLIT FLOOR AIR CONDITIONER DC INVERTER

Syntek Shine and Syntek Shine + Wall Air Conditioner

MONOSPLIT WALL AIR CONDITIONER DC INVERTER

Jolly Comfort air conditioner without external unit

DOUBLE DUCT INVERTER AIR CONDITIONER

Feel Plus+ Wall Air Conditioner

The FeelPlus+ wall line includes a Cold Plasma Generator and multifunctional purifying filters to combine the cooling and heating functions with those of air purification.

Cold Plasma Generator
Device that releases negative ions into the air to neutralise polluting particles in the environment, making the air healthy and providing well-being for the body and mind.

Catechin filter
Helps prevent multiplication of bacteria and contamination by viral agents.

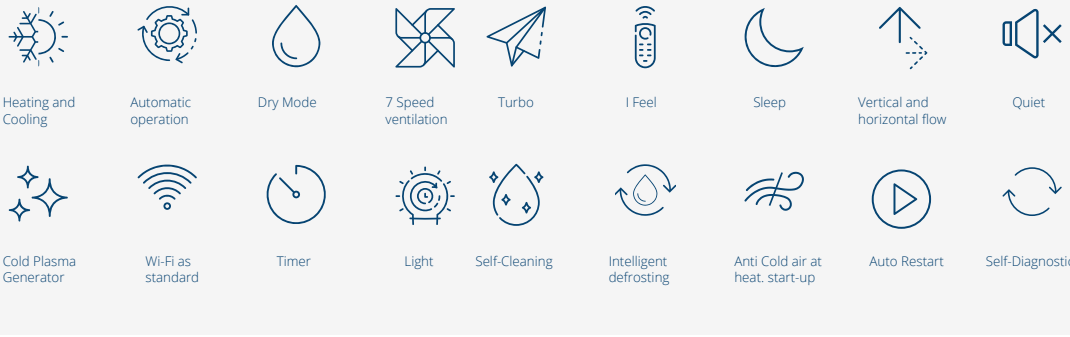
Mite-Bacteria Filter
Traps dust mites, the main causes of allergies.

Vitamin C Filter
Allows higher quality air to be breathed in, which is beneficial for health.

Silver Ion Filter
Eliminates 99.9% of bacteria in the air and regenerates it.

FIV Wall

Feel Plus+ Wall Air Conditioner



MODEL		I.U.	FIV0918HE32	FIV1218HE32	FIV1818HE32	FIV2418HE32
		O.U.	FV0918HE32	FV1218HE32	FV1818HE32	FV2418HE32
Power supply		V/Ph/Hz	230/1/50			
Seasonal efficiency in Cooling mode	Pdesign	kW	2.7	3.5	5.3	6.4
	SEER		8.5	8.5	7.6	7
	Annual energy consump.	kWh/a	111	144	244	350
	Energy Label		A+++	A+++	A++	A++
Seasonal efficiency in Heating mode - average/warmer climate	Pdesign	kW	2.8	3.2	4.5	6.4
	SCOP		4.60 / 5.40	4.40 / 5.10	4.10 / 5.20	4.00 / 5.20
	Annual energy consump.	kWh/a	852 / 830	1018 / 878	1537 / 1238	2240 / 1912
	Energy Label		A++ / A+++	A+ / A+++	A+ / A+++	A+ / A+++
Nominal cooling capacity (min-max)		kW	2.70 (0.90-3.61)	3.50 (1.00-3.81)	5.30 (1.26-6.60)	7.00 (1.10-9.05)
		BTU/h	9200 (3071-12317)	12000 (3400-13000)	18084 (4299-22519)	24000 (3700-30900)
Nominal cooling electric power (min-max)		kW	0.585 (0.10-1.38)	0.95 (0.10-1.40)	1.55 (0.38-2.45)	2.00 (0.40-3.70)
Nominal heating capacity (min-max)		kW	2.93 (0.70-3.96)	3.81 (1.20-4.40)	5.57 (1.12-6.80)	7.20 (1.70-10.10)
		BTU/h	10000 (2388-13510)	13000 (4100-15010)	19005 (3821-23202)	24500 (5800-34600)
Nominal heating electric power (min-max)		kW	0.65 (0.17-1.625)	0.975 (0.20-1.65)	1.428 (0.35-2.60)	1.845 (0.450-3.80)
EER / COP			4.62 / 4.51	3.68 / 3.91	3.42 / 3.90	3.50 / 3.90
Indoor unit air flow volume (SH/H/MH/M/ML/L/SL)		m³/h	660/590/540/490/450/420/390	680/590/540/490/450/420/390	850/750/-/610/-/520/306	1250/1100/1000/950/900/850/750
Outdoor unit air flow volume		m³/h	2200	2200	3200	3200
Indoor unit sound pressure (SH/H/MH/M/ML/L/SL)		dB(A)	41/39/37/35/33/31/24	43/39/37/35/34/32/25	49/45/43/41/39/37/34	49/47/44/42/40/38/36
Indoor unit sound power (SH/H/MH/M/ML/L/SL)		dB(A)	56/53/52/50/48/46/39	58/53/52/50/48/46/40	58/55/53/51/49/47/44	65/61/58/56/54/52/50
Outdoor unit sound pressure (H)		dB(A)	52	53	57	60
Outdoor unit sound power (H)		dB(A)	60	62	65	70
Indoor unit dimensions (HxWxD)		mm	290x865x210	290x865x210	301x996x225	327x1101x249
Indoor unit weight		kg	10.5	11	13.5	16.5
Outdoor unit dimensions (HxWxD)		mm	596x848x320	596x848x320	700x955x396	700x955x396
Outdoor unit weight		kg	33.5	33.5	45	53
Pipe length: min-max with standard charge/ max with additional charge		m	2-5 / 15	2-5 / 20	2-5 / 25	2-5 / 25
Max height difference		m	10	10	10	10
Liquid/gas pipe diameter		mm (inch")	6.35 (1/4") / 9.52 (3/8")	6.35 (1/4") / 9.52 (3/8")	6.35 (1/4") / 12.7 (1/2")	6.35 (1/4") / 15.8 (5/8")
Refrigerant type/standard charge		type/kg	R32 / 0.70	R32 / 0.75	R32 / 1.00	R32 / 1.70
Global warming potential / CO2 equiv.tons		GWP/ tons	675 / 0.473	675 / 0.506	675 / 0.675	675 / 1.148
Refrigerant addition beyond max length with standard charge		g/m	20	20	16	50
Heating/cooling ambient operating temp. range		°C	-15 to 24 / -15 to 43	-15 to 24 / -15 to 43	-15 to 24 / -15 to 43	-15 to 24 / -15 to 43
CODE		I.U.	2704041	2704043	2704045	2704047
		O.U.	2704042	2704044	2704046	2704048

OPTIONAL ACCESSORIES	CODE
Wired controller with weekly timer	2704040
Wired controller for control of up to 36 indoor units*	2701456
ON-OFF remote control kit	2402050

* Each indoor unit must be equipped with a wired controller Cod. 2704040

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

Console FeelPlus+ Air Conditioner

The FeelPlus+ line Console version is the ideal air-conditioning solution to guarantee **diffused, uniform distribution of air** inside rooms via upper and lower (floor) flow.

In addition to Wi-Fi as standard, the air conditioner **incorporates** a **Cold Plasma Generator**, a device that eliminates polluting particles using an emission of negative ions and simultaneously providing well-being for the body and mind.
The compact design also allows easy and versatile installation of the Console.

FIEV Console

Console FeelPlus+ Air Conditioner

MODEL		I.U.	FIEV 0919 HE32	FIEV 1219 HE32	FIEV 1819 HE32
		O.U.	FEV 0919 HE32	FEV 1219 HE32	FEV 1819 HE32
Power supply		V/Ph/Hz	230/1/50		
Seasonal efficiency in Cooling mode	Pdesign	kW	2.70	3.5	5.2
	SEER		7.2	7	6.6
	Annual energy con-sump.	kWh/a	131	175	276
	Energy Label		A++	A++	A++
Seasonal efficiency in Heating mode - average/ warmer climate	Pdesign	kW	2.60 / 2.80	3.20 / 3.30	5.00 / 5.00
	SCOP		4.00 / 5.30	4.10 / 5.30	4.00 / 5.10
	Annual energy con-sump.	kWh/a	910 / 740	1093 / 872	1750 / 1373
	Energy Label		A+ / A+++	A+ / A+++	A+ / A+++
Nominal cooling capacity (min-max)		kW	2.70 (0.70-3.40)	3.52 (0.80-4.40)	5.20 (1.26-6.60)
		BTU/h	9212 (2388-11601)	12010 (2730-15013)	17742 (4299-22519)
Nominal cooling electric power (min-max)		kW	0.72 (0.17-1.30)	1.00 (0.16-1.50)	1.55 (0.38-2.45)
Nominal heating capacity (min-max)		kW	2.90 (0.60-3.50)	3.80 (1.10-4.40)	5.33 (1.12-6.80)
		BTU/h	9895 (2047-11942)	12966 (3753-15013)	18186 (3821-23202)
Nominal heating electric power (min-max)		kW	0.73 (0.13-1.35)	0.96 (0.165-1.50)	1.50 (0.35-2.50)
EER / COP			3.75 / 3.97	3.52 / 3.96	3.40 / 3.55
Indoor unit air flow volume (SH/H/MH/M/ML/L/SL)		m³/h	500/430/410/370/330/280/250	600/520/480/440/400/360/280	700/650/580/520/460/410/320
Outdoor unit air flow volume		m³/h	1600	2200	3200
Indoor unit sound pressure (SH/H/MH/M/ML/L/SL)		dB(A)	39/36/33/31/29/26/23	44/40/38/36/33/29/25	47/45/43/41/38/37/32
Indoor unit sound power (SH/H/MH/M/ML/L/SL)		dB(A)	50/48/45/44/42/38/34	54/50/48/46/43/39/35	57/55/53/51/48/47/42
Outdoor unit sound pressure (H)		dB(A)	49	52	57
Outdoor unit sound power (H)		dB(A)	60	62	65
Indoor unit dimensions (HxWxD)		mm	600x700x215	600x700x215	600x700x215
Indoor unit weight		kg	15.5	15.5	15.5
Outdoor unit dimensions (HxWxD)		mm	540x782x320	596x848x320	700x965x396
Outdoor unit weight		kg	27.5	30.5	46
Pipe length: min-max with standard charge/ max with additional charge		m	2-5 / 15	2-5 / 20	2-5 / 25
Max height difference		m	10	10	10
Liquid/gas pipe diameter		mm (inch")	6.35 (1/4") - 9.52 (3/8")	6.35 (1/4") / 9.52 (3/8")	6.35 (1/4") / 12.7 (1/2")
Refrigerant type/standard charge		type/kg	R32 / 0.55	R32 / 0.75	R32 / 0.95
Global warming potential / CO2 equiv. tons		GWP/ tons	675 / 0.372	675 / 0.506	675 / 0.642
Refrigerant addition beyond max length with standard charge		g/m	16	16	16
Heating/cooling ambient operating temp. range		°C	-22 to 24 / -15 to 43	-22 to 24 / -15 to 43	-22 to 24 / -15 to 43
CODE		**I.U.**	**2705009**	**2705011**	**2705013**
		O.U.	**2705010**	**2705012**	**2705014**

OPTIONAL ACCESSORIES	CODE
Wired controller with weekly timer	**2704040**
Wired controller for control of up to 36 indoor units*	**2701456**

* Each indoor unit must be equipped with a wired controller Cod. 2704040

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

Syntek Shine + Wall Air Conditioner

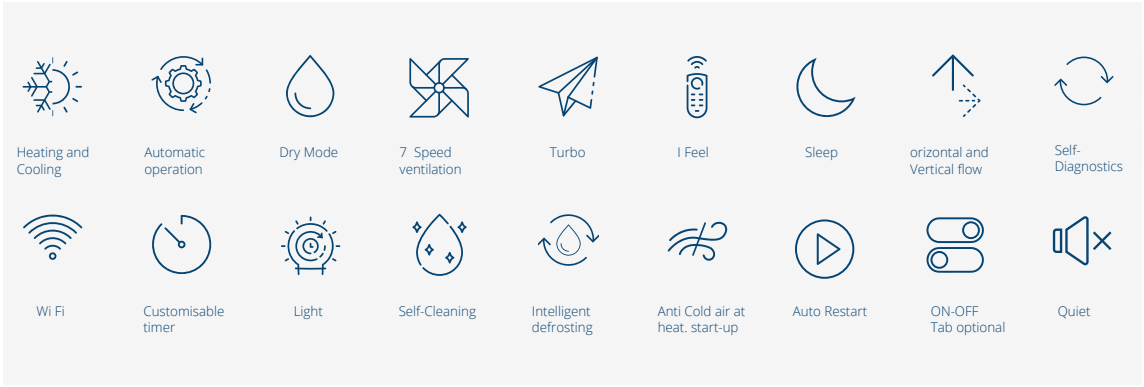
The Syntek Shine line responds to the most severe demands for functionality and guarantee of climate comfort. The new design harmonizes perfectly with every space: homes, bungalows, mobile homes, holiday homes.

The quality of the materials used and the careful construction have allowed extreme operating temperatures to be reached (-15°C +43°C), making the performance of Syntek Shine optimal even in salty environments.
Finally, the **A++++ energy class** and the presence of the ecological R32 refrigerant gas guarantee energy savings, high efficiency and environmental respect.

Wall SKWI

*Energy efficiency in heating

Climatizzatore **Parete Syntek Shine +**



MODEL		U.I.	SKWI0924GHP-32	SKWI1224GHP-32	SKWI1824GHP-32
		U.E.	SKWE0924GHP-32	SKWE1224GHP-32	SKWE1824GHP-32
Power supply		V/f/Hz	230/1/50		
Seasonal effeciency in cooling mode	Pdesign	kW	2,50	3,20	4,60
	SEER		6,60	6,10	7,20
	Annual energy consump.	kWh/a	133	184	224
	Energy label		A++	A++	A++
Seasonal effeciency in heating mode Average/warmer climate	Pdesign	kW	2,50/2,60	2,80/2,80	3,70/3,60
	SCOP		4,10/5,10	4,00/5,10	4,00/5,10
	Annual energy consump.	kWh/a	854/714	980/769	1295/988
	Energy label		A+/A+++	A+/A+++	A+/A+++
Nominal cooling capacity (min-max)		kW	2,50 (0,50÷3,25)	3,20 (0,90÷3,60)	4,60 (1,00÷5,40)
		BTU/h	8530 (1706÷11089)	10919 (3071÷12283)	15700 (3412÷18425)
Nominal cooling power input (min-max)		kW	0,680 (0,15÷1,30)	0,991 (0,22÷1,30)	1,353 (0,15÷1,90)
Nominal heating capacity (min-max)		kW	2,80 (0,50÷3,70)	3,40 (0,90÷4,00)	5,20 (0,75÷5,80)
		BTU/h	9554 (1706÷12624)	11600 (3071÷13648)	17742 (2559÷19790)
Nominal heating power input (min-max)		kW	0,73 (0,14÷1,50)	0,916 (0,22÷1,50)	1,34 (0,16÷1,90)
EER / COP			3,68 / 3,84	3,23 / 3,71	3,40 / 3,90
Indoor unit air flow volume (SH/H/MH/M/ML/L/SL)		m³/h	500/470/430/390/320/270/250	590/520/480/400/350/320/280	1000/960/870/810/720/640/600
Outdoor unit air flow volume		m³/h	1950	1950	2100
Indoor sound pressure (SH/H/MH/M/ML/L/SL)		dB(A)	38/36/34/32/28/25/21	41/37/35/33/30/26/24	47/45/43/41/35/30/28
Indoor sound power (SH/H/MH/M/ML/L/SL)		dB(A)	55/48/46/44/40/37/33	55/49/47/45/42/38/36	60/58/56/54/48/44/41
Outdoor sound pressure (max)		dB(A)	50	52	55
Outdoor sound power (max)		dB(A)	60	63	65
Indoor unit dimensions (HxWxD)		mm	260x708x185	260x783x185	333x943x246
Indoor unit weight		kg	7	8	13
Outdoor unit dimensions (HxWxD)		mm	555x732x330	555x732x330	555x732x330
Outdoor unit weight		kg	24,5	25	27,5
Pipe length: min-max with standard charge / max with additional charge		m	2-5 / 15	2-5 / 20	2-5 / 25
Max height difference		m	10	10	10
Liquid/gas pipe diameter		mm (inch")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")
Refrigerant type/standard charge		tipo/kg	R32 / 0,48	R32 / 0,55	R32 / 0,77
Global Warming Potential / CO2 equiv.tons		GWP/tons	675 / 0,324	675 / 0,371	675 / 0,520
Refrigerant addition beyond the max length with standard charge		gr/m	16	16	16
Heating/Cooling operation ambient temp. Range			-15÷24 / -15÷43	-15÷24 / -15÷43	-15÷24 / -15÷43
CODE		**U.I.**	**2402271**	**2402273**	**2402275**
		U.E.	**2402272**	**2402274**	**2402276**

OPTIONAL ACCESSORIES	CODE
Wired controller with weekly timer	**2704040**
Wired controller for control of up to 36 indoor units*	**2701456**
ON-OFF remote control kit	**2402050**

* Each indoor unit must be equipped with a wired controller Cod. 2704040

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

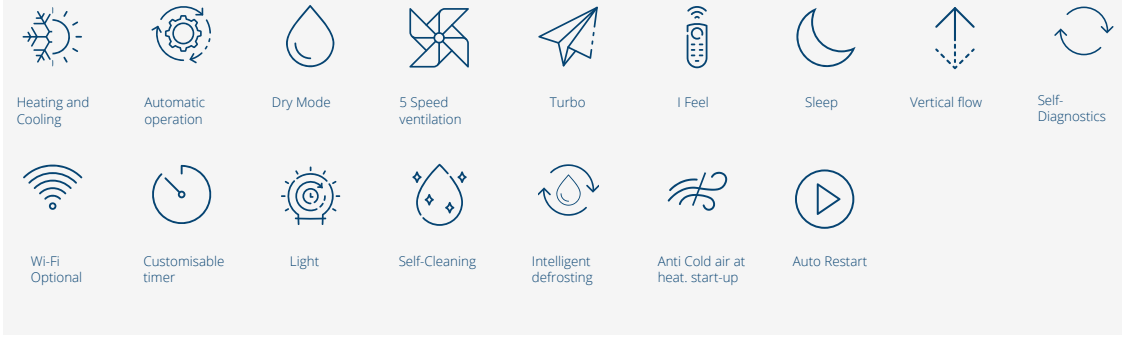
Syntek Shine Wall Air Conditioner

The Syntek Shine line meets the most stringent requirements for functionality and guaranteed climatic comfort. The **ultra-compact design** total white adapts to each space and provides a unique touch.

The quality of the materials used and painstaking manufacturing have made it possible to reach extreme operating temperatures (-15°C to +43°C), making Syntek Shine's performance optimal even in brackish environments.
Lastly, **energy class A+++** and the inclusion of **ecological refrigerant gas R32** ensure that this model saves energy, is highly efficient and environmentally friendly.

SKWI Wall

Syntek Shine Wall Air Conditioner



MODEL		I.U.	SKWI2422GHP-32
		O.U.	SKWE2422GHP-32
Power supply		V/Ph/Hz	230/1/50
Seasonal efficiency in Cooling mode	Pdesign	kW	6,20
	SEER		6,80
	Annual energy consump.	kWh/a	319
	Energy Label		A++
Seasonal efficiency in Heating mode - average/warmer climate	Pdesign	kW	4,70/4,70
	SCOP		4,00/5,10
	Annual energy consump.	kWh/a	1645/1290
	Energy Label		A+/A+++
Nominal cooling capacity (min-max)		kW	6,20 (1,60÷6,90)
		BTU/h	21000 (5459÷23500)
Nominal cooling electric power (min-max)		kW	1,771 (0,45÷2,20)
Nominal heating capacity (min-max)		kW	6,50 (1,30÷7,91)
		BTU/h	22000 (4400÷27000)
Nominal heating electric power (min-max)		kW	1,646 (0,45÷2,20)
EER / COP			3,50 / 3,95
Indoor unit air flow volume (SH/H/M/L)		m³/h	1100/950/750/650
Outdoor unit air flow volume		m³/h	2800
Indoor unit sound pressure (SH/H/M/L)		dB(A)	47/44/38/35
Indoor unit sound power (SH/H/M/L)		dB(A)	61/58/52/49
Outdoor unit sound pressure (H)		dB(A)	58
Outdoor unit sound power (H)		dB(A)	67
Indoor unit dimensions (HxWxD)		mm	325x1080x245
Indoor unit weight		kg	16,5
Outdoor unit dimensions (HxWxD)		mm	555x873x376
Outdoor unit weight		kg	36,5
Pipe length: min-max with standard charge/ max with additional charge		m	2-5 / 25
Max height difference		m	10
Liquid/gas pipe diameter		mm (inch")	6,35 (1/4") / 12,7 (1/2")
Refrigerant type/standard charge		type/kg	R32 / 1,30
Global warming potential / CO2 equiv.tons		GWP/tons	675 / 0,878
Refrigerant addition beyond max length with standard charge		g/m	16
Heating/cooling ambient operating temp. range		°C	-15÷24 / -15÷43
CODE		**I.U.**	**2402267**
		O.U.	**2402268**

OPTIONAL ACCESSORIES	CODE
Wi-Fi Module	**2402049**

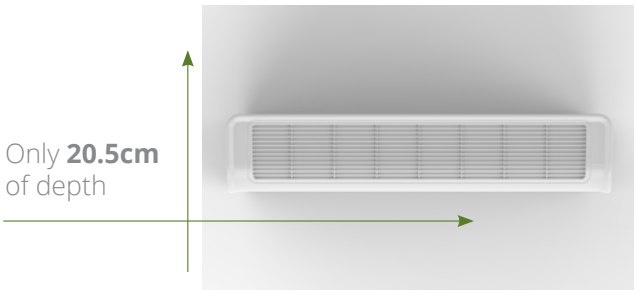
THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

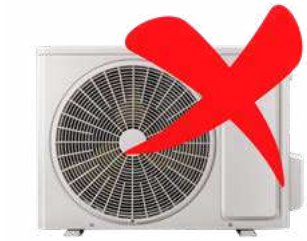
Jolly Comfort - Double pipe air conditioner **without outdoor unit**

The double pipe air conditioner without outdoor unit is designed for all applications where a product with simple and reliable operation is required with easy installation methods suitable for the most varied applications. The features that make it unique on the market are:

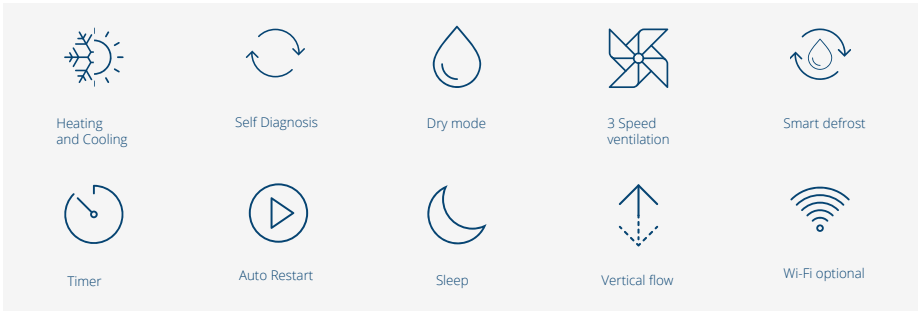
- High performance and low consumption;
- 800W integrative electrical resistance to guarantee operation at low temperatures;
- Removable front panel in ABS;
- Machine structure in galvanized and painted steel;
- Standard remote control;
- Ease of installation

Specially designed for residential/commercial applications and solutions such as prefabricated modules, B&Bs, schools, historic centers and all those applications where a versatile and simple to install product is required.





Jolly Comfort - Double pipe air conditioner **without outdoor unit**



Climatizzatore Jolly Comfort

Telecomando di serie

MODELLO		U.I.	SKU 1001 SHP-90
Power supply		V/f/Hz	230/1/50
Seasonal effeciency in cooling mode	SEER		2,60
	Annual energy consumption	kWh/60min	1,1
	Energy label		A
Seasonal effeciency in heating mode Average/warmer climate	SCOP		3,60
	Annual energy consumption	kWh/60min	0,7
	Energy label		A+
Nominal cooling capacity (min-max)		kW	2,93 (1,00÷3,52)
		BTU/h	10000 (3412÷12010)
Nominal cooling power input (min-max)		kW	1,12
Nominal heating capacity (min-max)		kW	2,63 (0,70÷3,52)
		BTU/h	9000 (2380÷12010)
Nominal heating power input (min-max)			0,73
Supplementary electrical resistance		kW	0,80
Unit air flow volume (max-med-min)		m³/h	550/450/350
Internal side sound pressure (max-min)		dB(A)	47/39
Internal side sound power (max-min)		dB(A)	58/53/49
Outer side sound pressure		dB(A)	55
Outer side sound power		dB(A)	65
Wall holes diameter		mm	180
Dimensions (HxLxD)		mm	585x1000x205
Net weight		kg	42,5
Refrigerant gas (type / standard charge)		tipo/kg	R290 / 0,290
Global Warming Potential / CO2 equiv.tons			3 / 0,001
Internal operating temperature min-max riscald./condiz.		°C	-3÷28 / 18÷35
External operating temperature min-max riscald./condiz.		°C	-5÷24 / -5÷43
CODE		**U.I.**	**2405006**

ACCESSORIES SUPPLIED AS STANDARD (in support)		
		
Plastic sheets for ducts	Grill kits	Wall suspension bracket

OPTIONAL ACCESSORIES	CODE
Wi-Fi Module	**2405016**

Installation kit ready!

This product contains R290 refrigerant and must be installed, used and/or stored in a room with a floor area greater than 15 square meters.

The above technical data refers to european standards EN14511 and EN14825.
Outdoor units contain fluorinated greenhouse gases governed by the Kyoto protocol.

SOLUZIONI MULTISPLIT

Feel Plus+ Wall Air Conditioner

MULTISPLIT WALL VERSION DC INVERTER

Feel Plus+ Console Air Conditioner

MULTISPLIT FLOOR VERSION DC INVERTER

Feel Plus+ Ducted Air Conditioner

MULTI DUCTED VERSION DC INVERTER

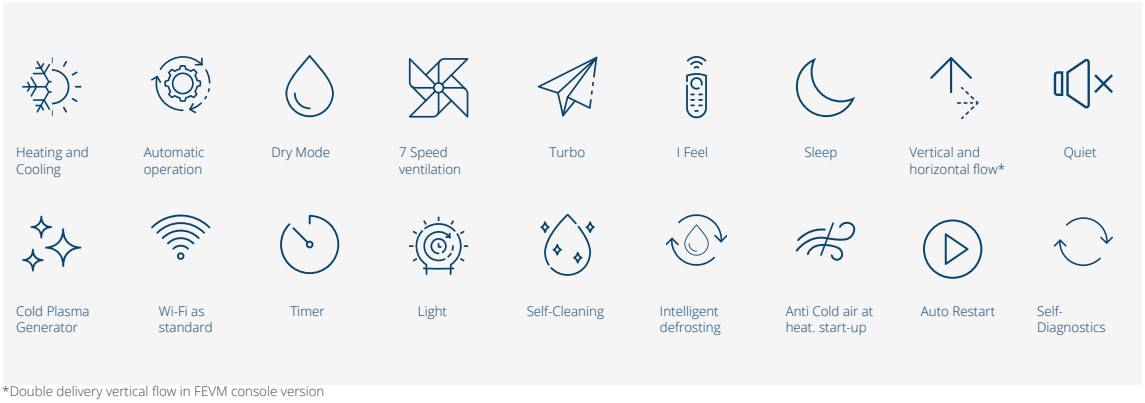
Feel Plus+ Cassette Air Conditioner

MULTI CASSETTE VERSION DC INVERTER

Syntek Shine Wall Air Conditioner

MULTISPLIT WALL VERSION DC INVERTER

FeelPlus+ Multi-Wall and **Multi-Console**



*Double delivery vertical flow in FEVM console version

FPVM Wall

FEVM Floor

TECHNICAL DATA

MODEL		WALL FPVM				FLOOR FEVM		
	I.U.	0918HE32	1218HE32	1818HE32	2418HE32	0919HE32	1219HE32	1819HE32
Power supply	V/Ph/Hz	230/1/50				230/1/50		
Nominal cooling capacity	kW	2.70	3.50	5.30	7.00	2.70	3.52	5.20
	BTU/h	9200	12000	18084	24000	9212	12010	17742
Nominal heating capacity	kW	2.93	3.81	5.57	7.20	2.9	3.8	5.33
	BTU/h	10000	13000	19005	24500	9895	12966	18186
Air flow volume (SH/H/MH/M/ML/L/SL)	m³/h	660/590/540/490/ 450/420/390	680/590/540/490/ 450/420/390	850/750/-/610/ -/520/-	1250/1100/1000/ 950/900/850/750	500/430/410/370/ 330/280/250	600/520/480/440/ 400/360/280	700/650/580/520/ 460/410/320
Sound pressure (SH/H/MH/M/ML/L/SL)	dB(A)	41/39/37/35/ 33/31/24	43/39/37/35/ 34/32/25	49/45/43/41/3 9/37/34	49/47/44/42/ 40/38/36	39/36/33/31/ 29/26/23	44/40/38/36/ 33/29/25	47/45/43/41/ 38/37/32
Sound power (SH/H/MH/M/ML/L/SL)	dB(A)	56/53/52/50/ 48/46/39	58/53/52/50/ 48/46/40	58/55/53/51/ 49/47/44	65/61/58/56/ 54/52/50	50/48/45/44/ 42/38/34	54/50/48/46/ 43/39/35	57/55/53/51/ 48/47/42
Dimensions (H x W x D)	mm	290x865x210	290x865x210	301x996x225	327x1101x249	600x700x215	600x700x215	600x700x215
Net weight	kg	10.5	11	13.5	16.5	15.5	15.5	15.5
Liquid / gas pipe diameter	mm (inch")	6.35 (1/4") / 9.52 (3/8")	6.35 (1/4") / 9.52 (3/8")	6.35 (1/4") / 12.7 (1/2")	6.35 (1/4") / 15.8 (5/8")	6.35 (1/4") / 9.52 (3/8")	6.35 (1/4") / 9.52 (3/8")	6.35 (1/4") / 12.7 (1/2")
CODE		**2702040**	**2702041**	**2702042**	**2702043**	**2702441**	**2702443**	**2702444**

OPTIONAL ACCESSORIES	CODE
Wired controller for control of up to 36 indoor units*	**2701456**
ON-OFF remote control kit**	**2402050**
Wall control with Weekly Timer	**2704040**

* Each indoor unit must be equipped with a wired controller Cod. 2704040 - **for FPVM wall split only

FeelPlus+Multi Cassette and **Multi Ducted**

Heating and Cooling
Automatic operation
Dry Mode
5 speed ventilation
Turbo
I Feel
Sleep
Vertical flow
Self-Diagnostics
Customisable timer
Light * cassette only
Self-Cleaning
Intelligent defrosting
Anti Cold air at heat. start-up
Auto Restart


Remote Control as standard

optional wall control


FCVM Cassette


FDVM Duct


wall control as standard


Optional Remote Control

TECHNICAL DATA

MODEL		CASSETTE FCVM		DUCTED FDVM	
	I.U.	1222HE32	1822HE32	1218HE32	1818HE32
Power supply	V/Ph/Hz	230/1/50			
Nominal cooling capacity	kW	3,50	5,00	3.50	5.00
	BTU/h	11900	17100	11942	17060
Nominal heating capacity	kW	4,00	5,50	3.85	5.5
	BTU/h	13600	18800	13150	18800
Air flow volume (smax/max/med/min)	m³/h	560/540/490/450/ 420/380/350	650/540/490/450/ 420/380/350	620/550/400/300	840/700/600/500
Sound pressure (smax/max/med/min)	dB(A)	"Raffr:41/39/36/34/32/30/28 Risc:40/38/3634/32/30/28"	43/39/36/34/32/30/28	42/39/35/32	45/41/37/33
Sound power (smax/max/med/min)	dB(A)	57/55/52/50/48/46/44	59/55/52/50/48/46/44	52/49/45/42	55/51/47/43
Dimensions (H x W x D)	mm	265x570x570	265x570x570	200x700x615	200x900x615
Net weight	kg	17	17	22	26
Liquid / gas pipe diameter	mm (inch")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 12,7 (1/2")	6.35 (1/4") / 9.52 (3/8")	6.35 (1/4") / 12.7 (1/2")
Grille dimensions (HxWxD)	mm	47,5x620x620	47,5x620x620		
Grille recess hole	mm	580x580	580x580		
Grille weight	kg	3	3		
CODE		**2702346 - 2702500**	**2702347 - 2702500**	**2702241**	**2702242**

OPTIONAL ACCESSORIES	CODE
Comando a parete con Timer Settimanale	**2704040**
Remote on-off contact card	**2402050**
Wired controller for control of up to 36 indoor units*	**2701456**
Comando a parete con WiFi integrato per cassetta FCVM	**2702501**
Circular nozzle section with 2 outlets ø 160mm for FDVM 1222	**2701930**
Circular nozzle section with 3 outlets ø 125mm for FDVM 1222	**2701931**
Circular nozzle section with 2 outlets ø 200mm for FDVM 1822	**2701935**
Circular nozzle section with 3 outlets ø 160mm for FDVM 1822	**2701937**
Circular nozzle section with 4 outlets ø 160mm for FDVM 1822	**2701938**

* Each indoor unit must be equipped with a wired controller Cod. 2704040

Multi Wall Syntek Shine

Heating and Cooling
Automatic operation
Dry Mode
5 Speed ventilation
Turbo
I Feel
Sleep
Vertical flow
Self-Diagnostics
Wi-Fi Optional
Customisable timer
Light
Self-Cleaning
Intelligent defrosting
Anti Cold air at heat. start-up
Auto Restart

Parete SKWIxx22

Da **2** a **5 unità**
interne con una
sola unità esterna

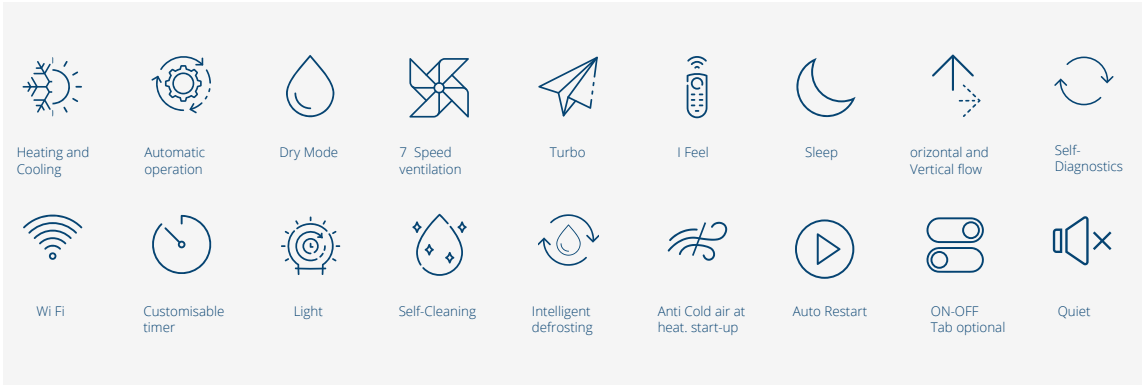
DATI TECNICI

MODEL		WALL SKWI		
	U.I.	1222GHP-32	1822GHP-32	2422GHP-32
Power supply	V/f/Hz	230/1/50		
Nominal cooling capacity	kW	3,20	4,60	6,15
	BTU/h	10919	15700	21000
Nominal heating capacity	kW	3,40	5,20	6,50
	BTU/h	11601	17742	22000
Air flow volume (SH/H/MH/M/ML/L/SL)	m³/h	590/520/400/320	850/800/700/550	1100/950/750/650
Sound pressure (SH/H/MH/M/ML/L/SL)	dB(A)	41/37/33/26	44/42/38/31	47/44/38/35
Sound power (SH/H/MH/M/ML/L/SL)	dB(A)	56/49/45/38	54/52/48/41	61/58/52/49
Dimensions (H x W x D)	mm	250x773x185	300x970x225	325x1080x245
Net weight	kg	8	13,5	16,5
Liquid / gas pipe diameter	mm (inch")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 12,7 (1/2")
CODE		**2402263**	**2402265**	**2402267**

OPTIONAL ACCESSORIES	CODE
Wi-Fi Module	**2402049**

I dati tecnici sopra riportati fanno riferimento alle normative europee EN14511 e EN14825.

Multi Wall Syntek Shine



Parete SKWIxx24

Da **2** a **5 unità**
interne con una
sola unità esterna

DATI TECNICI

MODEL		WALL SKWI		
	U.I.	0924GHP-32	1224GHP-32	1824GHP-32
Power supply	V/f/Hz	230/1/50		
Nominal cooling capacity	kW	2,50 (0,50÷3,25)	3,20 (0,90÷3,60)	4,60 (1,00÷5,40)
	BTU/h	8530 (1706÷11089)	10919 (3071÷12283)	15700 (3412÷18425)
Nominal heating capacity	kW	2,80 (0,50÷3,70)	3,40 (0,90÷4,00)	5,20 (0,75÷5,80)
	BTU/h	9554 (1706÷12624)	11600 (3071÷13648)	17742 (2559÷19790)
Air flow volume (SH/H/MH/M/ML/L/SL)	m³/h	500/470/430/390/320/270/250	590/520/480/400/350/320/280	1000/960/870/810/720/640/600
Sound pressure (SH/H/MH/M/ML/L/SL)	dB(A)	38/36/34/32/28/25/21	41/37/35/33/30/26/24	47/45/43/41/35/30/28
Sound power (SH/H/MH/M/ML/L/SL)	dB(A)	55/48/46/44/40/37/33	55/49/47/45/42/38/36	60/58/56/54/48/44/41
Dimensions (H x W x D)	mm	260x708x185	260x783x185	333x943x246
Net weight	kg	7	8	13
Liquid / gas pipe diameter	mm (inch")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")
CODE		**2402271**	**2402273**	**2402275**

OPTIONAL ACCESSORIES	CODE
Wired controller with weekly timer	**2704040**
Wired controller for control of up to 36 indoor units*	**2701456**
ON-OFF remote control kit	**2402050**

* Each indoor unit must be equipped with a wired controller Cod. 2704040

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

Multisplit external unit

The power and structure of the external units are fundamental for an efficient air conditioning system.

The use of high quality components, particular attention to insulation and the solidity of the metal structure are guarantees of long life and resistance even in difficult climatic conditions.
The high drainage capacity of the outdoor unit chassis prevents the formation of ice in the most difficult climates, guaranteeing reliability and optimal performance.

The range of air conditioners from the ECA Technology multisplit line responds perfectly to the most varied installation needs, adapting perfectly to every space.

FMVD2022

OUTDOOR UNIT MULTISPLIT LINE

FMVDT2422

OUTDOOR UNIT MULTISPLIT LINE

FMVDT2822

OUTDOOR UNIT MULTISPLIT LINE

FMVDTQ3422

OUTDOOR UNIT MULTISPLIT LINE

FMVQP4422

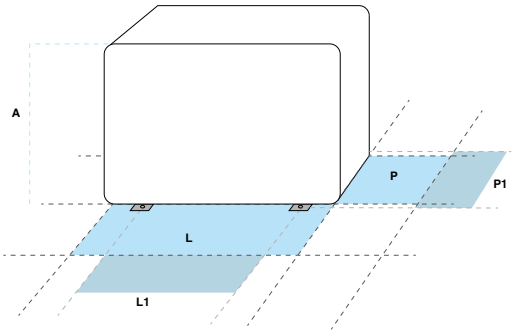
OUTDOOR UNIT MULTISPLIT LINE

Multisplit **Possible Combinations**

	FMVD2022HE32	FMVDT2422HE32	FMVDT2822HE32	FMVTQ3422HE32	FMVQP4422HE32
2 indoor units	9 + 9	9 + 9	9 + 9	9 + 9	-
	9 + 12	9 + 12	9 + 12	9 + 12	9 + 12
	-	12 + 12	9 + 18	9 + 18	9 + 18
	-	-	12 + 12	12 + 12	9 + 24
	-	-	12 + 18	12 + 18	12 + 12
	-	-	-	18 + 18	12 + 18
	-	-	-	-	12 + 24
	-	-	-	-	18 + 18
	-	-	-	-	18 + 24
	-	-	-	-	24 + 24
3 indoor units	-	9 + 9 + 9	9 + 9 + 9	9 + 9 + 9	9 + 9 + 9
	-	-	9 + 9 + 12	9 + 9 + 12	9 + 9 + 12
	-	-	-	9 + 9 + 18	9 + 9 + 18
	-	-	-	9 + 12 + 12	9 + 9 + 24
	-	-	-	12 + 12 + 12	9 + 12 + 12
	-	-	-	-	9 + 12 + 18
	-	-	-	-	9 + 12 + 24
	-	-	-	-	9 + 18 + 18
	-	-	-	-	9 + 18 + 24
	-	-	-	-	12 + 12 + 12
	-	-	-	-	12 + 12 + 18
	-	-	-	-	12 + 12 + 24
	-	-	-	-	12 + 18 + 18
4 indoor units	-	-	-	9 + 9 + 9 + 9	9 + 9 + 9 + 9
	-	-	-	9 + 9 + 9 + 12	9 + 9 + 9 + 12
	-	-	-	-	9 + 9 + 9 + 18
	-	-	-	-	9 + 9 + 9 + 24
	-	-	-	-	9 + 9 + 12 + 12
	-	-	-	-	9 + 9 + 12 + 18
	-	-	-	-	9 + 12 + 12 + 12
	-	-	-	-	9 + 12 + 12 + 18
	-	-	-	-	12 + 12 + 12 + 12
5 indoor units	-	-	-	-	9 + 9 + 9 + 9 + 9
	-	-	-	-	9 + 9 + 9 + 9 + 12
	-	-	-	-	9 + 9 + 9 + 12 + 12

Multisplit external unit

FMVD2022HE32



Per riferimento dati DIMENSIONI (AxLxP) e INTERASSI (L1 e P1) visualizzare la tabella sottostante

MODEL	U.E.	FMVD2022HE32	FMVDT2422HE32	FMVDT2822HE32	FMVTQ3422HE32	FMVQP4422HE32
Number of connections for indoor units		2	3	3	4	5
Power supply	V/f/Hz	230/1/50				
Nominal cooling capacity (min-max)	kW	5,30 (2,14÷5,80)	6,10 (2,20÷8,30)	7,10 (2,30÷9,20)	8,00 (2,30÷11,00)	12,10 (2,60÷15,20)
	BTU/h	18100 (7300÷19800)	20800 (7500÷28300)	24200 (7850÷32400)	28000 (7800÷37500)	41300 (8900÷51900)
Nominal cooling electric power	kW	1,48	1,48	1,88	2,12	3,40
Nominal heating capacity (min-max)	kW	5,65 (2,58÷6,50)	6,50 (3,60÷8,50)	8,60 (3,65÷9,20)	9,50 (3,65÷10,25)	13,00 (3,00÷15,50)
	BTU/h	19300 (8800÷22200)	22200 (12300÷29000)	29300 (12500÷30000)	32400 (12500÷35000)	44400 (10200÷52900)
Nominal heating electric power	kW	1,25	1,43	2,23	2,20	3,19
EER / COP		3,58 / 4,53	4,12 / 4,56	3,77 / 3,86	3,77 / 4,31	3,56 / 4,08
Air flow volume	m³/h	2300	3800	3800	3800	5800
Sound pressure / Sound power	dB(A)	54 / 64	58 / 68	58 / 68	58 / 68	60 / 74
Outdoor unit dimensions (**H**x**W***x**D**)	mm	550x745x300	654x889x340	654x889x340	654x889x340	1020x826x427
Leg spacing **W1** x **D1**	mm	512 x 332	570 x 371	570 x 371	570 x 371	635 x 396
Outdoor unit net weight	kg	32	47,5	47,5	51	73
Pipe length: max with standard/total charge with additional charge/single pipe with additional charge	m	10/40/20	30/60/20	30/60/20	40/70/20	50/100/25
Refrigerant addition beyond max length with standard charge	gr/m	20	20	20	20	20
Max height difference	m	15	15	15	15	25
Liquid/gas pipe diameter	mm (inch")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 9,52 (3/8")
Refrigerant type/standard charge	tipo/kg	R32 / 0,90	R32 / 1,60	R32 / 1,70	R32 / 1,80	R32 / 2,40
Global warming potential / CO2 equiv. tons	GWP/tons	675 / 0,607	675 / 1,080	675 / 1,147	675 / 1,215	675 / 1,620
Heating/cooling ambient operating temp. range.	°C	-22÷24 / -15÷43				
CODE		**2702551**	**2702552**	**2702553**	**2702554**	**2702555**

Outdoor units FMVD2022HE32, FMVDT2422HE32, FMVDT2822HE32, FMVDT3422HE32, FMVDT4422HE32 compatible with all FeelPlus+ (FPVM), Syntek Shine (SKWI), FeelPlus console (FEVM), cassette (FCVM), ducted (FDVM) multi wall indoor units as per the possible combinations shown on page 41.

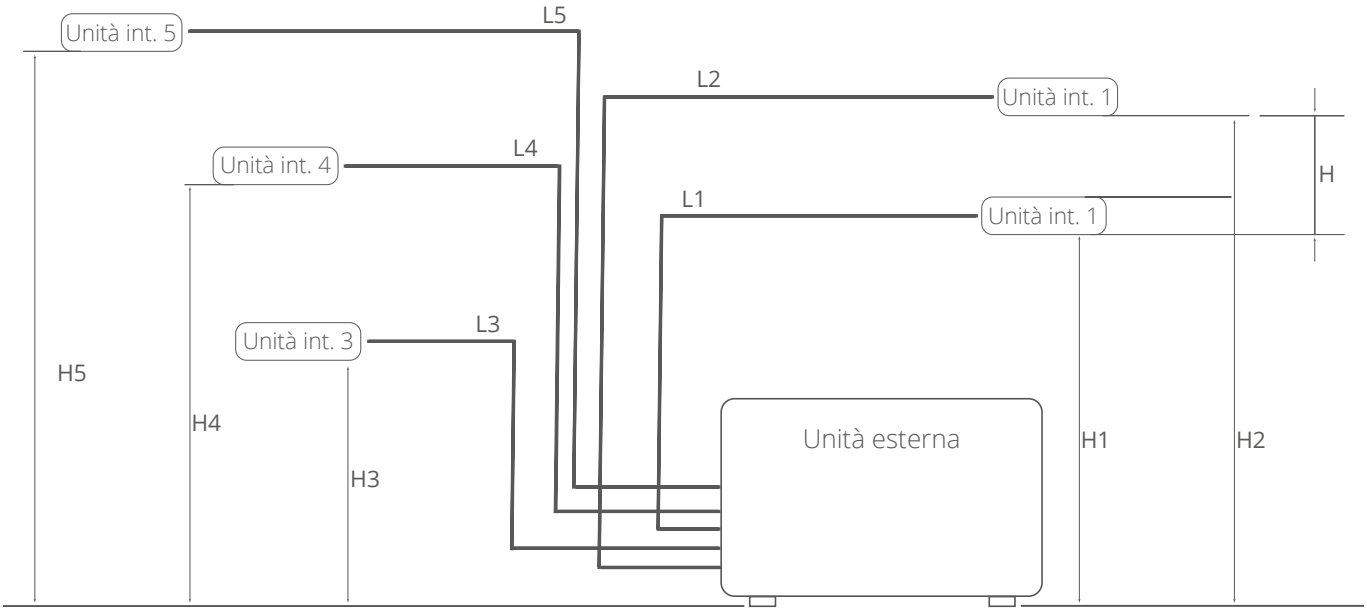
*The width measurement does not include the tap cover.

The technical data above refers to the European standards EN14511 and EN14825.

THE OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES REGULATED BY THE KYOTO PROTOCOL

Limits on **length** and **height difference** of refrigerant pipes

The length of the refrigerant pipes between the indoor and outdoor unit must be as short as possible and is limited by compliance with the maximum height difference between the units.
When installing the refrigerant pipes, both the length (L) and the height difference (H) must be minimised.
A minimum length of 2 metres per line is recommended.



QUANTITY OF REFRIGERANT

The following table shows the splitting and loading data. A minimum length of 2 metres per line is recommended.

OUTDOOR UNIT MODEL		FMVD 2022	FMVDT 2422	FMVDT 2822	FMVTQ 3422	FMVQP 4422
Refrigerant charge on shipment	kg	0,9	1,6	1,7	1,8	2,4
Liquid pipe diameter	mm / (inch")	6,35 - 1/4"				
Gas pipe diameter	mm / (inch"	9,52 - 3/8"				
Maximum pipe length with standard refrigerant charge	m	10	30	30	40	50
Additional quantity of refrigerant	g/m	20	20	20	20	20
Maximum total pipe length L = L1 + L2 + L3 + L4 + L5	m	40	60	60	70	100
Maximum single pipe length L1, L2, L3, L4, L5	m	20	20	20	20	25
Maximum height difference H1, H2, H3, H4, H5 with outdoor unit above indoor unit	m	15	15	15	15	25
Maximum height difference H1, H2, H3, H4, H5 with outdoor unit below indoor unit	m	15	15	15	15	25
Maximum height difference (H) between the various indoor units	m	15	15	15	15	25

N.B. additional compressor oil charge not required.

Efficiencies and **Cooling** and **Heating Combinations**

FMVD2022HE32

Internal Unit			Rated Capacity(KW)			Total Cooling Capacity kW			Total Power Input(KW)			Total Current(A)230V			SEER(W/W)		Energy Label	
A	B	C	1 unità	2 unità	3 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
9			2,60			2,15	2,60	3,00	0,30	0,70	1,50	1,33	3,11	6,65	6.10	6.10	A++	A++
12			3,50			2,15	3,50	3,80	0,30	1,20	1,80	1,33	5,32	7,99	6.10	6.10	A++	A++
9	9		2,60	2,60		2,15	5,20	5.80	0,40	1,48	2,50	1,77	6,57	11,09	7.20	6.10	A++	A++
9	12		2,23	2,97		2,15	5,20	5.80	0,50	1,48	2,50	2,22	6,57	11,09	7.20	6.50	A++	A++
Internal Unit			Rated Capacity(KW)			Total Heating Capacity kW			Total Power Input(KW)			Total Current(A)230V			SCOP(W/W)		Energy Label	
A	B	C	1 unità	2 unità	3 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
9			2,80			2,05	2,80	3,02	0,40	0,80	1,80	1,77	3,55	7,99	4,0	4,0	A+	A+
12			3,80			2,05	3,80	4,10	0,40	0,80	2,00	1,77	3,55	8,87	4,0	4,0	A+	A+
9	9		2,70	2,70		2.50	5,40	5.90	0,70	1,25	2,50	3,11	5,55	11,09	4,2	4,0	A+	A+
9	12		2,31	3,09		2.50	5,40	5.90	0,70	1,25	2,50	3,11	5,55	11,09	4,2	4,0	A+	A+

FMVDT2422HE32

Internal Unit			Rated Capacity(KW)			Total Cooling Capacity kW			Total Power Input(KW)			Total Current(A)230V			SEER(W/W)		Energy Label	
A	B	C	1 unità	2 unità	3 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
9	9		2,55	2,55		2.20	5,10	5,60	0,40	1,20	2,60	1,77	5,32	11,54	6.10	6.10	A++	A++
9	12		2,61	3,49		2.20	6,10	7,33	0,50	1,48	2,90	2,22	6,57	12,87	6.10	6.10	A++	A++
12	12		3,05	3,05		2.20	6,10	7,33	0,60	1,48	2,90	2,66	6,57	12,87	6.10	6.10	A++	A++
9	9	9	2,03	2,03	2,03	2.20	6,10	7,33	0,60	1,48	2,90	2,66	6,57	12,87	7.80	6.40	A++	A++
Internal Unit			Rated Capacity(KW)			Total Heating Capacity kW			Total Power Input(KW)			Total Current(A)230V			SCOP(W/W)		Energy Label	
A	B	C	1 unità	2 unità	3 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
9	9		2,80	2,80		3.60	5,60	8.50	0,60	1,23	2,50	2,66	5,44	11,09	4,0	3,8	A+	A
9	12		2,70	3,80		3.60	6,50	8.50	0,80	1,43	2,90	3,55	6,34	12,87	4,0	3,8	A+	A
12	12		3,25	3,25		3.60	6,50	8.50	0,80	1,43	2,90	3,55	6,34	12,87	4,0	3,8	A+	A
9	9	9	2,17	2,17	2,17	3.60	6,50	8.50	0,80	1,43	2,90	3,55	6,34	12,87	4,3	3,8	A+	A

FMVDT2822HE32

Internal Unit			Rated Capacity(KW)			Total Cooling Capacity kW			Total Power Input(KW)			Total Current(A)230V			SEER(W/W)		Energy Label	
A	B	C	1 unità	2 unità	3 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
9	9		2,60	2,60		2,40	5,20	6,30	0,80	1,40	3,00	3,55	6,21	13,31	6.10	6.10	A++	A++
9	12		2,60	3,50		2,40	6,10	7,30	1,00	1,65	3,20	4,44	7,30	14,20	6.10	6.10	A++	A++
9	18		2,37	4,73		2,40	7,10	8,50	1,10	1,88	3,40	4,88	8,34	15,08	6.10	6.10	A++	A++
12	12		3,55	3,55		2,40	7,10	8,50	1,10	1,88	3,40	4,88	8,34	15,08	6.10	6.10	A++	A++
12	18		2,84	4,26		2,40	7,10	8,50	1,10	1,88	3,40	4,88	8,34	15,08	6.10	6.10	A++	A++
9	9	9	2,37	2,37	2,37	2,40	7,10	8,50	1,10	1,88	3,40	4,88	8,34	15,08	7.10	6.10	A++	A++
9	9	12	2,13	2,13	2,84	2,40	7,10	8,50	1,10	1,88	3,40	4,88	8,34	15,08	7.10	6.30	A++	A++
Internal Unit			Rated Capacity(KW)			Total Heating Capacity kW			Total Power Input(KW)			Total Current(A)230V			SCOP(W/W)		Energy Label	
A	B	C	1 unità	2 unità	3 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
9	9		2,60	2,60		3.60	5,20	8,80	0,60	1,67	2,40	2,66	7,42	10,65	4,0	3,8	A+	A
9	12		2,60	3,80		3.60	6,40	8,80	0,60	1,95	2,60	2,66	8,66	11,54	4,0	3,8	A+	A
9	18		2,80	5,60		3.60	8,40	8,80	0,80	2,23	3,00	3,55	9,89	13,31	4,0	3,8	A+	A
12	12		4,25	4,25		3.60	8,50	8,80	0,80	2,23	3,00	3,55	9,89	13,31	4,0	3,8	A+	A
12	18		3,40	5,10		3.60	8,50	8,80	0,80	2,23	3,00	3,55	9,89	13,31	4,0	3,8	A+	A
9	9	9	2,83	2,83	2,83	3.60	8,50	8,80	0,80	2,23	3,00	3,55	9,89	13,31	4,3	3,8	A+	A
9	9	12	2,55	2,55	3,40	3.60	8,50	8,80	0,80	2,23	3,00	3,55	9,89	13,31	4,3	3,8	A+	A

Efficiencies and **Cooling** and **Heating Combinations**

	Internal Unit				Rated Capacity(KW)				Total Cooling Capacity kW			Total Power Input(KW)			Total Current(A)230V			SEER(W/W)		Energy Label	
	A	B	C	D	1 unità	2 unità	3 unità	4 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
FMVTQ3422HE32	9	9			2,60	2,60			2,50	5,20	5,62	0,80	1,40	2,60	3,55	6,21	11,54	6.10	6.10	A++	A++
	9	12			2,60	3,50			2,50	6,10	6,59	0,80	1,60	2,80	3,55	7,10	12,42	6.10	6.10	A++	A++
	9	18			2,60	5,00			2,50	7,60	8,21	1,20	2,00	2,80	5,32	8,87	12,42	6.10	6.10	A++	A++
	12	12			3,50	3,50			2,50	7,00	7,56	1,20	1,80	2,80	5,32	7,99	12,42	6.10	6.10	A++	A++
	12	18			3,20	4,80			2,50	8,00	10,00	1,20	2,12	3,40	5,32	9,41	15,08	6.10	6.10	A++	A++
	18	18			4,00	4,00			2,50	8,00	10,00	1,20	2,12	3,60	5,32	9,41	15,97	6.10	6.10	A++	A++
	9	9	9		2,67	2,67	2,67		2,50	8,00	8,64	1,30	2,00	3,40	5,77	8,87	15,08	6.50	6.10	A++	A++
	9	9	12		2,40	2,40	3,20		2,50	8,00	10,00	1,30	2,12	3,60	5,77	9,41	15,97	6.50	6.10	A++	A++
	9	9	18		2,00	2,00	4,00		2,50	8,00	10,00	1,30	2,12	3,60	5,77	9,41	15,97	6.50	6.10	A++	A++
	9	12	12		2,18	2,91	2,91		2,50	8,00	10,00	1,30	2,12	3,60	5,77	9,41	15,97	6.50	6.10	A++	A++
	12	12	12		2,67	2,67	2,67		2,50	8,00	10,00	1,30	2,12	3,60	5,77	9,41	15,97	6.50	6.10	A++	A++
	9	9	9	9	2,00	2,00	2,00	2,00	2,50	8,00	10,00	1,30	2,12	3,60	5,77	9,41	15,97	7.20	6.10	A++	A++
	9	9	9	12	1,85	1,85	1,85	2,46	2,50	8,00	10,00	1,30	2,12	3,60	5,77	9,41	15,97	7.20	6.10	A++	A++

	Internal Unit				Rated Capacity(KW)				Total Heating Capacity kW			Total Power Input(KW)			Total Current(A)230V			SCOP(W/W)		Energy Label	
	A	B	C	D	1 unità	2 unità	3 unità	4 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
FMVTQ3422HE32	9	9			2,80	2,80			3.60	5,60	10,00	0,70	1,41	2,50	3,11	6,27	11,09	4,0	3,8	A+	A
	9	12			2,80	5,43			3.60	8,23	10,00	0,70	1,65	2,60	3,11	7,32	11,54	4,0	3,8	A+	A
	9	18			2,80	3,80			3.60	6,60	10,00	1,00	2,12	3,40	4,44	9,41	15,08	4,0	3,8	A+	A
	12	12			3,80	3,80			3.60	7,60	10,00	0,90	1,89	2,80	3,99	8,37	12,42	4,0	3,8	A+	A
	12	18			3,80	5,60			3.60	9,40	10,00	1,00	2,20	3,60	4,44	9,76	15,97	4,0	3,8	A+	A
	18	18			4,75	4,75			3.60	9,50	10,00	1,00	2,20	3,60	4,44	9,76	15,97	4,0	3,8	A+	A
	9	9	9		3,17	3,17	3,17		3.60	9,50	10,00	1,00	2,12	3,40	4,44	9,41	15,08	4,0	4,0	A+	A+
	9	9	12		2,85	2,85	3,80		3.60	9,50	10,00	1,00	2,20	3,60	4,44	9,76	15,97	4,0	4,0	A+	A+
	9	9	18		2,38	2,38	4,75		3.60	9,50	10,00	1,00	2,20	3,60	4,44	9,76	15,97	4,0	4,0	A+	A+
	9	12	12		2,59	3,45	3,45		3.60	9,50	10,00	1,00	2,20	3,60	4,44	9,76	15,97	4,0	4,0	A+	A+
	12	12	12		3,17	3,17	3,17		3.60	9,50	10,00	1,00	2,20	3,60	4,44	9,76	15,97	4,0	4,0	A+	A+
	9	9	9	9	2,38	2,38	2,38	2,38	3.60	9,50	10,00	1,00	2,20	3,60	4,44	9,76	15,97	4,2	4,0	A+	A+
	9	9	9	12	2,19	2,19	2,19	2,92	3.60	9,50	10,00	1,00	2,20	3,60	4,44	9,76	15,97	4,2	4,0	A+	A+

Efficiencies and **Cooling** and **Heating Combinations**

	Internal Unit					Rated Capacity(KW)					Total Cooling Capacity kW			Total Power In-put(KW)			Total Curren-t(A)230V			SEER(W/W)		Energy Label	
	A	B	C	D	E	1 unità	2 unità	3 unità	4 unità	5 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	**Feel+**	**Shine**	**Feel+**	**Shine**
FMVQP4422HE32	9	12				2,60	3,50				2,40	6,10	6,59	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	18				2,60	5,00				2,40	7,60	8,21	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	24				2,60	7,20				2,40	9,80	10,58	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	12	12				3,50	3,50				2,40	7,00	7,56	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	12	18				3,50	5,00				2,40	8,50	9,18	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	12	24				3,50	7,20				2,40	10,70	11,56	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	18	18				5,00	5,00				2,40	10,00	10,80	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	18	24				5,14	6,86				2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	24	24				6,00	6,00				2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	9			2,60	2,60	2,60			2,40	7,80	8,42	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	12			2,60	2,60	3,50			2,40	8,70	9,40	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	18			2,60	2,60	5,00			2,40	10,20	11,02	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	24			2,57	2,57	6,86			2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	12	12			2,60	3,50	3,50			2,40	9,60	10,37	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	12	18			2,60	3,50	5,00			2,40	11,10	11,99	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	12	24			2,40	3,20	6,40			2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	18	18			2,40	4,80	4,80			2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	18	24			2,12	4,24	5,65			2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	12	12	12			3,50	3,50	3,50			2,40	10,50	11,34	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	12	12	18			3,43	3,43	5,14			2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	12	12	24			3,00	3,00	6,00			2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	12	18	18			3,00	4,50	4,50			2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	9	9		2,60	2,60	2,60	2,60		2,40	10,40	11,23	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	9	12		2,60	2,60	2,60	3,50		2,40	11,30	12,20	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	9	18		2,40	2,40	2,40	4,80		2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	9	24		2,12	2,12	2,12	5,65		2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	12	12		2,57	2,57	3,43	3,43		2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	12	18		2,25	2,25	3,00	4,50		2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	12	12	12		2,40	3,20	3,20	3,20		2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	12	12	18		2,12	2,82	2,82	4,24		2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	12	12	12	12		3,00	3,00	3,00	3,00		2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	9	9	9	2,40	2,40	2,40	2,40	2,40	2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	9	9	12	2,25	2,25	2,25	2,25	3,00	2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++
	9	9	9	12	12	2,12	2,12	2,12	2,82	2,82	2,40	12,00	13,60	2,60	3,45	4,00	11,54	15,31	17,75	6.10	6.10	A++	A++

Efficiencies and **Cooling** and **Heating Combinations**

	Internal Unit					Rated Capacity(KW)					Total Heating Capacity kW			Total Power Input(KW)			Total Current(A)230V			SCOP(W/W)		Energy Label	
	A	B	C	D	E	1 unità	2 unità	3 unità	4 unità	5 unità	Min.	Rated.	Max.	Min.	Rated.	Max.	Min.	Rated.	Max.	Feel+	Shine	Feel+	Shine
FMVQP4422HE32	9	12				2,80	3,80				2,60	6,60	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	18				2,80	5,60				2,60	8,40	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	24				2,80	8,50				2,60	11,30	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	12	12				3,80	3,80				2,60	7,60	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	12	18				3,80	5,60				2,60	9,40	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	12	24				3,80	8,50				2,60	12,30	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	18	18				5,60	5,60				2,60	11,20	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	18	24				5,57	7,43				2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	24	24				6,50	6,50				2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	9			2,80	2,80	2,80			2,60	8,40	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	12			2,80	2,80	3,80			2,60	9,40	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	18			2,80	2,80	5,60			2,60	11,20	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	24			2,79	2,79	7,43			2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	12	12			2,80	3,80	3,80			2,60	10,40	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	12	18			2,80	3,80	5,60			2,60	12,20	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	12	24			2,60	3,47	6,93			2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	18	18			2,60	5,20	5,20			2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	18	24			2,29	4,59	6,12			2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	12	12	12			4,33	4,33	4,33			2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	12	12	18			3,71	3,71	5,57			2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	12	12	24			3,25	3,25	6,50			2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	12	18	18			3,25	4,88	4,88			2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	9	9		3,25	3,25	3,25	3,25		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	9	12		3,00	3,00	3,00	4,00		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	9	18		2,60	2,60	2,60	5,20		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	9	24		2,29	2,29	2,29	6,12		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	12	12		2,79	2,79	3,71	3,71		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	12	18		2,44	2,44	3,25	4,88		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	12	12	12		2,60	3,47	3,47	3,47		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	12	12	18		2,29	3,06	3,06	4,59		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	12	12	12	12		3,25	3,25	3,25	3,25		2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	9	9	9	2,60	2,60	2,60	2,60	2,60	2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	9	9	12	2,44	2,44	2,44	2,44	3,25	2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A
	9	9	9	12	12	2,29	2,29	2,29	3,06	3,06	2,60	13,00	13,00	1,61	3,20	4,00	7,13	14,20	17,75	4,0	4,0	A	A

COMMERCIAL SOLUTIONS

DSV Ducted Air Conditioners

MONOSPLIT DUCTED AIR CONDITIONERS DC INVERTER

Floor - Ceiling Air Conditioner

MONOSPLIT FLOOR - CEILING AIR CONDITIONER DC INVERTER

Cassette Air Conditioner

MONOSPLIT CASSETTE AIR CONDITIONERS DC INVERTER

High-Pressure Ducted Air Conditioners

HIGH-PRESSURE DUCTED GAS AIR CONDITIONERS R410 GAS

MSV - Outdoor unit

An efficient air conditioning system must include the power and design of its outdoor units.
The use of high quality components, special focus on insulation and the robustness of the metal structure guarantee long life and resilience, even in the most troublesome climatic conditions.
The high drainage capacity of the outdoor unit's chassis prevents ice formation in the harshest climates and ensures optimum reliability and performance.

ECA Technology's range of commercial air conditioners meets the needs of the most varied installation requirements, adapting to industrial production areas, shops, supermarkets, offices, healthcare facilities, hotels, restaurants, bars and accommodation, public places and outdoor areas.

MSV1222

COMMERCIAL LINE OUTDOOR UNIT

MSV1822

COMMERCIAL LINE OUTDOOR UNIT

MSV2422

COMMERCIAL LINE OUTDOOR UNIT

MSV3622 / MSV4822

COMMERCIAL LINE OUTDOOR UNIT

MSV6022

COMMERCIAL LINE OUTDOOR UNIT

HMSV 2019 / 3019

COMMERCIAL LINE OUTDOOR UNIT

DSV - **Ducted** Air Conditioner

ECA Technology's **ducted units** are ideal for small commercial / tertiary applications.

These units feature an **ultra-thin design**: The height is only 200 mm for the DSV1218 and DSV1818 models, and 220 / 300 mm for all other models.
Careful design has resulted in an evaporating coil that promotes more effective air exchange.

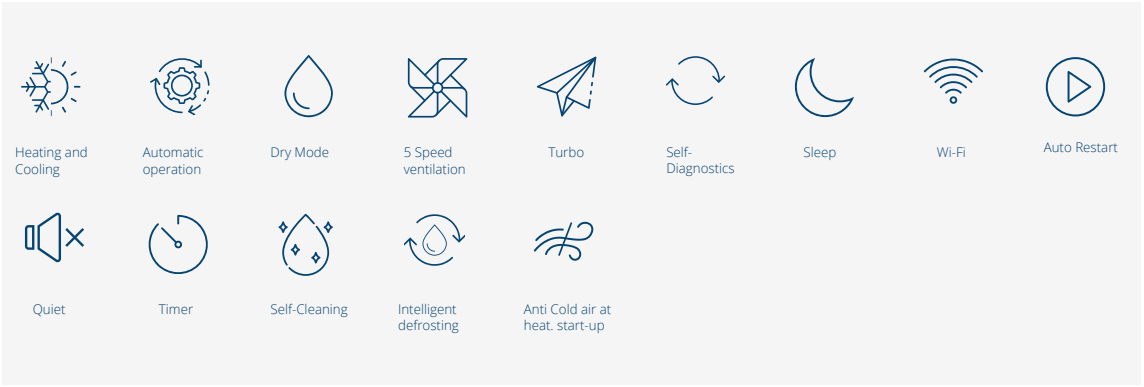
The centrifugal fan with DC Brushless motor provides a high air flow rate and complete silence.
Rear or bottom air intakes are available.

DSV Ducted

Wired control

Optional
remote control

DSV - **Ducted** Air Conditioner



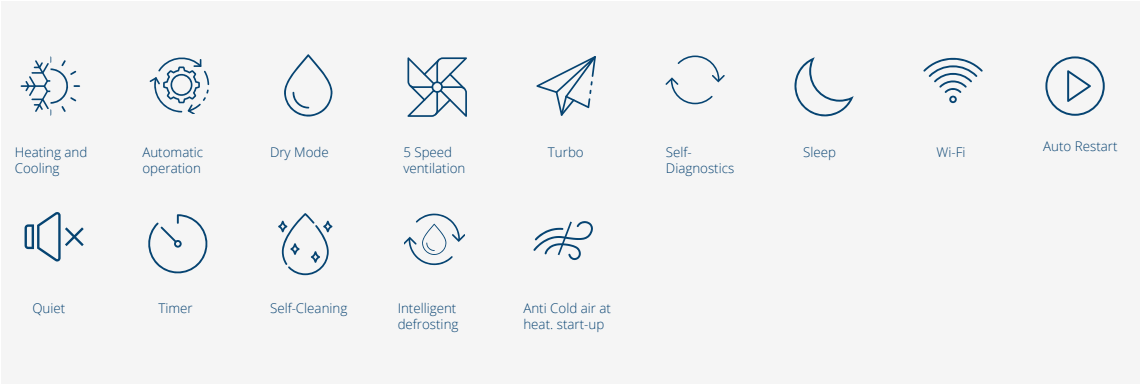
MODEL		U.I.	DSV1222HE32	DSV1822HE32	DSV2422HE32
		U.E.	MSV1222HE32	MSV1822HE32	MSV2422HE32
Power supply		V/f/Hz	230/1/50		
Seasonal efficiency in Cooling mode	Pdesign	kW	3,50	5,30	7,10
	SEER		6,50	6,30	6,60
	Annual energy consump.	kWh/a	189	294	377
	Energy Label		A++	A+++	A++
Seasonal efficiency in Heating mode - average/warmer climate	Pdesign	kW	3,00	3,90	4,70
	SCOP		4,00	4,00	4,10
	Annual energy consump.	kWh/a	1050	1365	1605
	Energy Label		A+	A+	A+
Nominal cooling capacity (min-max)		kW	3,50 (0,90-4,00)	5,30 (1,60-5,80)	7,10 (2,40-7,60)
		BTU/h	11900 (3100-13700)	18000 (5500-19800)	24200 (8200-26000)
Nominal cooling electric power (min-max)		kW	1,03 (0,20-1,30)	1,51 (0,30-1,80)	1,92 (0,50-2,60)
Nominal heating capacity (min-max)		kW	4,00 (0,90-4,50)	5,60 (1,60-6,10)	8,00 (2,20-8,60)
		BTU/h	13600 (3100-15400)	19100 (5500-20800)	27200 (7500-29400)
Nominal heating electric power (min-max)		kW	1,00 (0,20-1,30)	1,42 (0,30-1,80)	2,00 (0,50-2,60)
EER / COP			3,40 / 4,00	3,50 / 3,95	3,70 / 4,00
Indoor unit air flow volume (SH/H/M/L)		m³/h	600/550/500/400	900/800/700/600	1100/1000/900/800
Outdoor unit air flow volume		m³/h	1800	2200	3600
Indoor unit sound pressure (SH/H/M/L)		dB(A)	35/33/32/30	36/35/33/31	37/35/33/31
Indoor unit sound power (SH/H/M/L)		dB(A)	56	59	58
Outdoor unit sound pressure (H)		dB(A)	48	52	55
Outdoor unit sound power (H)		dB(A)	56	65	69
Indoor unit dimensions (HxWxD)		mm	200x700x450	200x1000x450	260x900x655
Indoor unit weight		kg	18	24	29,5
Outdoor unit dimensions (HxWxD)		mm	553x675x285	555x745x300	660x889x340
Outdoor unit weight		kg	24,5	30,5	41,5
Pipe length: min-max with standard charge / with additional charge		m	7 / 30	7 / 30	7 / 30
Max height difference		m	15	20	20
Liquid/gas pipe diameter		mm (inch")	6,35 (1/4") / 9,52 (3/8")	6,35 (1/4") / 12,7 (1/2")	9,52 (3/8") / 15,8 (5/8")
Refrigerant type/standard charge		tipo/kg	R32 / 0,57	R32 / 0,85	R32 / 1,50
Global warming potential / CO2 equiv.tons		GWP/tons	675 / 0,385	675 / 0,574	675 / 1,013
Refrigerant addition beyond max length with standard charge		gr/m	16	16	20
Heating/cooling ambient operating temp. range		°C	-20÷24 / -20÷52	-20÷24 / -20÷52	-20÷24 / -20÷52
CODE		**U.I.**	**2701242**	**2701243**	**2701244**
		U.E.	**2701542**	**2701543**	**2701544**

OPTIONAL ACCESSORIES	CODE
Circular nozzle section with 2 outlets ø 160mm for DSV 1222	**2701930**
Circular nozzle section with 3 outlets ø 125mm for DSV 1222	**2701931**
Circular nozzle section with 2 outlets ø 200mm for DSV 1822	**2701935**
Circular nozzle section with 3 uscite ø 160mm for DSV 1822	**2701937**
Circular nozzle section with 4 uscite ø 160mm for DSV 1822	**2701938**
Circular nozzle section with 3 uscite ø 200mm for DSV 2422	**2701940**
Circular nozzle section with 4 uscite ø 160mm for DSV 2422	**2701941**
Wired controller for control of up to 36 indoor units*	**2701456**
Modbus Gateway	**2701455**
ON - OFF remote control kit	**2701450**

* Each indoor unit must be equipped with a Modbus Gateway cod. 2701454 to enable communication with the central wired controller.

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

DSV - **Ducted** Air Conditioner



MODEL		U.I.	DSV3622HE32	DSV4822HE32	DSV6022HE32
		U.E.	MSV3622HE32	MSV4822HE32	MSV6022HE32
Power supply		V/f/Hz	400/3/50		
Seasonal efficiency in Cooling mode	Pdesign	kW	10,50	13,40	16,00
	SEER		6,40	6,10	6,10
	Annual energy consump.	kWh/a	574	769	918
	Energy Label		A++	A++	A++
Seasonal efficiency in Heating mode - average/warmer climate	Pdesign	kW	7,00	10,00	12,30
	SCOP		4,20	4,00	4,00
	Annual energy consump.	kWh/a	2333	3500	4305
	Energy Label		A+	A+	A+
Nominal cooling capacity (min-max)		kW	10,50 (3,20-11,00)	13,40 (6,00-14,20)	16,00 (4,80-17,00)
		BTU/h	35800 (11000-37600)	45700 (20500-48500)	54500 (16300-58000)
Nominal cooling electric power (min-max)		kW	3,00 (0,90-4,00)	4,50 (1,35-5,60)	5,40 (1,50-6,80)
Nominal heating capacity (min-max)		kW	11,50 (3,00-12,50)	15,50 (3,90-16,00)	17,00 (4,50-18,00)
		BTU/h	39200 (10300-42300)	52900 (13300-54600)	58000 (15300-61400)
Nominal heating electric power (min-max)		kW	2,80 (0,90-4,00)	4,50 (1,35-5,60)	4,70 (1,50-6,80)
EER / COP			3,50 / 4,10	2,98 / 3,44	2,96 / 3,62
Indoor unit air flow volume (SH/H/M/L)		m³/h	1700/1600/1400/1200	2300/2100/1800/1500	2600/2300/2000/1700
Outdoor unit air flow volume		m³/h	4800	5200	5500
Indoor unit sound pressure (SH/H/M/L)		dB(A)	39/38/37/36	43/42/40/38	46/44/42/40
Indoor unit sound power (SH/H/M/L)		dB(A)	62	67	70
Outdoor unit sound pressure (H)		dB(A)	57	59	60
Outdoor unit sound power (H)		dB(A)	70	75	75
Indoor unit dimensions (HxWxD)		mm	260x1340x655	300x1400x700	300x1400x700
Indoor unit weight		kg	43	52	54
Outdoor unit dimensions (HxWxD)		mm	820x940x370	820x940x370	960x990x370
Outdoor unit weight		kg	75	81	94
Pipe length: min-max with standard charge / with additional charge		m	7 / 75	9,5 / 75	7,5 / 75
Max height difference		m	30	30	30
Liquid/gas pipe diameter		mm (inch")	9,52 (3/8") / 15,8 (5/8")	9,52 (3/8") / 15,8 (5/8")	9,52 (3/8") / 15,8 (5/8")
Refrigerant type/standard charge		tipo/kg	R32 / 2,10	R32 / 2,80	R32 / 3,50
Global warming potential / CO2 equiv.tons		GWP/tons	675 / 1,418	675 / 1,890	675 / 2,363
Refrigerant addition beyond max length with standard charge		gr/m	20	35	35
Heating/cooling ambient operating temp. range		°C	-20÷24 / -20÷52	-20÷24 / -20÷52	-20÷24 / -20÷52
CODE		**U.I.**	**2701245**	**2701246**	**2701247**
		U.E.	**2701545**	**2701546**	**2701547**

ACCESSORI OPTIONAL	CODE
Circular nozzle section with 3 uscite Ø 200 mm for DSV3622	**2701945**
Circular nozzle section with 4 uscite Ø 200 mm for DSV3622	**2701946**
Circular nozzle section with 5 uscite Ø 160 mm for DSV3622	**2701947**
Circular nozzle section with 4 uscite Ø 200 mm for DSV4822 e DSV6022	**2701950**
Circular nozzle section with 5 uscite Ø 160 mm per DSV4822 e DSV6022	**2701951**
Wired controller for control of up to 36 indoor units*	**2701456**
Modbus Gateway	**2701455**
ON - OFF remote control kit	**2701450**

* Each indoor unit must be equipped with a Modbus Gateway cod. 2701454 to enable communication with the central wired controller.

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

FSV - **Floor - Ceiling** Air Conditioner

The **floor-ceiling units** are ideal for applications in the small commercial/ tertiary sectors such as shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas.

The compact design (only 235 mm deep) allows **versatile installation**.
The wide swing angle of the louvres also allows horizontal air flow for ceiling applications – this prevents direct air flows onto persons in the room.
When the unit is switched off, the air delivery louvres can be completely closed to prevent dust from entering the unit and keep the air conditioner clean.

FSV Floor-Ceiling

Standard remote control

Optional wired control

FSV - **Floor - Ceiling** Air Conditioner

Heating and Cooling
Automatic operation
Dry Mode
Different ventilation speeds
Turbo
I Feel
Sleep
Wi-Fi Optional
Room temperature control
Quiet[1]
Timer
Light
Self-Cleaning
Intelligent defrosting
Anti Cold air at heat. start-up
Auto Restart
Self-Diagnostics

[1]only with wired control integration

MODEL		I.U.	FSV1822HE32	FSV2422HE32	FSV3622HE32
		O.U.	MSV1822HE32	MSV2422HE32	MSV3622HE32
Power supply		V/Ph/Hz	230/1/50	230/1/50	400/3/50
Seasonal efficiency in Cooling mode	Pdesign	kW	5,30	7,10	10,00
	SEER		6,50	7,20	6,30
	Annual energy consump.	kWh/a	285	345	556
	Energy Label		A++	A++	A++
Seasonal efficiency in Heating mode - average/warmer climate	Pdesign	kW	3,90	4,70	7,00
	SCOP		4,20	4,30	4,20
	Annual energy consump.	kWh/a	1300	1530	2333
	Energy Label		A+	A+	A+
Nominal cooling capacity (min-max)		kW	5,30 (1,60-5,50)	7,10 (2,40-7,60)	10,00 (3,20-10,50)
		BTU/h	18000 (5500-18800)	24200 (8200-26000)	34100 (11000-35800)
Nominal cooling electric power (min-max)		kW	1,56 (0,30-1,80)	2,03 (0,50-2,60)	2,94 (0,90-4,00)
Nominal heating capacity (min-max)		kW	5,60 (1,60-6,10)	7,70 (2,20-8,40)	11,50 (3,00-12,00)
		BTU/h	19100 (5500-20800)	26200 (7500-28700)	39200 (10300-40600)
Nominal heating electric power (min-max)		kW	1,44 (0,30-1,80)	1,95 (0,50-2,60)	2,95 (0,90-4,00)
EER / COP			3,40 / 3,90	3,50 / 3,95	3,40 / 3,90
Indoor unit air flow volume (SH/H/M/L)		m³/h	900/800/700/600	1250/1100/1000/900	1600/1500/1400/1200
Outdoor unit air flow volume		m³/h	2200	3600	4800
Indoor unit sound pressure (SH/H/M/L)		dB(A)	41/40/38/36	41/39/37/35	48/46/45/43
Indoor unit sound power (SH/H/M/L)		dB(A)	59	54	65
Outdoor unit sound pressure (H)		dB(A)	52	55	57
Outdoor unit sound power (H)		dB(A)	65	69	70
Indoor unit dimensions (HxWxD)		mm	665x870x235	665x1200x235	665x1200x235
Indoor unit weight		kg	25	31	32
Outdoor unit dimensions (HxWxD)		mm	555x745x300	660x889x340	820x940x370
Outdoor unit weight		kg	30,5	41,5	75
Pipe length: min-max with standard charge / with additional charge		m	7 / 30	7 / 30	7 /75
Max height difference		m	20	20	30
Liquid/gas pipe diameter		mm (inch")	6,35 (1/4") / 12,7 (1/2")	9,52 (3/8") / 15,8 (5/8")	9,52 (3/8") / 15,8 (5/8")
Refrigerant type/standard charge		type/kg	R32 / 0,85	R32 / 1,50	R32 / 2,10
Global warming potential / CO2 equiv.tons		GWP/tons	675 / 0,574	675 / 1,013	675 / 1,418
Refrigerant addition beyond max length with standard charge		g/m	16	20	20
Heating/cooling ambient operating temp. range		°C	-20÷24 / -20÷52	-20÷24 / -20÷52	-20÷24 / -20÷52
CODE		**I.U.**	**2701143**	**2701144**	**2701145**
		O.U.	**2701543**	**2701544**	**2701545**

ACCESSORI OPTIONAL	CODICE
Wall control with Wifi	**2701448**
Centralized wall controller to control up to 36 indoor units*	**2701456**
Modbus Gateway	**2701454**
Remote ON-OFF board	**2701449**

* Each indoor unit must be equipped with a Modbus Gateway cod. 2701454 to enable communication with the central wired controller.

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

CSV - **Cassette** Air Conditioner

Cassette units are ideal for applications in small commercial / tertiary sectors such as shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas.

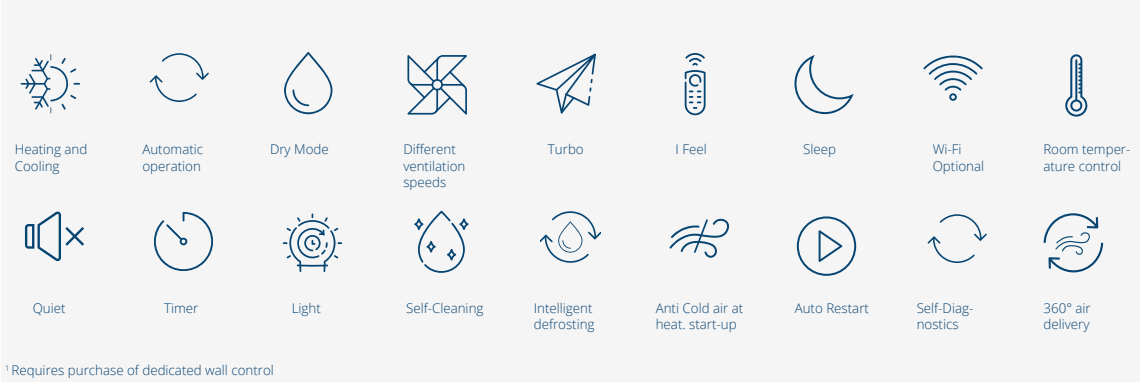
The units ensure **silent operation and optimum comfort** owing to a 360° air flow with motorised louvre swing range between 45 and 80°, which varies according to the hot/cold mode.
The high energy efficiency, at all power outputs, both for cooling and heating, allows optimal operation 365 days a year (seasonal efficiency).
The electrical box is made of fireproof material for enhanced protection from fire.

CSV Cassette

Standard remote control

Optional wired control

CSV - **Cassette** Air Conditioner



[1] Requires purchase of dedicated wall control

MODEL		I.U.	CSV1822HE32	CSV2422HE32	CSV3622HE32	CSV4822HE32
		O.U.	MSV1822HE32	MSV2422HE32	MSV3622HE32	MSV4822HE32
Power supply		V/Ph/Hz	230/1/50		400/3/50	
Seasonal efficiency in Cooling mode	Pdesign	kW	5,00	7,10	10,50	5,00
	SEER		6,60	6,70	6,60	6,60
	Annual energy consump.	kWh/a	266	371	557	266
	Energy Label		A++	A++	A++	A++
Seasonal efficiency in Heating mode - average/warmer climate	Pdesign	kW	3,90	5,00	7,00	3,90
	SCOP		4,00	4,30	4,40	4,00
	Annual energy consump.	kWh/a	1365	1628	2227	1365
	Energy Label		A+	A+	A+	A+
Nominal cooling capacity (min-max)		kW	5,00 (1,60-5,20)	7,10 (2,40-7,60)	10,50 (3,20-11,00)	13,40 (6,00-14,20)
		BTU/h	17000 (5500-17742)	24200 (8200-26000)	35800 (11000-37600)	45700 (20500-48500)
Nominal cooling electric power (min-max)		kW	1,47 (0,30-1,80)	2,03 (0,50-2,60)	3,10 (0,90-4,00)	4,60 (1,35-5,60)
Nominal heating capacity (min-max)		kW	5,60 (1,60-6,10)	7,80 (2,20-8,60)	11,50 (3,00-12,50)	15,50 (3,90-16,00)
		BTU/h	19100 (5500-20800)	26600 (7500-29400)	39200 (10300-42300)	52900 (13300-54600)
Nominal heating electric power (min-max)		kW	1,60 (0,30-1,80)	2,00 (0,50-2,60)	2,95 (0,90-4,00)	4,70 (1,35-5,60)
EER / COP			3,40 / 3,50	3,50 / 3,90	3,40 / 3,90	2,91 / 3,30
Indoor unit air flow volume (SH/H/M/L)		m³/h	720/650/600/500	1100/1000/900/800	1500/1400/1200/1000	2000/1800/1600/1400
Outdoor unit air flow volume		m³/h	2200	3600	4800	5200
Indoor unit sound pressure (SH/H/M/L)		dB(A)	43/41/39/35	39/38/36/34	43/41/39/38	50/48/45/41
Indoor unit sound power (SH/H/M/L)		dB(A)	56	51	56	64
Outdoor unit sound pressure (H)		dB(A)	52	55	57	59
Outdoor unit sound power (H)		dB(A)	65	69	70	75
Indoor unit dimensions (HxWxD)		mm	260x570x570	240x840x840	240x840x840	290x840x840
Dimensions of IU ceiling grille (HxWxD)		mm	47,50x620x620	52x950x950	52x950x950	52x950x950
Indoor unit weight		kg	16,5 / 3	21 / 6	23 / 6	25 / 6
Outdoor unit dimensions (HxWxD)		mm	555x745x300	660x889x340	820x940x370	820x940x370
Outdoor unit weight		kg	30,5	41,5	75	81
Pipe length: min-max with standard charge / with additional charge		m	7 / 30	7 / 30	7 / 75	9,5 / 75
Max height difference		m	20	20	30	30
Liquid/gas pipe diameter		mm (inch")	6,35 (1/4") / 12,7 (1/2")	9,52 (3/8") / 15,8 (5/8")	9,52 (3/8") / 15,8 (5/8")	9,52 (3/8") / 15,8 (5/8")
Refrigerant type/standard charge		type/kg	R32 / 0,85	R32 / 1,50	R32 / 2,10	R32 / 2,80
Global warming potential / CO2 equiv.tons		GWP/tons	675 / 0,574	675 / 1,013	675 / 1,418	675 / 1,890
Refrigerant addition beyond max length with standard charge		g/m	16	20	20	35
Heating/cooling ambient operating temp. range		°C	-20÷24 / -20÷52	-20÷24 / -20÷52	-20÷24 / -20÷52	-20÷24 / -20÷52
CODE		**I.U.**	**2701043**	**2701044**	**2701045**	**2701046**
		O.U.	**2701543**	**2701544**	**2701545**	**2701546**
GRILLE CODE			**2701492**	**2701493**	**2701493**	**2701493**

OPTIONAL ACCESSORIES	CODE
Wired controller with WiFi	**2701448**
Wired controller for control of up to 36 indoor units*	**2701456**
Modbus Gateway	**2701454**
ON - OFF remote control kit	**2701449**

* Each indoor unit must be equipped with a Modbus Gateway cod. 2701454 to enable communication with the central wired controller.

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

HDSV - **High-Pressure Ducted** Air Conditioners

HDVM air conditioners are **R410 gas inverter monosplit air/air heat pumps** for ducted installation, available in power ratings from 20 kW up to 40 kW (40 kW model with 2 condensing units);

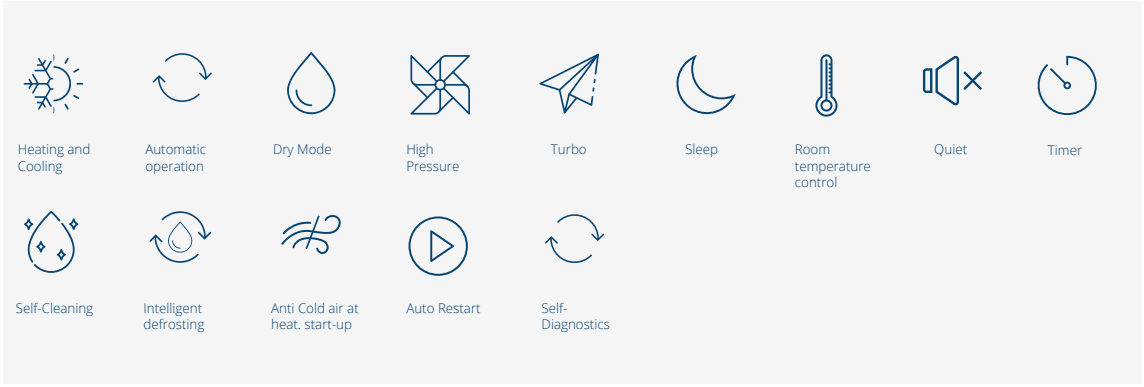
Indoor units are equipped with **DC inverter centrifugal fans** with high pressures up to 250Pa suitable for ducting for extended distances, they are supplied with wired controller for wall installation and natural condensate drainage;

The outdoor unit is equipped with a DC inverter compressor and fan, electronic expansion valve, finned copper exchanger with special anti-corrosion treatment, and welded refrigerant fittings.

HDSV Ducted

Wired controller as standard

HDSV - **High-Pressure Ducted** Air Conditioners



MODEL	I.U.	HDSV2019HE10	HDSV2519HE10	HDSV3019HE10
	O.U.	HMSV2019HE10	HMSV2519HE10	HMSV3019HE10
Number of outdoor units		1	1	1
Power supply	V/Ph/Hz	400/3/50		
Nominal cooling capacity (min-max)	kW	20.00 (8.00-22.00)	25.00 (10.00-27.50)	30.00 (12.00-33.00)
Nominal cooling power input (min-max)	kW	7.80 (2.34-10.75)	9.44 (2.83-11.80)	11.30 (3.39-14.40)
Nominal heating capacity (min-max)	kW	22.00 (8.80-24.20)	27.50 (11.00-30.30)	33.00 (13.20-36.30)
Nominal heating power input (min-max)	kW	7.00 (2.80-9.75)	8.87 (3.55-10.80)	10.30 (4.12-13.50)
EER / COP		2.56 / 3.14	2.65 / 3.10	2.65 / 3.20
Indoor unit air flow volume	m³/h	3700	4200	5200
Nominal static pressure	Pa	120	120	120
IU sound pressure (a/m/b delivery speed)	dB(A)	52 / 51 / 50	53 / 52 / 51	55 / 54 / 53
IU sound power (a/m/b delivery speed)	dB(A)	62 / 61 / 60	63 / 62 / 61	65 / 64 / 63
OU sound pressure	dB(A)	62	63	65
OU sound power	dB(A)	72	73	75
Indoor unit dimensions (HxWxD)	mm	385x1315x760	450x1520x840	450x1520x840
Indoor unit weight	kg	82	99	105
Outdoor unit dimensions (HxWxD)	mm	1430x940x320	1615x940x460	1615x940x460
Outdoor unit weight	kg	120	146	175
Pipe length with standard charge / with additional charge	m	7.5 / 70	7.5 / 70	7.5 / 70
Max height difference	m	30	30	30
Liquid/gas pipe diameter	mm (inch")	9.52 (3/8") / 19.05 (3/4")	9.52 (3/8") / 22 (7/8")	12.7 (1/2") / 25.4 (1")
Refrigerant type/standard charge	type/kg	R410A / 6.40	R410A / 8.00	R410A / 9.50
Global warming potential / CO2 equiv.tons	GWP/tons	2088 / 13.363	2088 / 16.704	2088 / 19.836
Refrigerant addition beyond max length with standard charge	g/m	54	54	110
Heating/cooling ambient operating temp. range	°C	-15 to 24 / -7 to 48	-15 to 24 / -7 to 48	-15 to 24 / -7 to 48
CODE	I.U.	2701700	2701701	2701702
	O.U.	2701730	2701731	2701732

ACCESSORI OPTIONAL	CODICE
Centralized wall controller to control up to 36 indoor units*	2701456
Modbus Gateway	2701752
Remote ON-OFF board	2701449

* Each indoor unit must be equipped with a Modbus Gateway cod. 2701752 to allow communication with the centralized wall control.

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL

Window type Syntek - Cooling

Immediate and simple room cooling is possible owing to ultra-compact solutions such as window type air conditioners in ecological R32 gas from the Syntek range.

The air conditioner designed specifically for the **summer air conditioning** of containers and prefabs is **hermetically sealed** and, therefore, features not only easy installation but also easy use owing to the practical **on-board control** that manages the various functions.

Ideal for prefabricated buildings, mobile offices.

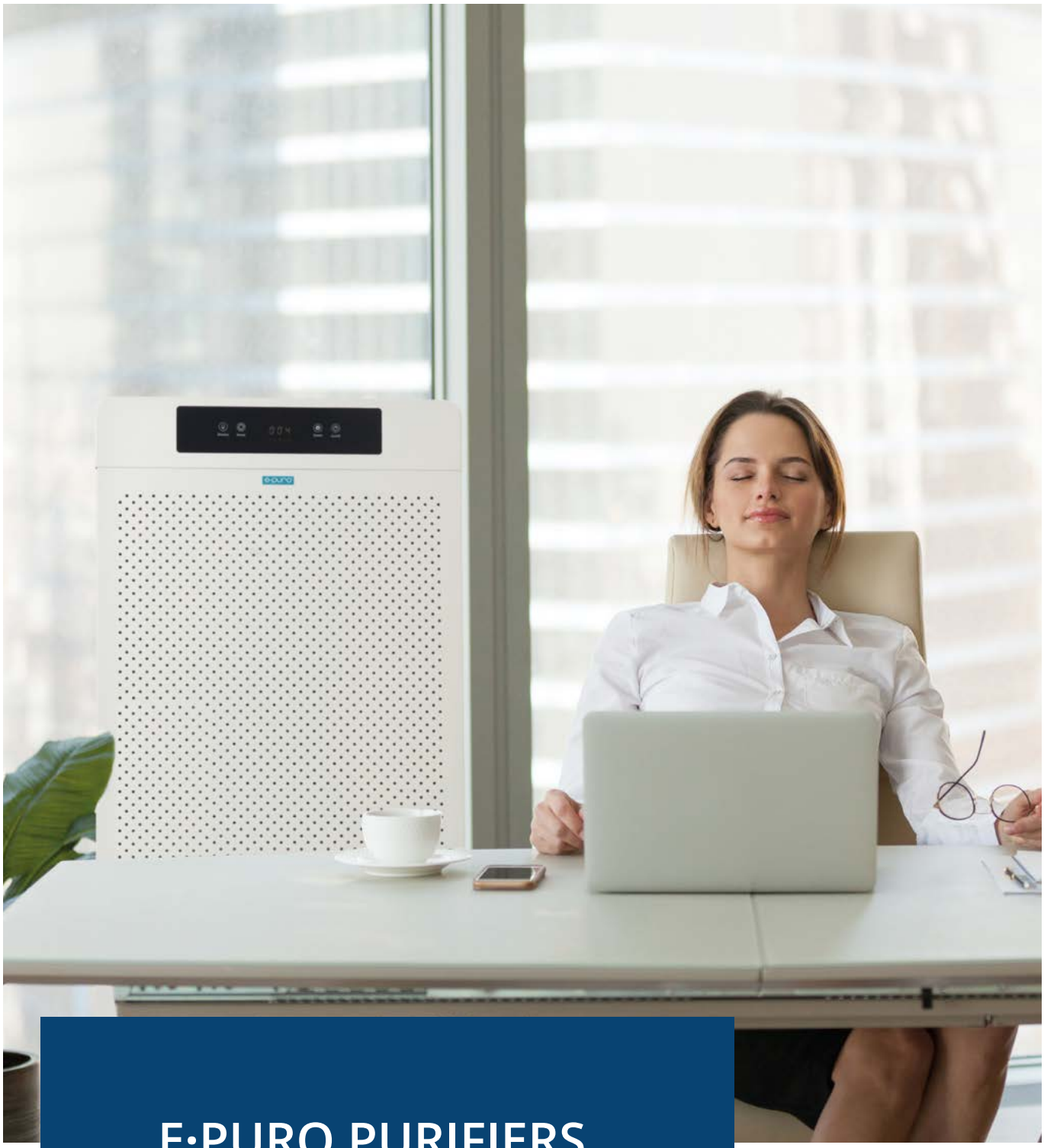
Window Type

Window type Syntek - Cooling

Only Cooling
Automatic operation
Dry Mode
4 ventilation speeds
Vertical flow
Room temperature control
Timer
Self-Cleaning
Intelligent defrosting
Anti Cold air at heat. start-up
Auto Restart
Self-Diagnostics

MODEL		I.U.	SKWTV 0916 GCL32	SKWTV 1216 GCL32
Power supply		V/Ph/Hz	230/1/50	
Seasonal efficiency in Cooling	Pdesign	kW	2.70	3.70
	SEER		5.20	5.40
	Annual energy consump.	kWh/a	182	240
	Energy Label		A	A
Nominal cooling capacity		kW	2.7	3.65
		BTU/h	9212	12454
Nominal cooling power input (min-max)		kW	782	1030
EER			3.45	3.54
Air flow volume (max-med-min)		m³/h	400-360-320	480-430-380
Internal side sound pressure (max - med - min)		dB(A)	50-48-46	50-48-46
External side sound pressure (max - med - min)		dB(A)	56-54-52	58-56-54
Internal side sound power (max - med - min)		dB(A)	59-57-55	59-57-55
External side sound power (max - med - min)		dB(A)	65-63-61	65-63-61
Dimensions (H x W x D)		mm	375x560x708	428x660x700
Net weight		kg	43	50
Refrigerant type / Standard charge		type/kg	R32 / 0.51	R32 / 0.63
Global warming potential / Tons CO_2 equivalent		GWP/tons	675 / 0.344	675 / 0.425
Refrigerant charge / tons		kg	0.51 / 0.344	0.63 / 0.425
Heating/cooling ambient operating temp. range		°C	16 - 43	16 - 43
CODE			**2405000**	**2405001**

THE ABOVE TECHNICAL DATA REFERS TO EUROPEAN STANDARDS EN14511 AND EN14825. OUTDOOR UNITS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL



E·PURO PURIFIERS

ECA Technology air purification devices in the E·PURO range are designed and engineered to provide an advanced level of air filtration. Integrated with the latest UVC technology and Plasma Generator, they sterilise air from pollutants and, at the end of the process, diffuse negative ions that are beneficial to health.

Pre-Filter

traps large particles, insects and other pollutants (PM50).

HEPA H13 Filter

in fibreglass to remove up to 99.5% of particles as small as 0.3 microns (PM2.5 and PM10).

Active Carbon Filter

to remove odours, fumes, formaldehyde and volatile organic compounds (VOCs).

TiO2 Photo-catalytic Filter

combined with the UVC lamp, neutralises the action of viruses, bacteria, moulds and spores in the environment.

UVC lamp (253.7 Nm)

which sterilises the air, eliminating bacteria, mould and spores in the environment.

Plasma Generator

Plasma generator that releases health-promoting ions of 5x106 pcs/cm.

Air quality indicator

PM2.5 level indicator in air of the room.

Signalling

Light and acoustic signal for HEPA filter and UVC lamp replacement.

Control panel

Touch screen control panel to control the main functions of the purifier.

Remote control

Remote control to control all functions of the purifier.

Child Lock

Child lock function to inhibit touch screen panel operation.

Quiet

The quiet function allows the enjoyment of the purifier's functions at night.

Shut-down timer

set automatic operation of the purifier, programming it according to your needs.

Wi-Fi

Wi-Fi module for interfacing with Tuya Smart application to manage all purifier functions.

E·puro EP400 - Air purifier

Air purifier with an accurate detection system that continuously communicates the indoor air quality pollution index via a built-in LED bar – blue if the air in the room is optimum, green if the air in the room is good, red if the air in the room is bad.

The device aspirates the air, **captures and filters out pollutants** such as fine dust (PM10 and PM2.5 from the outside pollution), formaldehyde, pollen, allergens, airborne organic compounds, cleaning product gases, odours and fumes using **4 levels of filtration**:
1. Cotton Pre-Filter
2. HEPA H13 Filter
3. Active Carbon Filter
4. TiO2 Photo-catalytic Filter

It then **neutralises ultra-fine particles** as well as Viruses, Moulds and Bacteria using a germicidal sterilising **UVC Lamp**.
Lastly, it **diffuses health-beneficial sterilised air** using an integrated **Plasma Generator**. This is activated when the UVC lamp is in operation and releases positive and negative ions into the air. By increasing the size of the polluting particles, these ions enable the purifier's filters to trap them and eliminate them more easily.

E·puro EP400 - Air purifier

Ideal for areas up to **50 m²** in domestic, commercial environments such as offices, shops and schools.

Epuro EP400

MODEL		EP400GY
Power supply	V/Ph/Hz	230/1/50
Power consumption	W	46
Sound pressure (min-max)	dB(A)	25-50
Air flow volume	m³/h	320
Ventilation speed	No.	4
Dimensions (H x W x D)	mm	617x390x225
Net weight	kg	8.5
Operating temperature	°C	5~40
Filtration system	HEPA composite filter + cotton pre-filter, TiO2 photocatalytic filter, activated carbon filter, plasma generator and UVC lamp	
CODE		**4900001**

E·puro EP400 Spare parts

Filter KIT

UVC lamp

OPTIONAL ACCESSORIES	CODE
HEPA filter kit + Pre-filter + Activated carbon	**4900011**
6W UVC lamp	**56000032**

E·puro EP1200 - Air purifier

Air purifier with an accurate detection system that continuously communicates the indoor air quality pollution index via an LED indicator (visible on the touch screen) of the level of PM2.5 (fine dust) in the room air.

The device aspirates the air, **captures and filters out pollutants** such as fine dust (PM10 and PM2.5 from the outside pollution), formaldehyde, pollen, allergens, airborne organic compounds, cleaning product gases, odours and fumes using **3 levels of filtration**:
1. Pre-Filter
2. HEPA H13 Filter
3. Active Carbon Filter

It then **neutralises ultra-fine particles as well as Viruses**, Moulds and Bacteria using a germicidal sterilising **UVC Lamp**.
Lastly, it **diffuses health-beneficial sterilised air** using an integrated **Plasma Generator**. This is activated when the UVC lamp is in operation, and releases positive and negative ions into the air. By increasing the size of the polluting particles, these ions enable the purifier's filters to trap them and eliminate them more easily.

The device includes a **Wi-Fi module** for interfacing it with the Tuya SMART application which enables all the purifier functions to be controlled and air quality levels displayed.

E·puro EP1200 - Air purifier

PM2.5 airborne level indicator

Warning light Alert replace HEPA Filter

Touch screen control panel

Remote control

Silent mode for night operation

Shut-down timer

UVC lamp

Plasma generator

Wi-Fi Module

Primary Filter

HEPA H13 Filter

Active Carbon Filter

Ideal for areas up to **150 m²** in commercial environments such as offices or shopping centres, professional environments such as doctors' surgeries, dentists' surgeries, waiting rooms, public environments such as schools, meeting rooms, bars or restaurants.

Epuro EP1200

MODEL		EP1200GY
Power supply	V/Ph/Hz	230/1/50
Power consumption	W	110
Sound pressure (min-max)	dB(A)	28-46
Air flow volume	m³/h	1200
Ventilation speed	No.	3
Dimensions (H x W x D)	mm	1320x570x320
Net weight	kg	39
Operating temperature	°C	5~40
Filtration system	Primary filter, HEPA filter, activated carbon filter, plasma generator and UVC lamp	
CODE		**4900003**

E·puro EP1200 Spare parts

Filter KIT

UVC lamp

OPTIONAL ACCESSORIES	CODE
HEPA filter kit + Pre-filter + Activated carbon	**4900013**
6W UVC lamp	**56000026**

The **first**
trivalent heat pump
made in the **world**

ACQUAINVERTER®

WRHL Acquainverter® Monoblock

VERSION WITH BUILT-IN 195L ACS STAINLESS STEEL WATER HEATER (SOLAR READY)

WA Acquainverter® Universal

VERSION WITH BUILT-IN 80L PUFFER

WM Acquainverter® Compact

COMPACT VERSION

ECAPOOL

HEAT PUMP FOR POOLS

The well-being of **Energy Saving**

Acquainverter® heat pump technology guarantees optimal efficiency for **heating** and **air conditioning** indoor environments using the **free, ecological and renewable energy** present in the outside air that surrounds us. Heat pumps are the ideal solution for reducing energy consumption and CO2 emissions while safeguarding the planet.

Air is a freely available, limitless resource, and always contains heat, even when it is very cold outside, which means that any air temperature contains thermal energy that can be used for the efficient operation of a heat pump;

Acquainverter® heat pumps guarantee the production and storage of domestic hot water at any time of year and offer the option of being completely integrated with the production of energy from renewable sources – electricity from photovoltaic solar energy with storage and/or thermal energy from solar water heating;

The **transfer of the thermal energy** generated by a heat pump to the **interior of a building** can take place via the most diverse system solutions, such as **radiant hydronic systems** (underfloor), **ventilated systems** (fan coil units), or **hybrid units** (V-Radiant) allowing the creation of **NZeb** (Near Zero energy buildings).

Features

Heating and Cooling

Heat pump for heating, cooling of rooms (max. water temperature 55°).

Condensation Control

Automatic function that measures the condensation temperature and, based on this, switches the fan(s) off or on to ensure optimal levels of efficiency.

Domestic hot water

Heat pump for domestic hot water production (max. water temperature 55°)

Anti-Legionella

Activation of the anti-legionella cycle for weekly heating of the entire tank to thermal shock temperature.

Defrosting

Automatic cycle reversal and base heating cable to prevent ice formation during winter operation.

Climate control

Intelligent self-regulation of the heating/air conditioning setpoint temperature according to the outside temperature.

Corrosion protection

Heat exchanger coils with corrosion protection – manganese aluminium coil fins.

Solar water heating manag

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Electronics designed to control solar water heating pumping assembly.

Silent Operation

Brushless DC axial fans (aerodynamic optimisation, reduced noise level, increased efficiency and air flow rate).

Energy saving

Activation of energy saving mode using potential free contact.

Auto-restart

Restart in the event of power cut.

DHW only operation

Exclusion of cooling and heating functions using potential free contact.

Self-Diagnostics

Automatic troubleshooting for easy maintenance.

Digital panel

Allows simple management of the main control activities storing all the information needed to control and manage optimum levels of climatic comfort.

Weekly Programme

Set up the different functions of the Acquainverter®, programming it according to your needs for the desired time slots.

Outside temperatures

Outdoor units with extended operating range from -20 °C up to +52 °C outdoor temperature

R32 eco refrigerant gas

New gas with low environmental impact and better performance.

Acquainverter® Air-to-water heat pump

Acquainverter® is a **R410A split heat pump** designed by ECA Technology to satisfy the most diverse system solutions in residential and commercial sectors, owing to a range consisting of 3 product families, each of which is available in 4 power sizes from 7 to 18kW:

WRHL: version with built-in 195L stainless steel DHW water heater (solar water heating ready);
WA: version with built-in 80L puffer;
WM: compact version for applications with external DHW water heater and puffer;

Acquainverter® control electronics allow the working parameters to be customised according to the most diverse system and climatic requirements, including – management of the climate temperature curve for the heating/air conditioning system, management of the external solar system, management of the DHW water heater anti-legionella cycle, availability of potential free contacts for third party control, energy saving function to optimise management costs, detailed self-diagnostics, load partialisation logic and uniform wear of outdoor units (dual versions);

Acquainverter® is an inverter heat pump that produces **hot water up to 55°C** for domestic use even with outdoor temperatures of -20°C, using a split-system, DC inverter heat pump system. The water temperature can be adjusted from 30°C to 50°C on domestic hot water and heating.
Acquainverter® supplies **chilled water for cooling from 7°C to 25°C** for radiant systems or with ventilated units;

The wide range of DHW water heaters and puffers is a perfect complement for all types of systems;

WRHL Monoblock

Heating and Cooling
Domestic hot water
Defrosting
Weekly Programme
Silent Operation
Auto-restart
Self-Diagnostics
Anti-Legionella
Condensation control
Corrosion protection
Climate control
Solar water heating management
Energy saving function
DHW only function
Digital panel
Outdoor temperature - 20 °C + 52 °C
R32 ecological gas

Acquainverter WRHL with COH external unit

Modello per la produzione di riscaldamento, raffrescamento e acqua calda sanitaria

WRH6.1 - WRH11.2 WRH8.1 - WRH15.2 - WRH9.1

the system is composed of:

- Internal hydronic unit WRHL model with integrated 185lt stainless steel boiler designed for solar wather heater.
- 1 or 2 external units COH model
- Superimposed hydronic module
- WRHC 60 puffer (optional)

TRIVALENT VERSION Heating , Cooling and domestic hot water	I.U.	WRH 6.1	WRH 11.2	WRH8.1	WRH15.2	WRH 9.1
	O.U.	COH3522HE32		COH5022HE32		COH7022HE32
OU Number		1	2	1	2	1
Power supply	V/f/Hz	230/1/50				
Nominal heating capacity (nom-max)1	kW	5,68	11,36	7,40	14,80	8,77
COP (nom)1		4,25	4,25	3,97	3,97	3,93
Nominal cooling capacity (nom-max)2	kW	6,02	12,04	7,92	15,84	11,05
EER[2]		4,22	4,23	4,66	4,68	4,28
Sound pressure (max)	dB(A)	54		56		58
O.U. dimensions (WxHxD)	mm	899 x596 x378		1003 ×790 ×427		1003 ×790 ×427
O.U. weight	kg	46		61		65
IU dimensions (WxHxD)	mm	705x1800x605				
Stainless steel boiler capacity	l	185				
I.U. weight in operation	kg	115	129	115	129	115
Refrigerant / Pre-charge	tipo/ kg	R32 / 1,00	R32 / 1,00 (x2)	R32 / 1,50	R32 / 1,50 (x2)	R32 / 2,0
Global warm potential / CO2 equivalent	GWP / tons	675 / 0,675	675 / 0,675 (x2)	675 / 1,013	675 / 1,013 (x2)	675 / 1,350
Split length min/max	mt	5 / 20		5 / 25		5 / 30
Refrigerant gas pipe diameter	mm	1/4" / 3/8"		1/4" / 5/8"		1/4" / 5/8"
CODE	**I.U.**	**00012WRH80**	**00012WRH81**	**00012WRH82**	**00012WRH83**	**00012WRH84**
	O.U.	**2701620**		**2701621**		**2701622**

ACCESSORIES	Initial	Code	Compatibility				
Initial start-up service	AVV	00013C	✓	✓	✓	✓	✓
Heat storage kit	WRHC60	0001480		✓	✓	✓	
Two-phase power supply	BIF	00013E		✓		✓	
Solar water heating management	SOL	00013F	✓	✓	✓	✓	✓
Solar kit 1 collector ESPS210	KST21	-	✓	✓	✓	✓	✓
Solar kit 1 collector ESPS260	KST26	-	✓	✓	✓	✓	✓
Water filter	FIL	00013G	✓	✓	✓	✓	✓
Rubber bases outdoor unit	BAS	6401062			✓	✓	✓
1500W stainless steel anti-legionella electr. resist.	RES	ARSSGA001	✓	✓	✓	✓	✓

Nominal efficiency under the following conditions, in accordance with UNI EN 14511: 2011
(1) Winter: outside air temperature 7°C DB/ 6°C WB; water temperature 30/35°C (2) Summer: outside air temperature 35°C DB / 24°C WB; water temperature 18/23°C
NOTE: THE ABOVE PRODUCTS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL.

WA Universal

Heating and Cooling
Domestic hot water
Defrosting
Weekly Programme
Silent Operation
Auto-restart
Self-Diagnostics
Anti-Legionella
Condensation control
Corrosion protection
Climate control
Solar water heating management
Energy saving
DHW only function
Digital panel
Outdoor temperature - 20 °C + 52 °C
R32 ecological gas

Acquainverter WA with COH external unit

TRIVALENT VERSION
Heating , Cooling and domestic hot water

WA6.1 - WA11.2 - WA8.1 - WA15.2 - WA9.1 - WA19.2

the system is composed of:
- Hydronic unit Acquainverter® WA model
- 1 or 2 external units COH model
- 80 liters puffer
- WBX DHW heat storage (optional) from 200 to 1000 liters with solar water heater exchanger (fixed serpentine).

HC VERSION
Heating and Cooling

WA6.1 - WA11.2 - WA8.1 - WA15.2 - WA9.1 - WA19.2

the system is composed of:
- Hydronic unit Acquainverter® WA model
- 1 or 2 external units COH model
- 70 liters embedded puffer

TRIVALENT VERSION Heating , Cooling and domestic hot water	U.I.	WA 6.1	WA 11.2	WA 8.1	WA 15.2	WA 9.1	WA 19.2
	U.E.	COH3522HE32		COH5022HE32		COH7022HE32	
OU Number		1	2	1	2	1	2
Power supply	V/f/Hz	230/1/50					
Nominal heating capacity (nom-max)1	kW	5,68	11,36	7,40	14,80	8,77	17,54
COP (1)		4,25	4,27	3,97	4,03	3,93	3,97
Nominal cooling capacity (nom-max)2	kW	6,02	12,04	7,92	15,84	11,05	22,10
EER (2)		4,22	4,23	4,66	4,68	4,28	4,34
Sound pressure (max)	dB(A)	54		56		58	
O.U. dimensions (WxHxD)	mm	899 x596 x378		1003 ×790 ×427		1003 ×790 ×427	
O.U. weight	kg	46		61		65	
I.U. dimensions (WxHxD)	mm	705x1205x505					
I.U. weight in operation	kg	186	198	186	198	186	198
built-in heat storage capacity	l	70					
Refrigerant / Pre-charge	tipo/ kg	R32 / 1,00	R32 / 1,00 (x2)	R32 / 1,50	R32 / 1,50 (x2)	R32 / 2,0	R32 / 2,0 (x2)
Global warm potential / CO2 equivalent	GWP / tons	675 / 0,675	675 / 0,675 (x2)	675 / 1,013	675 / 1,013 (x2)	675 / 1,350	675 / 1,350 (x2)
Split length min/max	mt	5 / 20		5 / 25		5 / 30	
Refrigerant gas pipe diameter	mm	1/4" / 3/8"		1/4" / 5/8"		1/4" / 5/8"	
CODE	U.I.	00012WA70	00012WA71	00012WA72	00012WA73	00012WA74	00012WA75
	U.E.	2701620		2701621		2701622	
HC VERSION Heating , Cooling	U.I.	WA 6.1 HC	WA 11.2 HC	WA 8.1 HC	WA 15.2 HC	WA 9.1 HC	WA 19.2 HC
	U.E.	COH3522HE32		COH5022HE32		COH7022HE32	

ACCESSORIES	Initial	Codice	Compatibilità					
Initial start-up service	AVV	00013C	✓	✓	✓	✓	✓	✓
Two-phase power supply	BIF	00013E		✓		✓		✓
Solar water heating management	SOL	00013F	✓	✓	✓	✓	✓	✓
Water filter	FIL	00013G	✓	✓	✓	✓	✓	✓
Rubber bases outdoor unit	BAS	6401062			✓	✓	✓	✓

Nominal efficiency under the following conditions, in accordance with UNI EN 14511: 2011
(1) Winter: outside air temperature 7°C DB/ 6°C WB; water temperature 30/35°C (2) Summer: outside air temperature 35°C DB / 24°C WB; water temperature 18/23°C
NOTE: THE ABOVE PRODUCTS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL.

WM Compact

Heating and Cooling
Domestic hot water
Defrosting
Weekly Programme
Silent Operation
Auto-restart
Self-Diagnostics
Anti-Legionella
Condensation control
Corrosion protection
Climate control
Solar water heating management
Energy saving
DHW only function
Digital panel
Outdoor temperature - 20 °C + 52 °C
R32 ecological gas

Acquainverter WM with COH outdoor unit

TRIVALENT VERSION
Heating , Cooling and domestic hot water

WM6.1 - WM11.2 - WM8.1 - WM15.2 - WM9.1 WM19.2

the system is composed of:
- Hydronic unit Acquainverter® WM model
- 1 or 2 external units COH model
- WBX DHW heat storage (optional) from 200 to 1000 liters with solar water heater exchanger (fixed serpentine).
- WACN optional puffer

HC VERSION
Heating and Cooling

WM6.1 - WM11.2 - WM8.1 - WM15.2 - WM9.1 WM19.2

the system is composed of:
- Hydronic unit Acquainverter® WM model
- 1 or 2 external units COH model
- WACN optional puffer

S VERSION
Domestic hot water

WM6.1 - WM11.2 - WM8.1 - WM15.2 - WM9.1 WM19.2

the system is composed of:
- Hydronic unit Acquainverter® WM model
- 1 or 2 external units COH model
- WBX DHW heat storage (optional) from 200 to 1000 liters with solar water heater exchanger (fixed serpentine).

TRIVALENT VERSION Heating , Cooling and domestic hot water	I.U.	WM 6.1	WM 11.2	WM 8.1	WM 15.2	WM 9.1	WM 19.2
	O.U.	COH3522HE32		COH5022HE32		COH7022HE32	
OU Number		1	2	1	2	1	2
Power supply	V/f/Hz	230/1/50					
Nominal heating capacity (nom-max)1	kW	5,68	11,36	7,40	14,80	8,77	17,54
COP (1)		4,25	4,27	3,97	4,03	3,93	3,97
Nominal cooling capacity (nom-max)2	kW	6,02	12,04	7,92	15,84	11,05	22,10
EER (2)		4,22	4,23	4,66	4,68	4,28	4,34
Sound pressure (max)	dB(A)	54		56		58	
O.U. dimensions (WxHxD)	mm	899 x596 x378		1003 ×790 ×427		1003 ×790 ×427	
O.U. weight	kg	46		61		65	
I.U. dimensions (WxHxD)	mm	585x900x485					
I.U. weight in operation	kg	115	129	115	129	115	129
Refrigerant / Pre-charge	tipo/ kg	R32 / 1,00	R32 / 1,00 (x2)	R32 / 1,50	R32 / 1,50 (x2)	R32 / 2,0	R32 / 2,0 (x2)
Global warm potential / CO2 equivalent	GWP / tons	675 / 0,675	675 / 0,675 (x2)	6,75 / 1,013	675 / 1,013 (x2)	675 / 1,350	675 / 1,350 (x2)
Split length min/max	mt	5 / 20		5 / 25		5 / 30	
Refrigerant gas pipe diameter	mm	1/4" / 3/8"		1/4" / 5/8"		1/4" / 5/8"	
CODE	I.U.	00012WM70	00012WM71	00012WM72	00012WM73	00012WM74	00012WM75
	O.U.	2701620		2701621		2701622	

HC VERSION Heating , Cooling	I.U.	WM 6.1 HC	WM 11.2 HC	WM 8.1 HC	WM 15.2 HC	WM 9.1 HC	WM 19.2 HC
	O.U.	COH3522HE32		COH5022HE32		COH7022HE32	

S VERSION Domestic hot water	I.U.	WM 6.1 S	WM 11.2 S	WM 8.1 S	WM 15.2 S	WM 9.1 S	WM 19.2 S
	O.U.	COH3522HE32		COH5022HE32		COH7022HE32	

ACCESSORIES	Initial	Code	Compatibility					
Initial start-up service	AVV	00013C	✓	✓	✓	✓	✓	✓
Two-phase power supply	BIF	00013E		✓		✓		✓
Solar water heating management	SOL	00013F	✓	✓	✓	✓	✓	✓
Water filter	FIL	00013G	✓	✓	✓	✓	✓	✓
Rubber bases outdoor unit	BAS	6401062			✓	✓	✓	✓

Nominal efficiency under the following conditions, in accordance with UNI EN 14511: 2011
(1) Winter: outside air temperature 7°C DB/ 6°C WB; water temperature 30/35°C (2) Summer: outside air temperature 35°C DB / 24°C WB; water temperature 18/23°C
NOTE: THE ABOVE PRODUCTS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL.

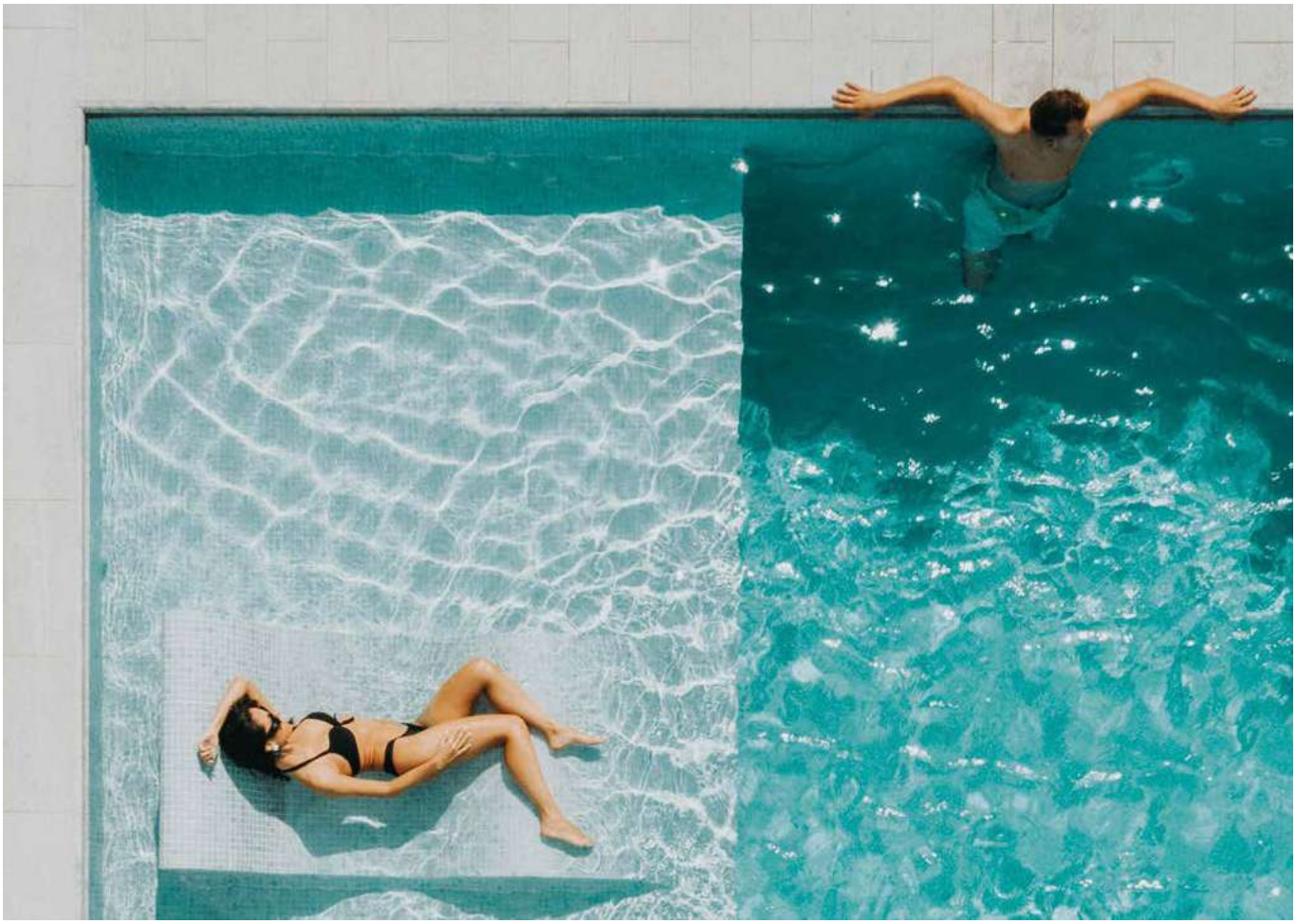
ECA POOL - Heat pump for pools

ECA POOL, the heat pump for **heating large and small indoor and outdoor swimming pools**, is an effective solution for heating water to the desired temperature and thus enjoying the pleasures of using the pool all
year round.
ECA POOL makes it possible to extend swimming pool opening times and can be used in tourist facilities or residential applications, while achieving optimal savings in energy owing to its exclusive DC Inverter technology.
ECA POOL heat pumps are the most effective solution for heating outdoor pools **for periods when there is insufficient exposure to the sun**.

ECA POOL is an R410A gas, split-system heat pump that integrates easily into both existing and new pools. It includes a small size indoor unit (58.3 x 48.1 x 90 cm) combined with one or two external condensing units (mod. EP 101, mod. EP 201).
The special size and shape of the ECAPOOL heating unit allows it to fit into small technical areas.

DC Inverter technology allows the heat pump to operate at outdoor temperatures from 40°C down to -15°C; ECA POOL with its DC Inverter compressors ensures very high COP in all operating conditions.

ECA POOL



ECA POOL - Heat pump for pools

Heating
Climate control
Defrosting
Weekly Programme
Silent Operation
Auto-restart
Self-Diagnostics
Corrosion protection
Condensation control
Energy saving
Digital panel

ECApool with COH external unit

I Plus

The ECAPOOL indoor hydronic unit is equipped with **parametric control electronics** and a **digital control panel** which allows customisation of the operating parameters according to the most diverse system and climatic requirements, including: management of the climate temperature curve, availability of potential free contacts for third party control, energy saving function to optimise operating costs, detailed self-diagnostics, load partialisation logic and uniform wear of outdoor units (dual versions);

MODEL	I.U.	EP101	EP201
	O.U.	COH6514HE10/1 EP	COH6514HE10/1 EP (x2)
Power supply	V/Ph/Hz	230/1/50	230/1/50
Nominal heating capacity (1)	kW	11.20	22.40
Nominal heating capacity (2)	kW	12.20	24.40
Nominal heat. electric power	kW	0.40 - 2.20	0.80 - 4.40
C.O.P. (1)	W/W	5.40	5.45
C.O.P. (2)	W/W	6.20	6.25
Nominal water flow rate (ΔT 2.5°C)	l/h	3600	7200
Exchanger pressure drop	m H2O	0.64	0.64 x 2
Hydraulic fitting diameter	mm (inch")	50 (1" ½)	63 (2")
Water temperature range set	°C	15 - 30	15 - 30
O.U. sound pressure	dB(A)	58	58
O.U. sound power	dB(A)	68	68
Refrigerant Type/ GWP		R410A / 2088	R410A / 2088
Refrigerant quantity / CO2 equivalent	kg	2.0 / 4.176	2.0 / 4.176
Pipe diameter (liquid – gas)	mm (inch")	1/4" - 5/8"	1/4" - 5/8"
Max-min length with standard charge/additional charge/max height difference	m	2-6 / 20 / 10	2-6 / 20x2 / 10
Additional refrigerant charge	g/m	50	50
I.U. net dimensions (WxHxD)	mm	583 x 900 x 481	583 x 900 x 481
I.U. net weight	kg	80	80
O.U. maximum dimensions (WxHxD)	mm	980 x 790 x 396	980 x 790 x 396
Outdoor unit net weight	kg	65	65
Outdoor operating temperature min-max heat.	°C	-15 - 40	-15 - 40
CODE	**I.U.**	**0001507**	**0001508**
	O.U.	**2701617/1**	**2701617/1 (x2)**

(1) Outdoor temperature 15°C – Water temperature 25°C
(2) Outdoor temperature 35°C – Water temperature 28°C

NOTE: THE ABOVE PRODUCTS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL.

ACQUAINVERTER® SMART

Acquainverter® SMART is a **reversible DC inverter outdoor monoblock heat pump** that uses ecological **R32** gas for residential and commercial applications to produce **domestic hot water**, **hot water for heating** and **chilled water for cooling**.

ECA Technology's experience combined with the sophisticated technology that has been developed to optimise winter operation allows it to achieve the highest performance available on the market with hot water (DHW) production of up to 50°C even at very cold outside operating temperatures of down to -25°C.

All this is made possible because of a series of state-of-the-art design and construction solutions. In particular, the sophisticated electronic management system regulates compressor power and electricity consumption from 15% to 100% according to need, carries out self-diagnostics and external climate control processes to ensure optimum performance at all times.
The unit can be **combined** with **traditional systems** or **radiant panels**, and guarantees **high energy efficiency**.

Inverter technology guarantees control over the heating capacity supplied by the unit by modifying the frequency or intensity of the supply current. This means that the rotation speed or the power of the compressor can be varied without any steps. This makes it possible to quickly and accurately adapt cooling or heating capacity to the actual operating conditions required without further increasing electrical consumption.
The Twin Rotary DC Inverter compressor is a DC type compressor which minimises losses due to leakage currents, typical of AC motors. In this way, the overall performance of the system is further improved and the control made more precise.

Simplified, functional **control**

Acquainverter® Smart includes a **touch control panel** that is practical and intuitive and not only allows simple management of the main switching on and off activities, but also continuously communicates the temperature of the water, storing all the information necessary for control and management.

Among other functions, the control panel allows priority setting between Cooling and Domestic Hot Water (DHW) or between Heating and Domestic Hot Water (DHW).
Activate and deactivate silent mode (unit noise reduction), set the parameters for the working setpoints according to the variations in the outside air temperature.
A weekly timer allows the unit to be programmed, automatically switched on and/or off for one week or set to programmed changes in the system's water set delivery.

Every aspect is easily accessible using a **smartphone**. Using the EWPE Smart application, **system control** can be managed directly using your mobile phone.

EWPE Smart App
Available on:

Download on the App Store

GET IT ON Google Play

Features

Heating and Cooling

Heat pump for heating, cooling of rooms (max. water temperature 60°).

Condensation Control

Automatic function that measures the condensation temperature and, based on this, switches the fan(s) off or on to ensure optimal levels of efficiency.

Auto-restart and Self Diagnostic

Restart in the event of power cut. and Automatic troubleshooting for easy maintenance.

Domestic hot water

Heat pump for domestic hot water production (max. water temperature 50°)

Defrosting

Automatic cycle reversal and base heating cable to prevent ice formation during winter operation.

Climate control

Intelligent self-regulation of the heating/air conditioning setpoint temperature according to the outside temperature.

Corrosion protection

Heat exchanger coils with corrosion protection: coil fins made of aluminium manganese (Al-Mn), coated with epoxy resin and a hydrophilic layer.

Wi-Fi function

Controlling the Acquainverter® SMART using a smart-phone is simple and intuitive. Using the EWPE Smart application, system control can be managed directly using your mobile phone.

Brushless DC fans

Brushless DC axial fans designed for aerodynamic optimisation, allowing reduced noise levels, increased efficiency and airflow.

Remote digital panel

Allows simple management of the main control activities, continuously communicates temperature states of the water while storing all the information needed to control and manage optimum levels of climatic comfort.

4 units

Possible installation of up to n. 4 units for a total power of 62 kW.

Economiser

Fridge circuit with Economiser for optimum performance.

Weekly Programme

Set up all the functions of the Acquainverter SMART, programming it according to your needs.

Emergency operation

Activation of replacement heat source: allows emergency operation to be set in heating or domestic hot water mode.

External temperatures

Outdoor units with operating range extended from external temperature -25 °C up to + 50 °C

Anti-Legionella

Activation of the anti-legionella cycle for weekly heating of the entire DHW tank to thermal shock temperature.

EWM Single-Phase and Three-Phase Outdoor Monoblock

Heating and Cooling
Domestic hot water
Defrosting
Weekly Programme
Anti-corrosion coil protection
Silent Operation
Auto-restart
Self-Diagnostics
Anti-Legionella
Condensation control
Climate control
Economiser
Wi-Fi function
Remote digital panel
Emergency operation
Gestione Cascata optional
Temp. esterne - 25°C + 50°C

Control panel

Single-phase Acquainverter SMART EWM

MODEL	U.I.	EWM10	EWM12	EWM12T	EWM14T	EWM16T
Power supply	V/f/Hz	230/1/50	230/1/50	400/3/50	400/3/50	400/3/50
Applicazione con unità terminali ventilconvettori*[1]						
Heating capacity (with fan coil/radiator)	kW	10,00	12,00	12,00	14,00	15,50
Cooling capacity (with fan coil)	kW	7,80	9,50	9,50	12,00	13,00
Heating power consumption (with fan coil/radiator)	kW	2,70	3,48	3,48	4,18	4,70
Cooling power consumption (with fan coil)	kW	2,48	3,20	3,11	4,38	4,91
COP	W/W	3,70	3,45	3,45	3,35	3,30
EER	W/W	3,15	2,97	3,05	2,74	2,65
Application with underfloor radiant panels [2] [2]						
Heating capacity (with underfloor heating)	kW	10,00	12,00	12,00	14,00	15,50
Cooling capacity (with underfloor cooling)	kW	8,80	11,00	11,00	12,50	14,50
Power consumption with underfloor heating	kW	2,17	2,64	2,64	3,22	3,60
Power consumption with underfloor cooling	kW	1,96	2,56	2,56	3,05	3,82
COP	W/W	4,61	4,55	4,55	4,35	4,31
EER	W/W	4,49	4,30	4,30	4,10	3,80
Seasonal energy efficiency class room heating (average climatic conditions)		A++	A++	A++	A++	A++
Nominal input current (max)	A	12 (23)	15,5 (25)	5 (12)	6 (12)	7 (12)
Sound pressure (cooling function)	dB(A)	56	56	56	57	59
Sound pressure (heating function)	dB(A)	54	54	54	55	57
Refrigerant	Tipo/q.tà	R32 / 2,20	R32 / 2,20	R32 / 2,20	R32 / 2,20	R32 / 2,20
Global Warming Potential / CO2 equivalent	GWP / Tons	675 / 1,485	675 / 1,485	675 / 1,485	675 / 1,485	675 / 1,485
Dimensions (WxHxD)	mm	1200x878x460	1200x878x460	1200x878x460	1200x878x460	1200x878x460
Unladen weight	Kg	151	151	151	151	151
Operating weight	Kg	163	163	163	163	163
CODE	**U.I.**	**00012EW20**	**00012EW30**	**00012EW40**	**00012EW50**	**00012EW60**

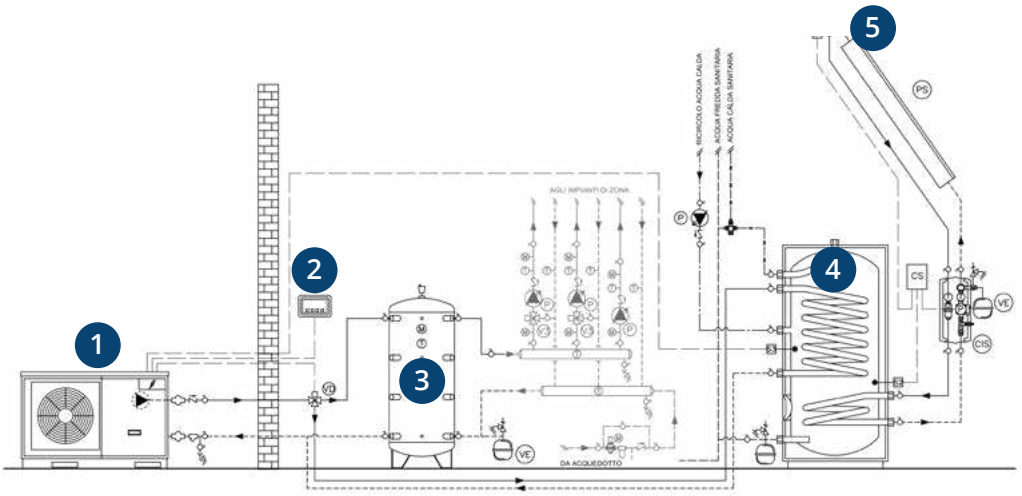
Nominal efficiency under the following conditions, in accordance with UNI EN 14511: 2013/2018
1) Cooling: user-side water temp. 12°C/7°C, outdoor temp. 35°C DB/ 24°C WB / Heating: user water temp. 40°C/45°C, outdoor temp. 7°C DB/ 6°C WB
2) Cooling: user-side water temp. 23°C/18°C, outdoor temp. 35°C DB/ 24°C WB / Heating: user water temp. 30°C/35°C, outdoor temp. 7°C DB/ 6°C WB
*radiators can only be connected in heating mode and must be appropriately sized.

THE ABOVE HERMETICALLY SEALED PRODUCTS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL.

MULTI-ZONE SYSTEM DIAGRAM
- HEATING
- CONDITIONING
- ACS

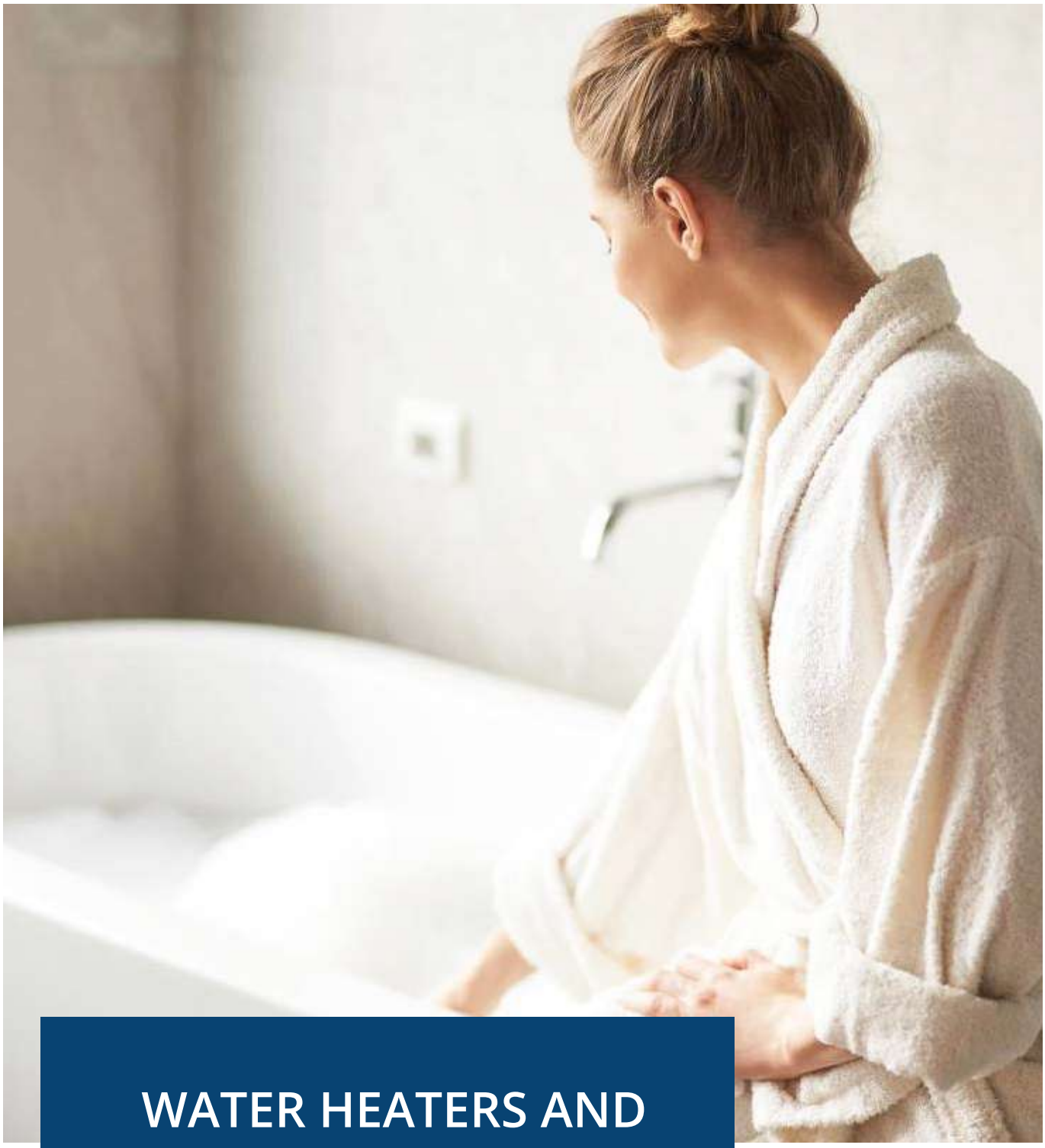
LEGENDA

1. Acquainverter SMART
2. Control Panel
3. Thermal flywheel
4. DHW tank
5. Solar water heating



OPTIONAL ACCESSORIES		INITIALS	
	Touch WiFi wall control with 8m communication cable	CP	(s)
	DHW temperature probe 20m	ACS	(s)
	Y Water filter	FIL	(s)
	Rubber bases 600x200h.150 (pair)	BAS	-
	Compact inertial module 20lt Compact inertial module 50lt	MIC20 MIC50	-
	Puffer 24lt Puffer 57lt Puffer 123lt Puffer 203lt Puffer 277lt	WACN25PU WACN50PU WACN100PU WACN200PU WACN300PU	-
	DHW water heater 190lt DHW water heater 263lt DHW water heater 470lt	BMAX200 BMAX300 BMAX500	-
	Dual storage water heater (ACS 270lt + Inerziale 80lt) Dual storage water heater (ACS 450lt + Inerziale 80lt)	BDA300 BDA500	-
	Removable coil 0,8 mq	SE080	-
	Cascade management kit for up to 4 units NEW	CAS	-

(s) as standard



WATER HEATERS AND PUFFERS

ECA Technology water heaters can be integrated into all types of systems and provide **rapid storage with plentiful, continuous delivery**.
The water heaters allow high efficiency at low operating costs and a long life with no corrosion. Installation is simple and hygiene guaranteed.

WBX

STAINLESS STEEL DHW HEAT STORAGE

WACN - WACN_S - WACN_PU

PUFFER FOR HEATING AND CHILLED WATER

BMAX

DHW WATER HEATER FROM HEAT PUMP

BSM

DHW WATER HEATER FROM HEAT PUMP AND SOLAR PANELS

YBSM

DHW WATER HEATER FROM HEAT PUMP AND INVERTED BOILER

BDA - BDAS

DUAL STORAGE WATER HEATER

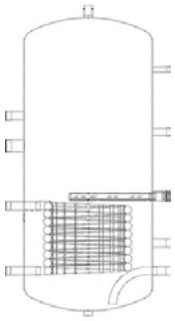
BSE

DHW WATER HEATER WITH REMOVABLE COILS

WBX Stainless steel DHW heat storage

Vertical water heaters made of AISI 316L stainless steel
designed for domestic hot water storage and integration with an additional energy source (solar) by means of a fixed coil;
300L to 1000L capacity.
Thick foam insulation in semi-shell construction and PVC outer finish.

Designed and manufactured for use in conjunction with Acquainverter WA and WM models;

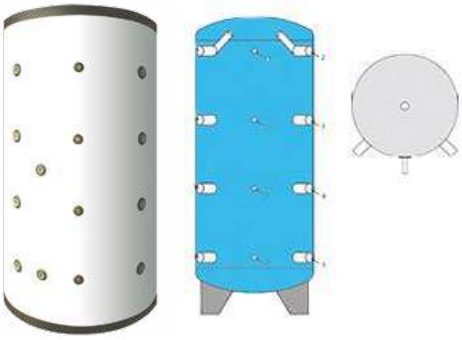


MODEL		WBX300	WBX500	WBX800	WBX1000
Useful volume	V/Ph/Hz	280	480	783	960
Energy class/dissipation	kW	B 59W	C 108W	C 118W	C 135W
Tank material	kW	AISI316L	AISI316L	AISI316L	AISI316L
Insulating material		PUR 40kg/m3	PUR 40kg/m3	EPS 17kg/m3	EPS 17kg/m3
Insulation thickness	kW	75	50	100	100
OPERATING PRESSURE					
Lower coil	bar	10	10	10	10
Domestic	bar	6	6	6	6
MAXIMUM TEMPERATURES					
Upper and lower coil	°C	110	110	110	110
Domestic	°C	99	99	99	99
DIMENSIONS AND WEIGHTS					
Diameter with thermal insulation	Ø mm	700	750	950	1000
Diameter with no thermal insulation	Ø mm	550	600	750	800
Total height	mm	1440	1720	2080	2105
Unladen weight	kg	55	75	132	164
LOWER COIL					
Coil surface area	m2	1.50	1.50	2.70	4.30
Coil water content	l	7.20	7.20	14.40	21.50
CODE		**00014WBX02**	**00014WBX03**	**00014WBX04**	**00014WBX05**

SOLAR WATER HEATING KIT	CODE	Kit ESPS260x2 WBX300 Water Heater	Kit ESPS210x3 WBX500 Water Heater	Kit ESPS260x3 WBX800 Water Heater	Kit ESPS260x5 WBX1000 Water Heater
Selective collector ESPS260 steel frame	**1901101**	2	-	3	5
Selective collector ESPS210 steel frame	**1901100**	-	3	-	-
High-efficiency hydraulic assembly complete with HE pump, deaerator, valve	**1902299**	1	1	1	1
Expansion tank 18L	**1902302**	1	1	2	2
Expansion tank connection pipe	**1902601**	1	1	1	1
Expansion tank support base	**1902602**	1	1	2	2
Glycol Tank 10L	**1901502**	1	1	1	2
Glycol Tank 1L	**1901501**	-	-	-	-
Support for 2 collectors	**1902501**	1	-	-	1
Support for 3 collectors	**1902502**	-	1	1	1
Hydraulic connection accessories for 1/2 collectors	**1902401**	1	-	-	1
Hydraulic connection accessories for 3 collectors	**1902402**	-	1	1	1

WACN
300 L to 2000 L puffer

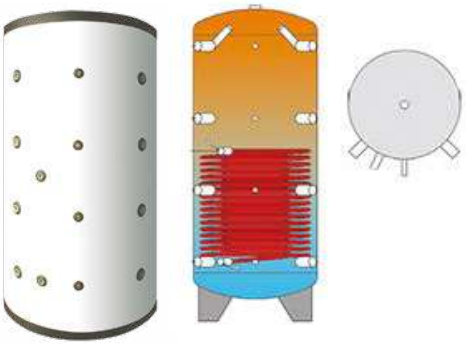
Treated interior, painted exterior.
made of carbon steel and lined with soft polyurethane insulation, thickness 100mm and PVC exterior finish.



MODEL		WACN300	WACN500	WACN800	WACN1000	WACN1250	WACN1500	WACN2000
Useful volume	L	270	476	710	920	1095	1410	2010
Energy class/dissipation	w	C 93W	C 110W	C 131W	C 143W	C 153W	C 167W	C 190W
Total height with insulation	mm	1635	1775	1800	2190	2095	2165	2480
Max. height straightening	mm	1630	1750	1840	2200	2100	2110	2530
Outer diameter	mm	700	850	990	990	1100	1200	1300
Flange	Ø mm	290/200						
Unladen weight	kg	85	120	148	169	197	222	327
Max. op. press. heating	bar	3						
Max. op. press. exchanger	bar	10						
Max. operating temperature	°C	95						
CODE		00014WA04	00014WA05	00014WA06	00014WA07	00014WA08	00014WA09	00014WA10

WACN_S
Puffer with single fixed coil from 300 L to 1500 L

Treated interior, painted exterior.
made of carbon steel and lined with soft polyurethane insulation, thickness 100mm and PVC exterior finish.



MODEL		WACN300S	WACN500S	WACN800S	WACN1000S	WACN1250S	WACN1500S
Useful volume	L	270	476	710	920	1095	1410
Energy class/dissipation	w	C 93W	C 110W	C 131W	C 143W	C 153W	C 167W
Total height with insulation	mm	1635	1775	1800	2190	2095	2165
Max. height straightening	mm	1630	1750	1840	2200	2100	2110
Outer diameter	mm	700	850	990	990	1100	1200
Lower exchanger	m2	1.8	1.8	2.6	2.6	3.8	3.8
Lower coil water cap.	L	10.4	10.4	14.6	14.6	21.6	21.6
Power consumption	kW	43	45	65	68	95	99
Req. flow rate to coil	m3/h	1.9	1.9	2.8	2.9	4.1	4.2
Water prod. 80°/60°(DIN4708)	m3/h	1.1	1.1	1.6	1.7	2.3	2.4
Pressure drops	mbar	67	73	208	228	645	700
Flange	Ø mm	290/200					
Unladen weight	kg	104	140	176	196	243	266
Max. op. press. of heat.	bar	3					
Max. op. press. exchanger	bar	10					
Max. op. temp.	°C	95					
CODE		00014WA04S	00014WA05S	00014WA06S	00014WA07S	00014WA08S	00014WA09S

WACN_PU

Puffer for chilled water and heating from 50 L to 500 L

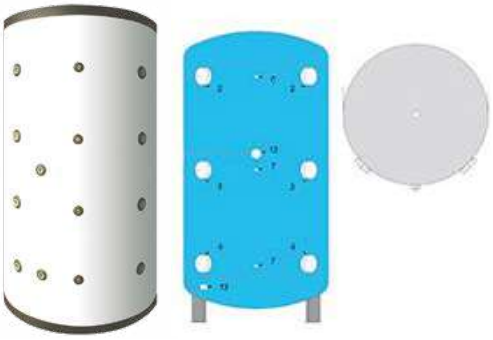
Treated interior, painted exterior.
made of carbon steel and lined with stiff, injected insulation, thickness 50mm and PVC exterior finish.

MODEL		WACN 25PU	WACN 50PU	WACN 100PU	WACN 200PU	WACN300PU	WACN500PU
Useful volume	L	24	57	123	203	277	473
Energy class/dissipation		A 19 W	B 34W	B 50W	C 68W	C 82W	C 114W
Total height with insulation	ZZmm	450	935	1095	1395	1560	1855
Maximum height in straightening	mm	590	1050	1250	1550	1700	2000
Outer diameter 50 mm PU stiff inj.	XX Ø mm	380	400	500	550	600	700
Unladen weight	kg	11,5	25	35	45	55	100
Max. op. press. of heat.	bar	6					
Max. water heater operating temp.	°C	95					
CODE		**00014WA00P**	**00014WA01P**	**00014WA02P**	**00014WA03P**	**00014WA04P**	**00014WA05P**

WACN_PU

Puffer for chilled water and heating from 800 L to 2000 L

Treated interior, painted exterior.
made of carbon steel and coated with armaflex insulation thick. 30mm and PVC exterior finish.

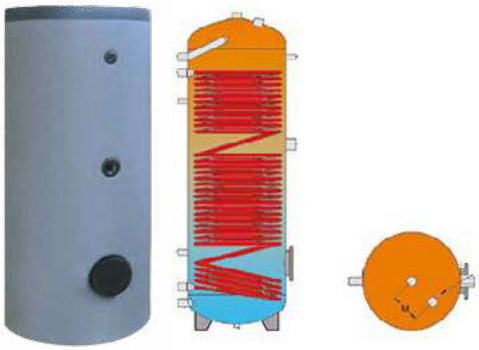


MODEL		WACN 800PU	WACN 1000PU	WACN 1500PU	WACN 2000PU
Useful volume	L	732	855	1420	2013
Energy class/dissipation		471 W	528 W	726 W	913 W
Total height with insulation	ZZmm	1725	1975	2090	2405
Maximum height in straightening	mm	1840	2200	2110	2530
Outer diameter 30 mm PEXL	XX Ø mm	850	850	1060	1160
Unladen weight	kg	170	190	240	330
Max. op. press. of heat.	bar	6			
Max. water heater operating temp.	°C	95			
CODE		**00014WA06P**	**00014WA07P**	**00014WA09P**	**00014WA10P**

BMAX

DHW water heater from heat pump from 200 to 500 L

Single-coil carbon steel water heater with anode protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025.
Insulation in stiff polyurethane thickness 50mm and external PVC finish.

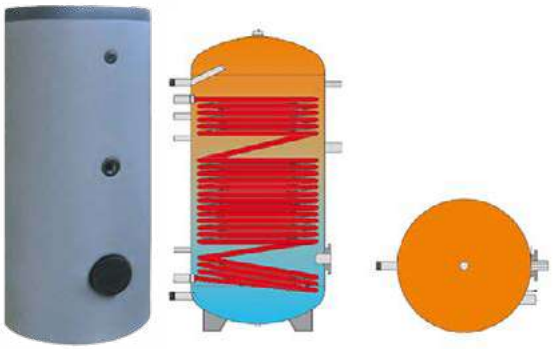


MODEL		BMAX200	BMAX300	BMAX500
Useful volume	L	190	263	470
Energy class/dissipation		C 67W	C 85W	C 112W
Total height with insulation	mm	1215	1615	1705
Max. height straightening	mm	1375	1735	1900
Outer diameter Water Heater ins. 50mm PU stiff inj.	Ø mm	600	600	750
Outer diameter Water Heater ins. 70mm PU stiff inj.	Ø mm	640	640	790
Exchanger	m2	3.0	4.0	6.0
Water capacity of coil	1	17.2	23.0	51.5
Heating water 60°C/50°C	m3/h	1.2	1.6	2.7
Power output 60°C/50°C	kW	14	19	31
DHW production 10°C/45°C	m3/h	0.3	0.5	0.8
Pressure drops 60°C/50°C	mbar	8	15	31
Heating water 80°C/60°C	m3/h	3.1	4.1	6.7
Power output 80°C/60°C	kW	72	96	156
DHW prod. 10°C/45°C DIN 4708	m3/h	1.8	2.4	3.8
Pressure drops 80°C/60°C	mbar	55	112	197
DIN 4708 coefficient	NL	10	13	28
Flange	Ø mm	180/120		
Unladen weight	kg	90	124	175
Domestic max. op. press.	bar	10		
Max. op. press. exchanger	bar	10		
Max. operating temperature	°C	95		
CODE		**00014BMAX02**	**00014BMAX03**	**00014BMAX05**

BMAX

DHW water heater from heat pump from 800 L to 2000 L

Single-coil carbon steel water heater with anode protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025.
100mm polyester fibre insulation and PVC exterior finish.



MODEL		BMAX800	BMAX1000	BMAX1500	BMAX2000
Useful volume	L	702	900	1300	1900
Energy class/dissipation		C 130W	C 142W	C 162W	C 186W
Total height with insulation	mm	1875	2205	2085	2470
Max. height straightening	mm	1900	2200	2180	2580
Water heater ins. 50mm PU stiff inj.	Ø mm	990	990	1200	1300
Exchanger	m2	7.0	8.0	8.0	13.0
Water capacity of coil	1	60.0	68.5	68.5	102.0
Heating water 60°C/50°C	m3/h	3.3	3.7	3.9	5.8
Power output 60°C/50°C	kW	38	43	45	68
DHW production 10°C/45°C	m3/h	0.9	1.1	1.1	1.7
Pressure drops 60°C/50°C	mbar	57	82	95	335
Heating water 80°C/60°C	m3/h	8.1	9.3	9.7	14.6
Power output 80°C/60°C	kW	189	216	225	340
DHW prod. 10°C/45°C DIN 4708	m3/h	4.6	5.3	5.5	8.4
Pressure drops 80°C/60°C	mbar	354	515	620	2020
DIN 4708 coefficient	NL	40	53	55	84
Flange	Ø mm	180/120		290/220	
Unladen weight	kg	235	265	370	573
Domestic max. op. press.	bar	10		8	
Max. op. press. exchanger	bar	10			
Max. operating temperature	°C	95			
CODE		**00014BMAX06**	**00014BMAX07**	**00014BMAX08**	**00014BMAX09**

BSM

DHW water heater from heat pump and solar panels from 300 L to 500 L

Twin-coil carbon steel water heater with anode protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025.
Rigid polyurethane insulation thick. 50mm and PVC exterior finish.

MODEL		BSM300	BSM500
Useful volume	LT	260	455
Energy class/dissipation		C 85W	C 112W
OPERATING PRESSURE			
Upper and lower coil	bar	10	10
Domestic	bar	10	10
MAXIMUM TEMPERATURES			
Upper and lower coil	°C	110	110
Domestic	°C	95	95
DIMENSIONS AND WEIGHTS			
Diameter with thermal insulation	Ø mm	600	740
Diameter with no thermal insulation	Ø mm	500	650
Total height	mm	1615	1705
Unladen weight	kg	131	182
Flange	Ø mm	180/120	
UPPER COIL			
Coil surface area	m^2	3.7	5.2
Coil water content	l	18	31
Heating water 60°C/50°C	m^3/h	1.59	2.37
Power output	kW	29	44
Domestic prod. 10°C/45°C-DIN 4708	m^3/h	0.71	1.08
Pressure drop	mbar	17	21
LOWER COIL			
Coil surface area	m^2	1.2	1.8
Coil water content	l	8	10
Heating water 80°C/60°C	m3/h	1.25	1.9
Power output	kW	18.5	27.5
Domestic prod. 10°C/45°C-DIN 4708	m^3/h	0.45	0.68
Pressure drop	mbar	31	37
SERIES COILS			
Coil surface area	m^2	4.9	7.0
Coil water content	l	26	41
Heating water 60°C/50°C	m^3/h	2.32	3.27
Power output	kW	27	38
Domestic prod. 10°C/45°C-DIN 4708	m^3/h	0.66	0.93
Pressure drop	mbar	63	67
CODE		**00014BSM03**	**00014BSM05**

BSM

DHW water heater from heat pump and solar panels from 800 L to 2000 L

Twin-coil carbon steel water heater with anode protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025.
Polyester fibre insulation thick. 100mm and PVC exterior finish.

MODEL		BSM800	BSM1000	BSM1500	BSM2000
Useful volume	LT	702	900	1390	1900
Energy class/dissipation		C 130W	C 142W	C 162W	C 186W
OPERATING PRESSURE					
Upper and lower coil	bar	10	10	10	10
Domestic	bar	10	10	8	8
MAXIMUM TEMPERATURES					
Upper and lower coil	°C	110	110	110	110
Domestic	°C	95	95	95	95
DIMENSIONS AND WEIGHTS					
Diameter with thermal insulation	Ø mm	990	990	1200	1300
Diameter with no thermal insulation	Ø mm	790	790	1000	1100
Total height	mm	1875	2205	2185	2470
Unladen weight	kg	265	294	395	601
Flange	Ø mm	180/200		290/220	
UPPER COIL					
Coil surface area	m^2	5.2	6.0	6.0	12.0
Coil water content	l	31	35	35	68
Heating water 60°C/50°C	m^3/h	2.58	3.01	3.01	6.02
Power output	kW	30	88	88	103
Domestic prod. 10°C/45°C-DIN 4708	m^3/h	1.47	2.21	2.21	2.5
Pressure drop	mbar	93	215	215	340
LOWER COIL					
Coil surface area	m^2	2.4	3.7	3.7	4.3
Coil water content	l	14	23	23	26
Heating water 80°C/60°C	m3/h	2.6	3.8	3.8	4.4
Power output	kW	30.0	35.0	35.0	70.0
Domestic prod. 10°C/45°C-DIN 4708	m^3/h	0.74	0.86	0.86	1.72
Pressure drop	mbar	40	45	45	90
SERIES COILS					
Coil surface area	m^2	7.6	9.7	9.7	16.3
Coil water content	l	45	58	58	94
Heating water 60°C/50°C	m^3/h	3.53	4.56	4.56	7.70
Power output	kW	41	53	53	89
Domestic prod. 10°C/45°C-DIN 4708	m^3/h	1.01	1.30	1.30	7.20
Pressure drop	mbar	150	195	195	330
CODE		**00014BSM06**	**00014BSM07**	**00014BSM08**	**00014BSM09**

YBSM

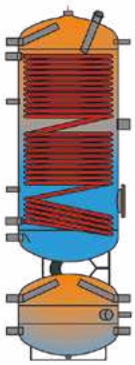
DHW water heater from heat pump and boiler inverted from 300 L to 500 L

Twin-coil carbon steel water heater with anode protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025.
Stiff polyurethane insulation and PVC exterior finish.

MODEL		YBSM300	YBSM500
Useful volume	L	260	455
Energy class/dissipation		C 85W	C 112W
OPERATING PRESSURE			
Upper and lower coil	bar	10	10
Domestic	bar	10	10
MAXIMUM TEMPERATURES			
Upper and lower coil	°C	110	110
Domestic	°C	95	95
DIMENSIONS AND WEIGHTS			
Diameter with thermal insulation	Ø mm	600/640	750/790
Diameter with no thermal insulation	mm	500	650
Total height	mm	1615	1705
Unladen weight	kg	128	176
Flange	Ø mm	180/120	
UPPER COIL			
Coil surface area	m^2	0.7	1
Coil water content	l	3.5	5.9
Heating water 80°C/60°C	m3/h	0.73	1.03
Power output	kW	17	24
Domestic prod. 10°C/45°C-DIN 4708	m3/h	0.42	0.60
Pressure drop	mbar	15	19
LOWER COIL			
Coil surface area	m^2	3.7	5.2
Coil water content	l	18	31
Heating water 60°C/50°C	m3/h	1.59	2.37
Power output	kW	18.5	27.5
Domestic prod. 10°C/45°C-DIN 4708	m3/h	0.45	0.68
Pressure drop	mbar	31	37
SERIES COILS			
Coil surface area	m^2	4.9	7.0
Coil water content	l	26	41
Heating water 60°C/50°C	m3/h	2.32	3.27
Power output	kW	27	38
Dom. prod.10°C/45°C-DIN 4708	m3/h	0.66	0.93
Pressure drop	mbar	63	67
CODE		**00014YBSM03**	**00014YBSM05**

BDA

Dual storage water heater single coil 300L and 500L; Puffer 80L in lower part

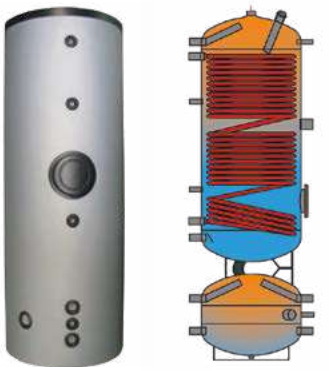


Combined, dual storage water heater with single coil in carbon steel with anode protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025.
Rigid polyurethane insulation thick. 70mm and PVC exterior finish.

MODEL		BDA300	BDA500
Water heater ins. 70mm PU stiff inj.	Ø mm	690	790
Energy class/dissipation		B 73W	B 84W
Total height	mm	1925	2040
Unladen weight	kg	150	200
BIVALENT WATER HEATER			
Actual capacity	l	270	450
FITTINGS			
Coil delivery and return	R	1"	1"
Cold water	R	1"	1"
Recirculation	R	1/2"	1/2"
Electrical element	R	1" 1/2	1" 1/2
OPERATING PRESSURE			
Coil	bar	10	10
Domestic	bar	10	10
MAXIMUM TEMPERATURES			
Upper and lower coil	°C	110	110
Domestic	°C	95	95
UPPER COIL			
Coil surface area	m^2	3.3	6
Coil water cap.	l	20.2	51.5
Heating water (60/50°C)	m3/h	1.3	2.7
Power output	kW	15	31
Domestic prod. (10/45°C) DIN 4708	m3/h	0.37	0.76
Pressure drop	mbar	11	31
PUFFER FOR HEAT PUMP			
Actual capacity		80	80
FITTINGS			
Delivery and return	R	1"	1"
Electrical element	R	1" 1/2	1" 1/2
OPERATING PRESSURE			
Puffer	bar	6	6
MAXIMUM TEMPERATURES			
Domestic	°C	95	95
CODE		**00014BDA03**	**00014BDA05**

BDAS

Dual storage tank twin coil 300L and 500L; Puffer 80L in lower part



Combined, dual storage tank with twin coil in carbon steel with anode protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025.
Rigid polyurethane insulation thick. 70mm and PVC exterior finish.

MODEL		BDA300S	BDA500S
Water heater ins. 70mm PU stiff inj.	Ø mm	690	790
Energy class/dissipation		B 73W	B 84W
Total height	mm	1925	2040
Unladen weight	kg	170	220
BIVALENT WATER HEATER			
Actual capacity	l	270	460
FITTINGS			
Coil delivery and return	R	1"	1" 1/4
Cold water	R	1"	1"
Recirculation	R	1/2"	1/2"
Electrical element	R	1" 1/2	1" 1/2
OPERATING PRESSURE			
Coil	bar	10	10
Domestic	bar	10	10
MAXIMUM TEMPERATURES			
Upper and lower coil	°C	110	110
Domestic	°C	95	95
UPPER COIL			
Coil surface area	m^2	2.8	4.4
Coil water cap.	l	17	26.6
Heating water (60/50°C)	m3/h	1.2	2
Power output	kW	14	23
Domestic prod. (10/45°C) DIN 4708	m3/h	0.34	0.57
Pressure drop	mbar	13	22
LOWER COIL			
Coil surface area	m^2	0.9	1.5
Coil water content	l	5.3	9.4
Heating water (80/60°C)	m3/h	0.9	1.6
Power output	kW	22	37
Dom. prod. (10°C/45°C) DIN 4708	m3/h	0.54	0.91
Pressure drop	mbar	7	13
PUFFER FOR HEAT PUMP			
Actual capacity	l	80	80
FITTINGS			
Delivery and return	R	1"	1"
Electrical element	R	1" 1/2	1" 1/2
OPERATING PRESSURE			
Puffer	bar	6	6
MAXIMUM TEMPERATURES			
Domestic	°C	95	95
CODE		**00014BDA03S**	**00014BDA05S**

BSE
200 L to 2000 L DHW water heater removable coil

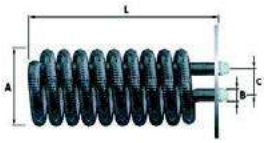
Combined carbon steel water heater with 1 or 3 inspection flanges for inspection ø 290/220 mm with anode protection and internal vitrification treatment according to DIN 4753-3 and UNI 10025. Polyester fibre insulation thick. 100mm and PVC exterior finish. Ready for installation of removable coils (optional).

MODEL		BSE200S1	BSE300S1	BSE500S1	BSE800S1	BSE1000S1	BSE1500S1	BSE2000S1
Useful volume	L	208	285	749	749	955	1450	1990
Energy class/dissipation		C 77W	C 95W	C 130W	C 130W	C 142W	C 162W	C 186W
Tot. ht. with ins.	mm	1275	1675	1875	1875	2205	2185	2470
Max. height straightening	mm	1275	1660	1920	1920	2200	2200	2520
Water heater polyester fibre ins. 100mm	Ø mm	700	700	990	990	990	1200	1300
Flange	Ø mm	290/220						
Unladen weight	kg	70	91	135	190	207	321	405
Maximum pressure	bar	10					8	
Max. water heat. op. temp.	°C	95						
CODE		00014BSE01	00014BSE03	00014BSE05	00014BSE07	00014BSE10	00014BSE13	00014BSE16

MODEL		BSE800S3	BSE1000S3	BSE1500S3	BSE2000S3
Useful volume	L	749	955	1450	1990
Energy class/dissipation		C 130W	C 142W	C 162W	C 186W
Tot. ht. with ins.	mm	1875	2205	2185	2470
Max. height straightening	mm	1920	2200	2200	2520
Water heater polyester fibre ins. 100mm	Ø mm	990	990	1200	1300
Flange	Ø mm	290/220			
Unladen weight	kg	190	207	321	405
Maximum pressure	bar	10		8	
Max. water heat. op. temp.	°C	95			
CODE		00014BSE09	00014BSE12	00014BSE15	00014BSE18

SE removable coil

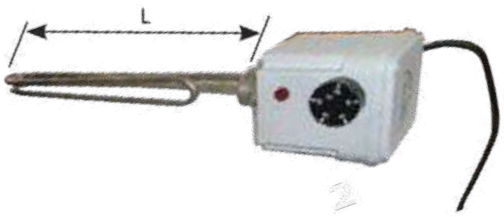
Removable coil KIT for BSE finned copper water heater with perforated flange, copper coil, flange cover and nuts and bolts.
N.B. The length of the coil must be at least 10 cm shorter than the diameter of the heater.



MODEL		SE121	SE180	SE263	SE320	SE454	SE634
Exchanger surface area	m2	1.21	1.80	2.36	3.20	4.54	6.43
Exchanger water cap.	l	0.7	1.4	2.0	2.5	3.5	5.0
Power consumption	kW	24	36	53	64	91	127
Req. flow rate to coil	m3/h	1.0	1.6	2.3	2.8	3.9	5.5
Domestic water prod, 80°/60° C (DIN 4708)	m3/h	0.6	0.9	1.3	1.6	2.2	3.1
Pressure drops	mbar	387	245	748	1303	745	1930
Coefficient (DIN 4708)	NL	3	5	13	16	30	42
kW		36	43	62	75	108	150
A		DN 200					
B		3/4"				1"	
C mm		80					
L mm		420	470	580	660	750	980
kg		11.0	13.4	16.4	18.4	23.4	30.0
CODE		00014SER01	00014SER02	00014SER03	00014SER04	00014SER05	00014SER06

STAINLESS STEEL Electrical element

Stainless steel immersion element, IP 65, with external thermostat and temperature limiter.



MODEL		REM1	REM2	REM3
W		1500	2000	3000
V		230		
kg		1.5		
L mm		320		
Fitt.		1"1/2		
CODE		**00014REM1**	**00014REM2**	**00014REM3**

MODEL		RET3	RET4	RET6	RET7	RET9
W		3000	4500	6000	7500	9000
V		400				
kg		2.0	2.5	3.0	3.5	3.5
L mm		300	450	600	700	
Fitt.		1"1/2				
CODE		**00014RET3**	**00014RET4**	**00014RET6**	**00014RET7**	**00014RET9**

COPPER Electrical element

Copper immersion element, IP 65, with internal adjustable thermostat and temperature limiter.

MODEL		REL1	REL2	REL3
W		1500	2000	3000
V		230		
kg		1.0	1.5	
L mm		340	390	
Fitt.		1"1/2		
CODE		**00014REL1**	**00014REL2**	**00014REL3**

HEAT PUMP WATER HEATER

Water heater in heat pump systems allow domestic water to be heated using heat pump technology, which heats water in a closed circuit using heat from the air: an **innovative technology** that is also **environmentally sustainable** and allows considerable energy savings.

Owing to the use of heat pump technology, the heat pump water heater makes it possible to heat domestic water easily and cost-effectively, reducing energy consumption by up to 70% compared to an electric water heater and by up to 30% compared to a natural gas boiler.

It also does not emit CO_2 into the environment and ensures the highest degrees of safety by not using gas or methane.

EW100PG Water Heater

WALL-MOUNTED DHW WATER HEATER IN HEAT PUMP

EW300 Water Heater

FLOOR-STANDING DHW WATER HEATER IN HEAT PUMP

EW100PG Wall-mounted monoblock water heater

Heat pump water heaters heat water in the home using heat pump technology, which heats water in a closed circuit thanks to the heat in the air: an innovative and environmentally sustainable technology that allows considerable energy savings.

ECA Technology **Wall-mounted water heater in heat pump** systems with **ecological gas R134A** produce domestic hot water using a tank with a capacity of **100 litres in vitrified steel**.

The compact size of the wall-mounted water heater in heat pump enables domestic water to be heated using innovative, eco-sustainable technology, allows the heating of domestic water, making it an ideal
replacement for traditional water heaters.

The user-friendly electronic control unit with LCD touch display allows complete customisation of the various modes including: Adjustment and display of temperature and quantity of water available, timer programming, rapid heating, “Absence / Holiday” setting when away from home for several days.

I Plus

- Wall-mounted with ducted air;
- Rotary compressor,
- Heating elements for indirect heating by air,
- Enamel to 850°C,
- Magnesium anode for water heater anti-corrosion protection.

EW100PG Wall-mounted monoblock water heater

Self-Diagnostics | Auto-restart | Touch screen display | Turbo | Anti-Legionella | Timer | - 7C° +35 C°

MODEL		EW100PG
Declared load profile / Energy efficiency class (1)		M / A+
Water heating energy efficiency ηwh (1)	%	110.7
Annual energy consumption AEC (1)	kWh	464
Daily electrical energy consumption Qelec	kWh	2.225
Thermostat temperature setting	°C	55
Internal sound power LWA / Sound pressure at 1 m	dB(A)	51 / 39.5
Specific precautions (assembly, installation, maintenance)		use of a safety valve is mandatory
Tank volume / Maximum volume of usable hot water (40°C)	l	97.9 / 130
Heating cycle A15 / W10-55 * - Heating cycle A7 / W10-55 **	h:min	05:40 - 06:50
Energy consumption in cycle A15 / W10-55 * / A7 / W10-55 **	kWh	2.05 / 2.35
COPDHW (A15 / W10-55) EN 16147 * - COPDHW (A7 / W10-55) EN 16147 **		3.10 - 2.63
Standby consumption according to EN16147	W	20
Refrigerant	type/qty.	R134a / 0.54 kg
Global Warming Potential / CO2 equivalent	GWP / Tons	1430 / 0.772
Ambient temperature limits at installation site	°C	+2 ~ +35
Intake air temperature operating limits	°C	-7 ~ +35
Air flow rate (min-max)	m^3/h	100-230
Pressure drop with 150 m^3/h and ventilation speed 60%-80%	Pa	70 (90)
Nominal power consumed by compressor	W	250
Maximum power consumption	W	2350
Electric elements	N° / W	2 x 1000
Power supply	V/Ph/Hz	230/1/50
Electrical protection / Protection class	A	16 / IP24
Max. operating pressure	MPa / bar	0.6 / 6
Maximum heat pump temperature / with electric elements	°C	55 / 75
Dimensions (H x W x D)	mm	1342x506x533
Net weight (empty/with water)	kg	62 / 162
Connection to mains water supply		G 1/2"
Air duct dimensions (max diameter / length)	mm/m	Ø125 (150x70) / 15
CODE		**0011501**

(1) EU REGULATIONS 812/2013 AND 814/2013 UNDER AVERAGE CLIMATIC CONDITIONS
(*) Water heating to 55°C with an air inlet temperature of 15°C, 74% humidity and a water inlet temperature of 10°C according to EN16147
(**) Water heating to 55°C with an air inlet temperature of 7°C, 89% humidity and water inlet temperature of 10°C according to EN16147

AIR DISTRIBUTION ACCESSORIES	CODE
PVC flat duct (150x70 mm / L=1.5mm)	0011530
PVC pipe (ø125 mm / L=1.5mm)	0011532
ABS vertical 90° elbow (ø 125mm to 150mm) round/rectangular	0011534
ABS vertical 90° elbow (150x70 mm) rectangular	0011536
ABS horizontal 90° elbow (150x70 mm) rectangular	0011538
ABS joint (ø 125 mm to 150x70 mm) round/rectangular	0011540
ABS joint for rectangular ducts (150x70 mm)	0011542
Pair rectangular duct brackets (150x70 mm)	0011544
Pair pipe clamps (ø 125 mm)	0011545
Wall-mounted through plate (ø 125 mm 150x70 mm)	0011546
Flexible duct joint 150x70 mm (max. 60 cm)	0011548
ABS grille 180x180 mm with gravity louvres	0011550
ABS grille 180x180 mm with fixed louvres	0011562

EW300 Floor-standing monoblock water heater

Heat pump water heaters heat water in the home using heat pump technology, which heats water in a closed circuit thanks to the heat in the air: an innovative and environmentally sustainable technology that allows considerable energy savings.

ECA Technology **floor-standing water heater in heat pump systems** using**environmentally friendly R134A gas** produce domestic hot water with **270-litre tank in AISI 304L stainless steel**.
The high performance of the compressor ensures the highest levels of energy efficiency.

The user-friendly electronic control unit with LCD display allows complete customisation of the different operating modes. The water heater also comes with a removable soft touch control panel for settings, programming and diagnostics.

I Plus

- DHW production up to 70 °C with no heating elements;
- Single-phase power supply;
- Integrated 1500 W electric elements on support;
- Magnesium anode for anti-corrosion protection of the tank;
- Condensate drain.

EW300 Floor-standing monoblock water heater

Self-Diagnostics · Auto-restart · Anti-Legionella · Timer · - 20C° +43 C° · Automatic defrost · 65°C water temperature · R134 ecological gas

MODEL		EW300
Nominal tank capacity	l	280
Volume of hot water mixed at 40°C(1)	l	349
Declared load profile(1)		XL
Energy efficiency class of water heating in average climate conditions(3)		A
Water heating energy efficiency ηwh in average climatic conditions(3)	%	93
Annual electricity consumption AEC in average climatic conditions(3)	kWh	1812
Nominal heating capacity(2)	kW	3,00
Nominal power consumption(2)	kW	0,78
Thermostat temperature setting	°C	38 - 65 (55° default)
Hot water temperature adjustment range	°C	58
Sound power level LWA, at home	dB (A)	45
COPDHW (A7 / W10-55) in average climatic conditions(1)		2,81
Nominal COP(2)		3,83
Nominal hot water production capacity(2)	l/h	86
Power supply	V/Hz/Ph	230 / 50 /1
Integral electric elements	kW	3,15
Maximum consumption including elements	kW	4,60
Rotary		Rotativo
Air flow with ducting	m3/h	414 / 355 / 312
Maximum operating pressure	bar	10
Refrigerant (type / quantity)	type / kg	R134a / 1,20
Global Warming Potential / CO2 equivalent	GWP / tonsCO2	1430 / 1,716
Dimensions (H x diam)	mm	1920x Ø650
Net/gross weight/with water	kg	146 / 176 / 426
Hydraulic fittings		G 3/4" - DN20
Duct fitting dimensions	mm	Ø 190
Air duct length	m	10
Air temperature (miin-max)	°C	-20 ~ +43
CODE		**0011400**

(1) Test according to EN16147; air temperature 7°C DB (6°C WB), water temperature inlet 10° C / outlet 55° C.
(2) Conditions: inlet air 20°C DB (15°C WB), water inlet 15° C / outlet 55° C.
(3) EU Regulation 812/2013 and 814/2013
THE ABOVE HERMETICALLY SEALED PRODUCTS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL.

White enamelled metal grid

Alutermoflex flexible tube

DN180 white wall grid

OPTIONAL ACCESSORIES	Codice
90° curve recovery discharge/Isolated	**7001164**
Insulated hose alutermoflex Ø200 mm L.10 mt	**700100P3**
Male connector Ø200 mm	**7001055**
50 mt aluminium adhesive tape	**7001032**
230x230 mm white enamelled metal grid	**7001163**
White wall grid DN180	**0006929**

HYDRONIC UNITS

Research, design and advanced technology have resulted in reliable and efficient water systems that provide comfort and well-being inside buildings.

The range of **water-cooled fan coil units** is designed to be integrated with heat pump systems such as Acquainverter, Acquainverter SMART and ECA Technology heat pumps, optimising the performance they are able to deliver.

XHW SLIM Fan Coil Units

WALL HYDRONIC UNIT

XFW SLIM Fan Coil Units

FLOOR/CEILING HYDRONIC UNIT

HWFC High wall fan coil

WALL HYDRONIC UNIT

FSW and FSWE Ducted fan coil units

DUCTED HYDRONIC UNIT

CFC Cassette fan coil

CASSETTE HYDRONIC UNIT

Fan coil units

FLOOR/CEILING RECESSED HYDRONIC UNITS

XFS - Floor/ceiling Slim fan coil unit

XFS is the new low-consumption (4 Watts) DC Inverter hydronic unit from ECA Technology for **cooling**, **heating**, **dehumidifying** and **purifying** environments.
Distinguished by the absence of front intake grilles, the innovative ventilation system improves coil performance by working at negative pressures.

The XFS model is suitable for low wall or floor installation. The modern design features a **tempered glass front panel** and **reduced footprint** (12 cm) that guarantees a unique impact, especially for new buildings.

The XFS terminal not only easy to install, but is simple to maintain and manage with its intuitive LCD display (optional). It is also possible to integrate a hydronic unit with a wired touch screen controller and a Wi-Fi device that provides control from a smartphone.

I Plus

- Reduced thickness (12 cm);
- Elegant, contemporary design;
- Optional 2-way and 3-way bypass valves;
- Modulated heat capacities from 0.5 to 4 kW;
- Floor or ceiling installation;
- Extreme silence.

XFS - Floor/ceiling Slim fan coil unit

Heating and Cooling | Automatic operation | Dry Mode | Different ventilation speeds | Optional Wi-Fi | Timer | Anti Cold air at heat. start-up | Auto Restart

Floor/ceiling Hydronic XFS with optional touchscreen control

MODEL		XFS20	XFS40	XFS60	XFS80
Maximum total cooling capacity[1]	kW	0.88	1.81	2.7	3.38
Maximum heat capacity[2]	kW	1.10	2.40	3.20	4.23
Air flow rate (min/max)	m³/h	80-180	155-315	240-450	310-540
Electric power (min/max)	W	3-12	4-13	5-14	8-17
Minimum sound pressure (SPL)	dB(A)	20.5	21.6	23.5	21.7
Dimensions (WxDxH)	mm	681x122x553	873x122x553	1065x122x553	1257x122x553
Supply voltage	V-Hz	220-50	220-50	220-50	220-50
DC motor low power inverter		yes			
Tangential aluminium fan		yes			
Pleated stainless steel filter		yes			
Tempered glass front panel		yes			
Powder-coated steel machine frame		yes			
CODE		**1501610**	**1501611**	**1501612**	**1501613**

(1) Cooling: Room temperature 27° C, 47% RH / Water temperature (in / out) 7/12° C
(2) Heating: Room temperature 20°C / Water temperature (in): 50°C

	ACCESSORI*	XFS20	XFS40	XFS60	XFS80
		CODICE	CODICE	CODICE	CODICE
	Touch screen top control with Wi-Fi	1501651	1501651	1501651	1501651
	Water temperature probe	1501652	1501652	1501652	1501652
	Floor fastening legs	1501653	1501653	1501653	1501653
	Condensate drain pump	1501654	1501654	1501654	1501654
	2-way valve + 2-pipe system kit + micro	1501655M	1501655M	1501655M	1501656M
	3-way valve with bypass + 2-pipe system kit	1501659	1501659	1501659	1501660
	3-way valve with bypass + 4-pipe system connection XFS series	1501663	1501663	1501663	1501663
	2 way valve insulation shell, 2 tubes	1501674	1501674	1501674	1501675
	2 way valve insulation shell, 3 tubes	1501676	1501676	1501676	1501677
	Horizontal condensate tray	1501664	1501665	1501666	1501667
	Rear trim panel	1501668	1501669	1501670	1501671
	Frontal electric element	1501672	1501672	1501673	1501673

*Accessories supplied

XHW - Slim Fan Coil Unit wall

XHW is the new low-consumption (4 Watts) DC Inverter hydronic unit from ECA Technology for **cooling**, **heating**, **dehumidifying** and **purifying** environments.
Distinguished by the absence of front intake grilles, the innovative ventilation system improves coil performance by working at negative pressures.

The XHW model is suitable for high-wall installation. The modern design features a **tempered glass front panel** and **reduced footprint** (12 cm) that guarantees a unique impact, especially for new buildings.

The XHW terminal not only easy to install, but is simple to maintain and manage with its intuitive LCD display (optional). It is also possible to integrate a hydronic unit with a wired touch screen controller and a Wi-Fi device that provides control from a smartphone.

I Plus

- Reduced thickness (12 cm);
- Elegant, contemporary design;
- Tangential aluminium fan for improved efficiency;
- 2- and 3-way by-pass valves (optional);
- Dual motorised flaps for accurate control of air direction;
- Modulated heat capacity from 0.5 to 4 kW;
- Remote control as standard;
- Extreme silence.

XHW - Slim Fan Coil Unit Wall

Heating and Cooling | Automatic operation | Dry Mode | Different ventilation speeds | Optional Wi-Fi | Customisable timer optional | Anti Cold air at heat. start-up | Auto Restart | Vertical flow

XHW Hydronic wall

Remote control as standard

Touchscreen command optional

MODEL		XHW40	XHW60	XHW80
Maximum total cooling capacity[1]	kW	1.20	1.70	2.45
Maximum heat capacity[2]	kW	1.68	2.45	3.30
Air flow rate (min/max)	m³/h	155/315	240/450	310/540
Electric power (min/max)	W	4/11	5/14	8/17
Minimum sound pressure (SPL)	dB(A)	23.0	23.4	25.0
Dimensions (WxDxH)	mm	873x122x383	1065x122x383	1257x122x383
Supply voltage	V-Hz	220-50	220-50	220-50
DC motor low power inverter		yes		
Tangential aluminium fan		yes		
Remote control		yes		
LCD Display		yes		
Pleated stainless steel filter		yes		
Front panel in tempered crystal glass		yes		
Powder-coated steel machine frame		yes		
CODE		**1501601**	**1501602**	**1501603**

(1) Cooling: Room temperature 27° C, 47% RH / Water temperature (in / out) 7/12° C
(2) Heating: Room temperature 20°C / Water temperature (in): 50°C

	ACCESSORI*	XHW40	XHW60	XHW80
		CODICE	CODICE	CODICE
	Touch screen top control with Wi-Fi	1501651	1501651	1501651
	Water temperature probe	1501652	1501652	1501652
	Condensate drain pump	1501654	1501654	1501654
	2-way valve + 2-pipe system kit + micro	1501657M	1501657M	1501658M
	3-way valve with bypass + 2-pipe system kit + micro	1501661M	1501661M	1501662M

*Accessories supplied.

HWFC High wall fan coil

ECA Technology wall-mounted fan coils are the perfect terminals to combine the well-being and **climatic comfor**t to contemporary **design and elegance.**

Simple to use and install, they are perfect for applications of all types of installation, in particular in the residential and commercial sector;

The HWFC series offers the best performance in terms of consumption and silence thanks to the
latest generation inverter fan motor. They are available in **2.5kW** sizes at **4.5kW** of power and find a perfect match with both heat pump systems in the winter and summer seasons.

Plus

- Elegant and contemporary design;
- Wall-mounted control (optional);
- BLDC inverter fan motor
- Remote control included as standard;
- Version for 2-pipe systems;
- Washable filters, easily accessible;
- Consent for external ON-OFF water valve;
- Minimum thermostat;
- Air vent valve;
- Modbus communication protocol;
- Remote on-off card (optional).

HWFC High wall fan coil

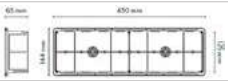
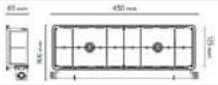
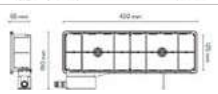
Heating and Cooling
Dry Mode
5 ventilation speeds
Turbo
Sleep
Vertical flow
Self-Diagnostics
Timer 24h
self Cleaning
Anti Cold air at heat. start-up
Auto Restart
Light

Telecomando di serie

Comando a filo parete optionial

MODELLO		HWFC0922	HWFC1222	HWFC1822
Power supply	V/f/Hz	230 / 1 / 50		
Total cooling capacity [1]	kW	2,70	3,60	4,30
Heating capacity [2]	kW	2,90	3,90	4,70
Pressure drop (cool./heat.)	kPa	30/35	43/55	52/65
Air flow volume (max/med/min)	m³/h	510 / 382 / 255	680 / 510 / 340	850 / 637 / 425
Power consumption	W	8 / 18	11 / 29	12 / 43
Water flow rate	l/h	468 / 504	612 / 684	720 / 792
Sound pressure (max)	dB(A)	21 / 35	26 / 42	30 / 46
Water temperature (min/max)	°C	+5 / +60		
Dimensions (WxDxH)	mm	845x209x289	845x209x289	970x224x300
Net Weight	kg	10,5	10,5	12,5
Hydraulic fittings	Ø	1/2"		
CODICE		**1601073**	**1601074**	**1601075**

(1) Cooling: Room air temperature 27°C DB / 19°C WB, Water temperature inlet 7°C, outlet 12°C;
(2) Heating: Room air temperature 20°C DB, Water temperature inlet 45°C, outlet 40°C;
* data for maximum ventilation speed

ACCESSORI OPTIONAL		sigla	Codice
-	Remote ON-OFF board	-	**2701450**
-	wall-mounted control	-	**1604053**
	2-way valve on/off *	V23	**1601081**
	3-way valve/4 connections on/off *	V34	**1601082**
	Ready recessed module without condensate drain	MP1	**1601090**
	Ready recessed module with left and right condensate drain	MP4	**1601093**
	Ready recessed module with integrated syphon (reversible)	MP6	**1601095**

FSW and **FSWE** ducted fan coil units

Ducted air conditioners in the FSW series are suitable for applications in small and medium-sized residential, commercial or industrial environments.
The small size of the units and the modular nature of the accessories simplify installation in small areas and provide a wide range of solutions to meet all requirements.

The FSW series consists of 7 sizes that span a range of flow rates from 930 m³/h to 4200 m³/h.
The units begin with basic modules that include water coil and electric fan that can be extracted from below for inspection and also with low consumption EC motorisation (FSWE).

Two versions are available:
- **horizontal**, referred to as FSW / 0
- **vertical**, referred to as FSW / V

FSW ductable fan coil unit

FSW and **FSWE** ducted fan coil units

- Internally coated Aluzink sheet metal structure;
- Exchanger with 3- or 4-row finned copper coil and stainless steel drip tray;
- FSW: AC centrifugal electric fan with 3 balanced speeds and low noise emission;
- FSWE: Centrifugal electric fan coupled to a low consumption 0-10V EC electric motor;

FSW / FSWE MODEL		100	100 E	170	170 E	200	200 E	220	220 E	250	250 E	350	350 E	450	450 E
Nominal air flow volume	m³/h	900		1500		1600		2100		2400		3600		4200	
Useful static pressure [1]	Pa	95	95	100	100	85	80	110	125	105	110	120	90	115	100
FAN															
Power supply	V/Ph/Hz	230/150		230/150		230/150		230/150		230/150		230/150		230/150	
Nominal current cons. [1]	A	0.7	0.5	1.2	1.7	1.2	1.9	1.5	2.6	1.7	3.1	3.3	2.2	4.7	3.3
Maximum current cons.	A	1.1	1.2	1.5	2.0	1.5	2.0	2.0	3.7	2.1	3.7	4.0	2.7	5.1	3.5
Nom. power consumption [2]	W	170	153	216	213	225	230	325	330	375	400	640	500	910	760
Maximum power consumption	W	230	154	305	245	295	245	435	465	450	465	770	610	990	800
n° speeds or adjustment type [3]		3	0-10V	3	0-10V	3	0-10V	3	0-10V	3	0-10V	3	0-10V	3	0-10V

WATER COIL								
Rows	No.	3	3	4	3	3	3	4
COOLING [5]								
Total cooling capacity	W	4600	7450	9070	10500	13100	15700	20700
Water side pressure drop	kPa	16	19	21	17	21	22	26
Water flow rate	m³/h	0.72	1.20	1.55	1.60	1.90	2.60	3.60
HEATING [6]								
Nominal heating	W	9800	15500	19700	21600	25900	35500	46300
Water side pressure drop	kPa	13	19	21	18	22	22	25
Water flow rate	m³/h	0.88	1.40	1.76	1.90	2.30	3.20	4.20

(1) Referred to nominal flow rate at maximum speed
(2) Selectable with SV or PCU commands
(3) Electronically adjustable with PC10R command
(4) Sound pressure level: values referred to 1.5 m from the machine intake in free field at nominal flow rate. The operating noise level generally deviates from the indicated values depending on the operating conditions, reflected noise and peripheral noise.
(5) Inlet air temperature 27°C DB, 19° WB. Inlet/outlet water temperature 7/12°C. Values referred to nominal air flow rate.
(6) Inlet air temperature 20°C DB. Inlet/outlet water temperature 70/60°C. Values based on nominal air flow rate.

FSW MODEL	100	170	200	220	250	350	450
CODE HORIZONTAL V.	0003321	0003322	0003323	0003324	0003325	0003326	0003327
CODE VERTICAL V.	0003331	0003332	0003333	0003334	0003335	0003336	0003337

FSWE MODEL	100	170	200	220	250	350	450
CODE HORIZONTAL V.	0003321E	0003322E	0003323E	0003324E	0003325E	0003326E	0003327E
CODE VERTICAL V.	0003331E	0003332E	0003333E	0003334E	0003335E	0003336E	0003337E

FSW and **FSWE** - Accessories

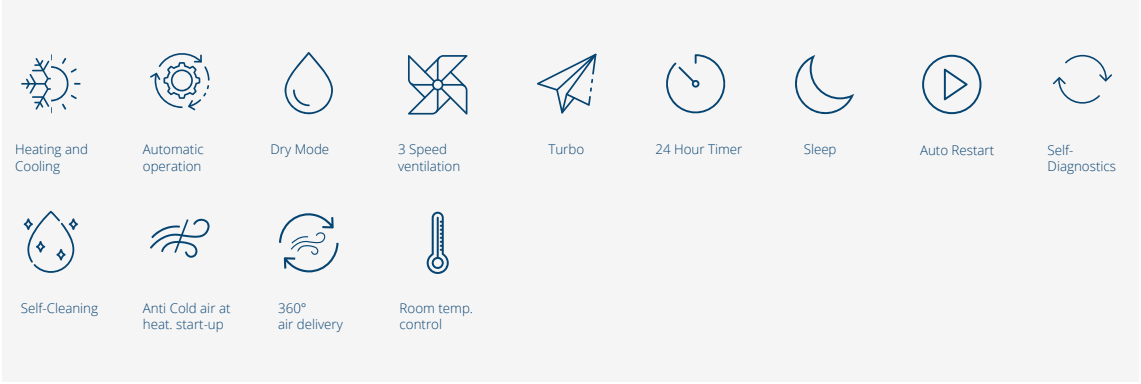
MODEL	Abb.
Water coil	BWS
Delivery nozzles	BMS
Dual electric elements	RE2S
Duct connection flange	FCS
Return grille	GRAS
Intake plenum	PLAS
Flexible duct plenum	PCFS
Delivery Plenum	PMS
Electrical element	RES
Filter section	FAS
Mixer section	MIS
Speed selector	SV
AC unit control panel with bypass	PCU

CFC Cassette Fan Coil

The CFC series water cassettes are air distribution units suitable for installation in false ceilings where an aesthetically pleasing appearance and less space is a pre-requisite.
They are combined with heat pump solutions for summer and winter room air conditioning.
They are available in 6 power sizes, equipped with a 3-speed AC electric motor and are ideal for 2-pipe systems.
The dimensions are extremely compact and maintenance is made easy by the fact that all components can be accessed by simply removing the front panel.

CFC Cassette

CFC Cassette Fan Coil



I Plus

- Built-in condensate drain pump;
- Motorised louvres;
- Easily accessible washable Nylon filters;
- Compact size;
- Electronics ready for connection with wired controller remote control (optional);
- Remote control as standard;

MODEL		CFC300	CFC400	CFC450	CFC520	CFC600
Nominal heating	max - kW	3.80	5.40	6.10	6.90	8.40
	med - kW	3.12	4.53	5.36	5.82	7.45
	low - kW	2.59	4.12	4.92	5.29	7.21
Water flow rate	l/h	540	780	930	1,000	1,290
Max pressure drop in heating	kPa	38	37	46	32	38
Total cooling capacity-Sensible	max - kW	3.30 - 2.70	4.50 - 3.13	5.00 - 3.60	6.00 - 4.31	7.40 - 5.44
	med - kW	2.69 - 1.99	3.88 - 2.80	4.59 - 3.33	5.20 - 3.81	6.61 - 5.01
	low - kW	2.24 - 1.60	3.55 - 2.53	4.22 - 3.05	2.69 - 3.41	6.40 - 4.84
Water flow rate	l/h	460	670	790	890	1,140
Max pressure loss in cooling	kPa	30	27	34	21	30
Power supply		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Power consumption (min-max)	W	39-78	51-81	68-110	79-105	119-143
Air flow rate	max - m³/h	660	800	940	1090	1400
	med - m³/h	560	665	770	860	1160
	low - m³/h	460	590	670	760	1000
Sound pressure (min-max)	dB(A)	33-46	35-39	35-49	38-43	44-50
Sound power (min-max)	dB(A)	41-53	49-54	50-55	46-52	51-54
Inlet water temperature (min-max)	°C	5-60	5-60	5-60	5-60	5-60
Max. operating pressure	bar	16	16	16	16	16
Min-max room temperature	°C	16-40	16-40	16-40	16-40	16-40
Net Weight	kg	20	25	25	27	27
Dimensions (WxDxH)	mm	664x596x240	840×840×190	840×840×190	840×840×240	840×840×240
Ceiling opening dimensions	mm	596x596	890x890	890x890	890x890	890x890
Cassette panel dimensions (WxDxH)	mm	670x670x60	950×950×85	950×950×85	950×950×85	950×950×85
Net weight of cassette panel	kg	3.5	7	7	7	7
Hydraulic fittings	Ø	3/4"				
CODE		**1603051**	**1603052**	**1603053**	**1603054**	**1603055**
GRILLE CODE			**1604051**			

Cooling: Room air temperature 27°C DB / 19°C WB, Water temperature inlet 7°C, outlet 12°C;
Heating: Room air temperature 20°C DB, Water temperature inlet 45°C, outlet 40°C;

OPTIONAL ACCESSORIES	Code
Remote wall controller	**1604052**
ON-OFF Remote Control Kit (to pair with wired controller)	**2701450**

Floor / **Ceiling** / **Recessed** Fan Coil Units

Reliable, guaranteed high- quality components, silent operation and versatility of application make this fan coil unit an excellent product for heating and air conditioning all types of environments.
a wide range of accessories is available for the product for application in all types of systems.

PVGO
Floor vertical
with adjustable grilles

PVAF
Floor vertical with front
intake

SOGO
Ceiling horizontal with
adjustable grilles

SOAF
Ceiling horizontal with front
intake

IVAV
Recessed vertical with
variable intake

IVMF
Recessed vertical with front delivery
and underside intake

IOAV
Recessed horizontal with
vertical intake

IVAF
Recessed vertical with front
delivery and intake

Floor Ceiling / Recessed - **AC VERSION**

Heating and Cooling | Automatic operation | Dry Mode | 3 ventilation speeds | 24 Hour Timer | Sleep | Auto-Restart

PVAF

AC MODEL		316	320	628	634	840	847	1250	1260	1575	1885
Max. air flow volume	m³/h	332	332	522	522	692	692	1060	1060	1359	1744
Maximum total cooling capacity (1)	kW	1.65	2.04	2.66	3.06	3.82	4.39	5.13	6.03	7.52	9,76
Max. sensitive cooling capacity (1)	kW	1.21	1.44	1.92	2.24	2.62	3.05	3.50	4.17	5.29	6,77
Max water flow rate (1)	l/h	283	350	457	525	655	753	880	1060	1359	1744
Max heating capacity power (2)	kW	3.83	4.39	6.10	6.89	8.26	9.29	11.28	13.00	16.57	21,10
Max heating capacity power (3)	kW	2.25	2.60	3.56	4.04	4.88	5.51	6.64	7.67	9.76	12,46
Water flow rate (3)	l/h	283	350	457	525	655	753	880	1060	1359	1744
Power consumption	W	33	33	43	43	87	87	140	140	147	184
PVGO Dimensions (WxHxD)	mm	860x486 x222	860x486 x222	1120x486 x222	1120x486 x222	1380x486 x222	1380x486 x222	1380x486 x222	1380x486 x222	1640x486 x222	1900x586 x222
Net weight (PVGO-PVAF-SOGO-SOAF)	kg	17	18	22	23	27.5	29	27.5	29	35	38
Net weight (IVAV-IVMF-IVAF-IOAV)	kg	15	16	19	20	23	24	23	24	29	32
Hydraulic fittings		GFØ=1/2"									

(1) Room temperature: 27°C - 47% RH - T. water (in/out): 7 / 12°C
(2) Room temperature: 20°C - T. water (in/out): 70 / 60°C
(3) Room temperature: 20°C - T. water (in/out): 50°C - same cooling water flow rate

PVGO MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502001**	**1502002**	**1502003**	**1502004**	**1502005**	**1502006**	**1502007**	**1502008**	**1502009**	1502010
PVAF MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502101**	**1502102**	**1502103**	**1502104**	**1502105**	**1502106**	**1502107**	**1502108**	**1502109**	150211
SOGO MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502201**	**1502202**	**1502203**	**1502204**	**1502205**	**1502206**	**1502207**	**1502208**	**1502209**	1502210
SOAF MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502301**	**1502302**	**1502303**	**1502304**	**1502305**	**1502306**	**1502307**	**1502308**	**1502309**	1502310
IVAV MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502401**	**1502402**	**1502403**	**1502404**	**1502405**	**1502406**	**1502407**	**1502408**	**1502409**	1502410
IVMF MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502501**	**1502502**	**1502503**	**1502504**	**1502505**	**1502506**	**1502507**	**1502508**	**1502509**	1502510
IOAV MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502601**	**1502602**	**1502603**	**1502604**	**1502605**	**1502606**	**1502607**	**1502608**	**1502609**	1502610
IVAF MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502701**	**1502702**	**1502703**	**1502704**	**1502705**	**1502706**	**1502707**	**1502708**	**1502709**	1502710

Floor Ceiling / Recessed - **EC VERSION**

Heating and Cooling | Automatic operation | Dry Mode | 3 ventilation speeds | 24 Hour Timer | Sleep | Auto-Restart | Quiet

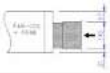
PVAF

MOD. EC with Brushless motor		316	320	628	634	840	847	1250	1260	1575	1885
Max. air flow volume	m³/h	368	368	535	535	850	850	1004	1004	1364	1473
Maximum total cooling capacity (1)	kW	1.81	2.22	2.72	3.12	4.37	5.11	4.94	5.11	4.94	8,66
Max. sensitive cooling capacity (1)	kW	1.30	1.56	1.95	2.29	3.02	3.55	3.38	4.00	5.31	5,99
Max water flow rate (1)	l/h	310	380	466	535	750	877	847	999	1294	1486
Max heating capacity power (2)	kW	4.16	4.78	6.20	7.02	9.58	10.93	10.88	12.48	16.60	18,54
Max heating capacity power (3)	kW	2.44	2.83	6.62	4.12	5.65	6.48	6.39	7.37	3.77	10,97
Water flow rate (3)	l/h	310	380	466	535	750	877	847	999	1294	1486
Power consumption	W	16	16	19	19	35	35	58	58	107	108
PVGO Dimensions (WxHxD)	mm	860x486 x222	860x486 x222	1120x486 x222	1120x486 x222	1380x486 x222	1380x486 x222	1380x486 x222	1380x486 x222	1640x486 x222	1900x586 x222
Net weight (PVGO-PVAF-SOGO-SOAF)	kg	17	18	22	23	27.5	29	27.5	29	35	38
Net weight (IVAV-IVMF-IVAF-IOAV)	kg	15	16	19	20	23	24	23	24	29	32
Hydraulic fittings		GFØ=1/2"									

(1) Room temperature: 27°C - 47% RH - T. water (in/out): 7 / 12°C
(2) Room temperature: 20°C - T. water (in/out): 70 / 60°C
(3) Room temperature: 20°C - T. water (in/out): 50°C - same cooling water flow rate

PVGO MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502011**	**1502012**	**1502013**	**1502014**	**1502015**	**1502016**	**1502017**	**1502018**	**1502019**	1502020
PVAF MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502111**	**1502112**	**1502113**	**1502114**	**1502115**	**1502116**	**1502117**	**1502118**	**1502119**	1502120
SOGO MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502211**	**1502212**	**1502213**	**1502214**	**1502215**	**1502216**	**1502217**	**1502218**	**1502219**	1502220
SOAF MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502311**	**1502312**	**1502313**	**1502314**	**1502315**	**1502316**	**1502317**	**1502318**	**1502319**	1502320
IVAV MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502411**	**1502412**	**1502413**	**1502414**	**1502415**	**1502416**	**1502417**	**1502418**	**1502419**	1502420
IVMF MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502511**	**1502512**	**1502513**	**1502514**	**1502515**	**1502516**	**1502517**	**1502518**	**1502519**	1502520
IOAV MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502611**	**1502612**	**1502613**	**1502614**	**1502615**	**1502616**	**1502617**	**1502618**	**1502619**	1502620
IVAF MODEL		316	320	628	634	840	847	1250	1260	1575	**1885**
CODE		**1502711**	**1502712**	**1502713**	**1502714**	**1502715**	**1502716**	**1502717**	**1502718**	**1502719**	1502720

Floor Ceiling / Recessed - **ACCESSORIES**

	MODELLO	sigla
	ANALOGUE CONTROLS	
	Wired S/W speed control	**CVP**
	On-board S/W speed control	**CVB**
	Electromechanical wall-mounted room thermostat with speed selector and S/W	**TP3**
	O- board electromechanical room thermostat with speed selector and S/W	**TB3**
	Relays mounted on board for master/slave 2,5A	**ETBN**
	EC control board from analogue control	**SC3**
	ADVANCED DIGITAL CONTROLS	
	Digital wall unit*	**REP3**
	On-board digital unit*	**REB3**
	Slave board REP3/REB3	**SP3**
	Modbus module SP3	**BMS-SP3**
	BUILT-IN ACCESSORIES	
	Minimum thermostat	**TM**
	Water probe	**SND**
	Electric heater	**EH+EHR**
	3-way valve 4 ports on/off	**V23**
	2 on-off valve for two-pipe systems [3]	**V22**
	2 ways holders [4]	**DET2**
	flexible pipes [4]	**FLEX2**
	Condensate drain pump [4]	**PSCZ**
	OTHER ACCESSORIES	
	Pair of feet [2]	**CZ**
	Return flange with bottom filter extraction	**FRAB**
	Flange for channel connection (return or delivery)	**FM**
	Plenum with circular connections for supply and recovery [5]	**PS**
	Plenum at 90 hrs for run and take [5]	**P90**
	Plenum at 90' with recovery grid and filter	**PA90GF**
	Telescopic coupling for supply and return [5]	**RT**
	Insulation Plenum PS,P90,RT	**COIB**
	Synthetic fibre filter (ex G3) [6]	**FAG3**
	Antibacterial synthetic fibre filter (ex G3) [6]	**FASAN**
	Fixed return grille (aluminium) RAL 9016	**GR**
	Delivery grid with double aluminium regulation RAL 9016	**GM2**

	IVAF ACCESSORIES	
	IVAF metal check-out box	**CCM**
	Metal infill panel RAL9010	**MPK**

[1] Includes SP3 card and SND water probe
[2] PVGO, SOGO only
[3] mounted and wired kit
[4] unassembled kit
[5] supplied without insulation
[6] non-washable filter

Note: on quote are available:
- Hydraulic accessories for 4pipe systems;
- 0-10V modulating water valves and balancing valves;
- Dynamic balancing valves;
- Aesthetic infill panels for "stand-alone" installations

AIR HANDLING

Residential Line

DRY RADIANT EVO

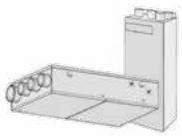
RADIANT SYSTEM DEHUMIDIFIER

HFR

HORIZONTAL CEILING UNITS

HFRM

VERTICAL WALL UNITS



DRI

DEHUMIDIFIER WITH HEAT RECOVERY UNIT

Commercial Line

HRS+ and HRSE+

HEAT RECOVERY UNIT

The **advantages** of proper **ventilation**

A controlled mechanical ventilation system with heat recovery is a system designed for the **continuous air exchange** in the home and in all indoor environments in general that allows stale air to be replaced and substituted with fresh, oxygen-rich outside air.

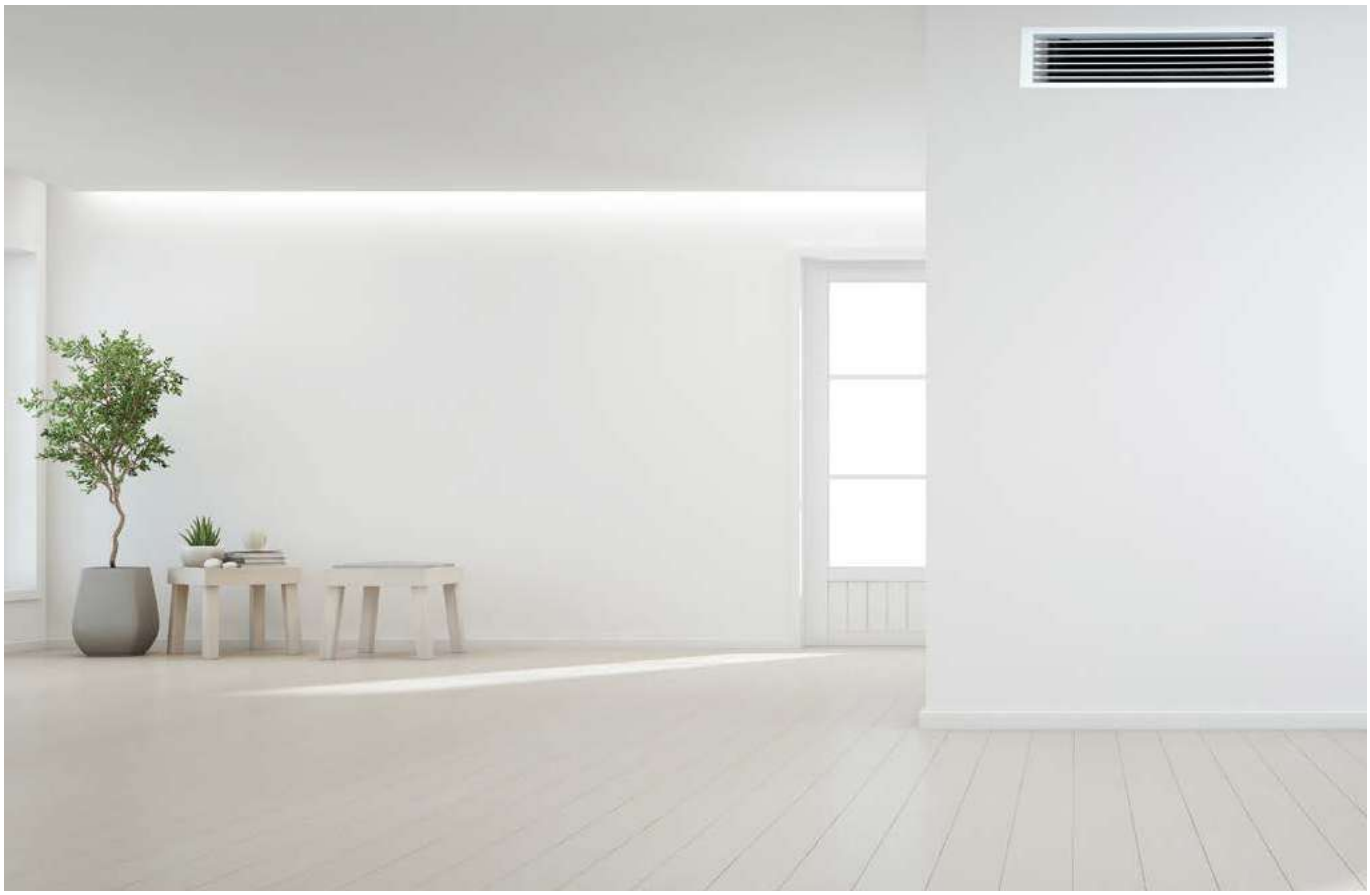
The choice of integrating a ventilation system into a building makes it possible to ensure proper exchange of air in closed rooms in all situations where it cannot be managed by opening windows. This is essential in promoting the evacuation of pollutants that accumulate in indoor spaces by ensuring **greater comfort** and **health** at home or in office spaces.

Mechanical ventilation is also essential in all modern homes or buildings with high energy efficiency and a high percentage of insulation for the prevention of issues regarding humidity and mould.

The most advanced VMC systems include a **heat recovery** system: the thermal energy of the outgoing air that has been heated or cooled is retained in the exchanger and then transferred to the incoming air, which will therefore be warmer in winter and cooler in summer than the outdoor air.

I Plus

- Continuous, uniform temperature management;
- Control of the percentage of humidity in rooms;
- Advanced air filtering;
- Containment of external noise;
- Reduction of energy loss to a minimum.



Dry Radiant - Radiant system dehumidifier

• Strong self-supporting structure made of galvanized steel plate prevents vibrations and includes fixing brackets for ceiling or wall installation. Accessibility to internal components is guaranteed by opening the front panel for easy access. The filter can be removed without removing the panels.

• COARSE ISO class filter with ePM10 efficiencies <50% (ISO 16890), thickness 6mm, made of washable synthetic material.

• Plastic fans with curved forward blades directly coupled to motor mounted on maintenance-free ball bearings. For size 80 the motor is AC at three speed levels degree of protection IP20. For size 160 the motor is EC at low consumption;

• Exchange battery made of copper tube and corrugated aluminum fins with high efficiency, with hydrophilic treatment to increase heat exchange even in the presence of high humidity.

• Thermal and acoustic insulation in 3mm expanded cross-linked polyethylene for size 80, polyurethane 10mm for size 160.

• Refrigeration circuit complete with hermetic compressor, condenser, evaporative battery, filter, expansion device, sensors positioned in suction and discharge, copper pipes with thermal insulation, pressure sockets. Refrigerant preloaded in the factory.

DRY RADIANT EVO

Mechanical humidistat

Versions:

VERSION D: Equipped with compressor on board, Summer operation with water between 15 and 20 C. Thanks to the post-heating battery, during the summer dehumidification the air is introduced in a neutral temperature environment. In winter, the operation of the radiant system can be integrated by supplying the battery with hot water.

VERSION I: Equipped with compressor on board, Summer operation with water between 15 and 20 C. Thanks to the post-heating battery and diverter valves of the internal circuit, during the summer dehumidification air can be released in a neutral temperature environment (dehumidification isotherm) or lower temperature (dehumidification with integration). In winter, by feeding the battery with hot water, it is possible to integrate the operation of the radiant system.

Model		**DRE 80 V**		**DRE 80 H**		**DRE 160 H**	
Version		**I**	**D**	**I**	**D**	**I**	**D**
Dehumidification capacity	l/24h	20,4	20,4	20,4	20,4	48,1	48,1
Total cooling capacity (1)	W	1270	nd	1270	nd	2820	nd
Total heat output (water in 50 °F) (2)	W	1400	850	1400	850	2840	1690
Total heat output (water in 35 °F) (2)	W	690	425	690	425	1400	850
Feeding	V-Hz	230V-50Hz		230V-50Hz		230V-50Hz	
Power consumption compressor	W	300	300	300	300	600	600
Battery water capacity	l/h	210	150	210	150	430	320
Pressure drop in hydraulic circuit	kPa	21	9	21	9	24	14
Flow rate	mc/h	260		260		520	
Maximum current consumption	A	2,7	2,7	2,7	2,7	5,3	5,3
Refrigerant gas		R134a	R134a	R134a	R134a	R410a	
Weight horizontal version (H)	kg	39		39		55	
Weight vertical version (V)	kg	36		36		-	
Sound power	dB(A)	48	48	48	48	52	52
Sound pressure (3)	dB(A)	39	39	39	39	43	43

Versione scheda evoluta (I)

CODE		**2005022**	**2005020**	**2005027**	**2005023**	**2005032**	**2005030**

Versione scheda base (B)

CODE		**nd**	**2005021**	**nd**	**2005025**	**nd**	**nd**

(1) Temperatura ambiente 26°C; umidità relativa 65%,Temperatura ingresso acqua 15°C (per entrambe le versioni D e I)
(2) Temperatura ambiente 20°C; umidità relativa 50%; Temperatura ingresso acqua vedi dati in tabella;
(3) Pressione sonora alle seguenti condizioni, misurata a 1,5m di distanza
Versione 80 V: velocità media del ventilatore
Versione 80 H: velocità minima del ventilatore
Versione 160 H: velocità minima del ventilatore

OPTIONAL ACCESSORIES	**Codice**
Wall humidistat HCP Dry Radiant	**2005053**
Casing CCM kit disassembled DRE 80 V	**2005040**
Front panel MPK metal RAL9003	**2005041**
Shooting plenum SBC - DRE H 80	**2005042**
Shooting plenum SBC - DRE H 160	**2005043**
Sent plenum SBC DRE 80 V	**2005044**

HFR - Horizontal ceiling units

Air renewal units for residential application in the HFR series feature very high heat recovery efficiency, light weight and compactness, and easy, trouble-free installation.
Heat recovery, which takes place using a device made entirely of polystyrene, makes it unnecessary to use post-handling systems for replacement air.
They can be supplied in combination with an air ionisation system, which is used to sanitise and deodorise air and the surfaces of the machine, ducting and neighbouring rooms.

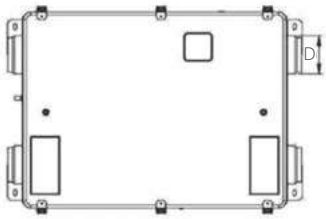
- Compliant with ERP 2016-2018,
- Low consumption EC fans,
- Integrated by-pass system,
- Compact and ultra lightweight,
- Radio-wave control panel with no wiring (optional)
- Filters and PM1O 50%

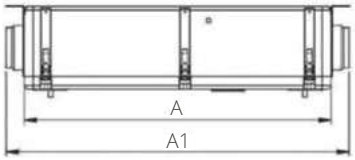
HFR heat recovery unit

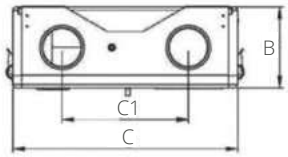
Pannello di controllo PCUS/PCUSM

MODEL		HFR17	HFR33
Power supply	V/Ph/Hz	230/1/50	
Nominal air flow volume	m³/h	100	200
Maximum air flow volume	m³/h	175	330
Nominal static flow rate	Pa	210	250
Weight	kg	12	17
Sound pressure level (1)	dB (A)	46	50
Operating limits	°C	-15 - 45	
FANS			
Max. current consumption	A	0.52	1.50
Max power consumption	W	54	170
Level of protection	IP	54	
Control signal	0-10 VDC		
WINTER OPERATION HEAT RECOVERY UNIT(2)			
Seasonal	%	92.1	90.0
Recovered power	W	778	1520
Intake air	°C/%	18.0 / 16	17.4 / 17
SUMMER OPERATION HEAT RECOVERY UNIT(3)			
Efficiency	%	87.5	83.9
Recovered power	W	174	334
Intake air	°C/%	26.8 / 68	27.0 / 67
CODE		**0006401**	**0006402**

(1) values refer to 1 metre from the unit in the inlet duct at nominal air flow rate; the operating noise level will generally deviate from the values indicated depending on the operating conditions of reflected and peripheral noise
(2) Nom. winter conditions outside air -5°C, room air 20°C
(3) Nom. summer conditions outside air 32°C, room air 26°C







MODEL DIMENSIONS		HFR17	HFR33
A	mm	874	874
A1	mm	972	972
B	mm	240	300
C	mm	655	655
C1	mm	360	360
D	mm	125	125
D1	mm	16	16

HFRM - Vertical wall units

Air renewal units for residential application in the HFRM series feature very high heat recovery efficiency, light weight and compactness, and easy, trouble-free installation.
Heat recovery, which takes place using a device made entirely of polystyrene, makes it practically unnecessary to use post-handling systems for replacement air. They can be supplied in combination with an air ionisation system, which is used to sanitise and deodorise air and the surfaces of the machine, ducting and neighbouring rooms.

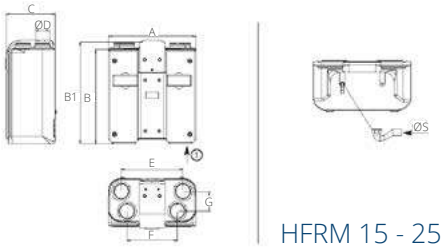
- Compliant with ERP 2016-2018,
- Low consumption EC fans,
- Integrated by-pass system,
- Compact and ultra lightweight,
- F7 return filtering,
- G4 expulsion filtration.

Pannello di controllo PCUS/PCUSM

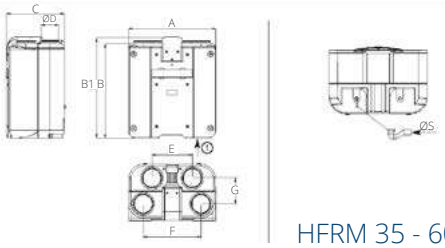
HFRM heat recovery unit

MODEL		HFRM15	HFRM25	HFRM35	HFRM50	HFRM60
Power supply	V/Ph/Hz	230/1/50				
Maximum nominal air flow volume 100Pa	m³/h	152	250	352	500	610
Nominal static air flow	Pa	300	100	280	100	100
Dimensions	mm	700x800x390	700x800x390	905x1030x600	905x1030x600	905x1030x600
Weight	kg	15	18	28	30	35
Sound pressure level(1)	dB (A)	49	52	54	55	55
Outdoor temperature/humidity limits	°C	-5...+45/5...95%				
Indoor temperature/humidity limits	°C	+10...+35/10...90%				
FANS						
Total nominal current consumption	A	0.60	1.30	1.30	1.70	1.30
Total nominal power consumption	W	64	58	58	86	153
Max. electric power consumption	W	136	136	196	196	340
Maximum total current consumption	A	1.30	1.30	1.70	1.70	3.40
WINTER OPERATION HEAT RECOVERY UNIT						
Heating efficiency(1)	%	87.2	87.0	85.7	88.2	84.8
Air delivery temperature(1)	°C	17.0	22.0	16.4	17.0	16.2
SUMMER OPERATION HEAT RECOVERY UNIT						
Heating efficiency(2)	%	82.4	79.9	80.4	81.0	79.2
Air delivery temperature(2)	°C	27.1	27.2	27.2	27.1	27.2
CODE		**0006451**	**0006452**	**0006453**	**0006454**	**0006455**

(1) Outdoor air -5°C 80% RH; room air 20°C 50% RH
(2) Outdoor air 32°C 50% RH; room air 26°C 50% RH



HFRM 15 - 25



HFRM 35 - 60

MODEL DIMENSIONS		HFRM15	HFRM25	HFRM35	HFRM50	HFRM60
A	mm	700	700	905	905	905
B	mm	740	740	970	970	970
B1	mm	800	800	1030	1030	1030
C	mm	390	390	600	600	600
E	mm	490	490	418	418	418
F	mm	400	400	600	600	600
G	mm	155	155	265	265	265
ØD	mm	125	125	200	200	200
ØS	mm	20				

Accessories - HFR and HFRM

PCUS/PCUSM

BW1-BW2

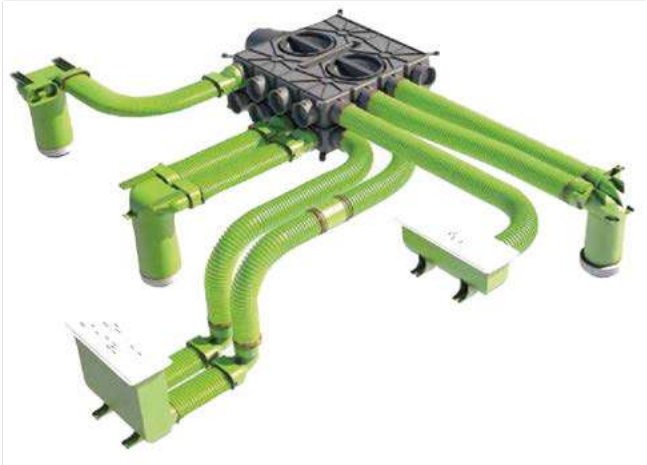
BHC

ION

USW

MODEL	Abb.
Electrical Pre-heat.	**BE1**
Electric Post-Heat.	**BE2**
Water Pre-heat. coil	**BW1**
	BW2
Water Post-cool.-heat. coil	**BHC**
2-way valve kit ON-OFF	**V20**
3-way valve kit MODULATING	**V3M**
Filter and PM1 70%	**F7CF**
ADJUSTMENT ACCESSORIES	
PCUS control panel	**PCUS**
PCUSM (modbus) control panel	**PCUSM**
4-button radio freq. panel	**TS4**
Antenna	**ANT**
Wall-mounted control panel	**WUI**
Wall-mounted CO2 probe	**QSW**
Wall-mounted humidity probe	**USW**
Ethernet network bridge	**BDG**
Ionizer Module	**Ion**

Air distribution accessories - HFR, HFRM and HRH

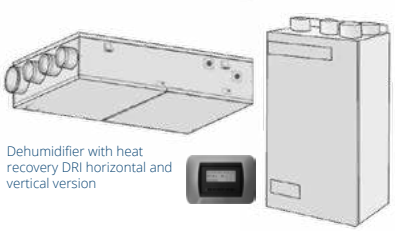


Air distribution systems for controlled mechanical ventilation are available on request.

DRI - Dehumidifier with heat recovery

The units of the DRI series are designed for air conditioning in the residential and commercial sector, are designed to be used in radiant systems and perform the following functions:
• Renewal with high efficiency heat recovery (>90%);
• Winter and summer thermal integration;
• Summer isotherm dehumidification;
• Management of the mixing valve and the main components of the radiant system;
• Operation by clean contacts (from external control unit) or with autonomous regulation.

Through the user interface (console included) the following functions are possible:
- Display and set ambient temperature and humidity; these values are used for activate dehumidification and/or air integration, in addition to calculating the dew point;
- Display unit status and alarms;
- Set the season (you can also select the season from clean contact);
- Set the weekly timetable for renewal;
- Access (via first and second level passwords) the parameters reserved for the installer and the service center.



Dehumidifier with heat recovery DRI horizontal and vertical version

SIZE:
80 - 160

ORIENTATION:
V=vertical
H=horizontal

VERSION:
W=water battery, without compressor
D=isotherm dehumidification
I= isotherm dehumidification + integration

MODEL		DRI 80			DRI 160		
VERSION		I	D	W	I	D	W
Dehumidification capacity	l/24h	26,5		43,2	62,4		84,0
Total froigorifera power	W	1590	nd	2280	3500	nd	4510
Total heat output (water in 50 °F)	W	1550	940	2120	3150	1880	4220
Total heat output (water in 35 % C)	W	760	470	1050	1550	940	2100
Rated efficiency winter recuperator	%	93			91		
Nominal efficiency summer recuperator	%	89			85		
Feeding	V-Hz	230V-50Hz			230V-50Hz		
Power consumption compressor	W	300		nd	600		nd
Working head for discharge fan (*)	Pa	170			230		
Useful blower head ejection (*)	Pa	140			195		
Battery water capacity	l/h	230		390	480		770
External air flow	mc/h	130			260		
Air flow in renewal only	mc/h	130			260		
Supply air flow in renewal + recirculation	mc/h	260			520		
Maximum current consumption	A	3,6		1,1	6,5		2,2
Refrigerant gas	-	R134a		nd	R410a		nd
Weight horizontal version (H)	kg	100			130		
Weight vertical version (V)	kg	120			150		
Sound pressure (**)	dB(A)	38		37	43		42
VERTICAL VERSION	**CODE**	**2005221**	**2005211**	**2005201**	**2005222**	**2005212**	**2005202**
HORIZONTAL VERSION	**CODE**	**2005223**	**2005213**	**2005203**	**2005224**	**2005214**	**2005204**

(*) Data for fans calibrated to 8V (on a scale with maximum 10V) at nominal air flow (**) Sound pressure under the conditions as above, measured at 1m distance
The performance is related to the following conditions: SUMMER: Temp. environment 26 χ C; relative humidity 65%; Temp. external air 35%, relative humidity 50%; Temp. water inlet 15 to C (for version D and I), water inlet temperature 7 to C (for version W). WINTER: Temp. external air -5% C, relative humidity 80%; Temp. environment 20 C, relative humidity 50%, Temp. water inlet: see data in the table.

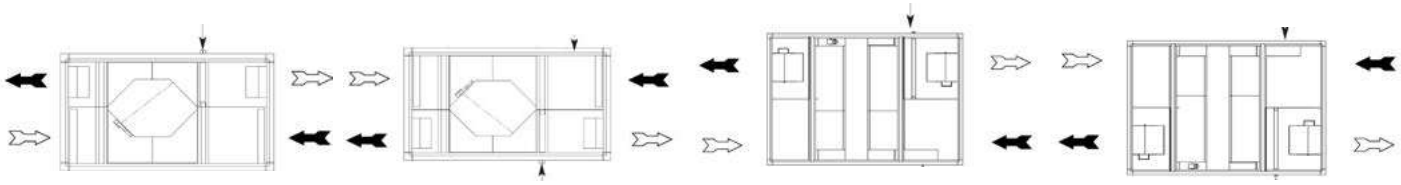
ACCESSORIES		MOD.80	MOD.160
	ACRONYM	CODE	CODE
CO2 air quality sensor	AQS	2005230	2005230
AHS ambient humidity probe	AHS	2005231	2005231
Sec. PS DRI supply circular nozzles	PS80	2005232	2005233
2-way valve on-off 230V kit V22K	V22K-80	2005234	2005235
3-way valve on-off 230V kit V23K	V23K-80	2005236	2005237
2-way valve on-off 230V kit V22MIK	V22MIK-80	2005238	2005239
3-way valve on-off 230V kit V23MIK	V23MIK-80	2005240	2005241
PSC Kit Condensate Drain Pump	PSC	2005242	2005242
Support with probe temp. sup screed	SUP	2005243	2005243
Power supply 12VDC humidity probe AL12	AL12	2005244	2005244
Flow sensor for water flow	WFSK	2005245	2005245
BMS management module (modbus) BMS-DRI	BMS-DRI	2005246	2005246
Spare air filter DRI horizontal	FS-H	2005247	2005248
Spare air filter DRI vertical	FS-V	2005249	2005250

HRS+ and **HRSE+** Heat recovery units

HRS+ and **HRSE+ heat recovery units** for **commercial applications**, combine optimum environmental comfort with definitive energy savings. The design feature in HRS+ HRSE+ heat recovery units saves more than 50% of the energy that would otherwise be lost through exhausted stale air. Suitable for installation in false ceilings, they can be ducted to allow air to be introduced and extracted directly from the room.

- Galvanised sheet metal structure with panels thick. 25mm, injected polyurethane insulation,
- Air filters efficiency class F7 on renewal air flow and M5 on exhaust air flow,
- By-pass for integrated free cooling,
- New AC fans compliant with EU Directive 1253/2014.
- Pressure switch for dirty filter alarm function.

HRS+ Heat recovery unit



Model 40 horizontal | Model 40 vertical | Model 75-500 vertical | Model 75-500 horizontal

AC Version

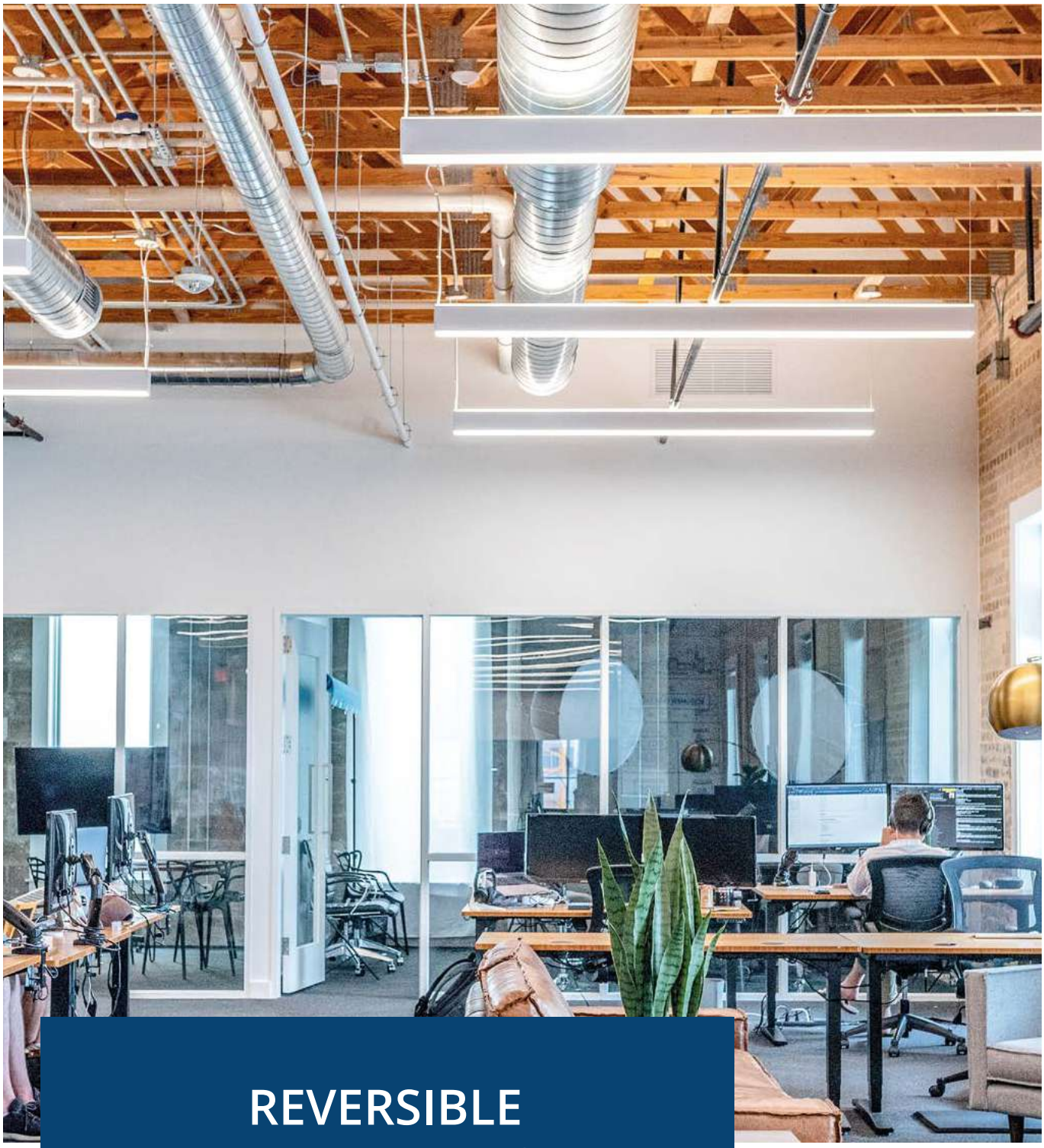
MODEL		HRS+40	HRS+75	HRS+100	HRS+150	HRS+200	HRS+320
Power supply	V/Ph/Hz	230/1/50					
Total air flow volume	m³/h	400	750	1000	1500	2050	3200
Total static pressure	Pa	160	120	130	160	120	180
Dimensions W/H/D	mm	1480x380 x800	1940x480 x990	1940x480 x990	2200x550 x1000	2200x550 x1400	2500x680 x1400
Winter efficiency	%	83.6	82.9	81.6	83.3	83.7	86.8
Summer efficiency	%	75.5	75.9	74.5	75.1	75.6	78.0
CODE	**vers.A**	**0006551**	**0006553**	**0006555**	**0006557**	**0006559**	**0006561**
	vers.B	**0006552**	**0006554**	**0006556**	**0006558**	**0006560**	**0006562**

EC Version

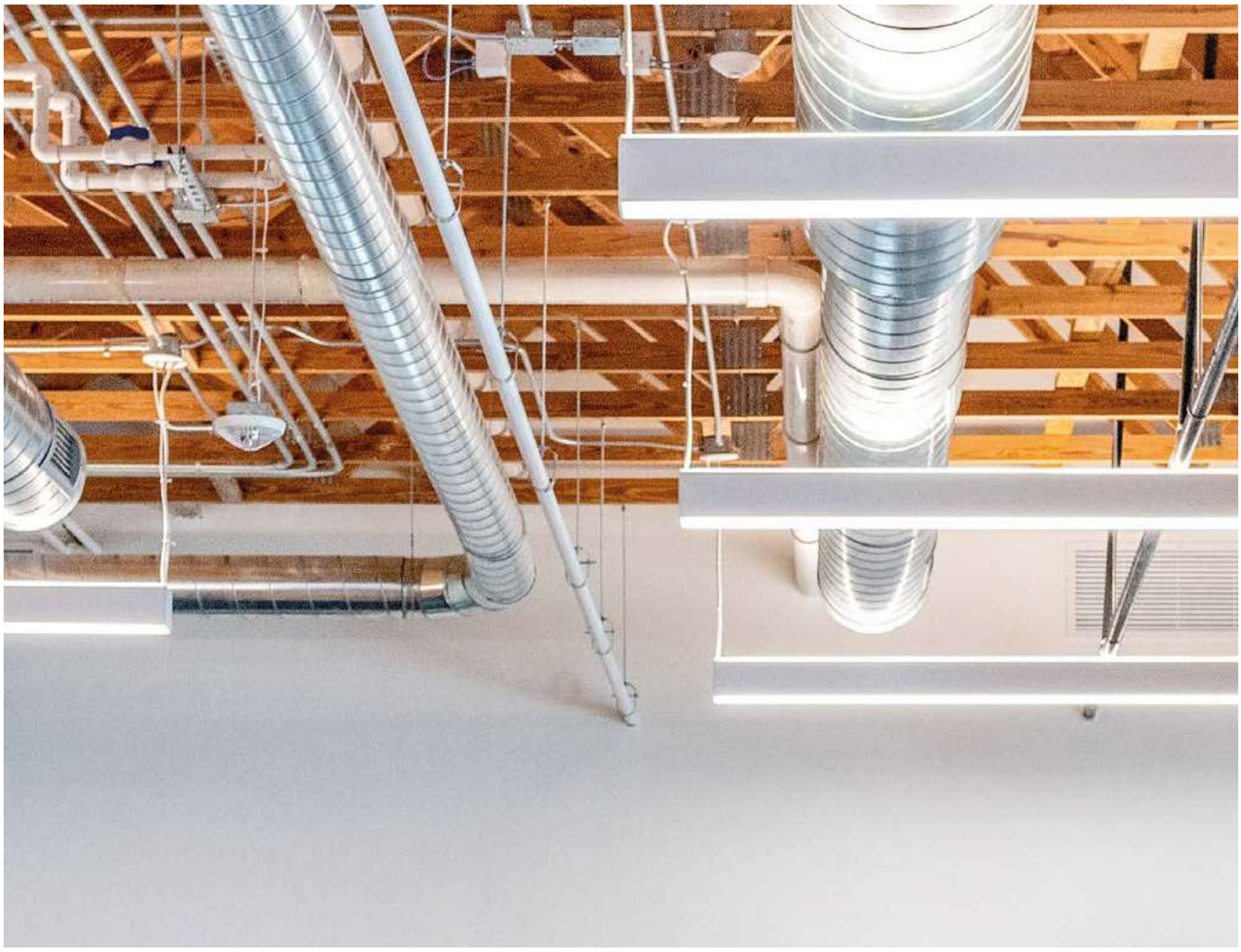
MODEL		HRSE+40	HRSE+75	HRSE+100	HRSE+150	HRSE+200	HRSE+320	HRSE+400	HRSE+500
Power supply	V/Ph/Hz	230/1/50							
Total air flow volume	m³/h	400	750	1000	1500	2050	3200	3800	4700
Total static pressure	Pa	340	210	520	500	540	375	330	200
Dimensions W/H/D	mm	1480x380 x800	1940x480 x990	1940x480 x990	2200x550 x1000	2200x550 x1400	2500x680 x1400	2500x680 x1400	2500x680 x1700
Winter efficiency	%	83.6	82.9	81.6	83.3	83.7	86.8	84.1	84.2
Summer efficiency	%	75.5	75.9	74.5	75.1	75.6	78.0	75.0	75.1
CODE	**vers.A**	**0006551E**	**0006553E**	**0006555E**	**0006557E**	**0006559E**	**0006561E**	**0006563E**	**0006565E**
	vers.B	**0006552E**	**0006554E**	**0006556E**	**0006558E**	**0006560E**	**0006562E**	**0006564E**	**0006566E**

HRS+ and **HRSE+** Accessories

MODEL	HRS+ / HRSE+
	ABB.
Post-heating electric battery	BE
Post-heating water coil (internal)	BW
Section with hot/cold water coil	SBFR
Return filter class F7	F7CF
Post Filtration Section F7	DSF7
Post Filtration Section F9	DSF9
Adjustment damper	SR
Section 3 dampers for mixing/recirculation	RMS
Servomotor for SR damper	SM
Servo motor for SR damper with spring return	SMR
Servomotors for defr. dampers RMS	3SM230
Servomotors for defr. dampers RMS with spring return	3SMR230
Automatic free cooling bypass kit	KBP
Section circ. nozzle	SBC
Duct silencers	SSC
Warning lamp kit	KLS
Pressure switch for dirty filter alert	PS
Anti-freeze thermostat	ATG
2-way valve kit with servomotor on-off (BW-SBFR)	V2O
3-way valve kit with modulating servomotor (BW-SBFR)	V3M
Ionizer Module	ION
Outdoor installation kit	EXT
Outdoor air casing kit	CPA
HRS+ ADJUSTMENTS	
AC unit control panel with bypass	PCU
AC unit speed selector	SV
HRSE+ ADJUSTMENTS	
AC unit control panel with bypass	PCUE
Unit control panel with Modbus board	PCUEM
Unit control panel with 0-10V board	MCUE
Unit control panel with 0-10V board and Modbus board	MCUEM
Continuous flow fans	VSD
HRS+ / HRSE+ ADVANCED ADJUSTMENTS	
Management system with wall-mounted panel	SIGQ
Management system with on-board panel	SIGB
Modbus serial board	SCMB
CO2 duct probe	QSC
CO2 wall probe	QSA
Duct humidity probe	USD
Wall humidity probe	USW



REVERSIBLE HEAT PUMPS



BWHE-S

AIR -TO-WATER HEAT PUMPS from 20 kW to 42 kW

BWHE-Si

AIR -TO-WATER HEAT PUMPS from 20 kW to 42 kW

BWHE-ZS

AIR -TO-WATER HEAT PUMPS from 46 kW to 182 kW

ECA Technology Air-to-water heat pump

Our objective is to create solutions for environmentally and energetically sustainable comfort.
In all the environments we spend time in.
In all the moments we live.

The targeted combination of research, design and advanced technology has enabled us to devise **360° reliable, efficient installation systems**, which provide well-being in residential as well as commercial buildings where **producing comfort while reducing energy maintenance costs** is essential.

ECA Technology's reversible heat pump systems, as a replacement for traditional systems, are designed to be integrated with a range of hydronic units to ensure optimum performance and activity.

Versions

BWHE-S
Air to water heat pump from 20 to 42kw

BWHE-Si
INVERTER Air to water heat pump from from 20 to 42kw

BWHE-ZS
Air to water heat pump from 46 to 182 kw

BWHE-S / BWHE-Si Air to water heat pump

New range of BWHE series monobloc outdoor air/water heat pumps in R32 ecological gas, suitable for both comfort and process applications, designed to provide the best comfort and maximum respect for the environment.

Available in two versions:
BWHE S reversible heat pump
BWHE Yes reversible heat pump with inverter compressor

The standard versions with hermetic scroll compressor complete with rubber anti-vibration mounts. The on-off compressors are equipped with a crankcase heater as standard.
The versions with inverter compressor with permanent magnet brushless motor and variable speed are designed to maximize seasonal efficiency and reduce the total starting current as its starting always occurs with an acceleration ramp.
Source side coil in aluminum finned copper with a high exchange surface with fin pitch sized to maximize heat exchange and reduce the acoustic impact and hydrophilic treatment to facilitate the drainage of condensation water from the coil.
Helical fans directly coupled to the 6-pole external rotor electric motor, IP 54 protection degree with accident prevention protection grid; User side exchanger with brazed plates in insulated AISI 316 stainless steel;

The unit includes

- General disconnecting device and protection of auxiliary and power circuits,
- Flow switch (supplied)
- Advanced Control
- Circuit breakers
- Battery protection net,
- Summer/Winter and On/Off selection from digital input
- Condensate collection tray
- Electronic thermostatic valve
- Cu/Al battery with hydrophilic treatment
- Serial port for RS485 or TCP/IP BMS connection
- Condensation control with speed regulator

n.3 BWHE 28 kW

BWHE-S Air to water heat pump from 20 kW to 42 kW

MODEL		S18	S24	S30	S36	S45
Power supply	V/f/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
Cooling capacity (1)	kW	17,1	21,3	26,0	28,7	36,2
EER (1)		2,77	2,88	2,98	2,83	2,68
Heating Capacity (2)	kW	19,9	24,5	30,3	33,6	42,5
COP (2)		3,24	3,31	3,34	3,29	3,19
Number of compressors	N°	1/1	1/1	1/1	1/1	1/1
Number of fans	N°	1	2	2	2	2
Air flow volume	m3/h	9500	10400	18800	18900	18700
User exchange water flow rate	m3/h	2,99	3,78	5,21	5,78	7,31
User exchange load loss	kPa	13,2	17,2	20,4	24,8	17,7
Useful pump head (opt)	kPa	60	109	101	135	181
Tank capacity (opt)	Lt	130	130	130	130	130
Dimensions (see base) WxDxH	mm	1110*750*1370	1300*720*1580	1800*750*1610	1800*750*1610	1800*750*1610
Operating weight (base version)	Kg	235	250	305	315	320
Refrigerant / Q.tà	tipo / q.tà	R32 / 2,8	R32 / 3,85	R32 / 4,2	R32 / 4,2	R32 / 4,4
Tons CO2	tons	1,890	2,599	2,835	2,835	2,970

(1) EXTERNAL AIR TEMPERATURE 35°C; USER EXCHANGER INLET/OUTLET WATER TEMPERATURE 12/7°C. VALUES COMPLIANT WITH THE EN 14511 STANDARD.
(2) OUTDOOR AIR TEMPERATURE 7°C DB, 6°C WB; CONDENSER INLET/OUTLET WATER TEMPERATURE 40/45°C. VALUES COMPLIANT WITH THE EN 14511 STANDARD
NOTE: THE PRODUCTS INDICATED ABOVE, HERMETICALLY SEALED, CONTAIN FLUORINATED GREENHOUSE GASES REGULATED BY THE KYOTO PROTOCOL;

BWHE-S - Accessories

HYDRAULIC SYSTEM ACCESSORIES		S18	S24	S30	S36	S45
Pump	1P	-	-	-	-	-
Standard user-side pump with tank	1PS	-	-	-	-	-
Filling group with pressure gauge	GRPC	-	-	-	-	-
Antifreeze heater (for units without pumps)	RA	(s)	(s)	(s)	(s)	(s)
Antifreeze heater (for units with pumps)	RA	-	-	-	-	-
Antifreeze heater (for units with pump and tank)	RA	-	-	-	-	-
Water filter	FW	-	-	-	-	-
ELECTRICAL ACCESSORIES						
Advanced control	CA	(s)	(s)	(s)	(s)	(s)
Speed regulator condensation control	CRG	(s)	(s)	(s)	(s)	(s)
Remote user terminal	TERM	-	-	-	-	-
Single clean operating contacts	CP	-	-	-	-	-
Stopping the unit for temp. lower than the operating limit	ARU	(s)	(s)	(s)	(s)	(s)
Set point compensation in operation of the temp. external air	CSP	(s)	(s)	(s)	(s)	(s)
Double set point from digital input	SETD	(s)	(s)	(s)	(s)	(s)
Management relay of 1 external pump	RE1P					
ACCESSORIES						
Rubber vibration dampers	AG	-	-	-	-	-
Pre-painted aluminum battery	ALPR	-	-	-	-	-
Battery treated with anti-corrosion paints	ANTC	-	-	-	-	-
Condensate collection tray	VASC	(s)	(s)	(s)	(s)	(s)
Antifreeze heater for condensate collection tray	RAV	-	-	-	-	-
Battery protection net	RETE	(s)	(s)	(s)	(s)	(s)

BWHE-Si Air to water heat pump with **inverter** compressor from 20 kW to 42 kW

MODEL		Si18	Si24	Si30	Si36	Si45
Power supply	V/f/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
Cooling capacity (1)	kW	18,1	22,1	30,2	36,4	42,5
EER (1)		2,92	2,99	3,19	3,01	2,74
Thermal Power (2)	kW	19,4	23,5	31,5	38,4	45,0
COP (2)		3,24	3,21	3,36	3,29	3,05
n. compressors/ circuits	N°	1/1	1/1	1/1	1/1	1/1
Number of fans	N°	1	2	2	2	2
Air flow	m3/h	9500	10400	18800	18900	18700
User exchange water flow rate	m3/h	3,34	4,04	5,42	6,59	7,73
User exchange load loss	kPa	16,1	20,1	22,7	32,2	20,7
Useful pump head (opt)	kPa	59	109	89	109	173
Tank capacity (opt)	Lt	130	130	130	130	130
Dimensions (see base) WxDxH	mm	1110*750*1370	1300*720*1580	1800*750*1610	1800*750*1610	1800*750*1610
Operating weight (see base)	Kg	239	257	310	323	330
Refrigerant / Qty	tipo / q.tà	R32 / 2,8	R32 / 3,85	R32 / 4,2	R32 / 4,2	R32 / 4,4
Refrigerant / Qty	tons CO2	1,890	2,599	2,835	2,835	2,970

(1) EXTERNAL AIR TEMPERATURE 35°C; USER EXCHANGER INLET/OUTLET WATER TEMPERATURE 12/7°C. VALUES COMPLIANT WITH THE EN 14511 STANDARD.
(2) OUTDOOR AIR TEMPERATURE 7°C DB, 6°C WB; CONDENSER INLET/OUTLET WATER TEMPERATURE 40/45°C. VALUES COMPLIANT WITH THE EN 14511 STANDARD
NOTE: THE PRODUCTS INDICATED ABOVE, HERMETICALLY SEALED, CONTAIN FLUORINATED GREENHOUSE GASES REGULATED BY THE KYOTO PROTOCOL;

BWHE-Si - Accessories

HYDRAULIC SYSTEM ACCESSORIES		Si18	Si24	Si30	Si36	Si45
Pump	1P	-	-	-	-	-
Standard user-side pump with tank	1PS	-	-	-	-	-
Filling group with pressure gauge	GRPC	-	-	-	-	-
Antifreeze heater (for units without pumps)	RA	(s)	(s)	(s)	(s)	(s)
Antifreeze heater (for units with pumps)	RA	-	-	-	-	-
Antifreeze heater (for units with pump and tank)	RA	-	-	-	-	-
Water filter	FW	-	-	-	-	-
ELECTRICAL ACCESSORIES						
Advanced control	CA	(s)	(s)	(s)	(s)	(s)
Speed regulator condensation control	CRG	(s)	(s)	(s)	(s)	(s)
Remote user terminal	TERM	-	-	-	-	-
Single clean operating contacts	CP	-	-	-	-	-
Stopping the unit for temp. lower than the operating limit	ARU	(s)	(s)	(s)	(s)	(s)
Set point compensation in operation of the temp. external air	CSP	(s)	(s)	(s)	(s)	(s)
Double set point from digital input	SETD	(s)	(s)	(s)	(s)	(s)
Management relay of 1 external pump	RE1P	-	-	-	-	-
ACCESSORIES						
Rubber vibration dampers	AG	-	-	-	-	-
Pre-painted aluminum battery	ALPR	-	-	-	-	-
Battery treated with anti-corrosion paints	ANTC	-	-	-	-	-
Condensate collection tray	VASC	(s)	(s)	(s)	(s)	(s)
Antifreeze heater for condensate collection tray	RAV	-	-	-	-	-
Battery protection net	RETE	(s)	(s)	(s)	(s)	(s)

BWHE-ZS Air-to-water heat pumps from 46 kW to 182 kW

Range of **air-to-water heat pumps** with axial fans and R410a gas designed and developed to provide optimum comfort and the highest levels of environmental well-being. Fully configurable with a wide range of models and accessories.
Compressors are hermetic scroll orbiting spiral compressors connected in tandem. They are equipped with thermal protection and an oil equalization line.
Condenser consisting of a coil with copper pipes and aluminium fins with a high exchange surface area. The base of each battery includes anti-ice control logic, which helps prevent ice from forming on the underside of the coil and therefore allows the unit to operate even in extremely cold temperatures and high humidity levels;
Helical fans directly coupled to 6-pin external rotor electric motor, IP 54 protection class with grille guard;
AISI 316 stainless steel brazed plate heat exchanger on the utility side, insulated with a closed-cell foam shell. The exchanger is equipped with a temperature probe for frost protection and a vane flow switch supplied as standard.

The unit includes

- Fixed-setting automatic compressor switches,
- Fan fuses and auxiliary circuits,
- Numbered electrical cables in electrical panel,
- Flow switch or differential pressure switch fitted,
- Condensation control with speed controller for models Z32 to Z102,
- Inlet water control,
- RS485 serial connection with Modbus protocol,
- TCP-IP (Ethernet) serial connection with Modbus protocol (only for units with advanced control),
- TCP-IP port (Ethernet) with integrated web server (only for units with advanced control),
- Individual potential free contacts (compressors, fans and pumps when present),
- Coil protection mesh;
- Antifreeze element (v. without pumps).

BWHE-ZS Air-to-water heat pump from 46 kW a 182 kW

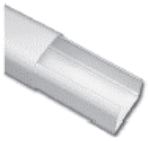
MODELLO		ZS32	ZS42	ZS52	ZS62	ZS72	ZS82	ZS92	ZS102	ZS122	ZS132	ZS152	ZS172
Power supply	V/f/Hz	400/3+N/50											
Cooling capacity (1)	kW	44,7	49,3	53,2	62,2	75,5	80,9	99,8	110,5	120,4	139,8	157,9	178,6
EER (1)		3,34	3,12	3,06	3,27	3,28	3,21	3,29	3,25	3,03	3,36	3,24	3,20
Thermal Power (2)	kW	46,10	50,80	54,70	64,10	75,50	81,90	102,20	112,80	123,20	142,50	161,90	183,00
COP (2)		3,42	3,34	3,36	3,41	3,34	3,34	3,36	3,44	3,43	3,40	3,39	3,38
n. compressors/ circuits	N°	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1
Number of fans	N°	2	2	2	2	2	3	2	2	2	3	3	3
Air flow	m3/h	18.000	18.000	18.000	20.000	28.000	28.000	42.000	42.000	42.000	59.000	59.000	59.000
Useful pump head (opt)	kPa	125	149	151	142	140	181	155	154	177	170	162	174
Tank capacity (opt)	Lt	165	165	165	200	200	390	390	390	700	700	700	700
Dimensions (see base) WxDxH	cm	226*103*180			326*113*180			326*113*238			426*113*238		
Operating weight (see base)	Kg	543	567	578	823	880	883	1088	1116	1167	1384	1452	1480
Refrigerant	tipo	R32											
Refrigerant	q.tà	7,7	7,7	7,7	11	12,2	13	14,6	15,6	18	23,1	23,1	24,5

(1) External air temperature 35°C; user exchanger inlet/outlet water temperature 12/7°C. Values compliant with the EN 14511 standard.
(2) Outdoor air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with the EN 14511 standard
Note: The products indicated above, hermetically sealed, contain fluorinated greenhouse gases regulated by the Kyoto Protocol;

BWHE-ZS - Accessories

MODEL		ZS32	ZS42	ZS52	ZS62	ZS72	ZS82	ZS92	ZS102	ZS122	ZS132	ZS152	ZS172
ACCESSORY VERSIONS													
Silenced version	LN	-	-	-	-	-	-	-	-	-	-	-	-
Super-silenced version	SLN	-	-	-	-	-	-	-	-	-	-	-	-
HYDRAULIC MODULE ACCESSORIES													
Pump	1P	-	-	-	-	-	-	-	-	-	-	-	-
Pump and tank	1PS	-	-	-	-	-	-	-	-	-	-	-	-
Antifreeze resistance (see pump) (b)	RA1P	-	-	-	-	-	-	-	-	-	-	-	-
Antifreeze resistance (see pump and tank) (b)	RA1PS	-	-	-	-	-	-	-	-	-	-	-	-
Water side safety valve	VSIW	-	-	-	-	-	-	-	-	-	-	-	-
Water filter (a)	FW	-	-	-	-	-	-	-	-	-	-	-	-
REFRIGERATING SYSTEM ACCESSORIES													
Condensation control speed regulator	RG	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Pressure gauges	MAFR	-	-	-	-	-	-	-	-	-	-	-	-
Electronic thermostatic valve	VTE	-	-	-	-	-	-	-	-	-	-	-	-
ELECTRICAL ACCESSORIES													
Advanced control	CA	-	-	-	-	-	-	-	-	-	-	-	-
Electronic soft starter	SOFT	-	-	-	-	-	-	-	-	-	-	-	-
Auto switches (in place of fuses)	IACV	-	-	-	-	-	-	-	-	-	-	-	-
Single clean contacts work.	CP	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Rem. user term. (basic check)	TERMB	-	-	-	-	-	-	-	-	-	-	-	-
Rem. user term. (advanced control)	TERMA	-	-	-	-	-	-	-	-	-	-	-	-
Connection RS485 Modbus serial	SERI	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
ACCESSORIES													
Rubber vibration dampers	AG	-	-	-	-	-	-	-	-	-	-	-	-
Battery protection net	RETE	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Treat. battery anti-corrosion	ANTC	-	-	-	-	-	-	-	-	-	-	-	-
Condensate collection tray	VASC	-	-	-	-	-	-	-	-	-	-	-	-

AIR-CO ACCESSORIES



Ducts

Insulated copper pipes

Condensate drain accessories

Supports for outdoor units

Air distribution

Modular control systems

Refrigeration equipment

Installation solutions - **DUCTS** and **ACCESSORIES**

Monosplit **65x50 mm** and Multisplit **90x65mm**

	CODE	DESCRIPTION	PACKAGE
	6501001 6502001	Duct 65x50 Duct 90x65 - 2 m lengths -	24 M 16 M
	6501005 6502005	External bend 65x50 External bend 90x65	8 PCS 6 PCS
	6501004 6502004	Internal bend 65x50 Internal bend 90x65	8 PCS 6 PCS
	6501003 6502003	Flat bend 65x50 Flat bend 90x65	12 PCS 8 PCS
	6501006 6502006	T-fitting 65x50 T-fitting 90x65	4 PCS 3 PCS
	6501002 6502002	Standard end cap 65x50 Standard end cap 90x65	16 PCS 12 PCS
	6501007	End cap with rosette 65x50	16 PCS
	6501008	Cov Clamp 65x50	30 PCS
	6501009	Wall rosette 65x50	15 PCS
	6502008	Reduction connection fittings 90x65 - 65x50	6 PCS
	65010101	Flexible connection fitting 65x50	6 PCS

Installation solutions - **INSULATED COPPER PIPES**

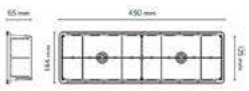
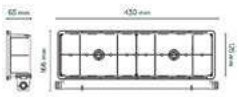
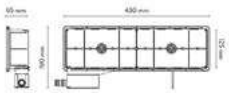
	CODE	DESCRIPTION	PACKAGE
	6303001S 6303002S 6303003S 6303004S 6303005S	Cooling copper pipe with SILVER (anti UV) Ø 6.35 Cooling copper pipe with SILVER (anti UV) Ø 9.52 Cooling copper pipe with SILVER (anti UV) Ø 12.70 Cooling copper pipe with SILVER (anti UV) Ø 15.80 Cooling copper pipe with SILVER (anti UV) Ø 19.05	50 M 50 M 50 M 25 M 25 M
	6303001 6303002 6303003 6303004 6303005	Cooling copper pipe smooth insulation Ø 6.35 Cooling copper pipe smooth insulation Ø 9.52 Cooling copper pipe smooth insulation Ø 12.70 Cooling copper pipe smooth insulation Ø 15.80 Cooling copper pipe smooth insulation Ø 19.05	50 M 50 M 50 M 25 M 30 M
	6302004	Cooling copper pipe corrug. insulation Ø 15.80	25 M

Ask for dedicated COPPER discount

Installation solutions - **FITTINGS**

	CODE	DESCRIPTION	PACKAGE
	6702141 6702142 6702143 6702144 6702145	Copper cap 1/4 (Ø 6.35) Copper cap 3/8 (Ø 9.52) Copper cap 1/2 (Ø 12.7) Copper cap 5/8 (Ø 15.8) Copper cap 3/4 (Ø 19.05)	100 PCS 100 PCS 100 PCS 100 PCS 50 PCS
	6702151 6702152 6702153 6702154 6702155	Copper gasket 1/4 (Ø 6.35) Copper gasket 3/8 (Ø 9.52) Copper gasket 1/2 (Ø 12.7) Copper gasket 5/8 (Ø 15.8) Copper gasket 3/4 (Ø 19.05)	100 PCS 100 PCS 100 PCS 100 PCS 50 PCS
	6702001 6702002 6702003 6702004 6702005	Nozzle 1/4 (Ø 6.35) Nozzle 3/8 (Ø 9.52) Nozzle 1/2 (Ø 12.7) Nozzle 5/8 (Ø 15.8) Nozzle 3/4 (Ø 19.05)	20 PCS 20 PCS 20 PCS 10 PCS 10 PCS
	6702101 6702102 6702103 6702104 6702105	Two-sided coupling 1/4 (Ø 6.35) Two-sided coupling 3/8 (Ø 9.52) Two-sided coupling 1/2 (Ø 12.7) Two-sided coupling 5/8 (Ø 15.8) Two-sided coupling 3/4 (Ø 19.05)	20 PCS 20 PCS 20 PCS 10 PCS 10 PCS
	6702121 6702122 6702123 6702125	Reducing adaptor 3/8M-1/4F Reducing adaptor 1/2M-3/8F Reducing adaptor 5/8M-1/2F Reducing adaptor 3/4M-5/8F	20 PCS 20 PCS 10 PCS 10 PCS
	6702131 6702136 6702134	Increasing adaptor 1/4M-3/8F Increasing adaptor 3/8M-1/2F Increasing adaptor 1/2M-5/8F	20 PCS 10 PCS 10 PCS

Installation solutions - **CONDENSATE DRAIN ACCESSORIES**

	CODE	DESCRIPTION	PACKAGE
	6801001	Condensate drain pipe TSC160	50 M
	6801002	2-way fitting RC2 ø 15/18	50 M
	6801013	PSC - Long Mini Pump 15lt/hr	1 PC
	1601081	2-way valve on/off *	1 PC
	1601082	3-way valve/4 connections on/off *	1 PC
	1601090	Recessed ready module without condensate drain	1 PC
	1601093	Recessed ready module with left and right condensate drain	1 PC
	1601095	Recessed ready module with integrated syphon (reversible)	1 PC
	6801005	Condensate drain syphon kit (anti-odour)	1 PC
	6801006	Condensate drip opener	1 PC
	6701001	Insulating tap cover Drain Stop	20 PAIRS

Installation solutions - **SUPPORTS FOR OUTDOOR UNITS**

	CODE	DESCRIPTION	PACKAGE
	6401057 6401058 6401059 6401060 6401061	Rubber base 250x150x h95 mm – max.100kg Rubber base 400x150x h95 mm – max.200kg Rubber base 600x150x h95 mm – max.500kg Rubber base 1000x150x h95 mm – max.500kg Rubber base 1200x150x h95 mm – max.500kg M10 galvanised hardware included	1PC 1PC 1PC 1PC 1PC
	6401062 6401063	Rubber base 600x200x h150 mm – max.500kg Rubber base 1200x200x h150 mm – max.500kg M10 galvanised hardware included	1PC 1PC
	6401052K	Brackets **MX480** with stainless steel bolts and grommets Total load-bearing cap. 160 kg - 480x420x850 mm	1 PC
	6401053K	Brackets **EME420** with galvanised bolts, level and grommets Total load-bearing cap. 120 kg - 420x400x800 mm	1 PC
	6401054	Bracket **MA560** with galvanised bolts and grommets Total load-bearing cap. 160 kg - 600x600x1000 mm - Preassembled	1 PC
	6401056	Superlong brackets **SL640** with galvanised bolts and grommets Total load-bearing cap. 300 kg - supplied with adjustable extensions	1 PC
	6401023	Brackets **SA400** pre-assembled with galvanised bolts and grommets Total load-bearing cap. 100 kg - 400x400 mm	4 PAIRS
	6401055	**Roof brackets** 15° (80 kg) - 30° (150 kg) adjustable with galvanised bolts and grommets - 520x850 mm	1 PC
	6401105 6401106	Telescopic floor support – (WxDxH) 450-730x450x250 mm with stainless steel bolts and grommets Telescopic floor support – (WxDxH) 450-730x450x400 mm with stainless steel bolts and grommets	1 PC 1 PC
	6401021 6401022	Floor support **FSE350** - 80x80x350 mm Stiff PVC and galvanised hardware Floor support **FSE450** - 80x80x450 mm Stiff PVC and galvanised hardware	4 PAIRS 4 PAIRS
	6701101 6701102	KIT 4 Adjustable floor supports (recommended for units**VRV/VRF** & chillers) Height from 9 to 14 cm - Load capacity up to 3000 kg Spanner for adjustable supports M/M 40x30	8 KITS 1 PC
	6701054 6701055 6701056	Rubber anti-vibration legs M/M 30x20 Rubber anti-vibration legs M/M 40x40 Rubber anti-vibration legs M 40x40	1 KIT 1 KIT 1 KIT

Installation solutions - **AIR DISTRIBUTION**

	CODE	DESCRIPTION	PACKAGE
	700100P1 700100P2 700100P3 7001004	ALUTERMOFLEX PL insulated flexible pipe ins. th. 25mm Ø125 mm ALUTERMOFLEX PL insulated flexible pipe ins. th. 25mm Ø160 mm ALUTERMOFLEX PL insulated flexible pipe ins. th. 25mm Ø200 mm ALUTERMOFLEX insulated flexible pipe ins. th. 25mm Ø250 mm	10 M 10 M 10 M 10 M
	7001007 7001008 7001009 7001010	FLEXAL flexible pipe Ø125 mm FLEXAL flexible pipe Ø160 mm FLEXAL flexible pipe Ø200 mm FLEXAL flexible pipe Ø250 mm	10 M 10 M 10 M 10 M
 	7001077 7001092	EBK painted steel diffuser - 595x595 mm for ceiling applications, colour white RAL 9010 PLENUM PBQ isolated for EBK diffuser H.250 mm Side connection Ø 200 mm	1 PC 1 PC
 	7001078 7001079 7001090A 7001091A	EFC diffuser Ø 150 mm, anodised aluminium RAL 9016 EFC diffuser Ø 200 mm, anodised aluminium RAL 9016 - ECL collar required - Polycarbonate ECL mounting collar Ø150 L100 Polycarbonate ECL mounting collar Ø200 L100 - for EFC diffusers -	1 PC 1 PC 1 PC 1 PC
	7001088 7001089	Extraction valve EEA enamelled steel RAL 9010 - Ø 150 mm Extraction valve EEA enamelled steel RAL 9010 - Ø 200 mm	1 PC 1 PC
	7001022 7001023 7001024 7001076	Delivery grille with 2 rows of anodised aluminium louvres, including adjustment damper, adjustable louvres pitch 20 mm, screw holes 200x100 mm 300x100 mm 300x150 mm 400x150 mm	1 PC 1 PC 1 PC 1 PC
	7001080 7001081 7001082	Linear delivery grille with 2 rows of anodised aluminium louvres, fixed horizontal 25°louvres and adjustable rear vert. louvres, includes calibration damper, screw holes 300x100 mm 300x150 mm 400x150 mm	1 PC 1 PC 1 PC
	7001085 7001086 7001087	Return air intake grille anodised aluminium colour, horizontal louvres fixed 15°, with filter, screw holes 300x100 mm 300x150 mm 400x150 mm	1 PC 1 PC 1 PC

Installation solutions - **AIR DISTRIBUTION**

	CODICE	DESCRIZIONE	CONFEZIONI
		Linear aluminum slot diffuser complete with deflector, sliding damper and perforated distributor	
	700DLN51F08	Linear diffuser with 1 slot L.800 RAL9010	1 PZ
	700DLN51F10	Linear diffuser with 1 slot L.1000 RAL9010	1 PZ
	700DLN51F15	Linear diffuser with 1 slot L.1500 RAL9010	1 PZ
	700DLN51F20	Linear diffuser with 1 slot L.2000 RAL9010	1 PZ
		Connection plenum in galvanized steel with external insulation and diffuser fixing by means of springs	
	700PDLI1F08	Insulated plenum L.800 H.250 1xø160	1 PZ
	700PDLI1F10	Insulated plenum L.1000 H.250 1xø160	1 PZ
	700PDLI1F15	Insulated plenum L.1500 H.250 2xø160	1 PZ
	700PDLI1F20	Insulated plenum L.2000 H.250 2xø160	1 PZ
		Return air intake grille in white RAL 9010, including subframe and filter, fixed 45° horizontal louvres with 25 mm pitch, magnetic closure for filter housing and replacement.	
	7001124	800x200 mm	1 PC
	7001127	1000x400 mm	1 PC
	7001128	1200x400 mm	1 PC
	7001125		
		Insulated galvanised sheet metal plenum	
	7001025	215 x h.115 x 250 Ø160	1 PC
	7001030	315 x h.115 x 250 Ø160	1 PC
	7001027	315 x h.165 x 250 Ø200	1 PC
	70010271	315 x h.165 x 250 Ø160	1 PC
	7001075	415 x h.165 x 250 Ø200	1 PC
	70010751	415 x h.165 x 250 Ø160	1 PC
	7001059 7001060	Conical reduction Ø200 - Ø160	1 PC
	7001053 7001054 7001055	Male fitting Ø160 Male fitting Ø200	1 PC 1 PC
	700106A 7001065 7001066 7001067	Y-fitting Ø160 Y-fitting Ø200 Y-fitting Ø200 - Ø160	1 PC 1 PC 1 PC
	7001061 7001062 7001063	T-fitting Ø160 T-fitting Ø200	1 PC 1 PC
	7001032	Aluminium adhesive tape	50 M
	7001035 7001036	Steel tube clamps (Ø 60-215mm) Steel tube clamps (Ø 60-270mm)	10 PCS 10 PCS

Installation solutions - **MODULAIR AIR DISTRIBUTION**

	CODE	DESCRIPTION	PACKAGE
	7002001 7002002 7002007 7002017	Modular electronic damper Ø152 Modular electronic damper Ø203 Modular damper motor Modular RJ45 damper motor (for WIRELESS system)	1 PC 1 PC 1PC 1PC

Installation solutions - **MODULAIR WIRELESS**

	CODE	DESCRIPTION	PACKAGE
	7002014	Wireless control unit with power supply unit, controls up to 5 dampers and 1 bypass damper; Remote ON-OFF control for air conditioners	1 PC
	7002013	Modulair wireless wall thermostat	1 PC
	7002015	By-pass motor for damper with RJ11 connection 6m cable	1 PC

Installation solutions - **MODULAIR WIRED**

	CODE	DESCRIPTION	PACKAGE
	7002003	Modulair wall thermostat with RJ11 connection 6m cable	1 PC
	7002003D	Recessed digital modulair thermostat with RJ11 connection 6m cable	1 PC
	7002004 7002005 7002006	Modular transformer 1 zone Modular transformer 2 zones Modular transformer 4 zones	1 PC 1 PC 1 PC

Installation solutions - **COOLING EQUIPMENT**

	CODE	DESCRIPTION	PACKAGE
	6903022	Universal gas reclaimer (suitable for all types of gas)	1PC
	6903015	Universal gas reclaimer filter N.B. a filter must be purchased for each type of gas used	1PC
	6901002 6901003	KIT R410A charging system and pressure gauge assembly KIT R407C charging system and pressure gauge assembly	1 PC 1 PC
	6902054	Non-refillable cylinder - R407C 750g	1PC
	6903013	Pump fitting 3/8 A 5/16	1PC
	6903016	Charging fitting for R407C cylinder	1PC
	6903017	Elbow fitting 1/4 F - 5/16 M	1 PC
	69030040	Torque spanner sets 17-22-24-26-27-29	1 PC
	6903011	Universal leak detector	1 PC
	6903010	Pipe bending set case 3/8"-1/2"-5/8"-3/4"-7/8"	1 PC

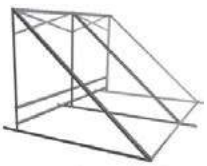
SOLAR WATER HEATING

Natural Circulation

COMPLETE SOLAR WATER HEATING KIT NATURAL CIRCULATION

Forced Circulation

COMPLETE SOLAR WATER HEATING KIT FORCED CIRCULATION



Forced circulation components

COLLECTORS, WATER HEATERS, ACCESSORIES

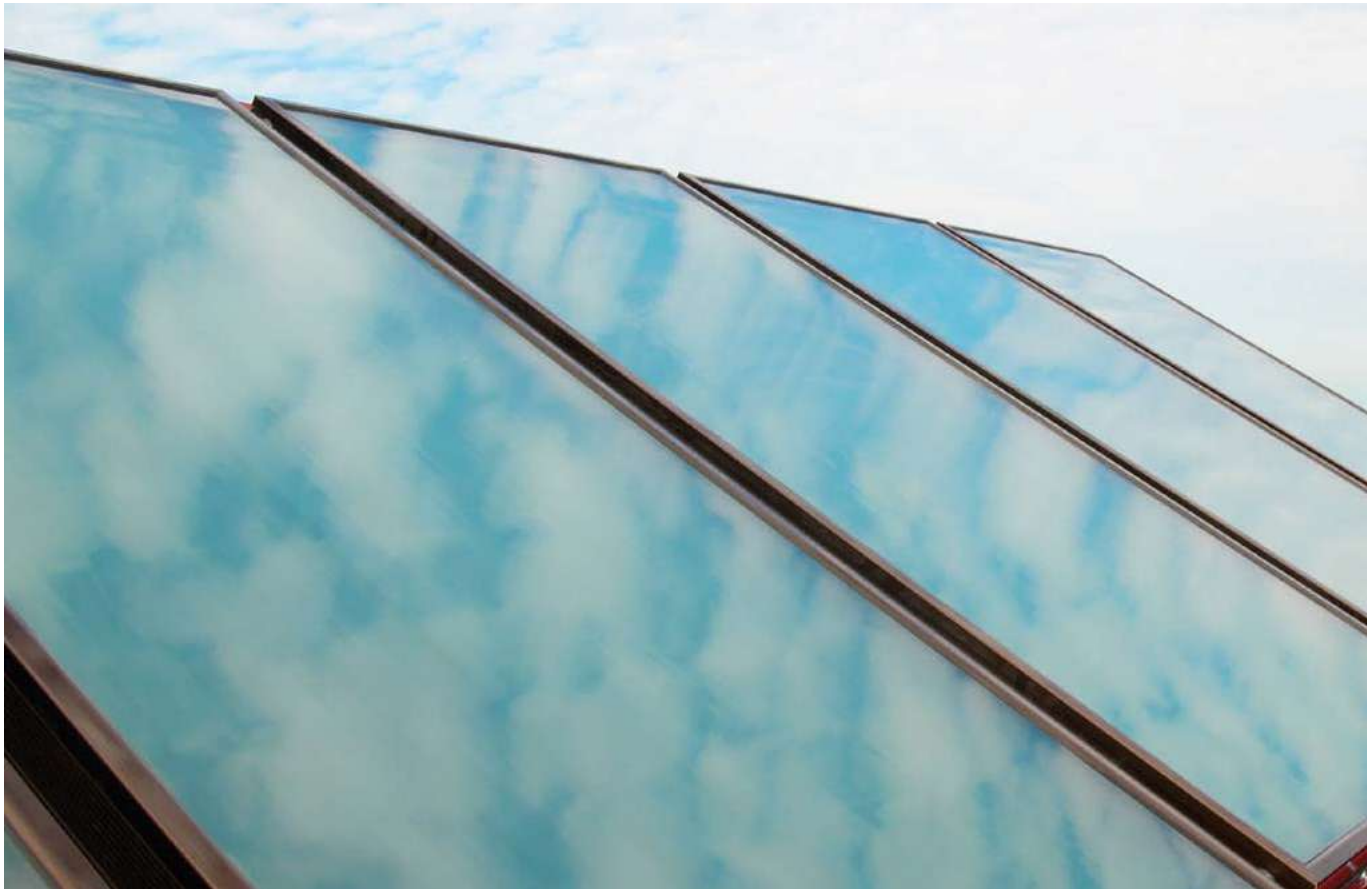
Solar Water Heating system

ECA Technology brings the heat of the sun into the home using highly efficient, renewable energy technology. The solar water heating system captures solar energy, stores it and uses it for **meet the requirements to produce domestic hot water and heating** that is environmentally friendly and cost-effective.

The comfort that is derived from solar water heating systems can be measured in terms of the benefits for the environment and in a reduction in utility bills!
The system can be designed using **natural circulation** by installing a water heater just above the solar panel which stores the heat collected by the fluid circulating in the circuit in a natural manner.
If larger quantities of water are required, or positioning a tank above the panels is not possible, a **forced circulation** system can be designed to meet the needs of the customer, which transfers the collected heat to a domestic water tank via a heat exchanger.

Advantages

- Energy and cost savings of at least 50%,
- Can be integrated into existing or new systems;
- Increases the energy class of the building;
- Reduces CO2 emissions.



Natural Circulation

Natural circulation systems are the simplest applications of solar systems for the production of domestic hot water. In these systems, the water heater is installed close to the collector in its highest position. They are supplied in complete kits with a galvanised steel support structure, in models that suit a variety of requirements.

A Kit includes:

- Selective solar collector with prismatic tempered glass,
- Enamelled glass tank at 850°C,
- Pipeline cover casing,
- Liquid circulation pipeline kit and connection accessories,
- Glycol tank,
- Galvanised steel profiles to mount the frame,
- Hot-dip galvanised steel support structure,
- Safety valves,
- 2 kW round electric element with thermostat.

Solar water heating natural circulation

TECHNICAL DATA

MODEL		ESK160SR	ESK160SR	ESK200SR	ESK300SR
Collector	mod.	ESPS210	ESPS260		ESPS210
Quantity	No.	1	1	1	2
Dimensions	HxWxD	2050x1012x90	2050x1279x90		2050x1012x90 (x2)
Surface area	m²	2.08	2.62		2.08 (x2)
Open surface	m²	1.80	2.33		1.80 (x2)
Collector weight	kg	36	45		36 (x2)
Tank	mod.	EBN160R	EBN160R	EBN200R	EBN300R
Nominal capacity	l	160	160	200	300
Dimensions	Ø / L	530x1320	530x1320	570x1320	570x2050
Weight	kg	59	59	65	110
Energy class		C	C	C	C
Dissipation		68 W	68 W	65 W	87 W
Support structure (Weight)	kg	24	24	24	32
Code		**1901010**	**1901011**	**1901012**	**1901014**

Forced Circulation

Forced circulation systems are modular systems that can be installed in different positions with respect to solar collectors.
These systems include a hydraulic pump and electronic control unit, which allow complete control of the system.

A Kit includes:

- selective solar collector with prismatic tempered glass,
- enamelled steel water heater,
- hydraulic unit including pump, deaerator, and valve
- control panel,
- pipeline cover casing,
- liquid circulation fitting kit and connection accessories,
- glycol tank,
- galvanised steel profiles to mount the frame,
- hot-dip galvanised steel support structure,
- safety valves.

EPS collector and EBF water heater

TECHNICAL DATA

MODEL		ESM151S	ESM1/201S	ESM2/201S	ESM1/301S	ESM2/301S	ESM1/501S	ESM2/501S
Collector	mod.	ESPS260	ESPS210		ESPS260		ESPS210	
Quantity	No.	1	2		2		3	
Dimensions	HxWxD	2050x1279x90	2050x1012x90 (x2)		2050x1279x90 (x2)		2050x1012x90 (x3)	
Surface area	m²	2.62	2.08 (x2)		2.62 (x2)		2.08 (x3)	
Open surface	m²	2.33	1.80 (x2)		2.33 (x2)		2.33 (x3)	
Collector weight	kg	45	36 (x2)		45 (x2)		36 (x3)	
Tank	mod.	EBF150/1S	EBF200/1S	EBF200/2S	EBF300/1S	EBF300/2S	EBF500/1S	EBF500/2S
Nominal capacity	l	150	200	200	300	300	500	500
Dimensions	Ø / L	603x1050	603x1400	603x1400	603x1930	603x1930	730x1970	730x1970
Weight	kg	64	85	93	108	128	165	182
Energy class		C	C	C	E	E	E	E
Dissipation	W	76	85	85	136 W	136 W	169 W	169 W
Code		**1902011**	**1902012**	**1902013**	**1902014**	**1902015**	**1902018**	**1902019**

N.B. Estimates for forced circulation kits with AISI 316L stainless steel tanks are available

Forced Circulation Components

Support for collectors

MTDC

Hydraulic Unit

Expansion tank

COLLECTORS	CODE
Selective collector ESPS210 steel frame	1901100
Selective collector ESPS260 steel frame	1901101

ENAMELLED STEEL WATER HEATERS	CODE
EBF150/1S Water Heater 1 coil	1902201
EBF200/1S Water Heater 1 coil	1902202
EBF200/2S Water Heater 2 coil	1902203
EBF300/1S Water Heater 1 coil	1902204
EBF300/2S Water Heater 2 coil	1902205
EBF420/1S Water Heater 1 coil	1902206
EBF420/2S Water Heater 2 coil	1902207
EBF500/1S Water Heater 1 coil	1902208
EBF500/2S Water Heater 2 coil	1902209

ACCESSORIES	CODE
Hydraulic unit including pump, deaerator, valve for MTDC	1902299
Control panel mod. MTDC	1902103
Expansion tank 18L	1902302
Expansion tank connection pipe	1902601
Expansion tank support base	1902602
Glycol Tank 10L	1901502
Collector support (for models with 1 collector)	1902500
Collector support (for models with 2 collectors)	1902501
Collector support (for models with 3 collectors)	1902502
Hydraulic connection accessories (for models with 1/2 collectors)	1902401
Hydraulic connection accessories (for models with 3 collectors)	1902402
3 kW electric element with thermostat	1903000

SOLAR PHOTOVOLTAIC AND CHARGING STATIONS

Entrusting power generation to renewable energy sources while de-carbonising the electricity system is a goal that ECA Technology fully believes in and is continuing to promote. This is why it guarantees and encourages installation of customised photovoltaic systems for all building types, whether they be private homes, public buildings or production plants.

Monocrystalline panels with hulf-cut technology

NEW

POWER 430Wp - 580Wp

Fronius inverters

FRONIUS PRIMO - SYMO - ECO - GEN 24 PLUS

SMA inverters

SMA SINGLE-PHASE - THREE-PHASE

Kostal inverters

SINGLE-PHASE - THREE-PHASE - HYBRID

Coils

BYD PREMIUM HVS and HVS BATTERIES - LG CHEM RESU

EnSolar inverters and batteries

ON-GRID SINGLE-PHASE - THREE-PHASE - HYBRID

Car charging stations

RESIDENTIAL AND COMMERCIAL CAR CHARGING STATIONS

The **half-cut** technology

Half-Cut modules have twice the number of cells compared to traditional modules, so the panels will have 108 and 132 half cells.

The Half-Cut technology allows to increase the average power of the module while maintaining the same dimensions. The current flowing through each cell is smaller, being cut in half. As a result, it reduces power loss and increases performance.

The advantages:

• The cells, being smaller, suffer reduced mechanical stress. Consequently, there is less chance of them breaking;
• Thanks to the high power of the modules with half-cut cells, the license plate power of the plant is greater for the same area occupied;
• The upper and lower half of the module are independent and this guarantees a lower loss of energy in case of partial shading. In fact, if the lower half of the module is in shadow, the upper half continues to produce;
• Since the surface area is half that of whole cells, in half-cut cells the current produced is halved. So the module temperature will be lower, thus increasing the producibility.

430Wp Monocrystalline Panels with **half-cut** technology

LONGI photovoltaic panels, proposed by ECA Technology, are among the best on the market and offer high yields, quality and durability over time.
Solid and resistant design given by the materials it is made of: low-iron tempered glass with anti-reflective treatment, 3.2 mm thick, black frame and hollow chamber frame.

New generation HPBC (hybrid back contact passivation) **technology**, which improves the light absorption and photoelectric conversion capabilities of the cell, increasing the module's performance even in high temperature and low irradiation conditions. Furthermore, the two independent circuits of HALF-CUT technology allow for less energy loss in the event of shading and/or the presence of dirt.

430 Wp Monocrystalline Panel

The Module

• 108 first-class half-cut monocrystalline cells with HPBC (Hybrid Passivated Back Contact) technology;
• busbar-free design on the front side, which allows for a side free from shadowed metal contacts;
• single-line rear contact welding to improve the module's resistance to breakage;
• Power tolerance 0 /+3%;
• Solid PID resistance ensured by solar cell process optimization and careful module selection;
• Reduced risk of hot spots with optimized electrical design and lower operating current;
• Anodized aluminum frame, hollow chamber frame;
• Glass thickness 3.2 mm;
• Product warranty: 15 years;
• IEC 61215 / IEC 61730 certifications;
• Fire reaction class 1.

TECHNICAL DATA

MODELLO		430M
Nominal power PMPP	Wp	430
Power Tolerance		0 / +3%
Nominal voltage VMPP	V	32,84
Nominal current IMPP	A	13,10
No-load voltage VOC	V	39,13
Short-circuit current ISC	A	14,15
Module efficiency	%	22
NOCT	°C	45 ± 2°C
Maximum system voltage	V	1500 DC
Temperature coefficient ISC	%/°C	+0,050
Temperature coefficient VOC	%/°C	-0,230
Temperature coefficient PMPP	%/°C	-0,290
Dimensions HxWxD	mm	1722x1134x30
Weight	Kg	20,8
Max snow load	Pa/m²	5400

Standard Test Conditions (STC): Radiation intensity 1000 W/m²; spectral distribution AM 1.5; cell temperature 25± 2°C.

525 and **580 Wp** Monocrystalline Panels with **half-cut** technology

LONGI photovoltaic panels, proposed by ECA Technology, are among the best on the market and offer high yields, quality and durability over time.
Solid and resistant design given by the materials it is made of: 3.2 mm thick iron-poor tempered glass with anti-reflective treatment, black frame and hollow chamber frame.
New generation HPBC (hybrid back contact passivation) **technology**, which improves the light absorption and photoelectric conversion capabilities of the cell, increasing the module's performance even in high temperature and low irradiation conditions.
Furthermore, the two independent circuits of HALF-CUT technology allow for less energy loss in the event of shading and/or the presence of dirt.

525Wp Monocrystalline Panel

The Module

• 132 monocrystalline cells (for 525Wp panel) - 144 first-class half-cut monocrystalline cells (for 580Wp panel) with HPBC (Hybrid Passivated Back Contact) technology;
• busbar-free design on the front side, which allows for a side free from shadowed metal contacts;
• single-line rear contact welding to improve the module's resistance to breakage;
• Power tolerance 0 /+3%;
• Solid PID resistance ensured by solar cell process optimization and careful module selection;
• Reduced risk of hot spots with optimized electrical design and lower operating current;
• Anodized aluminum frame, hollow chamber frame;
• Glass thickness 3.2 mm;
• Product warranty: 15 years;
• IEC 61215 / IEC 61730 certifications;
• Fire reaction class 1.

TECHNICAL DATA

MODEL		525M	580M
Nominal power PMPP	Wp	525	580
Power Tolerance		0 / +3%	0 / +3%
Nominal voltage VMPP	V	40,06	44.06
Nominal current IMPP	A	13,11	13,17
No-load voltage VOC	V	47,73	52,21
Short-circuit current ISC	A	14,12	14,20
Module efficiency	%	22,1	22,5
NOCT	°C	45 ± 2°C	45 ± 2°C
Maximum system voltage	V	1500 DC	1500 DC
Temperature coefficient ISC	%/°C	+0,050	+0,050
Temperature coefficient VOC	%/°C	-0,230	-0,230
Temperature coefficient PMPP	%/°C	-0,290	-0,290
Dimensions HxWxD	mm	2094x1134x35	2278x1134x35
Weight	Kg	26	27,5
Max snow load	Pa/m²	5400	5400

Standard Test Conditions (STC): Radiation intensity 1000 W/m²; spectral distribution AM 1.5; cell temperature 25± 2°C.

FRONIUS Inverters

Fronius PRIMO single-phase inverter

Available in power classes **from 3.0 to 8.2 kW**.
The ideal single-phase inverter for domestic photovoltaic systems, that includes excellent configuration flexibility.
Fronius Primo makes installation and maintenance easy and can be used for both new and existing systems. The communication package with WLAN and energy management is integrated as standard.


Fronius Primo

Fronius SYMO three-phase inverter

Available in power classes **from 3.0 to 20.0 kW**.
Fronius Symo is a transformer-free, three-phase inverter suitable for installations of any size, owing to its maximum voltage of 1,000V, wide operating range and dual MPPT.
The adaptive Dynamic Peak Manager algorithm allows for maximum system output, even with localised shading. Connection to the Internet via WLAN or Ethernet and simple integration of third-party components make Fronius Symo one of the most communicative inverters on the market.


Fronius Symo

Fronius ECO three-phase inverter

Available in power classes **25.0 and 27.0 kW**.
The Fronius Eco three-phase inverter perfectly meets the requirements of large-scale systems. The low weight and SnapINverter mounting system allow the three-phase unit to be installed quickly and easily both indoors and outdoors. In addition, integrated string fuse holders on all pins and optional DC fuse eliminate the need for string combination boxes.


Fronius ECO

Fronius GEN 24 PLUS hybrid inverter

Fronius **Primo GEN24 Plus**, single-phase in power classes ranging from **3.0 to 6.0 kW**, and Fronius **Symo GEN24 Plus**, three-phase in power classes ranging from **6.0 to 10.0 kW**.
Owing to the variety of integrated functions such as energy management options, WLAN connection as standard, Ethernet interface and the very simple integration of third-party components, these appliances can easily be adapted to different customer requirements. Extensive modular nature of the storage function in combination with BYD high-voltage batteries.


Fronius GEN24PLUS Primo

Fronius TAURO three-phase inverter

The Fronius Tauro three-phase inverter, available in **50 and 100 kW** power classes, is the ideal solution for commercial installations owing to its flexible configurability and low installation costs. In addition, the innovative mounting and mechanical ventilation systems allow the Fronius Tauro to maintain a high energy output, even when exposed to direct sunlight.
Inverter-mounted arresters do not require integration of additional components and the AC-side chain connection reduces the number of AC panels.

Product warranty: 2 years (unless 'end-user registration' is carried out at www.solarweb.com for free extension to 5 or 7 years)


Fronius TAURO

SMA Inverters

Sunny Boy single-phase inverter

SMA Sunny Boy single-phase inverter
Single-phase inverter for residential systems with advanced monitoring in the power classes from 3.0 to 6.0 kW.
Optimized yields even in shading situations, thanks to the SMA Shadefix solution integrated directly into the inverter at no additional cost.


Sunny Boy Inverter

Sunny Tripower three-phase inverter

SMA Sunny Tripower
Three-phase inverters with advanced monitoring in power classes 3.0 to 10.0 kW.
- Interface device integrated in the machine;
- Optimized yields even in shading situations, thanks to the SMA Shadefix solution integrated directly into the inverter at no additional cost.


Sunny Tripower Inverter

Smart Energy three-phase inverter

SMA Sunny Tripower Smart Energy
Three-phase hybrid inverter for residential systems in the power classes from 5.0 to 10.0 kW.
- Compatible with high voltage batteries from major manufacturers;
- Compact solution with quick and intuitive installation via app;
- Integrated backup function that guarantees supply even in the event of a power grid blackout.


Smart Energy Inverter

Sunny Tripower three-phase inverter

SMA Sunny Tripower X 12 / 15 / 20 / 25
Three-phase inverters for large residential and commercial PV systems in the power classes from 12.0 to 25.0 kW.
- Monitoring of up to 5 SMA inverters (max. 135kVA) and a meter, thanks to the integrated System Manager function with direct access to Sunny Portal powered by ennexOS;
- SMA Dynamic Power Control for dynamic regulation of active and reactive power;
- Protection against DC overvoltages;
- High input current for high performance photovoltaic modules;
- Possibility of expansion to future energy management functions thanks to the modular design;


Sunny Tripower Inverter

Sunny Tripower three-phase inverter

SMA Sunny Tripower CORE2 STP110-60
Inverters for large decentralized systems in the megawatt range
Your benefits
- 12 MPPT trackers for maximum flexibility in the system design phase;
- Easy commissioning via Data Manager M and monitoring with Sunny Portal;
- Optimized plant yield thanks to the integrated and patented SMA Shadefix software solution.


Sunny Tripower CORE2 Inverter

KOSTAL PIKO Inverters

Kostal Piko MP Plus single-phase inverter

The PIKO MP plus is the ideal single-phase hybrid inverter for small systems and is available in power classes from **1.5 to 5 kW**. May also be retrofitted with BYD high-voltage batteries
- Ideal for revamping due to wide MPPT voltage range.
- Integrated DC disconnector and graphic display for easy set-up configuration.
- Free monitoring of the PV system via KOSTAL Solar Portal, KOSTAL Solar App and integrated Webserver.

Kostal Piko MP Plus

Kostal Piko three-phase inverter

Three-phase inverter, available in power classes from **10 to 20 kW**, with wide input current and voltage ranges, as well as flexible string configuration. Independent MPPT trackers ensure optimal system management at all times with almost any combination. The PIKO is ideal for very large roofs and commercial buildings.

Kostal Piko

Plenticore Plus hybrid three-phase inverter

PLENTICORE plus is a three-phase hybrid inverter with 3 MPPT trackers and, with its power classes of **3 to 10 kW**, it can be used flexibly depending on requirements.
- Hybrid inverter with on-demand battery input using one of the 3 independent MPPTs.
- Ideal for revamping due to high configuration flexibility.
- Extended modular nature of storage function,owing to five power sizes and five sizes of storage capacity (in combination with BYD high-voltage batteries).
-Smart communication ensured by monitoring on a single portal/web app.

Plenticore Plus

Kostal Piko CI inverter

The new PIKO CI (Commercial Inverter) inverters in power classes **30, 50 and 60 kW** provide a variety of options suitable for the needs of large photovoltaic systems.
- Optimised generator design using system voltage up to 1100 V.
- Simple and cost-effective DC installation with no combiner boxes.
- Disconnection of the generator on site via integrated DC disconnector.
- Flexible generator configuration thanks to up to 50% over-assignment (DC to AC).
- Integrated KOSTAL Smart AC Switch to replace external coordinated switch.
- Simple communication (daisy chain) via double LAN interface (RJ45) with integrated switch.
- Proven communication via integrated RS485 bus as standard.
- System information available at all times using the integrated data logger.

Piko CI

Product warranty: 2 years (unless 'end user registration' carried out on KOSTAL Solar Webshop for free extension to 5 years)

Batteries for **Fronius**, **SMA** and **Kostal** Inverters

BYD Lithium Iron Phosphate (LFP) batteries without cobalt are **compatible with single-phase and three-phase inverters**.
- Backup functions in the event of emergency and off-grid operation.
- Optimum levels of efficiency owing to real high-voltage series connection.
- Plugin connection with no internal cabling allows greater flexibility and ease of use.
- Two versions are available to meet all requirements.

Product warranty 10 years

Battery BID

BYD Battery-Box Premium HVM

High-voltage storage system consisting of **3 to 8 modules**, 2.76 kWh HVM battery connected in series to obtain a **usable capacity from 8.3 to 22.1 kWh**. Parallel connection of up to 3 identical towers allows a maximum capacity of 66.2 kWh.

BYD Battery-Box Premium HVS

High-voltage storage system consisting of **2 to 5 modules**, 2.56 kWh HVS battery connected in series to obtain a **usable capacity from 5.1 a 12.8 kWh**. Parallel connection of up to 3 identical towers allows a maximum capacity of 38.4 kWh.

ENTRADE Inverters

ON-GRID Inverter

ENR-H models (single phase up to 5 kW):
Single-phase hybrid inverter with Lithium-LFP storage management, equipped as standard with the emergency/UPS function in the event of a network blackout with power up to 3 kW and with the Anti-Injection Block function which allows you to maximize self-consumption without injection excess energy into the network.
Wi-Fi monitoring + App and LAN/Wi-Fi remote monitoring with Datalogger.
Product warranty: 5 years

Entrade ONGRID HYBRID
model ENR-H

Models ENR-J1H (single-phase up to 6 kW) and ENR-J3H (three-phase up to 30.0 kV
Hybrid inverter with Lithium-LFP storage management, equipped as standard with th
Anti-Injection Block function which allows you to maximize self-consumption witho
introducing excess energy into the grid.
Double MPPT and parallelable up to 6 units. Wi-Fi monitoring + App as standard.
Product warranty: 10 years

Entrade ONGRID HYBRID
models ENR-J1H and ENR-J3H

Batteries for **ENTRADE** Inverters

BAT-US3000 and US5000

Nominal 3.55 kWh and 4.8 kWh lithium-LFP battery, 6000 cycles
Product warranty: 10 years


BAT-US2000


BAT-US5000

Battery Holder Cabinets

Battery cabinets compatible with BAT-US2000 and BAT-LPS48-110 models.


For BAT-US2000
and BAT-LPS48-110


For BAT-US2000

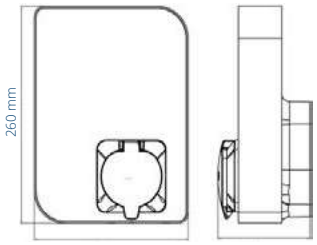
The smart **recharge**

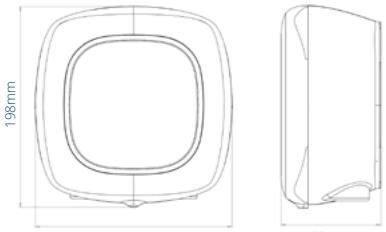
ECA Technology, in pursuing its mission of combining human well-being and environmental respect, has developed a car charging system.

Thanks to the continuous technological innovation, solutions have been designed for the charging of electric vehicles that can be easily installed and easily managed. ECA Technology offers the best charging experience for all electric vehicles.

Commercial charging station

Residential charging station





Residential Solution

MODEL		Residential charging station
Maximum output	kW	22
Input voltage	V	400
Maximum current	A (3P)	32 A (3P)
Cable section	mm²	5 x 10
Configurable charging current		between 6 A and maximum output
Network frequency	Hz	50 / 60
Grip		type 2
Degree of protection		IP55 / IK10
Overvoltage category		III
Detection of residual current		DC 6 mA
Differential magnetothermic circuit breaker		Mandatory external switch (type A or B according to local regulations)
Charging mode		Mode 3
Size (lxaxp)	mm	198x201x99
Net weight without cable	kg	1
Operating temperature	°C	-25 - +40 without direct solar radiation
Storage temperature	°C	-10 - +70
Assembly		on a wall or on a pedestal
USER INTERFACE AND COMMUNICATION		
Connectivity		Wi-Fi / Bluetooth
User identification		App / Web Portal
User interface		App / Web Portal
Information on the status of the loader		LED RGB / App / Web Portal
Functions included		
Optional functions		3G-4G connectivity / Power boost
SUPPORT ON THE GROUND (COLUMN)		
Size (WxHxD)	mm	350x1705,5x135
Net weight	kg	30
Storage temperature	°C	-40 - +70
Protection class		IP55 / IK10
Material		Structure: Galvanized + Tint Lids: SUS 430 + Tint

Residential charging station

SINGLE-PHASE	
N. 1	Pulsar Max Wallbox charging station with 5 mt type 2 cable included, 7.4 kW max. charging power (single phase), OCCP protocol, single phase black version up to 32A, configurable charging current from 6A up to max 32A, 6 mA DC residual current detection, Cat III overcurrent detection, with WiFi connectivity / Bluetooth, charger status information via RGB LED and App / Web Portal, incl. Power Sharing Smart function
N. 1	Power Boost - Metro monofase da installare nel Quadro Generale

THREE-PHASE	
N. 1	Pulsar Max Wallbox charging station with 5 mt type 2 cable included, max. 22kw (three-phase), OCCP protocol, three-phase black version up to 32A, configurable charging current from 6A up to max 32A, 6 mA DC residual current detection, Cat III overcurrent detection, with WiFi connectivity / Bluetooth, charger status information via RGB LED and App / Web Portal, incl. Power Sharing Smart function
N. 1	Power Boost - Misuratore trifase da installare nel Quadro Generale

OPTIONAL ACCESSORIES		CODE
Wall Mount for Cable Cable		**1802934**
Ground support		**1802937**
Weatherproof protective cover for prepainted aluminium ground support (particularly recommended for outdoor installations)		-

Commercial solution - **Wall** installation

MODEL		Commercial charging station
Maximum output	kW	22
Input voltage	V	400
Maximum current	A (3P)	32 A (3P)
Cable section	mm²	5 x 10
Configurable charging current		between 6 A and maximum output
Network frequency	Hz	50 / 60
Grip		type 2
Degree of protection		IP54 / IK08
Overvoltage category		III
Detection of residual current		DC 6 mA
Differential magnetothermic circuit breaker		Mandatory external magnetothermic switch 3P+N 6ka 40A + differential Type A 4M.
Charging mode		Mode 3
Size (lxaxp)	mm	192x260x113
Net weight without cable	kg	2
Operating temperature	°C	-25 - +40 without direct solar radiation
Storage temperature	°C	-40 - +70
Assembly		on a wall or on a pedestal
USER INTERFACE AND COMMUNICATION		
Connectivity		Wi-Fi / Ethernet / Bluetooth
User identification		App / RFID / Portale web
User interface		App / Portale web
Information on the status of the loader		LED RGB / App / Portale Web
Functions included		Power Sharing Smart
Optional functions		Connettività 3G-4G / Potenziamento di potenza

Commercial charging station

	SINGLE-PHASE
N. 1	Charging station Wallbox COPPER SB black with type 2 power socket, max. 7.4kw charging power (single phase), configurable charging current from 6A up to max 32A, with WiFi connectivity / Ethernet / Bluetooth, Charger status information via RGB LED and Wallbox App / myWallbox Portal, incl. Power Sharing Smart function, RFID authentication, OCPP
N. 1	Power Boost - Single-phase meter to be installed in the main panel

	TRIFASE
N. 1	1 Wallbox COPPER SB charging station black with type 2 power socket, max. 22kw charging power (three-phase), configurable charging current from 6A up to max 32A, with WiFi / Ethernet / Bluetooth connectivity, Charger status information via RGB LED and Wallbox App / myWallbox Portal, incl. Power Sharing Smart function, RFID authentication, OCPP
N. 1	Power Boost - Misuratore trifase da installare nel Quadro Generale

OPTIONAL ACCESSORIES		CODE
AC charging cable Type 2 - Type 2, 5m, three-phase, 32 A		**1802933**
Wall Mount for Cable Cable		**1802934**
Packaging 10 RFID Card		**1802932**

Commercial Solution - **Ground Mount** Installation

SUPPORT ON THE GROUND (COLUMN)		
Size (WxHxD)	mm	350x1705,5x135
Net weight	kg	30
Storage temperature	°C	-40 - +70
Protection class		IK10
Material		Structure: Galvanized + Tint Lids: SUS 430 + Tint

Commercial charging station with ground support useful for the installation of 2 charging points

THREE-PHASE WITH 1 CHARGER	
N. 1	Charging station Wallbox COPPER SB black with type 2 power socket, max. 22kw charging power (three-phase), configurable charging current from 6A up to max 32A, with WiFi / Ethernet Bluetooth connectivity, Charger status information via RGB LED and Wallbox App / myWallbox Portal, incl. Power Sharing Smart function, RFID authentication, OCPP
N. 1	Ground support
N. 1	Internal electrical panel container
N. 1	Power Boost - Misuratore trifase da installare nel Quadro Generale

THREE-PHASE WITH 2 MAGAZINES	
N. 2	Wallbox COPPER SB stazioni di ricarica nero con presa di tipo 2, potenza di ricarica max. 22kw (trifase), corrente di ricarica configurabile da 6A fino a max 32A, con connettività WiFi / Ethernet Bluetooth, informazioni sullo stato del caricabatterie tramite LED RGB e Wallbox App / myWallbox Portal, incl. Power Sharing Funzione intelligente, autenticazione RFID, OCPP
N. 1	Ground support
N. 1	Fixing plate according to charger
N. 1	Internal electrical panel container
N. 1	Power Boost - Three-phase meter to be installed in the Main Panel

OPTIONAL ACCESSORIES		CODE
AC charging cable Type 2 - Type 2, 5m, three-phase, 32 A		**1802933**
10 RFID Card		**1802932**
Weatherproof protective cover for prepainted aluminium ground support (particularly recommended for outdoor installations)		-

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Goods found to be defective must be kept at the disposal of ECA Technology Srl. The Customer may not use or tamper with the aforementioned, even in part, without the authorisation of our Company, under penalty of forfeiture of the right of complaint. When ECA Technology Srl recognises that the complaint is well-founded, it may be required to remedy or replace partially or totally the items sold in accordance with availability, with exemption from any further liability, such that the Customer cannot claim any other compensation for direct or indirect consequential damages.
Goods to be replaced must be returned completely intact, by the means deemed most suitable by our Company.

RETURNS:
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In the event of any dispute arising, the parties indicate that the Court of Vicenza shall have exclusive jurisdiction. Italian law shall apply exclusively to this contract.

This catalogue annuls and replaces any previous ones and comes into force on 02/04/2024
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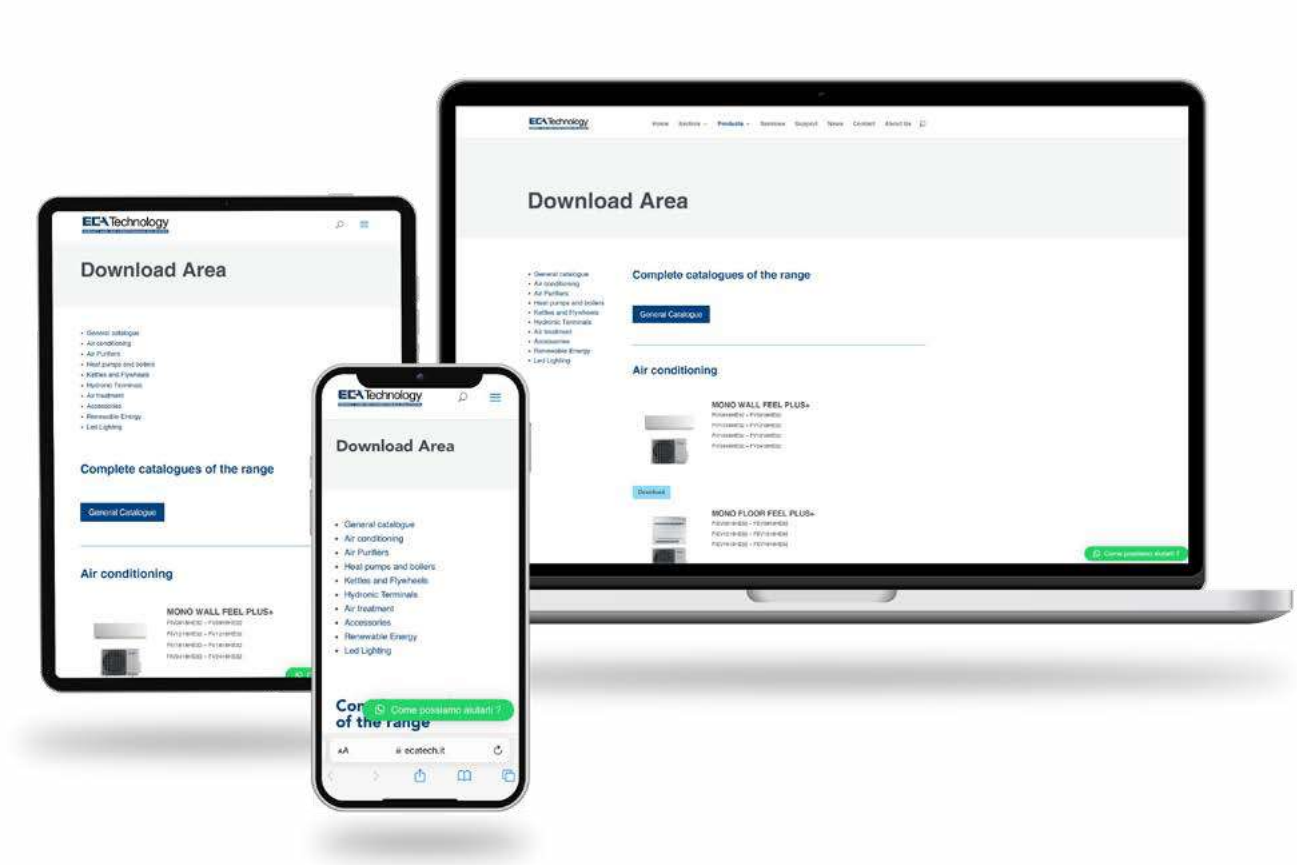

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April 2024

ECA TECHNOLOGY SRL
Via dell'industria 51, 36040 Grisignano di Zocco (VI)
Tel 0444 418388 - eca@ecatech.it - www.ecatech.it

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