

Mechanical ventilation, air treatment, sanitization and IAQ monitoring systems

2023





Publication: MECHANICAL VENTILATION, AIR TREATMENT, SANITIZATION
AND IAQ MONITORING SYSTEM PRODUCT GUIDE

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Mechanical ventilation, air treatment, sanitization and IAQ monitoring systems

INTRODUCTION

Over the past 10 years, the way buildings are renovated and designed has changed profoundly, just as expectations and needs for indoor comfort have become more precise and sophisticated. The energy efficiency criteria required for new nZEB (Nearly Zero Energy Buildings) constructions have also become mandatory by law (EU-27).

This drive towards green evolution, in line with the provisions of European Directive 2010/31/EU (the so-called EPBD, Energy Performance of Buildings Directive), has led the entire heating, air-conditioning, ventilation and domestic hot water production sector to profound renewal, both in the public and private sectors. In fact, air system solutions are playing a decisive role in the energy, quality, safety and health of the air inside buildings.

AIR CONTROL, which has been dealing with indoor comfort for 20 years, has developed a variety of products, systems and solutions to masterfully solve the need for comfort in plant engineering, inside buildings. This product range leaves nothing to chance and ensures quality at clear costs and lead times right from the design phase.

Our aim is to offer the market an excellent service; this is why we have produced this guide dedicated to architects, planners, thermal technicians, installers, plant operation and maintenance companies and, more generally, to all those involved in comfort choices in modern building-plant systems.

We hope you enjoy reading!

COMPANY

Profile

"We meet customers' needs for thermal comfort and well-being with effort and passion through innovative, design-oriented solutions."

Air Control is an industry leader specialising in the production and distribution of air control devices.

It is part of an articulated system of partner companies pursuing a single objective: to supply the professional market with systems that allow cooling and air exchange in buildings and indoor environments with special attention on indoor air quality and energy savings.



Thanks to our attentive, qualified staff, we offer a comprehensive technical consulting service. Our mission is to fulfil customer expectations with effort and passion, both in terms of comfort and environmental well-being and in terms of both aesthetics and design in the solutions adopted.

We are able based on a mechanical/executive design to realise any air distribution system with precision and timeliness, providing everything from ducting to diffusers, from heat recovery to air treatment units up to active sanitization systems to guarantee not only an efficient system but also good, healthy air quality. Air Control's technical staff is available to guide you towards the most advantageous and most suitable plant solution for your needs.

A COMPANY success story

2009

Air Control becomes the exclusive distributor in Italy for motorised zoning systems.



2005

Air Control is founded in Milan thanks to the initiative of its two founders:

Luca Gatti and Federico Ruberto

2012

GP Engineering S.r.l., a specialised plant design company, joins the group.

2015

PL Clima S.r.l., a company dealing with the design and construction of machinery in the field of industrial and civil ventilation, joins the group.

2019

Air Control moves to its new premises in Via Colico, Milan.

2022

Air Control exports its products to over 15 countries with a network of 35 agencies in Italy and 5 dedicated distributors for the foreign market.

All the information contained in this publication in printed format is also available
in digital format online.

We advise you to always consult our website:

www.aircontrolclima.it

Mechanical ventilation, air treatment, sanitization and IAQ monitoring systems

CONSULTATION GUIDE

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ASSISTANCE, GENERAL TERMS AND CONDITIONS OF SALE, WARRANTY AND SERVICES

1.0 CONTROLLED MECHANICAL VENTILATION SYSTEMS



A COMPREHENSIVE, FLEXIBLE PROPOSAL FOR DIFFERENT APPLICATIONS

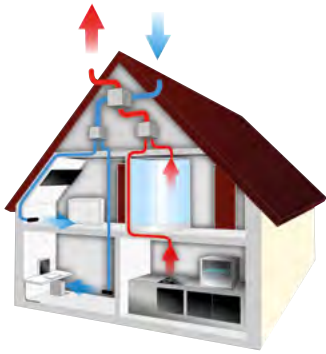
Controlled Mechanical Ventilation is a type of air system developed when people began constructing buildings designed to consume less energy for heating/cooling them. The considerable goal of reducing energy requirements is achieved with the introduction of insulating materials in the walls and the installation of highly airtight windows and doors. At the same time, however, this airtightness tends to negatively affect the health of the building, as the correct exchange of air inside the rooms is lacking, which until then had been guaranteed in a natural and spontaneous way through the “non-hermetic seal” of windows and walls.

In an expanding market such as that of CMV, there are dozens and dozens of brands with a wide range of products that are now difficult to differentiate.

In this context, AIR CONTROL has not only been able to build a comprehensive and reliable range but has also been able to distinguish itself by going beyond the product, by packaging system solutions that improve the overall result of the work of the designer and installer. This is true for the simple reason that the range is conceived entirely within AIR CONTROL so all the parts of the system are designed to dialogue with each other and provide a superior result to the individual products that can be purchased from different suppliers on the market.

The AIR CONTROL range is consolidated around two types of solutions.

1.0 CONTROLLED MECHANICAL VENTILATION SYSTEMS

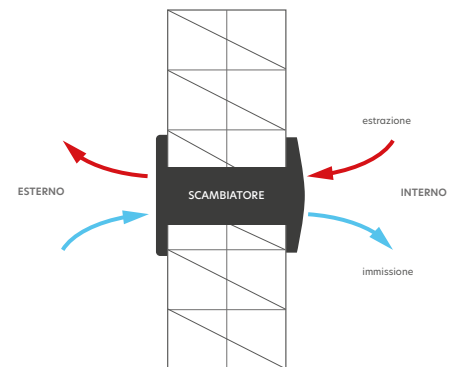


Centralised CMV solution

The system independently and simultaneously supplies and extracts air in rooms. Fresh air (supply) and exhaust air (return) are conveyed into the machine by means of fans placed inside it and, thanks to a cross-flow heat exchanger, it recovers the energy of the exhausted air in order to contain energy waste.

Decentralised (or punctual) CMV solution

Residential SINGLE-ROOM solution especially suitable when there is a need to change the air in existing rooms or when renovating (if a centralised system cannot be installed). Unit installation is wall-mounted and is direct exhaust.



VENTILATION REGULATIONS

Residential sector

In Italy there are currently two standards that designers can use to calculate air renewal rates if they want to size a mechanical ventilation system for residences. These standards are UNI 10339 of 1995 and UNI EN 16798-1 of 2019. The co-existence of partly overlapping documents has been creating uncertainty for years now; this is because UNI EN 16798-1 is nothing more than a revision of UNI EN 15251 from 2008. Its number has changed because the CEN (European Committee for Standardization) decided to group (and thus reorganise) all standards on building ventilation into a package of about 20 parts with the same number.

Standard UNI 10339 is well known in Italy also because it has been and is referred to in many Building and Hygiene Regulations. It is a standard appreciated for its conciseness and ease of use.

Standard UNI EN 16798-1 (formerly UNI EN 15251) is written in English and aims to provide input parameters for the design and energy analysis of buildings (assessment of energy performance of buildings) relating to indoor air quality, thermal environment, lighting and acoustics. This is a very important document due to the fact that it supports the EPBDs, i.e. the Energy Performance Building Directive, the latest of which dates back to 2018. A feature of the EPBD mandated standards is that they contain "twin" appendices: a national one (Appendix A) and an EU one (Appendix B).

The EU appendix contains internationally agreed reference design values (i.e. "default"); the national one, if necessary, can introduce suitably modified tables with the design values adopted in specific local laws. If Appendix A is not compiled by a member state, reference should be made.

1.1 Residential systems - up to 90% efficiency



URC DOMO H
HORIZONTAL CMV
air flow rate 150-500 m³/h
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URC DOMO V
VERTICAL CMV
air flow rate 150-500 m³/h
PAGE 14



URC DOMO SMALL
COMPACT H/V CMV
air flow rate 150-200 m³/h
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URC DOMO ECO
BASIC H/V CMV
air flow rate 300-400 m³/h
PAGE 18



URC DOMO EXT
EXTERNAL H/V CMV
air flow rate 150-200 m³/h
PAGE 20



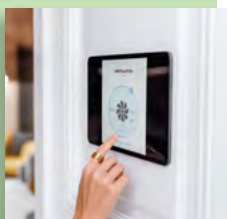
URA R DOMO H
H CMV + DEHUMIDIFICATION
air flow rate 300-600 m³/h
PAGE 22



URA R DOMO V
V CMV + DEHUMIDIFICATION
air flow rate 300-600 m³/h
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URCP
PUNCTUAL CMV
air flow rate 12-50 m³/h
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RECOVERY UNITS
ACCESSORIES
PAGE 30



DISTRIBUTION
ACCESSORIES
PAGE 37

1.2 Kits for CMV systems



EASY KIT CMV
INTRODUCTION
PAGE 58

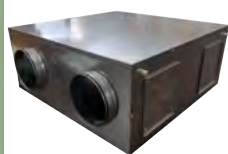


KIT 1
AIR EXCHANGE ONLY
PAGE 60



KIT 2
AIR EXCHANGE +
DEHUMIDIFICATION
PAGE 62

1.3 Commercial systems - up to 80% efficiency



URC 80 EC
H/V CMV
air flow rate 400-4500 m³/h
PAGE 64



URA
CMV + ON/OFF INTEGRATION
air flow rate 500-5000 m³/h
PAGE 66



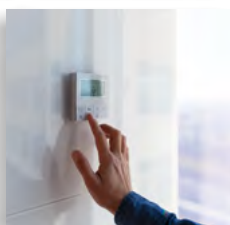
URA EC INVERTER
CMV + INVERTER INTEGRATION
air flow rate 500-5000 m³/h
PAGE 68



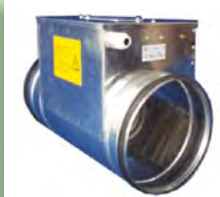
BOREAS
STAND ALONE CMV
max. air flow rate 600-1200 m³/h
PAGE 72



ZEPHYR H/V
STAND ALONE THERMODYNAMIC
CMV
max. air flow rate 350-450 m³/h
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RECOVERY UNITS
ACCESSORIES
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BER
ELECTRIC COIL
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BAC
WATER HEATING COIL
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BAF
*WATER HEATING/
COOLING COIL*
PAGE 80

1.4 Ventilation parts



BOXED CSF
CENTRIFUGAL FAN
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FAN SMT
DUCT EXTRACTOR
PAGE 82



FAN B
HELICAL FAN
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URC DOMO H

HORIZONTAL CMV

URC DOMO is a ventilation unit complete with heat recovery unit dedicated to air exchange without energy waste, especially suitable for single family units, flats and for all those cases where the nominal flow rates for air exchange do not exceed 500 m³/h. Up to 90% efficiency.

DESCRIPTION

Electronic I STANDARD: electrical panel complete with 4-speed fan management board, anti-freeze, automatic bypass, temperature probes, post-heating coil management and automatic dirty filter warning.

CNW control panel with management.

Electronic E ADVANCED: on-board electrical panel with micro-processor and dedicated regulation. Management of modulating fans, internal machine temperature probe display, timed dirty filter management, free-cooling management with temperature probes.

TGF or **TNF touch** command.

FEATURES

- Self-supporting sheet metal frame with moulded EPS interior.
- High-efficiency countercurrent cross-flow polypropylene exchanger.
- Brushless fans with electronic motor and modulating control, Erp2018-compliant.
- Motorised bypass.
- ePM1 80% - F7 flat filters, easily removable and with low pressure drops.
- Free cooling realised inside the unit with large air passage and damper with motorised actuator.
- Horizontal ceiling installation.
- **For controller and accessories, see section (page 30).**

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Flow rate (m ³ /h) Useful pressure 100 Pa	Power (W)	Intensity (A)	Sound pressure 3 m dB(A)*	Efficiency (%)**	Machine code	Controller code
URC DOMO 20H	230	170	96	0.74	40.8	80.7	URC-DOMO020HI	CNW
							URC-DOMO020HE	TGF
URC DOMO 30H	230	300	170	1.6	41.5	78	URC-DOMO030HI	CNW
							URC-DOMO030HE	TGF
URC DOMO 40H	230	375	170	1.6	42.6	83	URC-DOMO040HI	CNW
							URC-DOMO040HE	TGF
URC DOMO 50H	230	480	340	2.5	47.6	79.3	URC-DOMO050HI	CNW
							URC-DOMO050HE	TGF

* Data according to standard UNI EN 3741 and EN 3744

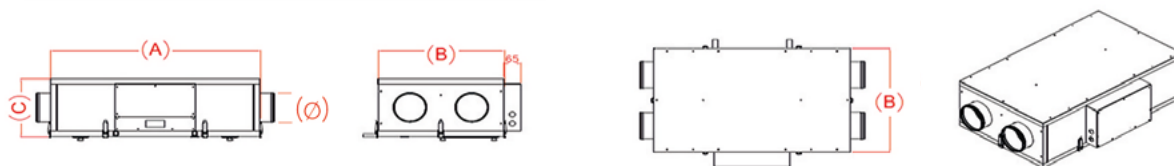
**Data according to standard UNI EN 13141-7 (Indoor temperature 20° - Indoor humidity 28% - Outdoor temperature 7° - Outdoor humidity 70%)

SIZE	20 H	30 H	40 H	50 H
VERSION I				
VERSION I + RH / VOC-CO ₂ CONTROLLER				
VERSION E				
VERSION E + RH / VOC-CO ₂ CONTROLLER				

Values according to European Regulation 1253/2014 and 1254/2014.

1.1 Residential systems - up to 90% efficiency

DIMENSIONAL DATA



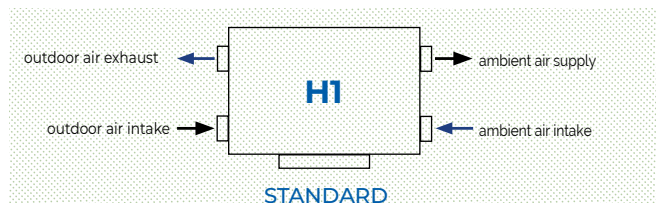
MODEL	Width A (mm)	Depth B (mm)*	Height C (mm)	Ø connections (mm)	Condensate (mm)	Weight (kg)
URC DOMO 20H	800	480	270	125	12	25
URC DOMO 30H	795	600	295	160	12	30
URC DOMO 40H	1150	650	290	160	12	38
URC DOMO 50H	1150	650	290	160	12	38

* Not including electrical panel

Note: a space of at least 30 cm must be left from other structures for machine inspection and maintenance

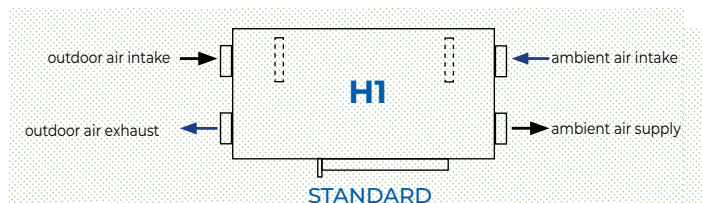
MACHINE CONFIGURATION - VIEW FROM ABOVE

SIZE 20/30



STANDARD

SIZE 40/50

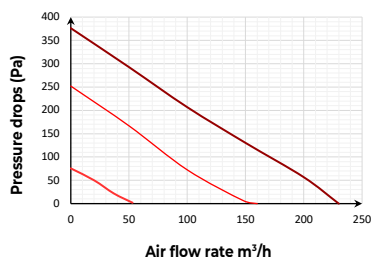


STANDARD

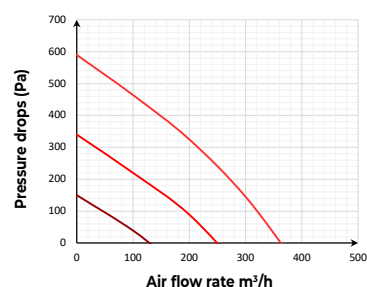
Note: When ordering, please specify the desired configuration if different from standard.

PERFORMANCE CHARTS

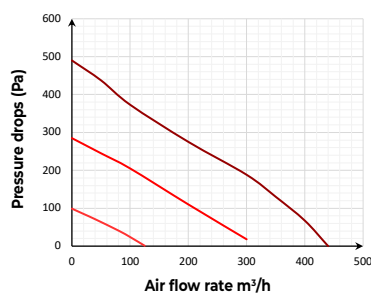
URC DOMO 20 H



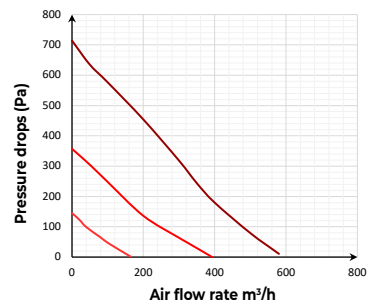
URC DOMO 30 H



URC DOMO 40 H



URC DOMO 50 H



[*] Curves referring to the following conditions UNI EN 13141-7: out. air 7° - 70% r.h. / ind. air 20° - 28% r.h.



Electronic I



Electronic E



URC DOMO V

VERTICAL CMV

URC DOMO is a ventilation unit complete with heat recovery unit dedicated to air exchange without energy waste, especially suitable for single family units, flats and for all those cases where the nominal flow rates for air exchange do not exceed 500 m³/h. Up to 90% efficiency.

DESCRIPTION

Electronic I STANDARD: electrical panel complete with 4-speed fan management board, anti-freeze, automatic bypass, temperature probes, post-heating coil management and automatic dirty filter warning.

CNW control panel with management.

Electronic E ADVANCED: on-board electrical panel with micro-processor and dedicated regulation. Management of modulating fans, internal machine temperature probe display, timed dirty filter management, free-cooling management with temperature probes.

TGF or **TNF touch** command.

FEATURES

- Double galvanised sheet metal panel (painted externally) with thermal and acoustic insulation.
- High-efficiency countercurrent cross-flow polypropylene exchanger.
- Brushless fans with electronic motor and modulating control, Erp2018-compliant.
- Motorised bypass.
- ePM1 80% - F7 flat filter, easily removable and with low pressure drops.
- Free cooling realised inside the unit with large air passage and damper with motorised actuator.
- Vertical floor installation.
- For controller and accessories, see section (page 30).

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Flow rate (m ³ /h) Useful pressure 100 Pa	Power (W)	Intensity (A)	Sound pressure 3 m dB(A)*	Efficiency (%)**	Machine code	Controller code
URC DOMO 20V	230	180	96	0.74	38.6	80	URC-DOMO020VI	CNW
							URC-DOMO020VE	TGF
URC DOMO 30V	230	320	170	1.6	41	80	URC-DOMO030VI	CNW
							URC-DOMO030VE	TGF
URC DOMO 40V	230	385	170	1.6	38.4	84	URC-DOMO040VI	CNW
							URC-DOMO040VE	TGF
URC DOMO 50V	230	480	340	2.5	44.4	80.5	URC-DOMO050VI	CNW
							URC-DOMO050VE	TGF

* Data according to standard UNI EN 3741 and EN 3744

**Data according to standard UNI EN 13141-7 (Indoor temperature 20° - Indoor humidity 28% - Outdoor temperature 7° - Outdoor humidity 70%)

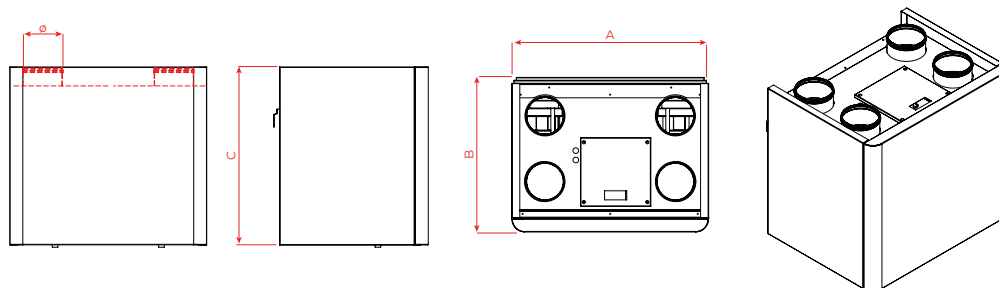
Note: For vertical installation provide a support feet kit KIT-URC-DOMOV

SIZE	20 V	30 V	40 V	50 V
VERSION I				
VERSION I + RH / VOC-CO ₂ CONTROLLER				
VERSION E				
VERSION E + RH / VOC-CO ₂ CONTROLLER				

Values according to European Regulation 1253/2014 and 1254/2014.

1.1 Residential systems - up to 90% efficiency

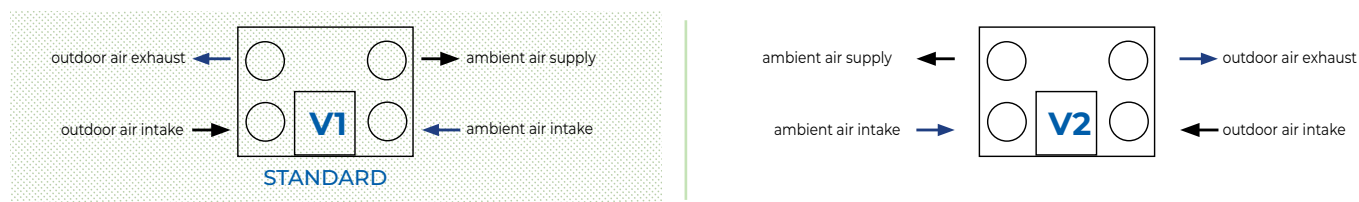
DIMENSIONAL DATA



MODEL	Width A (mm)	Depth B (mm)*	Height C (mm)	Ø connections (mm)	Condensation (mm)	Weight (Kg)
URC DOMO 20V	630	495	570	125	20	32
URC DOMO 30V	790	640	670	160	20	38
URC DOMO 40V	790	770	670	160	20	42
URC DOMO 50V	790	770	670	160	20	43

Note: a space of at least 30 cm must be left from other structures for machine inspection and maintenance

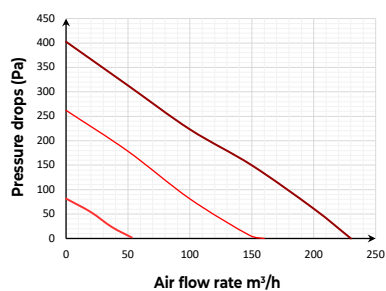
MACHINE CONFIGURATION - VIEW FROM ABOVE



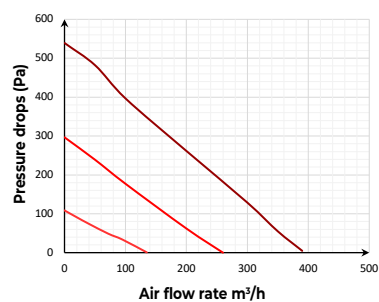
Note: When ordering, please specify the desired configuration if different from standard.

PERFORMANCE CHARTS

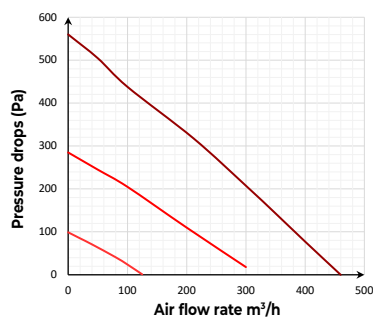
URC DOMO 20 V



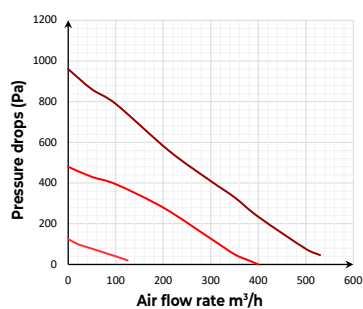
URC DOMO 30 V



URC DOMO 40 V



URC DOMO 50 V



[*] Curves refer to the following conditions UNI EN 13141-7: out. air 7° - 70% r.h./ind. air 20° - 28% r.h.



Electronic I



URC DOMO SMALL

COMPACT H/V CMV

URC DOMO SMALL is a ventilation unit complete with heat recovery unit dedicated to air exchange without energy waste. The unit is especially suitable for single family units, flats and in all those cases where the nominal flow rates for air exchange do not exceed 200 m³/h.

Up to 90% efficiency.

DESCRIPTION

Electronic I: electrical panel complete with 4-speed fan management board, anti-freeze, automatic bypass, temperature probes, post-heating coil management and automatic dirty filter warning.

CNW control panel with management

FEATURES

- Self-supporting sheet metal frame and galvanised sheet metal panels, painted externally.
- High-density EPS internal insulation; Alucobond composite front cover.
- Brushless fans with electronic motor and constant flow control (3 levels).
- High-efficiency countercurrent cross-flow polypropylene exchanger.
- Automatic bypass.
- Internal free cooling through fan unbalance.
- ePM1 80% - F7 filters with low pressure drops and easily removable.
- Universal installation (Z): both horizontally and vertically.
- **For controller and accessories, see section (page 30).**

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Flow rate (m ³ /h) Useful pressure 100 Pa	Power (W)	Intensity (A)	Sound pressure 3 m dB(A)*	Efficiency (%)**	Machine code	Controller code
URC DOMO SMALL 15 ZI	230	140	95	0.8	34.7	81	URC-DOMOSMALL15ZI	CNW
URC DOMO SMALL 20 ZI	230	201	130	1.2	36	77	URC-DOMOSMALL20ZI	CNW

* Data acc. to standard UNI EN 3741 and EN 3744

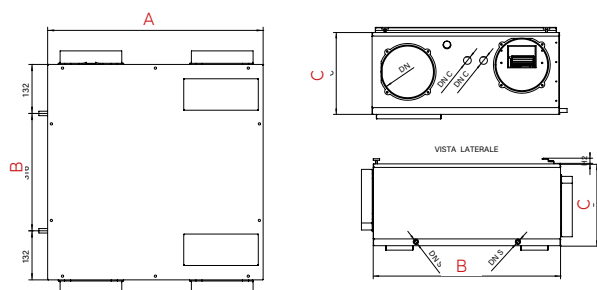
**Data acc. to standard UNI EN 13141-7 (Indoor temperature 20° - Indoor humidity 28% - Outdoor temperature 7° - Outdoor humidity 72%)

OPTIONAL ACCESSORIES

CASE	Description	ACCESSORIES	Description
	CSS-SMALL-1 Built-in case config. V1 (supply/return connections bottom side)		KIT-CSS-SMALL Outdoor air grille filter holder kit for CSS-SMALL-1/2 case
	CSS-SMALL-2 Built-in case config. V2 (supply/return connections top side)		PANNELLO CSS-SMALL Cover panel for stand alone installation

1.1 Residential systems - up to 90% efficiency

DIMENSIONAL DATA



URC DOMO SMALL 15 ZI	URC DOMO SMALL 20 ZI
A	A

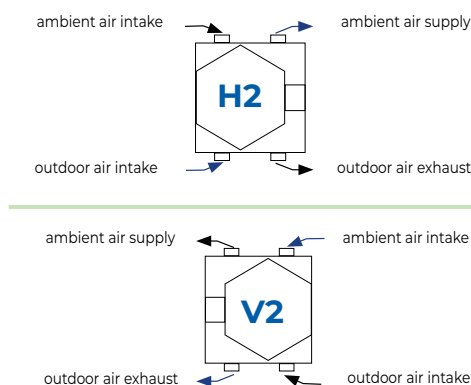
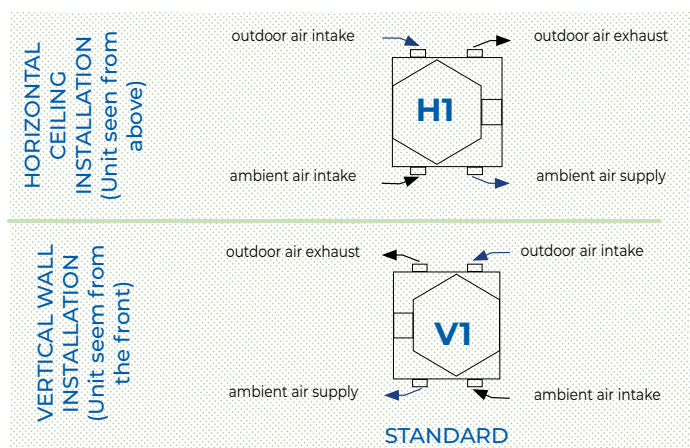
Values according to European Regulation 1253/2014 and 1254/2014.

MODEL	Width A (mm)	Depth B (mm)*	Height C (mm)	Ø connections (mm)	Condensation (mm)	Weight (Kg)
DOMO SMALL 15 / 20 ZI	580	580	255	160	12-20	19

* Not including electrical panel

Note: a space of at least 30 cm must be left from other structures for machine inspection and maintenance

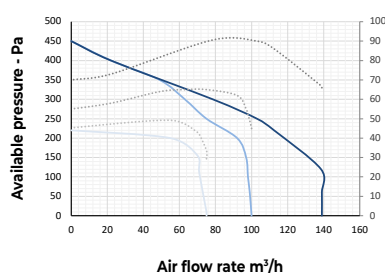
MACHINE CONFIGURATION - VIEW FROM ABOVE/FRONT



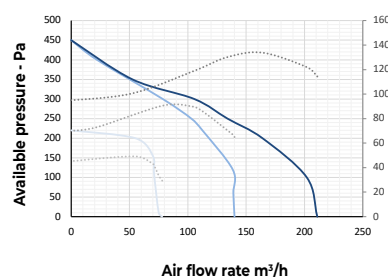
NOTE: When ordering, please specify the desired configuration if different from standard.

PERFORMANCE CHARTS

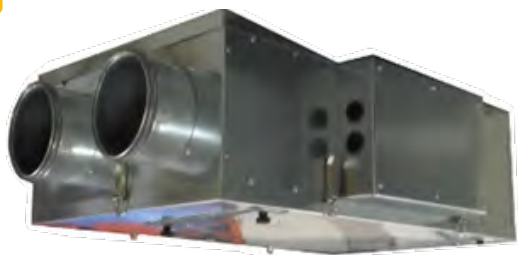
URC DOMO SMALL 15 ZI



URC DOMO SMALL 20 ZI



[*] Curves refer to the following conditions (UNI EN 13141-7): out. air 7° - 70% r.h./ind. air 20° -28% r.h.



Electronic I



URC DOMO ECO

BASIC H/V CMV

URC DOMO ECO is a ventilation unit complete with heat recovery unit dedicated to air exchange without energy waste. The unit is especially suitable for single family units, flats and for all those cases where the nominal flow rates for air exchange do not exceed 400 m³/h.

Up to 90% efficiency.

DESCRIPTION

Electronic I: electrical panel complete with card for 3-step speed management, anti-freeze and automatic bypass. Wall-mounted remote touch panel. On-board temperature sensors and possibility of hot water auxiliary coil management. Input for humidity/air quality controllers.

CNW control panel with management

FEATURES

- Self-supporting galvanised sheet metal frame.
- Galvanised sheet metal panelling with polyethylene thermal and acoustic insulation.
- High-efficiency countercurrent cross-flow polypropylene exchanger.
- Brushless fans with electronic motor and modulating control, Erp2018-compliant.
- ePM1 80% - F7 filters, easily removable and with low pressure drops.
- Motorised bypass built into the electrical panel.
- Universal installation (Z): both horizontally and vertically.
- **For controller and accessories, see section (page 30).**

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	flow rate (m ³ /h) Useful pressure 100 Pa	Power (W)	Intensity (A)	Ø connections (mm)	Sound pressure 3 m dB(A)*	Efficiency (%)**	Machine code	Controller code
URC DOMO ECO 30 ZI	230	310	170	1.6	160	41.7	80	URC-DOMOECO30ZI	CNW
URC DOMO ECO 40 ZI	230	410	170	2.4	160	42.9	76	URC-DOMOECO40ZI	CNW

* Data according to standard UNI EN 3741 and EN 3744

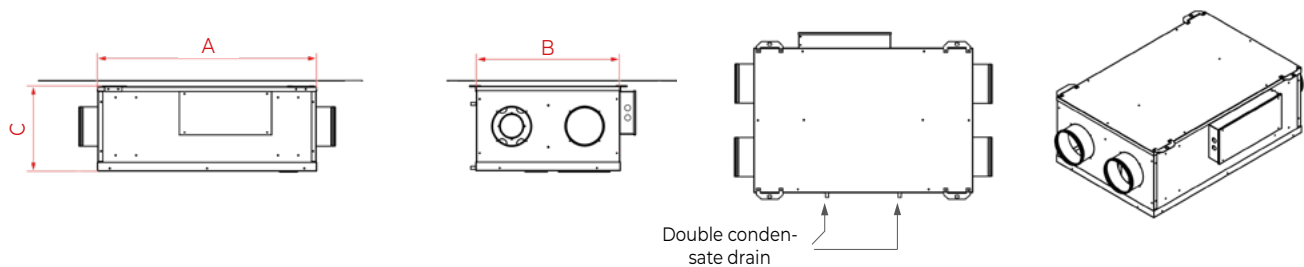
**Data according to standard UNI EN 13141-7 (Indoor temperature 20° - Indoor humidity 28% - Outdoor temperature 7° - Outdoor humidity 72%)

SIZE	30 H	40 H
STANDARD VERSION I		

Values according to European Regulation 1253/2014 and 1254/2014.

1.1 Residential systems - up to 90% efficiency

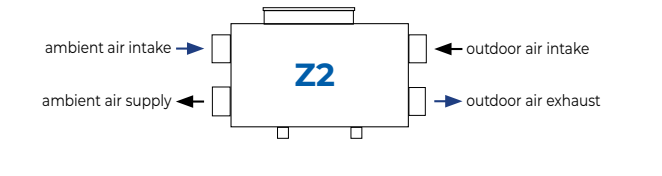
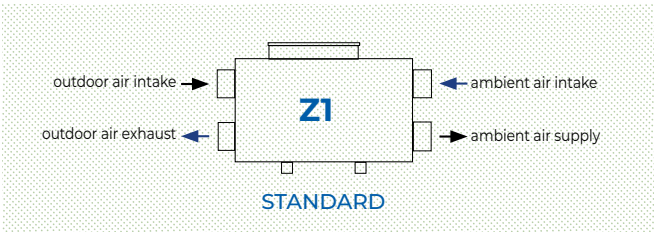
DIMENSIONAL DATA



MODEL	Width A (mm)	Depth B (mm)*	Height C (mm)	Ø connections (mm)	Condensation (mm)	Weight (kg)
URC DOMO ECO 30 ZI	900	595	350	160	16	45
URC DOMO ECO 40 ZI	900	595	350	160	16	48

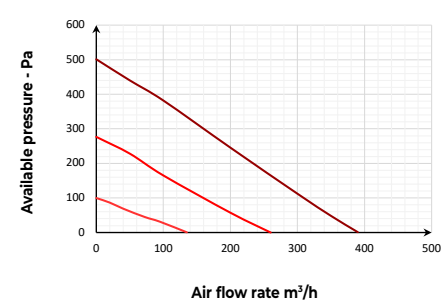
* Not including electrical panel
Note: a space of at least 30 cm must be left from other structures for machine inspection and maintenance

MACHINE CONFIGURATION – VIEW FROM BELOW (CEILING-MOUNTED) / FRONT (WALL-MOUNTED)

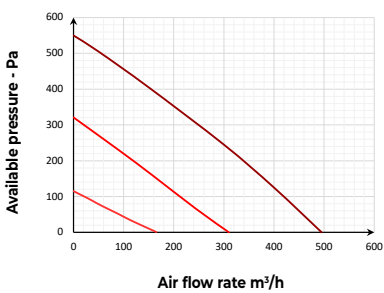


PERFORMANCE CHARTS

URC DOMO ECO 30 ZI



URC DOMO ECO 40 ZI



[*] Curves refer to the following conditions (UNI EN 13141-7): out. air 7° - 70% r.h./ind. air 20° -28% r.h.



Electronic I



Electronic E



version S



version V

URC DOMO EXT

EXTERNAL H/V CMV

URC DOMO EXT is a ventilation unit complete with heat recovery unit dedicated to air exchange without energy waste, for outdoor installation, especially suitable where the nominal flow rates for air exchange do not exceed 200 m³.

Up to 90% efficiency.

Can be installed outdoors thanks to combination with the case (IP44).

DESCRIPTION

Version S BUILT-IN: units with self-supporting sheet metal frame. Sandwich panels made of double galvanised sheet metal and high-density polystyrene internal insulation. Additional external insulation for outdoor installation. Heavy-gauge galvanised sheet metal internal cladding. Housing frame with 10 mm insulation. Integrated supply and return manifold for 6+6 outlets Ø 75/90 mm. Vertical outdoor installation in case.

Version V STAND ALONE: units with self-supporting sheet metal frame. Sandwich panels made of double galvanised sheet metal and high-density polystyrene internal insulation. Additional external insulation for outdoor installation. Heavy-gauge galvanised sheet metal internal cladding. Cover painted white RAL 9003. Vertical outdoor installation in niche (covered).

Electronic I STANDARD: electrical panel complete with 4-speed fan management board, anti-freeze, automatic bypass, temperature probes, post-heating coil management and automatic dirty filter warning.

CNW control panel with management

Electronic E ADVANCED: On-board electrical panel with microprocessor and dedicated regulation.

Management of modulating fans, internal machine temperature

probe display, timed dirty filter management, free-cooling management with temperature probes.

Extensive graphic interface with configuration menu and multilingual user menu.

TGF or **TNF touch** command.

FEATURES

- High-strength structure with self-supporting sheet metal frame.
- Sandwich panels made of double galvanised sheet metal.
- High-density EPS internal insulation; Alucobond composite front cover.
- Additional external insulation for outdoor installation.
- Brushless fans with electronic motor and modulating control.
- Very high-efficiency countercurrent cross-flow polypropylene heat exchanger.
- Vertical installation: **S** - built-in; **V** - stand alone
- Automatic bypass.
- ePM1 80% - F7 filters with low pressure drops and easily removable on the front of the unit.
- Free cooling realised inside the unit with large air passage and damper with motorised actuator.
- **For controller and accessories, see section (page 30).**

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Flow rate (m ³ /h) Useful pressure 100 Pa	Power (W)	Intensity (A)	Ø connections (mm)	Sound pressure 3 m dB(A)*	Efficiency (%)**	Machine code	Controller code
URC DOMO EXT 20 S	230	153	130	0.85	160	40.5	82.5	URC-DOMOEXT020SI	CNW
								URC-DOMOEXT020SE	TGF
URC DOMO EXT 25 S	230	205	170	1.46	160	49.5	80.8	URC-DOMOEXT025SI	CNW
								URC-DOMOEXT025SE	TGF
URC DOMO EXT 20 V	230	153	130	0.85	160	40.5	82.5	URC-DOMOEXT020VI	CNW
								URC-DOMOEXT020VE	TGF
URC DOMO EXT 25 V	230	205	170	1.46	160	49.5	80.8	URC-DOMOEXT025VI	CNW
								URC-DOMOEXT025VE	TGF

* Data according to standard UNI EN 3741 and EN 3744

**Data according to standard UNI EN 13141-7 (Indoor temperature 20° - Indoor humidity 28% - Outdoor temperature 7° - Outdoor humidity 72%)

1.1 Residential systems - up to 90% efficiency

ACCESSORIES FOR S UNIT (BUILT-IN)

STANDARD CASE

Case for installation of URC DOMO EXT S version built-in unit, made of galvanised sheet metal. Fitted with 6+6 supply/return air connections Ø 75/90 mm. Front panel with inspection and outdoor air intake/exhaust grilles. Pre-cut passages to remote the intake and exhaust of outdoor air to outside the case. Supplied complete with piping for connection between manifold and unit.

DESIGN CASE

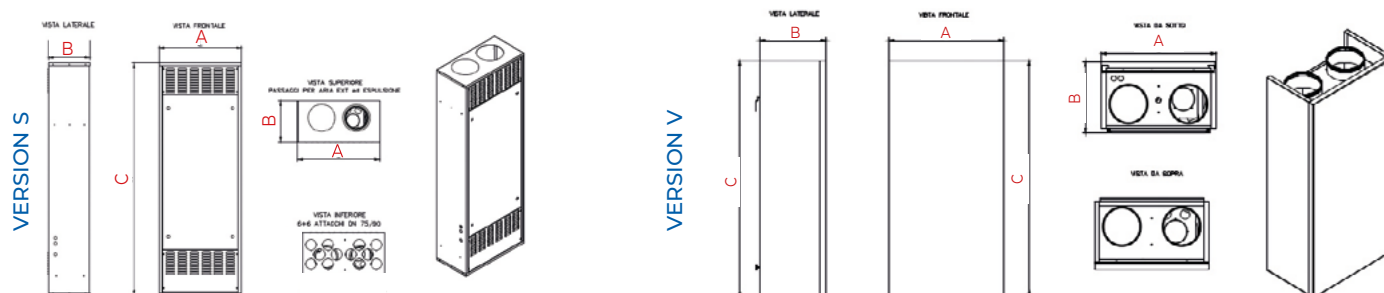
Case in combination with the "EXT-DESIGN-PANEL" cover panel, for assembly with slots that adjust the distance of the panel from the formwork. Fitted with 6+6 supply/return air connections Ø 75/90 mm. Finish: painted RAL 9003.

STANDARD CASE

DESIGN CASE

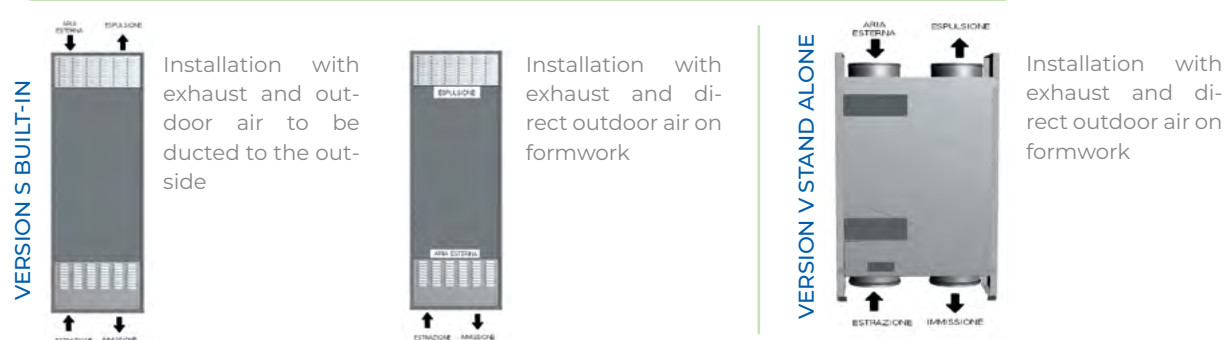


DIMENSIONAL DATA



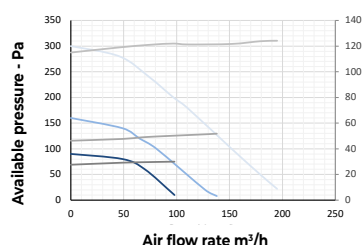
MODEL	Width A (mm)	Depth B (mm)	Height C (mm)	Ø connections (mm)		Condensate (mm)	Weight (Kg)	
				Outdoor air	Supply/Return		Case	Unit
URC DOMO EXT 20 S	600	305	1700	160	6 x Ø 75/90	16	28	45
URC DOMO EXT 25 S	600	305	1700	160	6 x Ø 75/90	16	28	45
URC DOMO EXT 20 V	490	280	980	160	160	20	-	48
URC DOMO EXT 25 V	490	280	980	160	160	20	-	48

MACHINE CONFIGURATION - FRONT VIEW

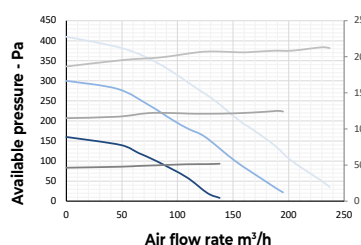


PERFORMANCE CHARTS

URC DOMO EXT 20



URC DOMO EXT 25



SIZE	20	25
VERSION I + RH / VOC-CO ₂ CONTROLLER	A	A
VERSION E + RH / VOC-CO ₂ CONTROLLER	A	A

Values according to European Regulation 1253/2014 and 1254/2014.



Electronic I



Electronic E



DESCRIPTION

Model D STANDARD: unit for the renewal of ambient air with outdoor air through a high-efficiency recovery unit. The air flow rate is increased by partially recirculating the ambient air, thus allowing the cooling circuit to operate, obtaining dehumidified air during the summer (compressor active). Equipped with hydronic pre- and post-cooling/heating coils which, when powered, allow for the integration of cooling/heating power to the radiant air-conditioning system (connection to the heating/cooling system does not block operation of the unit even though it decreases dehumidification performance).

Model DC WITH INTEGRATION: unit for the renewal of ambient air with outdoor air through a high-efficiency recovery unit. The air flow rate is increased by partially recirculating the ambient air, thus allowing the air to be dehumidified and providing cooling/heating power integration to the radiant air-conditioning system. The unit can operate in two modes during the summer (compressor on). 1- Renewal + Dehumidification: the unit condenses partially in air and partially in water through the plate condenser, obtaining dehumidified air. 2- Renewal + Dehumidification + Cooling integration: the unit completely condenses in water, thus obtaining dehumidified and cooled air. During the winter period (compressor off) the hydronic coil is supplied with hot water from the heating system and behaves like a thermoventilation unit with recovery system.

Electronic I STANDARD: electrical panel complete with management board: 4-speed fan management, automatic bypass, temperature probes, post-heating coil management and automatic dirty filter warning.
CNU Control panel.

Electronic E ADVANCED: on-board electrical panel with micro-processor and dedicated regulation for managing: modulating fans, internal machine temperature probe display, timed dirty filters, free-cooling with temperature probes. Types of commands: simple **TGF** or advanced **TNF**.

URA R DOMO H

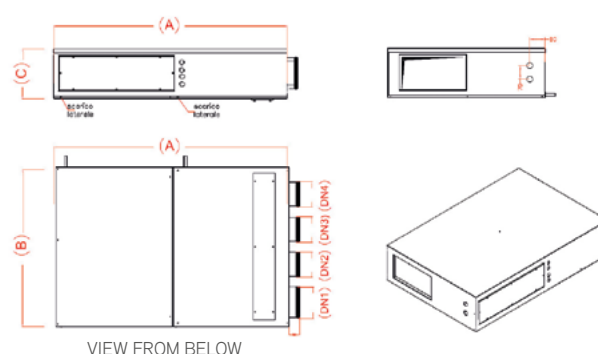
H CMV + DEHUMIDIFICATION

URA R DOMO is a controlled mechanical ventilation unit with high-efficiency heat recovery unit, air treatment section with dehumidification, cooling and heating.
Up to 90% efficiency.

FEATURES

- Double sandwich panels, painted externally, galvanised inside, polyethylene insulation.
- Polypropylene counter current heat exchanger with high efficiency up to 90%.
- Plug-fun Brushless fans with electronic motor and Erp2018 modulating control.
- Two ePM1 80% - F7 filters on outdoor air intake and supply air; Coarse filter on recirculating air.
- Cooling circuit made of brazed copper, high efficiency compressor.
- On-board electrical panel with microprocessor and dedicated regulation: managing fans, internal temperature probe display, timed dirty filters, recirculating and fresh air management.
- Horizontal ceiling installation.
- **For controller and accessories, see section (page 30).**

DIMENSIONAL AND TECHNICAL DATA



SUPPLY PLENUM

Number of connections	Ø connections (mm)	Combination with size URA R DOMO H	Code
to be specified	to be specified	30/15 - 40/20	PLM-URARIH
		50/25 - 60/30	PLM-URAR2H

Supply plenum in PAL for URA R DOMO H

Note Specify number and Ø of outlet connections.

Example: plenum for URA R DOMO H size 30/15

with 3 connections Ø 80 + 1 connection Ø 125

code: **PLM-URARIH** / description: **3xD80 + 1xD125**

1.1 Residential systems - up to 90% efficiency

MODEL	Voltage (V) 50Hz	Flow rate (m³/h) Useful pressure 100 Pa	Absorbed electrical power (W)	Intensity (A)	Sound pressure 3 m dB(A)*	Efficiency (%)**	Weight (kg)	Machine code	Controller code
URA R DOMO 30/15 HD	230	297	154	3.5	38.6	85.7	72	URAR-DOMO3015HDI	CNU
								URAR-DOMO3015HDE	TGF-URAR
URA R DOMO 40/20 HD	230	391	199	5.5	40.8	81.2	77	URAR-DOMO4020HDI	CNU
								URAR-DOMO4020HwDE	TGF-URAR
URA R DOMO 50/25 HD	230	520	265	5.9	40.2	86	91	URAR-DOMO5025HDI	CNU
								URAR-DOMO5025HDE	TGF-URAR
URA R DOMO 60/30 HD	230	619	313	7	40.9	81.8	101	URAR-DOMO6030HDI	CNU
								URAR-DOMO6030HDE	TGF-URAR
URA R DOMO 30/15 H DC	230	297	154	3.5	38.6	85.7	73	URAR-DOMO3015HDCI	CNU
								URAR-DOMO3015HDCE	TGF-URAR
URA R DOMO 40/20 H DC	230	391	199	5.5	40.8	81.2	78	URAR-DOMO4020HDCI	CNU
								URAR-DOMO4020HDCE	TGF-URAR
URA R DOMO 50/25 H DC	230	520	265	5.9	40.2	86	92	URAR-DOMO5025HDCI	CNU
								URAR-DOMO5025HDCE	TGF-URAR
URA R DOMO 60/30 H DC	230	619	313	7	40.9	81.8	102	URAR-DOMO6030HDCI	CNU
								URAR-DOMO6030HDCE	TGF-URAR

* Outdoor air 7°C/72% RH - Indoor air 20°C/28% RH B Outdoor air 30°C/60% RH - ** Indoor air 25°C/50% RH nominal flow rate.

MODEL	Width A (mm)	Depth B (mm)	Height C (mm)	Ø connections (mm)		Condensate Ø (mm)	Water connections (mm)	Supply bxh (mm)
				Ø 1 recirculation	Ø 2 3 4			
URA R DOMO 30/15	1220	820	255	160	125	20	1/2"	350x180
URA R DOMO 40/20	1220	820	255	160	125	20	1/2"	350x180
URA R DOMO 50/25	1220	960	330	200	160	20	1/2"	490x255
URA R DOMO 60/30	1220	960	330	200	160	20	1/2"	490x255

Note: a space of at least 30 cm must be left from other structures for machine inspection and maintenance



WINTER/SUMMER OPERATING VALUES

MODEL	Useful dehumidification capacity (l/24h)*	Hydronic coil cooling power output (Kw)**	Compressor cooling power output (Kw)**	Water flow rate (m³/h)	Pressure drop (Kpa)	Heating power output (kW)***
URA R DOMO 30/15 D	22	0.53	-	0.15	4.5	0.62
URA R DOMO 40/20 D	30.5	0.7	-	0.25	8.5	0.86
URA R DOMO 50/25 D	40	1.25	-	0.3	9	1.3
URA R DOMO 60/30 D	56	1.56	-	0.35	10.5	1.4
URA R DOMO 30/15 DC	22	0.53	1.14	0.15	4.5	0.62
URA R DOMO 40/20 DC	30.5	0.7	1.55	0.25	8.5	0.86
URA R DOMO 50/25 DC	40	1.25	2.02	0.3	9	1.3
URA R DOMO 60/30 DC	56	1.56	2.4	0.35	10.5	1.4

* Outdoor air 30°C/60% RH; Indoor air 25°C/50%, nominal flow rate

** Outdoor air 25°C/60% RH nominal flow rate; water IN 16°C

*** Outdoor air 20°C/60% RH nominal flow rate; water IN 35°C

MODEL	30/15 D-DC	40/20 D-DC	50/25 D-DC	60/30 D-DC
URA R DOMO H				

Values according to European Regulation 1253/2014 and 1254/2014.

ErP
READY

R134a

Electronic I



Electronic E



DESCRIPTION

Model D STANDARD unit for the renewal of ambient air with outdoor air through a high-efficiency recovery unit. The air flow rate is increased by partially recirculating the ambient air, thus allowing the cooling circuit to operate, obtaining dehumidified air during the summer (compressor active). Equipped with hydronic pre- and post-cooling/heating coils which, when powered, allow for the integration of cooling/heating power to the radiant air-conditioning system (connection to the heating/cooling system does not block operation of the unit even though it decreases dehumidification performance).

Model DC WITH INTEGRATION: Unit for the renewal of ambient air with outdoor air through a high-efficiency recovery unit. The air flow rate is increased by partially recirculating the ambient air, thus allowing the air to be dehumidified and providing cooling/heating power integration to the radiant air-conditioning system. The unit can operate in two modes during the summer (compressor on). **1- Renewal + Dehumidification:** the unit condenses partially in air and partially in water through the plate condenser, obtaining dehumidified air. **2- Renewal + Dehumidification + Cooling integration:** the unit completely condenses in water, thus obtaining dehumidified and cooled air. During the winter period (compressor off) the hydronic coil is supplied with hot water from the heating system and behaves like a thermoventilation unit with recovery system.

Electronic I STANDARD: Electrical panel complete with management board: 4-speed fan management, automatic bypass, temperature probes, post-heating coil management and automatic dirty filter warning.

CNU Control panel.

Electronic E ADVANCED: On-board electrical panel with micro-processor and dedicated regulation for managing: modulating fans, internal machine temperature probe display, timed dirty filters, free-cooling with temperature probes. Types of commands: simple **TGF** or advanced **TNF**.

URA R DOMO V

V CMV + DEHUMIDIFICATION

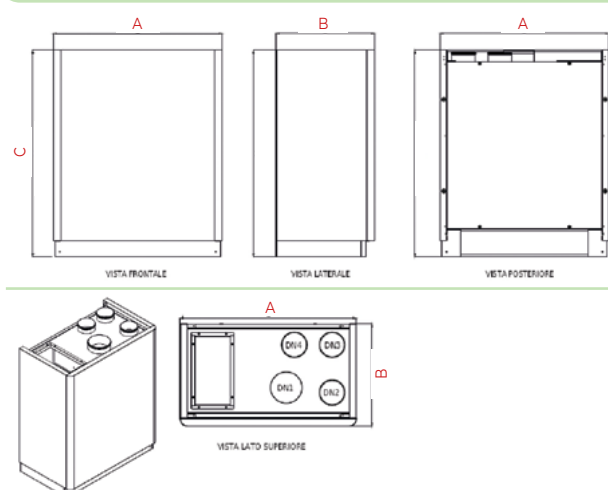
URA R DOMO is a controlled mechanical ventilation unit with high-efficiency heat recovery unit, air treatment section with dehumidification, cooling and heating.

Up to 90% efficiency.

FEATURES

- Double sandwich panels, painted externally, galvanised inside.
- Polypropylene countercurrent heat exchanger with high efficiency up to 90%.
- Plug-fun Brushless fans with electronic motor and Erp2018 modulating control.
- Two ePM1 80% - F7 filters on outdoor air intake and supply air; Coarse filter on recirculating air.
- Cooling circuit made of brazed copper, high efficiency compressor.
- On-board electrical panel with microprocessor and dedicated regulation: managing fans, internal temperature probe display, timed dirty filters, recirculating and fresh air management.
- Vertical floor installation.
- **For controller and accessories, see section (page 30).**

DIMENSIONAL AND TECHNICAL DATA



SUPPLY PLENUM

Number of connections	Ø connections (mm)	Combination with size URA R DOMO V	Code
to be specified	to be specified	30/15 - 40/20	PLM-URARIV
		50/25 - 60/30	PLM-URAR2V

Supply plenum in PAL for URA R DOMO V

Note Specify number and Ø of outlet connections.

Example: plenum for URA R DOMO V size 30/15

with 3 connections Ø 80 + 1 connection Ø 125

code: **PLM-URARIV** / description: **3xD80 + 1xD125**

1.1 Residential systems - up to 90% efficiency

MODEL	Voltage (V) 50Hz	Tot. flow rate (m³/h) 100 Pa	Integrat. air flow rate (m³/h) 100 Pa	Intensity (A)	Sound pressure Lp 3m dB (A)	Efficiency (%)*	Weight (Kg)	Machine code	Controller code
URA R DOMO 30/15 V D	230	302	161	3.5	38.6	83.9	74	URAR-DOM3015VDI	CNU
								URAR-DOM3015VDE	TGF-URAR
URA R DOMO 40/20 V D	230	401	204	5.5	40.8	81.5	76	URAR-DOM4020VDI	CNU
								URAR-DOM4020VDE	TGF-URAR
URA R DOMO 50/25 V D	230	538	258	5.9	40.2	86	83	URAR-DOM5025VDI	CNU
								URAR-DOM5025VDE	TGF-URAR
URA R DOMO 60/30 V D	230	640	319	7	40.9	81.8	85	URAR-DOM6030VDI	CNU
								URAR-DOM6030VDE	TGF-URAR
URA R DOMO 30/15 V DC	230	302	161	3.5	38.6	83.9	74	URAR-DOM3015VDCI	CNU
								URAR-DOM3015VDCE	TGF-URAR
URA R DOMO 40/20 V DC	230	401	204	5.5	40.8	81.5	76	URAR-DOM4020VDCI	CNU
								URAR-DOM4020VDCE	TGF-URAR
URA R DOMO 50/25 V DC	230	538	258	5.9	40.2	86	83	URAR-DOM5025VDCI	CNU
								URAR-DOM5025VDCE	TGF-URAR
URA R DOMO 60/30 V DC	230	640	319	7	40.9	81.8	85	URAR-DOM6030VDCI	CNU
								URAR-DOM6030VDCE	TGF-URAR

* Outdoor air 7°C/72% RH - Indoor air 20°C/28% RH

MODEL	Width A (mm)	Depth B (mm)	Height C (mm)	Ø connections (mm)		Condensate Ø (mm)	Water connections: (mm)	Supply bxx (mm)
				Ø 1 recirculation	Ø 2 3 4			
URA R DOMO 30/15	885	515	1085	160	125	20	1/2"	345x175
URA R DOMO 40/20	885	515	1085	160	125	20	1/2"	345x175
URA R DOMO 50/25	885	740	1185	200	160	20	1/2"	510x240
URA R DOMO 60/30	885	740	1185	200	160	20	1/2"	510x240

WINTER/SUMMER OPERATING VALUES

MODEL	Useful dehumidification capacity (l/24h)*	Hydronic coil cooling power output (Kw)**	Compressor cooling power output (Kw)**	Water flow rate (m³/h)	Pressure drop (Kpa)	Heat output (kW)***
URA R DOMO 30/15 D	22	0.53B	-	0.15	4.5	0.62
URA R DOMO 40/20 D	30.5	0.7B	-	0.25	8.5	0.86
URA R DOMO 50/25 D	40	1.25B	-	0.3	9	1.3
URA R DOMO 60/30 D	56	1.56B	-	0.35	10.5	1.4
URA R DOMO 30/15 DC	22	0.53B	1.14	0.15	4.5	0.62
URA R DOMO 40/20 DC	30.5	0.7B	1.55	0.25	8.5	0.86
URA R DOMO 50/25 DC	40	1.25BB	2.02	0.3	9	1.3
URA R DOMO 60/30 DC	56	1.56	2.4	0.35	10.5	1.4

* Outdoor air 30°C/60% RH; Indoor air 25°C/50%, nominal flow rate

** Outdoor air 25°C/60% RH nominal flow rate; water IN 16°C

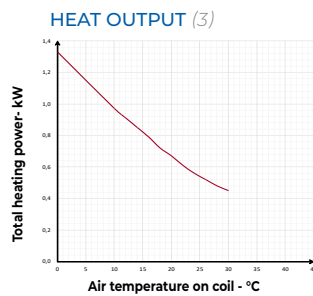
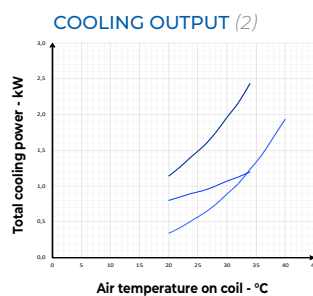
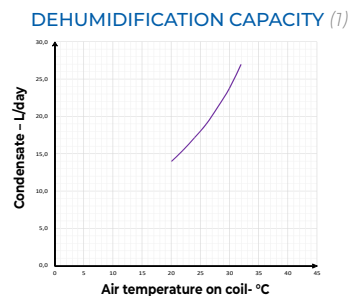
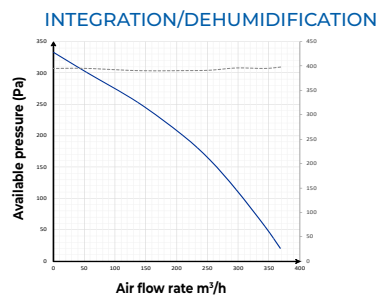
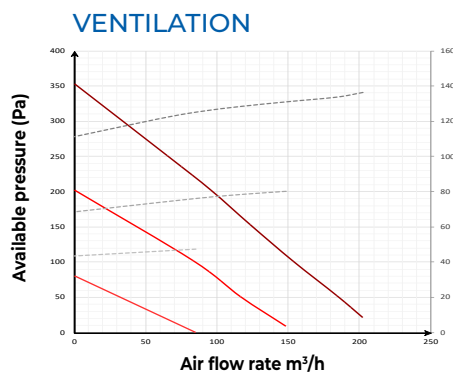
*** Outdoor air 20°C/60% RH nominal flow rate; water IN 35°C

MODEL	30/15 D-DC	40/20 D-DC	50/25 D-DC	60/30 D-DC
URA R DOMO V				

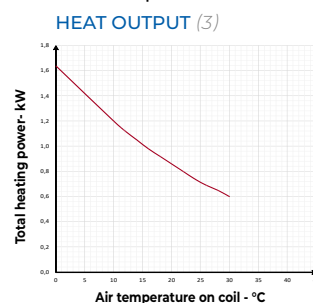
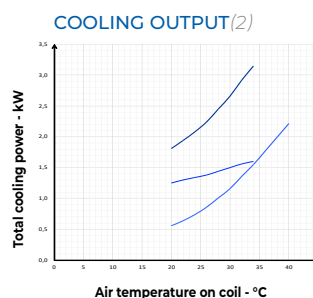
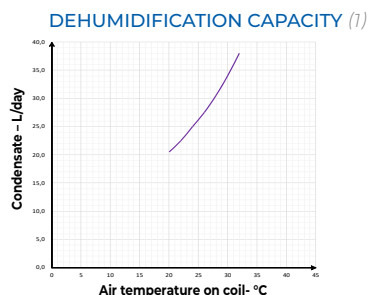
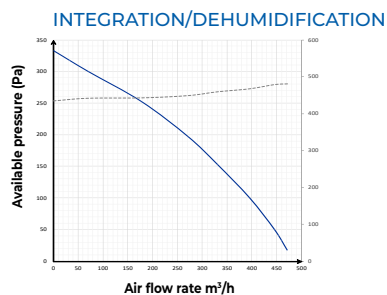
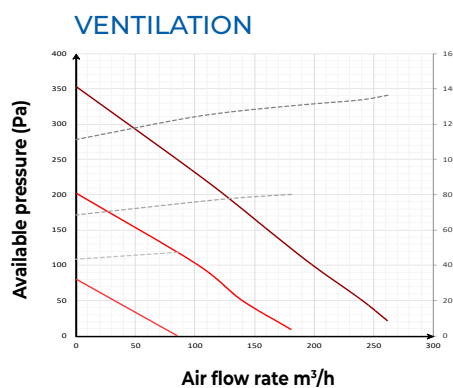
Values according to European Regulation 1253/2014 and 1254/2014.

URA R DOMO H/V PERFORMANCE CHARTS

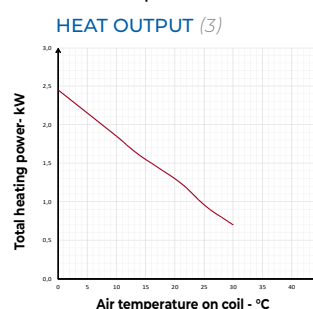
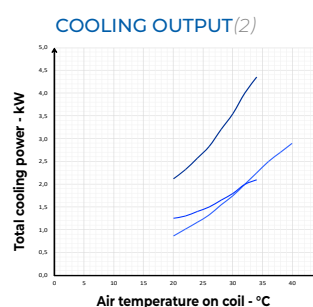
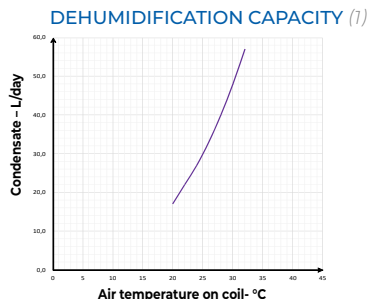
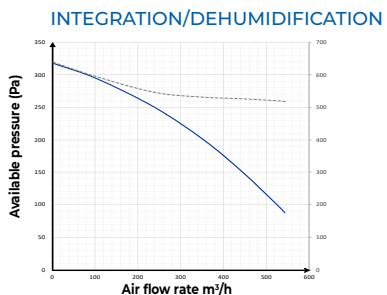
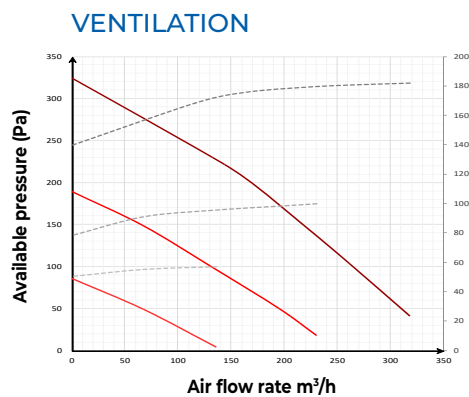
URA R DOMO 30/15 D-DC



URA R DOMO 40/20 D-DC

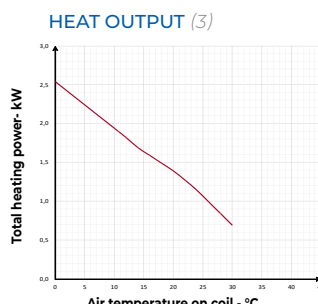
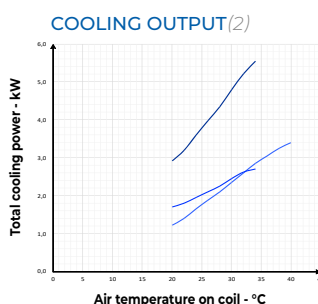
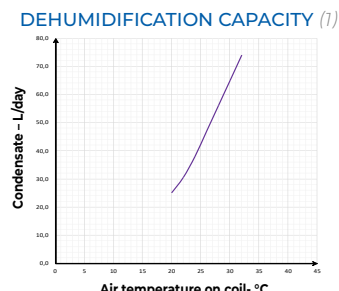
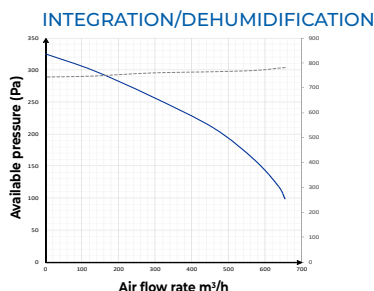
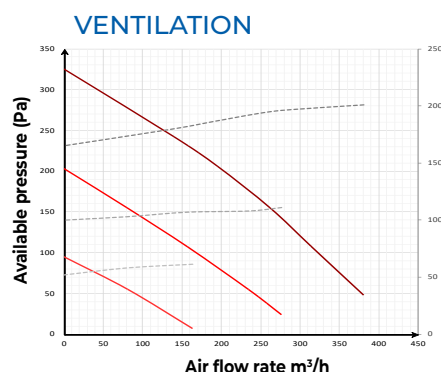


URA R DOMO 50/25 D-DC



1.1 Residential systems - up to 90% efficiency

URA R DOMO 60/30 D-DC



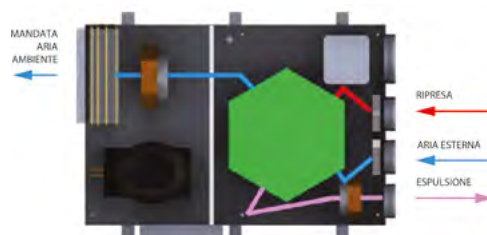
- (1) T ambient 25°; 60% r.h., T water IN 16°C - nominal out air flow rate
 (2) T ambient 25°; 60% r.h., T water IN 16°C - nominal out air flow rate
 (3) T ambient 20°; 60% r.h., T water IN 35°C - nominal out air flow rate

AIR EXCHANGE ONLY OPERATION

The unit provides mechanical ventilation with high-efficiency heat recovery: the fan speed can be selected to achieve the desired flow rate to meet air renewal requirements.

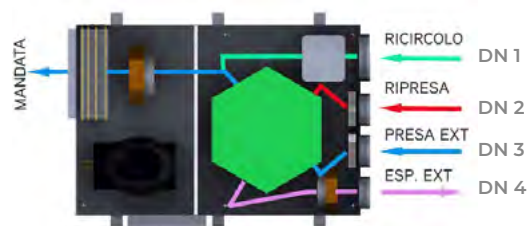
The selectable flow rates are:

- on size 30/15 and 60/15 from 0 to 150 m³/h
- on size 50/25 and 90/25 from 0 to 150 m³/h

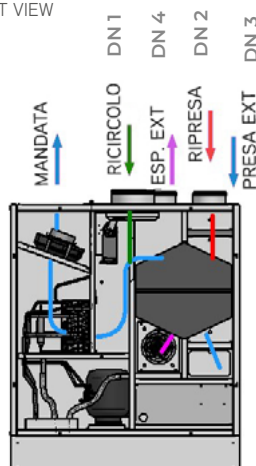


AIR EXCHANGE + DEHUMIDIFICATION OPERATION

VIEW FROM ABOVE



FRONT VIEW



The unit continues to provide mechanical ventilation with high-efficiency heat recovery but increases the air flow by recirculating from a duct dedicated to ambient air to increase the volume of air on the integration part.

The integration part can consist of 2 versions:

- version D with dehumidification
- version DC with dehumidification and integration

The most common application of version D is in radiant systems where only dehumidification is needed during the summer. During operation, the unit, by means of humidity and temperature probes, activates the cooling circuit consisting of the compressor, air evaporator coil and air condenser, thus carrying out dehumidification. By supplying the post hydronic coil with water from the radiant system (failure to supply the coil does not compromise cooling circuit operation), it is possible to integrate summer cooling and winter heating. The most common application of version DC in radiant systems where there is a need for dehumidification and integration of cooling in the summer. During operation, the unit, by means of humidity and temperature probes, activates the cooling circuit consisting of the compressor, air evaporator coil and air and water condenser supplied by the radiant system, thus carrying out air dehumidification and cooling integration. In the winter, however, it is possible to use the unit to integrate radiant heating by supplying the hydronic hot water coil, thus obtaining a rapid heat supply to the room.

ErP
READY



URCP

PUNCTUAL CMV

URCP is a single-zone heat recovery unit that allows for controlled mechanical ventilation without the need for a complete system with centralised unit, piping and vents.

The unit works on the principle of regenerative heat recovery through a ceramic heat exchanger placed inside and a DC Brushless fan with reverse cycle operation.

Up to 90% efficiency.

DESCRIPTION

Model S: ANALOGUE VERSION (OUT OF PRODUCTION) managed with wall-mounted remote control. Selection of ventilation speed and operating mode from intake-only, extraction-only or automatic cycle for heat recovery; setting of cycle time for optimisation of heat recovery efficiency. Up to a maximum of 4 units installed with one control (1 master + max 3 slaves)

Model E: ELECTRONIC VERSION operated by remote control with radio frequency operation. Selection of ventilation speed and operating mode from intake-only, extraction-only or automatic cycle for heat recovery; selection of sensor mode operation; automatic management of ventilation and cycle time for optimisation of heat recovery efficiency.

Up to a maximum of 13 units installed with one control (1 master + max 11 slaves)

FEATURES

- Structure in antistatic ABS plastic material and UV protection.
- Alternating-flow regenerative heat exchanger in technical ceramics with high exchange efficiency and low pressure drops.
- DC Brushless fan with electronic motor and modulating control, very high efficiency and low noise levels.
- G3 filters with low pressure drops, easily removable.
- Quick installation thanks to installation kit.
- Easy maintenance.
- **For accessories, see section (page 35).**

NEW!

Single model: unit replacing model E (electronic version) to be set as master or slave.

Operation of the units in supply or return mode (opposite or parallel).

Infrared control provided.

Possibility of Bluetooth and Wi-Fi connection manageable via App (WIFI version).

NEW!

COMING SOON



INFRARED CONTROL

MODEL	Machine code
URCP 02 M S	URCP02MS
URCP 05 M S	URCP05MS
URCP02 M S - Wi-Fi	URCP02MS-WIFI
URCP05 M S - Wi-Fi	URCP05MS-WIFI

TECHNICAL DATA

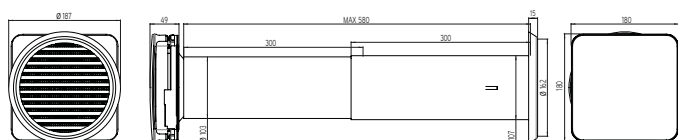
	MODEL	Unit	Ø (mm)	Remote control	Voltage (V)	Speed number	Flow rate (m³/h)	Power (W)	Max sound pressure 1m dB (A)	Weight (kg)	Machine code
OUT OF PRODUCTION	URCP 02 S M	Master	100	wall-mounted	230	2	12-24	2	26-28	2.7	URCP02SM
	URCP 02 S S	Slave	100	-	230	2	12 - 24	2	26-28	2.7	URCP02SS
	URCP 05 S M	Master	160	wall-mounted	230	2	25 - 50	2.8	26-32	4	URCP05SM
	URCP 05 S S	Slave	160	-	230	2	25 - 50	2.8	26-32	4	URCP05SS
REPLACEMENT PRODUCT	URCP 02 E M	Master	100	remote control	230	3	8 - 12 - 24	2	23-26-28	2.7	URCP02EM
	URCP 02 E S	Slave	100	-	230	3	8 - 12 - 24	2	23-26-28	2.7	URCP02ES
	URCP 05 E M	Master	160	remote control	230	3	15 - 25 - 50	2.8	18-26-32	4	URCP05EM
	URCP 05 E S	Slave	160	-	230	3	15 - 25 - 50	2.8	18-26-32	4	URCP05ES

1.1 Residential systems - up to 90% efficiency

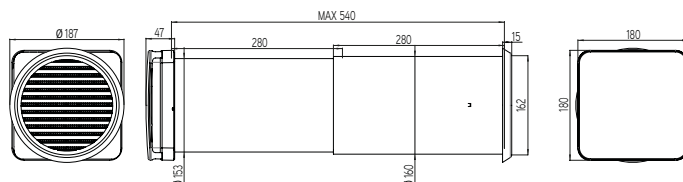
DIMENSIONAL DATA

DIMENSIONAL DATA VALID FOR ALL MODELS

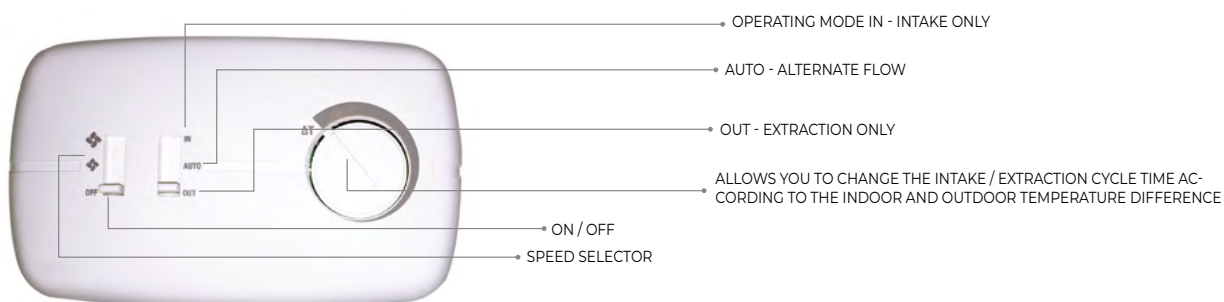
URCP 02



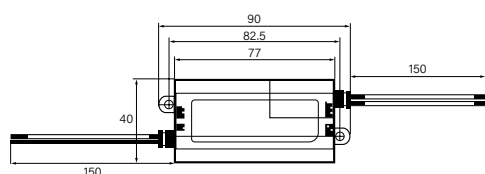
URCP 05



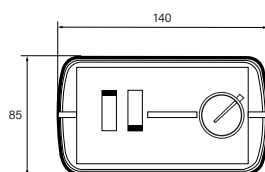
VERSION S ANALOGUE



POWER SUPPLY UNIT



WIRED CONTROL

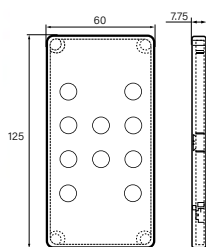


POSITION	1	2	3	4
CYCLE TIME	35s	70s	130s	220s
DELTA T	20°	10°	5°	0°/2°

VERSION E ELECTRONIC



REMOTE CONTROL



ON / OFF button



Lets you view the unit's operating status (speed, operating mode, sensor function and night mode).



Enables automatic speed operating mode. It will be regulated by the sensors on the unit (LIGHT SENSOR and HUMIDITY SENSOR).



Enables NIGHT mode operation. Makes the unit silent.



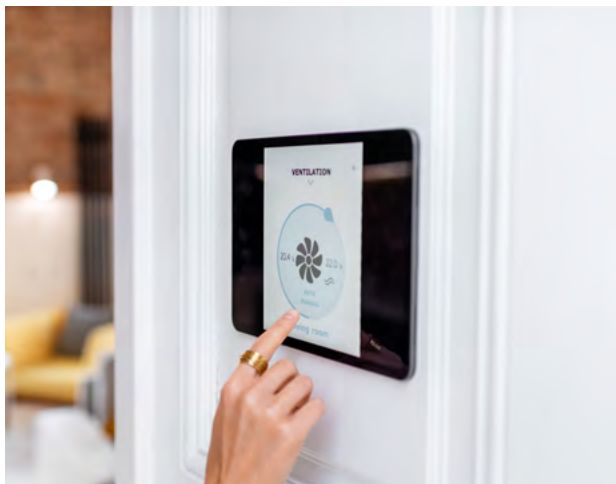
Operating mode:

- 1 Extraction Only
- 2 Intake Only
- 3 Alternate flow (automatic regulation)



Speed selector:

- 1 Minimum speed
- 2 Medium speed
- 3 Maximum speed




RECOVERY UNIT ACCESSORIES

For the technical specifications of the following products, please refer to the data sheets on the website:
www.aircontrolclima.it

CENTRALISED CMV **CONTROLS**



CNW PANEL

Remotable panel for mounting on 503 box or wall-mounting.
Speed, temperature and operating mode control functions.
Integrated air quality, temperature and humidity sensors.
Version with built-in Wi-Fi (CNW )

SUITABLE FOR SERIES URC DOMO (I) - URC DOMO SMALL - URC DOMO ECO - URC DOMO EXT (I)

Code

CNW



CNU PANEL

Remotable panel for wall-mounting on 503 box.
Digital control with temperature and humidity sensor.

SUITABLE FOR SERIES URA R DOMO D/DC (I)

Code

CNU



TAL PANEL

Remote panel showing the same information as the display on-board the unit.

SUITABLE FOR SERIES URC DOMO (E) - URC DOMO EXT (E)

Code

TAL



TGF PANEL

Remotable panel, wall-mounting on 503 box.

SUITABLE FOR SERIES URC DOMO (E) - URC DOMO EXT (E)

SUITABLE FOR SERIES URA R DOMO D/DC (E)

Code

TGF

TGF-URAR



TNF PANEL

Remotable colour panel, wall-mounting on 503 box.

SUITABLE FOR SERIES URC DOMO (E) - URC DOMO EXT (E)

Code

TNF



TNF BUILT-IN BOX

TNF built-in control box.

SUITABLE FOR SERIES URC DOMO (E) - URC DOMO EXT (E)

Code

SC-TNF

1.1 Residential systems

CENTRALISED CMV **ACCESSORIES**



SQA CONTROLLER

Room VOC controller with integrated sensor (power supply 230 Volt AC; dim. W96.4 x H101 x D39 mm)

Code

SUITABLE FOR SERIES **URC DOMO - URC DOMO SMALL - URC DOMO ECO - URC DOMO EXT - URA R DOMO D/DC**

SQA



UMR HUMIDISTAT

Room humidistat, ON/OFF signal for humidification/dehumidification control via external manual potentiometer, wall mounting.

(Field: 30...90% RH; dim. L76 x H76 x P34 mm)

Code

SUITABLE FOR SERIES **URC DOMO - URC DOMO SMALL - URC DOMO ECO - URC DOMO EXT - URA R DOMO D/DC**

UMR



PROGRAMMABLE THERMOSTAT/HUMIDISTAT

Integrated programmable thermostat/humidistat: controls ambient temperature and humidity through the control of two separate relays and the management of time ranges.

Code

SUITABLE FOR SERIES **URA R DOMO D/DC**

CTH



TEMPERATURE PROBE

Ambient temperature detection probe. Positioning on 503 box.

Code

SUITABLE FOR SERIES **URA R DOMO D/DC**

SAB



CONDENSATE DRAIN SIPHON

Siphon for draining condensate.

Code

SUITABLE FOR SERIES **URC DOMO - URC DOMO SMALL - URC DOMO ECO - URC DOMO EXT - URA R DOMO D/DC**

SIF



2-WAY VALVE

1/2" 2-way ON/OFF zone valve.

Code

SUITABLE FOR SERIES **URC DOMO - URC DOMO SMALL - URC DOMO ECO - URC DOMO EXT - URA R DOMO D/DC**

VDZ2



3-WAY VALVE

1/2" 3-way ON/OFF zone valve.

Code

SUITABLE FOR SERIES **URC DOMO - URC DOMO SMALL - URC DOMO ECO - URC DOMO EXT - URA R DOMO D/DC**

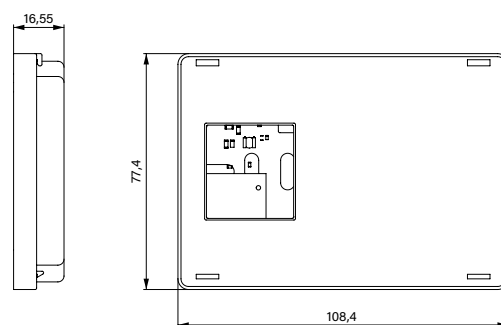
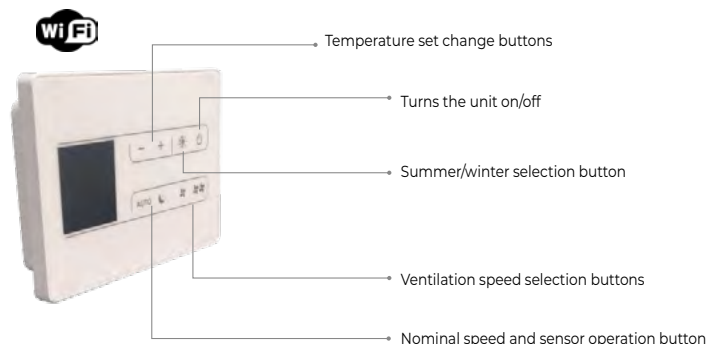
VDZ3

CONTROLS FOR ELECTRONIC I VERSIONS

CNW

FEATURES

Capacitive touch-type remote control for managing all unit functions with integrated **WiFi** for unit management via APP.



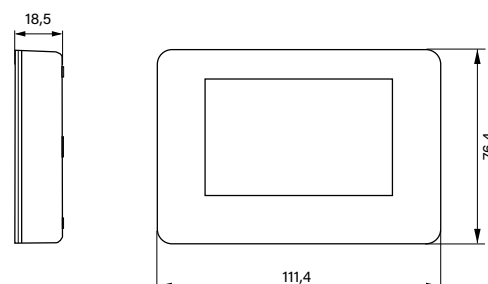
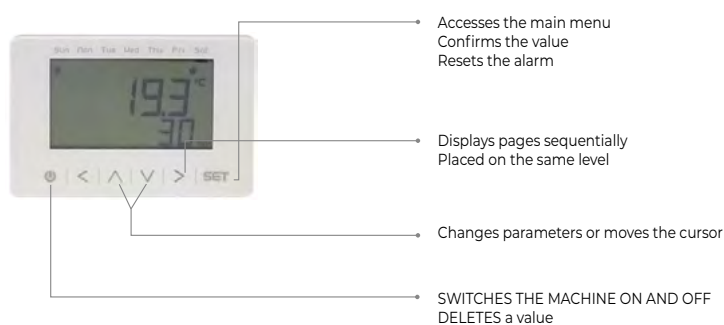
CNU

FEATURES

The keypad is equipped with 6 navigation buttons. The interface is structured through templates containing writing, graphic symbols and numbers. The buttons are located on the black bar at the bottom of the display.

From the main screen you can view:

- The day of the week at the top
- The ambient temperature in the top line
- The ambient humidity in the bottom line



1.1 Residential systems

CONTROLS FOR ELECTRONIC E VERSIONS

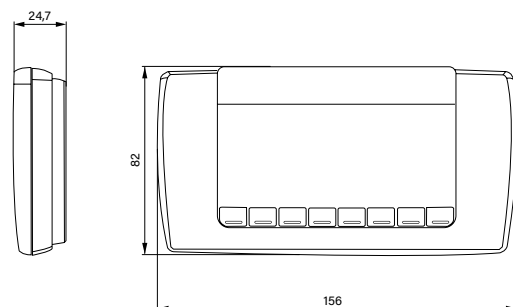
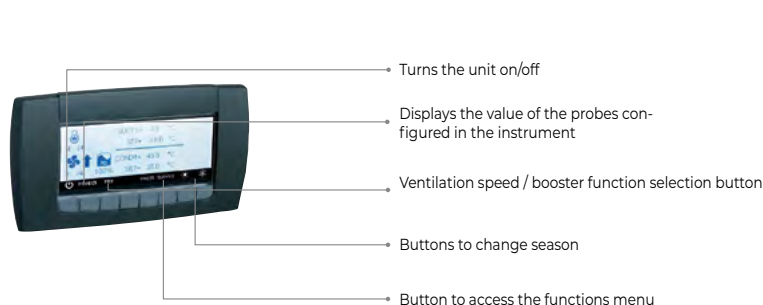
TGF

FEATURES

The panel consists of 6 buttons and an alphanumeric display.

The unit control panel is a graphic keypad with a screen resolution of 82x156 mm and IP65 front protection.

The interface is structured through templates containing writing, graphic symbols and numbers.

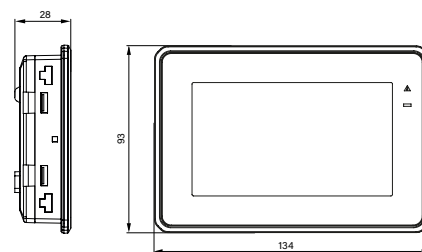
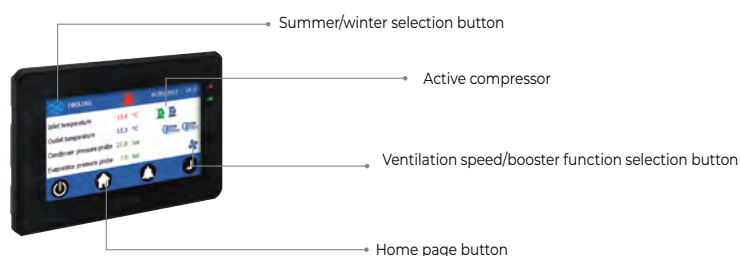


TNF

FEATURES

The TNF touch screen panel features a large 4.3-inch colour touch screen display. High level of connectivity via LAN and USB ports and high versatility.

Wall and/or panel mounting possible.

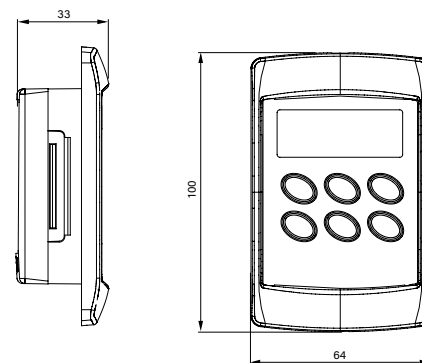
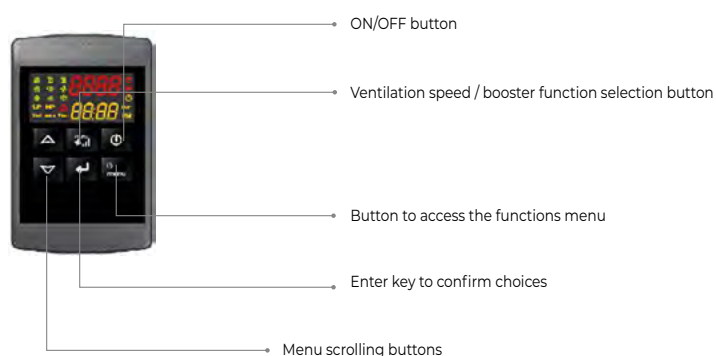


TAL

FEATURES

The TAL remote panel is a built-in display for 503 electrical boxes with vertical installation.

The interface, functions and buttons do not differ from the electronics installed on the machine.



SPARE FILTER PARTS CENTRALISED CMV ACCESSORIES



FILTERS and PM1 KITS

2-filter kit (ePM1 80% - F7):

- **FDR1-URC** for URC DOMO 20 H/V - URC DOMO SMALL 15/20 - URC DOMO EXT 20/25
- **FDR2-URC** for URC DOMO 30 H/V U R C DOMO ECO 30 Z
- **FDR3-URC** for URC DOMO 40/50 H URC DOMO ECO 40 Z
- **FDR4-URC** for URC DOMO 40/50 V

SUITABLE FOR SERIES **URC DOMO H/V - URC DOMO SMALL - URC DOMO ECO - URC DOMO EXT**

Code
FDR1-URC
FDR2-URC
FDR3-URC
FDR4-URC



FILTERS and PM1 + COARSE KITS

3-filter kit (2 ePM1 80% + 1 Coarse):

- **FDR1-URARH** per URA R DOMO 30/15 - 40/20 H
- **FDR2-URARH** per URA R DOMO 50/25 - 60/30 H
- **FDR1-URARV** per URA R DOMO 30/15 - 40/20 V
- **FDR2-URARV** per URA R DOMO 50/25 - 60/30 V

SUITABLE FOR SERIES **URA R DOMO H/V**

Code
FDR1-URARH
FDR2-URARH
FDR1-URARV
FDR2-URARV



SUPPORT FEET KIT

Kit of 4 anti-vibration feet with sound absorbers for vertical unit installation.

SUITABLE FOR SERIES **URC DOMO V**

Code
KIT-URC-DOMOV

ELECTRIC COILS



BER

BER electric heating coil complete with temperature probe control (pre- or post-heating operation). Electric pre/post heating units with a circular cross-section consist of a galvanised sheet metal frame with an armoured heating element. They are fitted with circular flanges for easier duct installation. The side electrical box, which is already complete with cable grommet, allows access to the components inside. Electronic temperature control is carried out via a TRIAC circuit board mounted directly inside the heater control box. The output temperature is continuously controlled by a probe placed inside the duct and can be adjusted by means of a potentiometer placed outside the control box. A 0-30°C plate placed underneath it allows the output DT to be set. It is designed for stand-alone installation without any communication with the unit.

MODEL	Nominal electrical power (Kw)	Power supply	Stages	Absorption (A)	Ø (mm)	Code
BER 1R	0.5	230/1/50	1	2.2	125	BER 1R
BER 2R	1	230/1/50	1	4.5	160	BER 2R

BER 1R SUITABLE FOR SERIES **URC DOMO 20 H/V**

BER 2R SUITABLE FOR SERIES **URC DOMO 30/40/50 H/V - URC DOMO ECO 30/40 Z - URC DOMO SMALL 15/20 URC DOMO EXT 20/25**

1.1 Residential systems

ACCESSORIES URCP PUNCTUAL CMV



THERMAL INSULATION FOR UNITS

Kit consists of a rigid EPP pipe and 2 end caps:

- **KIS1** for unit URCP 02
- **KIS2** for unit URCP 05

Code

KIS1

KIS2



CORNER OUTLET KIT

Kit consists of: round/rectangular connection, flat pipe (2 m long), end connection with aluminium grille with rain fins and protective net:

- **KUA1** for unit URCP 02
- **KUA2** for unit URCP 05

Code

KUA1

KUA2



WALL-MOUNTING TEMPLATE

Template for wall-mounting the unit with quick release, supplied in kit with fixing screws and accessories (dim. 230x230 mm).

Code

DFM



EXTERNAL COVER GRILLE

External cover grille made of plastic with a deflector shell (alternative to the folding grille supplied with the unit):

- **GEM1** for unit URCP 02
- **GEM2** for unit URCP 05

Code

GEM1

GEM2



SILENCERS

Noise reduction silencer.

- **SIL1** for unit URCP 02
- **SIL2** for unit URCP 05

Code

SIL1

SIL2



REPLACEMENT FILTER G3

Class G3 replacement filter (dim. 230 x 230 mm)

Code

FDRT



REPLACEMENT CERAMIC EXCHANGER

Replacement ceramic regenerator:

- **SCR1** for unit URCP 02
- **SCR2** for unit URCP 05

Code

SCR1

SCR2

FRONT COVERS WITH HIGH QUALITY FINISH



EXTERNAL COVER GRILLE

The unit can be equipped with internal front covers in various finishes, materials and design colours. The cover is supplied with mounting screws and can easily and intuitively be replaced with the product front (dim. 230x230 mm).



MIRROR

Code

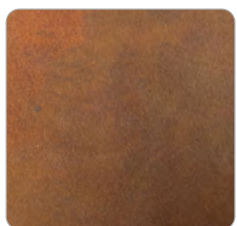
CF1



BRUSHED METAL

Code

CF2



CORTEN

Code

CF3



SHINY WHITE

Code

CF4



SHINY BLACK

Code

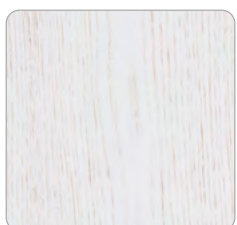
CF5



WENGÉ

Code

CF6



BLEACHED WOOD

Code

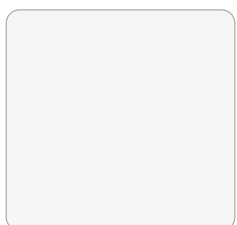
CF7



NATURAL WOOD

Code

CF8

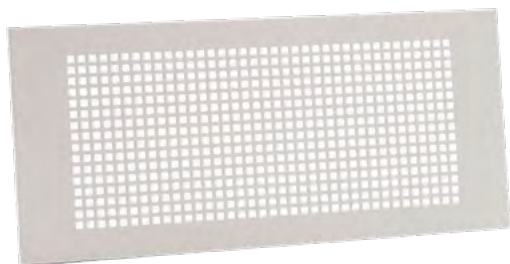


PAINTABLE NEUTRAL

Code

CF9

1.1 Residential systems



DISTRIBUTION ACCESSORIES

For the technical specifications of the following products, please refer to the data sheets on the website:
www.aircontrolclima.it

TERMINALS/EXTERNAL GRILLES



EXTERNAL ROOF TERMINAL

FEATURES

External terminal for air intake/exhaust on the roof. Includes 2 connectors:
- 1 in EPP for connection to EPP pipe DN 160 (AIR10091)
- 1 in rubber for connection to EPP pipe DN 180 (AIR10092)

Ø (mm)	Code
160/180	AIR10077



ROOF TERMINAL TILE

FEATURES

Flat roof terminal tile.

Degree of inclination	Code
160/180	AIR10078



ROOF TILE

FEATURES

Inclined roof terminal tile (inclination not adjustable).

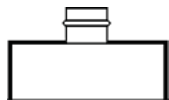
Degree of inclination	Code
20-30°	AIR10078-A
30-40°	AIR10078-B
40-50°	AIR10078-C



PLENUM FOR EXTERNAL GRILLE

FEATURES

Plenum in PAL for external grille GRAR.
Version with rear P connection for flexible pipe Ø 125/160/200/250 mm.



Grille reference	Ø Connec- tion (mm)	Dimensions LxHxD (mm)	Code
200x150	125	224x174x250	PLP200X150-D125
300x150	125	324x174x250	PLP300X150-D125
200x200	125	224x174x250	PLP200X150-D125
	160	224x224x200	PLP200X200-D160
300x200	125	324x224x200	PLP300X200-D125
	160	324x224x200	PLP300X200-D160
400x200	125	424x224x200	PLP400X200-D125
	160	424x224x200	PLP400X200-D160
500x200	160	524x224x200	PLP500X200-D160
300x300	160	324x324x200	PLP300X300-D160
	200	324x324x200	PLP300X300-D200
400X300	160	424x324x200	PLP400X300-D160
	200	424x324x200	PLP400X300-D200
	250	424x324x200	PLP400X300-D250
400x400	200	424x424x200	PLP400X400-D200
	250	424x424x200	PLP400X400-D250



EXTERNAL S/R GRILLE WITH MESH

FEATURES

Supply/return grille with single row of fixed fins, deflection 15°. Includes bird mesh for outdoor air intake/exhaust.

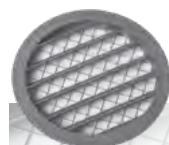
Aluminium finish.

Installation using clips: wall or ceiling.

Installation height: 2.5 - 3.5 m.

Note: see the complete data sheet on page 136 of the DISTRIBUTION catalogue

Dimensions (mm)	Code
200x150	GRAR-200X150A
300x150	GRAR-300X150A
200x200	GRAR-200X200A
300x200	GRAR-300X200A
400x200	GRAR-400X200A
500x200	GRAR-500X200A
300x300	GRAR-300X300A
400X300	GRAR-400X300A
400X400	GRAR-400X400A



ROUND EXTERNAL S/R GRILLE WITH MESH

FEATURES

Round supply/return grille with single row of fixed fins, deflection 15°.

Includes bird mesh for outdoor air intake/exhaust.

Aluminium finish.

Built-in wall installation.

Note: see the complete data sheet on page 150 of the DISTRIBUTION catalogue

Ø (mm)	Code
120	G-CAM-D120
160	G-CAM-D160
200	G-CAM-D200

1.1 Residential systems



ROUND EXTERNAL GRILLE WITH MESH AND FLOW DIVERTER

FEATURES

Round stainless steel grille with bird mesh and flow diverter.

Ø (mm)	Code
125	GR-EXT-FL125
160	GR-EXT-FL160
200	GR-EXT-FL200



EXTENSION

FEATURES

Galvanised steel telescopic extension for wall crossings.

Ø (mm)	Code
125	PRO-EXT-D125
160	PRO-EXT-D160
200	PRO-EXT-D200

PIPING RECOVERY UNIT - EXTERNAL GRILLE / RECOVERY UNIT S/R MANIFOLDS



EPP-INSULATED RIGID PIPE

FEATURES

Insulated and vapour-tight expanded polypropylene (EPP) pipe, including connector.
1 metre bar.

Ø (mm)	Code
120	AIR10090
160	AIR10091
180	AIR10092



EPP-INSULATED JOINT

FEATURES

EPP-insulated rigid pipe joint.

Ø (mm)	Code
120	AIR10093
160	AIR10094
180	AIR10095



EPP-INSULATED ELBOW

FEATURES

Thanks to the central groove, the 90° elbow can be divided into two 45° elbows.

Ø (mm)	Code
120	AIR10096
160	AIR10097
180	AIR10098



EPP-INSULATED REDUCER

FEATURES

EPP-insulated rigid pipe reducer.

Ø (mm)	Code
160/125	AIR10099
180/160	AIR10100



INSULATED FLEXIBLE PIPE

FEATURES

Flexible aluminium foil pipe reinforced with a polyester film and a steel wire spiral structure. Thermal insulation: glass wool mat. Anti-condensation outer coating: Aluminium and polyester fabric reinforced with a glass fibre mesh. (pack 10 m).

Notes: non-standard transport conditions.

Note: see the complete data sheet on page 82 of the DISTRIBUTION catalogue

Ø (mm)	Code
127	TES127
160	TES160
203	TES203



INSULATED SEMI-RIGID PIPE

FEATURES

Semi-rigid pipe with polyolefin resin film with antibacterial and mould-resistant master additives. Heat-insulating covering made of closed-cell, cross-linked polyethylene foam (pack 10 m)

Notes: non-standard transport conditions.

Note: see the complete data sheet on page 83 of the DISTRIBUTION catalogue

Ø (mm)	Code
80	TER82
100	TER102
125	TER127
160	TER160
200	TER203
250	TER254



PIPE CLAMP

FEATURES

Stainless steel pipe clamp (for flexible piping).

Ø piping (mm)	CODE
from 60 to 135	FSI60-135
from 60 to 170	FSI60-170
from 60 to 270	FSI60-270



GALVANISED SHEET METAL REDUCER

FEATURES

Circular male-male galvanised sheet metal reducer.

Ø (mm)	Code
160/125	AIR-RCPL160/125
200/160	AIR-RCPL200/160



GALVANISED SHEET METAL CONNECTOR

FEATURES

Female-female galvanised sheet metal connector.

Ø (mm)	Code
125	AIR-MF125
160	AIR-MF160
200	AIR-MF200

1.1 Residential systems



GALVANISED SHEET METAL CONNECTOR

FEATURES

Male-male galvanised sheet metal connector.

Ø (mm)	Code
125	AIR-MM125
160	AIR-MM160
200	AIR-MM200

MANIFOLDS SUPPLY/RETURN

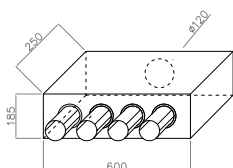
POLYURETHANE S/R MANIFOLD



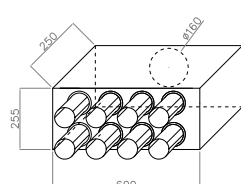
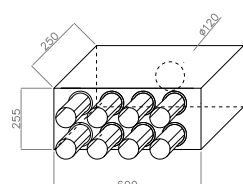
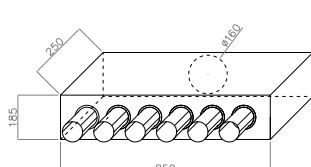
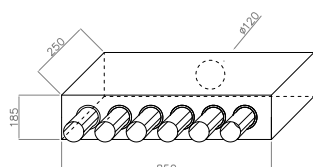
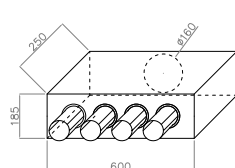
FEATURES

PAL supply/return manifold with 1 inlet Ø 120/160 mm and 4/6/8 outlets for corrugated pipe Ø 75/90 or flexible pipe Ø 80.
Note: Ducts Ø 75/90/80 included.

PLENUMCMV120



PLENUMCMV160



FEATURES

PAL supply/return manifold with 1 inlet Ø 120/160 mm:
Specify number and Ø of outlet connections.

Note: Sleeves for corrugated pipe Ø 75/90 not included (AIR10034/AIR10035).

Example: manifold with inlet Ø 160 and 5 outlets for corrugated pipe Ø 75:

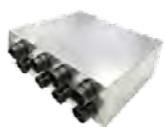
code: **PLENUMCMV-160-SP**

code description: **5xD75**

Note: add 5 sleeves Ø 75 (AIR10034)

Ø inlet connection (mm)	Ø outlet connections (mm)	# outlet connections (mm)	CODE
120	75	4	PLENUMVMC-120X4D75
		6	PLENUMVMC-120X6D75
		8	PLENUMVMC-120X8D75
	90	4	PLENUMVMC-120X4D90
		6	PLENUMVMC-120X6D90
		8	PLENUMVMC-120X8D90
	80	4	PLENUMVMC-120X4D80
		6	PLENUMVMC-120X6D80
		8	PLENUMVMC-120X8D80
160	75	4	PLENUMVMC-160X4D75
		6	PLENUMVMC-160X6D75
		8	PLENUMVMC-160X8D75
	90	4	PLENUMVMC-160X4D90
		6	PLENUMVMC-160X6D90
		8	PLENUMVMC-160X8D90
	80	4	PLENUMVMC-160X4D80
		6	PLENUMVMC-160X6D80
		8	PLENUMVMC-160X8D80

Ø inlet connection (mm)	Ø outlet connections (mm)	# outlet connections (mm)	CODE
120	to be specified	to be specified	PLENUMVMC-120-SP
160	to be specified	to be specified	PLENUMVMC-160-SP



METAL S/R MANIFOLD

FEATURES

Galvanised steel supply/return manifold with sound-absorbing internal insulation. Including an inlet connection Ø 160 and 6/8 outlet sleeves for corrugated pipe Ø 75 with integrated externally adjustable butterfly damper for simple and effective system calibration. Both models are prepared for the possibility of adding a further 4 connectors (2 on each side).

Dimensions LxHxD (mm)	Ø inlet (mm)	Ø outlet (mm)	Code
390x401x200	160*	6x75	PLENUMVMC-X6
510x401x200	160*	8x75	PLENUMVMC-X8

IMG	Description	CODE
A	CONNECTOR Ø 75 mm	MANICOTTO-VMC 75
B	CONNECTOR Ø 90 mm	MANICOTTO-VMC 90
C	DAMPER 75/90 mm	SERRANDA-VMC 75/90



Note: see the complete data sheet on page 113 of the *DISTRIBUTION* catalogue



PLASTIC FLAT PIPE MANIFOLD S/R

FEATURES

Plastic manifold for flat floor piping:
2xØ 163x68 mm- 5xØ 132x52 mm

Dimensions (mm)	Code
2x 163x68 5x 132x52	AIR10059

SILENCERS AND FLOW REGULATORS



FLEXIBLE ACOUSTIC SILENCER

FEATURES

Flexible aluminium sheet silencer for circular ducts. Mineral wool sound insulation (25 mm thick). Installation: plug-in connection.

Note: see the complete data sheet on page 208 of the *DISTRIBUTION* catalogue

Ø (mm)	L (mm)	Code
125	500	SRAF25-125-500
160	500	SRAF25-160-500



CONSTANT FLOW REGULATOR

FEATURES

PVC constant flow regulator: a PVC regulating module inserted into a plastic connector with a sealing gasket. The regulating element consists of a PVC blade with a balancing spring and an amortising piston. Constant flow rate with a pressure range of 20-250 Pa.

Notes: Other versions are available for different flow ranges.

Ø (mm)	Flow rate (m³/h)	Code
80	15 - 50	RPCM-80
100	15 - 50	RPCM-100-A
100	50 - 100	RPCM-100-B
125	50 - 100	RPCM-125-B
125	100 - 180	RPCM-125-C
160	50 - 100	RPCM-160-B
160	100 - 180	RPCM-160-C
160	180 - 300	RPCM-160-D

Note: see the complete data sheet on page 202 of the *DISTRIBUTION* catalogue

1.1 Residential systems



ROUND FLOW REGULATOR

FEATURES

Dynamic flow regulator for round corrugated pipe.

Flow rate ranges: 20-50 m³/h

Ø (mm)	Code
80	AIR10069



FLAT STATIC FLOW REGULATOR

FEATURES

Static flow regulator for flat pipe.

Dimensions (mm)	Code
132x52	AIR10068

S/R GRILLE CONNECTION PIPING



ROUND ANTIBACTERIAL TUBE

FEATURES

Double-walled round corrugated pipe, smooth inside and corrugated outside. External UV protection, inner wall with anti-static treatment. Antibacterial and anti-mould.

Installation: underfloor, in wall cavities, in false ceilings.

Note: see the complete data sheet on page 112 of the DISTRIBUTION catalogue

Ø (mm)	Code
75 mm	AIR10003
90 mm	AIR10005

Note: Non-standard transport conditions



FLAT ANTIBACTERIAL TUBE

FEATURES

Reel of anti-static and antibacterial corrugated flat pipe (pack of 20 m).

DIMENSIONS (mm)	Code
132x52	AIR10006

Note: Non-standard transport conditions



FLAT PIPE BAR

FEATURES

Flat pipe bar:

- Anti-static and antibacterial corrugated (pack of 3 m)
- Smooth ABS (pack 1.15 m)

Dimensions (mm)	Code
132x52	AIR10014

Dimensions (mm)	Code
163x68	AIR10015

Note: Non-standard transport conditions



REEL OF INSULATION

FEATURES

Reel of insulation for corrugated pipe (pack 15 m).

Note: see the complete data sheet on page 112 of the DISTRIBUTION catalogue



SLEEVE

FEATURES

Aluminium sheet metal collars with h 120 mm.

Made to connect hoses to ducts. Supplied open for minimum storage space.

Closure with interlocking tab without rivet.

Note: see the complete data sheet on page 80 of the DISTRIBUTION catalogue

	Dimensions (mm)	Code
Round	Ø 75	AIR10011
Round	Ø 90	AIR10012
Flat	132x52	AIR10013

Note: Non-standard transport conditions

Ø (mm)	Code
100	CANOTTO100
120	CANOTTO120
160	CANOTTO160

ACCESSORIES / FITTINGS FOR CORRUGATED PIPE



FITTING FOR ROUND CORRUGATED PIPE

FEATURES

Coupling fitting for round corrugated pipe.
AIR10003 / AIR10005

Ø (mm)	Code
75	AIR10034
90	AIR10035



ROUND-FLAT FITTING

FEATURES

Round to flat corrugated pipe fitting.

Dimensions (mm)	Code
Ø 75 mm to flat 1 x 32 x 52	AIR10027
Ø 90 mm to flat 1 x 132 x 52	AIR10028

Note: Non-standard transport conditions



FLAT FITTING

FEATURES

Fitting for flat corrugated pipe.

Dimensions (mm)	Code
132x52	AIR10025



O-RING

FEATURES

O-Ring seal for corrugated pipe and fittings.

Ø (mm)	Code
75*	AIR10008
90*	AIR10009

1.1 Residential systems



ROUND 90° ELBOW

FEATURES

90° elbow for round corrugated pipe.

Ø (mm)	Code
75	AIR10036
90	AIR10037



ROUND PIPE JOINT

FEATURES

Connecting joint for corrugated round pipe.

Ø (mm)	Code
75	AIR10112
90	AIR10113



ROUND BLIND CAP

FEATURES

Blind cap for round corrugated pipe.

Ø (mm)	Code
75	AIR10039
90	AIR10040



ROUND PIPE FIXING CLIP

FEATURES

PVC fixing clip for round corrugated pipe (48 pc. pack)

Ø (mm)	Code
75	AIR10109-P
90	AIR10110-P



DOUBLE O-RING FOR FLAT PIPE

FEATURES

Double O-Ring seal for corrugated pipe and fittings.

	Dimensions (mm)	Code
Corrugated pipes and fittings	132x52	AIR10016
Smooth ABS	163x68	AIR10017



VERTICAL FLAT 90° ELBOW

FEATURES

Vertical 90° elbow for flat corrugated pipe.

	Dimensions (mm)	Code
Flat corrugated pipe	132x52	AIR10021
Smooth ABS	163x68	AIR10022



HORIZONTAL FLAT 90° ELBOW

FEATURES

Horizontal 90° elbow for flat corrugated pipe.

	Dimensions (mm)	Code
Flat corrugated pipe	132x52	AIR10023
Smooth ABS	163x68	AIR10024



INVERTED FLAT FITTING

FEATURES

Inverted 180° fitting for flat corrugated pipe.

Dimensions (mm)	Code
132x52	AIR10026



FLAT BLIND CAP

FEATURES

Blind cap for flat corrugated pipe.

Dimensions (mm)	Code
132x52	AIR10041



FLAT FIXING CLIP

FEATURES

Steel fixing clip for flat corrugated pipe.

Dimensions (mm)	Code
132x52	AIR10042



ROUND-FLAT FITTING

FEATURES

Round to flat corrugated pipe fitting.

Dimensions (mm)	Code
1xØ 90 / 1x 132x52	AIR10029



ROUND-FLAT FITTING

FEATURES

Round to flat smooth ABS corrugated pipe fitting.

Dimensions (mm)	Code
1xØ 125 / 1x 163x68	AIR10020



ROUND-DOUBLE FLAT FITTING

FEATURES

Single round to double smooth ABS corrugated pipe fitting.

Dimensions (mm)	Code
1xØ 160 / 2x 163x68	AIR10018



ROUND-FLAT 90° ELBOW

FEATURES

90° elbow from round corrugated pipe to flat.

Dimensions (mm)	Code
1xØ 75 / 1 x 132x52	AIR10030
1xØ 90 / 1 x 132x52	AIR10031

1.1 Residential systems



ROUND/ROUND DOUBLE 90° DIFFUSER

FEATURES

90° elbow double diffuser (cap included).

Dimensions (mm)	Code
1xØ 125 - 2xØ 75	AIR10062
1xØ 125 - 2xØ 90	AIR10063



ROUND/ROUND DOUBLE 90° DIFFUSER - SHORT

FEATURES

Double 90° elbow diffuser (cap included) with reduced length.

Dimensions (mm)	Code
1xØ 125 - 2xØ 75	AIR10062-C
1xØ 125 - 2xØ 90	AIR10063-C



ROUND/FLAT SINGLE 90° DIFFUSER

FEATURES

Single 90° elbow diffuser

Dimensions (mm)	Code
1xØ 125 - 1x 132x52	AIR10064



ROUND/FLAT DOUBLE 90° DIFFUSER

FEATURES

Double 90° elbow diffuser

Dimensions (mm)	Code
1xØ 125 - 2x 132x52	AIR10065



SINGLE FLAT/ROUND STRAIGHT DIFFUSER

FEATURES

Flat/round straight single diffuser.

Dimensions (mm)	Code
1xØ 125 - 1x 132x52	AIR10066



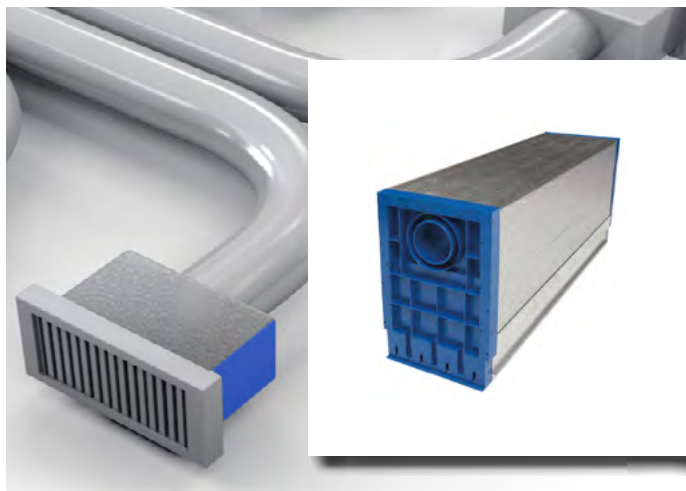
FLAT/FLAT SINGLE 90° DIFFUSER

FEATURES

Single 90° angle diffuser for AIR10067-B design vents.

Dimensions (mm)	Code
1x 132x52 - 1x 300x80	AIR10067

PLENUMS AND INTERNAL GRILLES



PLENUMS FOR INTERNAL GRILLE

Plenum in PAL for internal grille BMA/LAF, reduced depth (130 mm). **Plenum h 150 with blue ABS caps.**
Includes sleeves for corrugated pipe Ø 75/90 or flexible pipe Ø 80.

CODE DESCRIPTION

PL*VMC L x H - n° x Ø

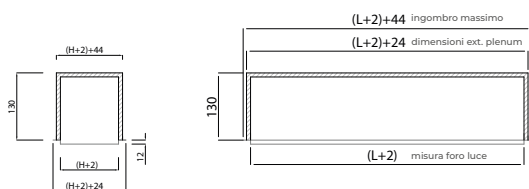
Connection type:
P rear
S top
L side

Base
Height



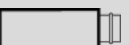
connections

Connection diameter:
Ø 75/90 corrugated pipe
Ø 80/100... corrugated pipe




DIMENSIONAL DATA



Example of new code creation: plenum for grille 300X100 con 1 rear connection for corrugated pipe Ø75;
code **PLPVMC300X100-D75** (sleeve code **AIR10034**).

grille reference	Ø connection (mm)	# outlet connections (mm)	plenum dimensions LxHxD (mm)			
				Code	Code	Code
200x100	75	1	224x124x130	PLPVMC200X100-D75	PLSVMC200X100-D75	PLLVMC200X100-D75
	90	1	224x124x130	PLPVMC200X100-D90	PLSVMC200X100-D90	PLLVMC200X100-D90
	80	1	224x124x130	PLPVMC200X100-D80	PLSVMC200X100-D80	PLLVMC200X100-D80
300x100	75	1	324x124x130	-	-	PLLVMC300X100-D75
	90	1	324x124x130	-	-	PLLVMC300X100-D90
	80	1	324x124x130	-	-	PLLVMC300X100-D80
	75	2	324x124x130	PLPVMC300X100-2XD75	PLSVMC300X100-2XD75	-
	90	2	324x124x130	PLPVMC300X100-2XD90	PLSVMC300X100-2XD90	-
	80	2	324x124x130	PLPVMC300X100-2XD80	PLSVMC300X100-2XD80	-
400x100	75	1	424x124x130	-	-	PLLVMC400X100-D75
	90	1	424x124x130	-	-	PLLVMC400X100-D90
	80	1	424x124x130	-	-	PLLVMC400X100-D80
	75	3	424x124x130	PLPVMC400X100-3XD75	PLSVMC400X100-3XD75	-
	90	3	424x124x130	PLPVMC400X100-3XD90	PLSVMC400X100-3XD90	-
	80	3	424x124x130	PLPVMC400X100-3XD80	PLSVMC400X100-3XD80	-
200x150	75	1	224x174x130	PLPVMC200X150-D75	PLSVMC200X150-D75	PLLVMC200X150-D75
	90	1	224x174x130	PLPVMC200X150-D90	PLSVMC200X150-D90	PLLVMC200X150-D90
	80	1	224x174x130	PLPVMC200X150-D80	PLSVMC200X150-D80	PLLVMC200X150-D80
300x150	75	1	324x174x130	-	-	PLLVMC300X150-D75
	90	1	324x174x130	-	-	PLLVMC300X150-D90
	80	1	324x174x130	-	-	PLLVMC300X150-D80
	75	2	324x174x130	PLPVMC300X150-2XD75	PLSVMC300X150-2XD75	-
	90	2	324x174x130	PLPVMC300X150-2XD90	PLSVMC300X150-2XD90	-
	80	2	324x174x130	PLPVMC300X150-2XD80	PLSVMC300X150-2XD80	-

1.1 Residential systems

				 PLPVMC - rear connection	 PLSVMC - top connection	 PLLVMC - side connection
400x150	75	1	424x174x130	-	-	PLLVMC400X150-D75
	90	1	424x174x130	-	-	PLLVMC400X150-D90
	80	1	424x174x130	-	-	PLLVMC400X150-D80
	75	3	424x174x130	PLPVMC400X150-3XD75	PLSVMC400X150-3XD75	-
	90	3	424x174x130	PLPVMC400X150-3XD90	PLSVMC400X150-3XD90	-
	80	3	424x174x130	PLPVMC400X150-3XD80	PLSVMC400X150-3XD80	-



PLENUMS FOR LINEAR DIFFUSER

Plenum in PAL for linear diffuser DLF(1 slot) reduced depth (130 mm).
Includes sleeves for corrugated pipe Ø 75/90 or flexible pipe Ø 80:

CODE DESCRIPTION

PL*DLFVMC L X1F - n° x Ø

Connection type:
P rear
S top

Base

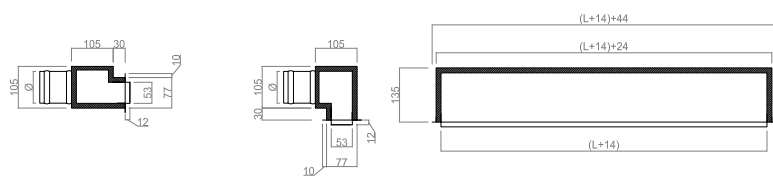
connections



Connection diameter:
Ø 75/90 corrugated pipe
Ø 80/100... corrugated pipe

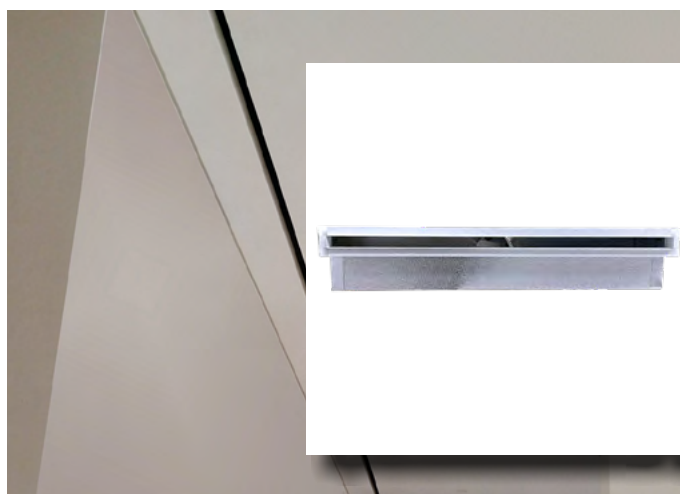
Example of new code creation: plenum for diffuser

DLF L1000-1slot with 2 rear connections for corrugated pipe Ø75; code **PLPDLFVMC10001F-2XD75** (sleeve code **AIR10034**).

DIMENSIONAL DATA



				 PLPDLFVMC - rear connection	 PLSDLFVMC - top connection
diffuser reference	Ø connection (mm)	# outlet connections (mm)	plenum dimensions LxHxD (mm)	Code	Code
L 400 - 1 slot	75	1	438x77x130	PLPDLFVMC4001F-D75	PLSDLFVMC4001F-D75
	90	1	438x77x130	PLPDLFVMC4001F-D90	PLSDLFVMC4001F-D90
	80	1	438x77x130	PLPDLFVMC4001F-D80	PLSDLFVMC4001F-D80
L 800 - 1 slot	75	2	838x77x130	PLPDLFVMC8001F-2XD75	PLSDLFVMC8001F-2XD75
	90	2	838x77x130	PLPDLFVMC8001F-2XD90	PLSDLFVMC8001F-2XD90
	80	2	838x77x130	PLPDLFVMC8001F-2XD80	PLSDLFVMC8001F-2XD80
L 1000 - 1 slot	75	3	1038x77x130	PLPDLFVMC10001F-3X75	PLSDLFVMC10001F-3X75
	90	3	1038x77x130	PLPDLFVMC10001F-3X90	PLSDLFVMC10001F-3X90
	80	3	1038x77x130	PLPDLFVMC10001F-3X80	PLSDLFVMC10001F-3X80

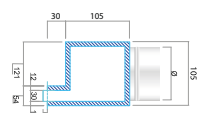


NEW!

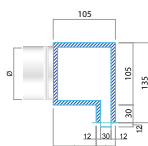
CONCEALED SLOT PLENUM

Concealed slot plenum (h 30 mm) for both ceiling and wall installation (drywall or masonry).
Reduced depth. L-profile (depth 12 mm) for easier installation on drywall.
Includes sleeves for corrugated pipe Ø 75/90 or flexible pipe Ø 80:

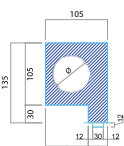
DIMENSIONAL DATA



Dettaglio PSFVMC
con attacco P



Dettaglio PSFVMC
con attacco S



Dettaglio PSFVMC
con attacco L

CODE DESCRIPTION

PSFVMC **L** **X30** ***** **-** **n°** **X** **Ø**

Base

Connection type:

P rear
S top
L side




connections

Connection diameter:

Ø 75/90 corrugated pipe
Ø 80/100... corrugated pipe




Example of new code creation: concealed slot plenum 600X30 with 3 rear connection for corrugated pipe per Ø75;
code **PSFVMC600X30P-3XD75** (sleeve code **AIR10034**).

* For versions with TOP (S) and SIDE (L) connection, reverse HxD values for dimensions

slot dimensions LxH (mm)	Ø connection (mm)	# outlet connections (mm)	plenum dimensions LxHxD (mm)			
				Rear connection P	Top connection S	Side connection L
				Code	Code	Code
200x30	75	1	224X105X135*	PSFVMC200X30P-D75	PSFVMC200X30S-D75	PSFVMC200X30L-D75
	90	1	224X105X135*	PSFVMC200X30P-D90	PSFVMC200X30S-D90	PSFVMC200X30L-D90
	80	1	224X105X135*	PSFVMC200X30P-D80	PSFVMC200X30S-D80	PSFVMC200X30L-D90
300x30	75	1	324X105X135*	-	-	PSFVMC300X30L-D75
	90	1	324X105X135*	-	-	PSFVMC300X30L-D90
	80	1	324X105X135*	-	-	PSFVMC300X30L-D80
	75	2	324X105X135*	PSFVMC300X30P-2XD75	PSFVMC300X30S-2XD75	-
	90	2	324X105X135*	PSFVMC300X30P-2XD90	PSFVMC300X30S-2XD90	-
	80	2	324X105X135*	PSFVMC300X30P-2XD80	PSFVMC300X30S-2XD80	-
400x30	75	1	424X105X135*	-	-	PSFVMC400X30L-D75
	90	1	424X105X135*	-	-	PSFVMC400X30L-D90
	80	1	424X105X135*	-	-	PSFVMC400X30L-D80
	75	2	424X105X135*	PSFVMC400X30P-2XD75	PSFVMC400X30S-2XD75	-
	90	2	424X105X135*	PSFVMC400X30P-2XD90	PSFVMC400X30S-2XD90	-
	80	2	424X105X135*	PSFVMC400X30P-2XD80	PSFVMC400X30S-2XD80	-
600x30	75	1	624X105X135*	-	-	PSFVMC600X30L-D75
	90	1	624X105X135*	-	-	PSFVMC600X30L-D90
	80	1	624X105X135*	-	-	PSFVMC600X30L-D80
	75	2	624X105X135*	PSFVMC600X30P-2XD75	PSFVMC600X30S-2XD75	-
	90	2	624X105X135*	PSFVMC600X30P-2XD90	PSFVMC600X30S-2XD90	-
	80	2	624X105X135*	PSFVMC600X30P-2XD80	PSFVMC600X30S-2XD80	-

1.1 Residential systems

* For versions with TOP (S) and SIDE (L) connection, reverse HxD values for dimensions

slot dimensions LxH (mm)	Ø connection (mm)	# outlet connections (mm)	plenum dimensions LxHxD (mm)			
				Code	Code	Code
800x30	75	1	824X105X135*	-	-	PSFVMC800X30L-D75
	90	1	824X105X135*	-	-	PSFVMC800X30L-D90
	80	1	824X105X135*	-	-	PSFVMC800X30L-D80
	75	2	824X105X135*	PSFVMC800X30P-2XD75	PSFVMC800X30S-2XD75	-
	90	2	824X105X135*	PSFVMC800X30P-2XD90	PSFVMC800X30S-2XD90	-
	80	2	824X105X135*	PSFVMC800X30P-2XD80	PSFVMC800X30S-2XD80	-
1000x30	75	1	1024X105X135*	-	-	PSFVMC1000X30L-D75
	90	1	1024X105X135*	-	-	PSFVMC1000X30L-D90
	80	1	1024X105X135*	-	-	PSFVMC1000X30L-D80
	75	3	1024X105X135*	PSFVMC1000X30P-3XD75	PSFVMC1000X30S-3XD75	-
	90	3	1024X105X135*	PSFVMC1000X30P-3XD90	PSFVMC1000X30S-3XD90	-
	80	3	1024X105X135*	PSFVMC1000X30P-3XD80	PSFVMC1000X30S-3XD80	-



NEW!

CONCEALED DIFFUSER PLENUM

Concealed diffuser plenum (h 50 mm) for both ceiling and wall installation (drywall or masonry). Reduced depth. L-profile (depth 12 mm) for easier installation on drywall. Includes sleeves for corrugated pipe Ø 75/90 or flexible pipe Ø 80:

CODE DESCRIPTION

PSDVMC **L** **X50*** - **n°** x **Ø**

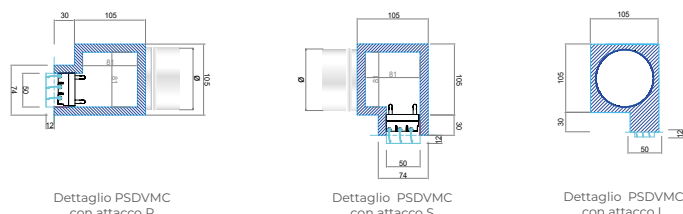
Base

Connection type:
P rear
S top
L side

connections




Connection diameter:
Ø 75/90 corrugated pipe
Ø 80/100... corrugated pipe

DIMENSIONAL DATA






Example of new code creation: concealed diffuser plenum 600X50 with 1 rear connection for corrugated pipe Ø75; code **PSDVMC600X50P-D75** (sleeve code **AIR10034**).

* For versions with TOP (S) and SIDE (L) connection, reverse HxD values for dimensions

slot dimensions LxH (mm)	Ø connection (mm)	# outlet connections (mm)	plenum dimensions LxHxD (mm)			
				Code	Code	Code
200x50	75	1	224X105X135*	PSDVMC200X50P-D75	PSDVMC200X50S-D75	PSDVMC200X50L-D75
	90	1	224X105X135*	PSDVMC200X50P-D90	PSDVMC200X50S-D90	PSDVMC200X50L-D90
	80	1	224X105X135*	PSDVMC200X50P-D80	PSDVMC200X50S-D80	PSDVMC200X50L-D80

* For versions with TOP (S) and SIDE (L) connection, reverse HxD values for dimensions

				 Rear connection P	 Top connection S	 Side connection L
slot dimensions LxH (mm)	Ø connection (mm)	# outlet connections (mm)	plenum dimensions LxHxD (mm)	Code	Code	Code
300x50	75	1	324X105X135*	-	-	PSDVMC300X50L-D75
	90	1	324X105X135*	-	-	PSDVMC300X50L-D90
	80	1	324X105X135*	-	-	PSDVMC300X50L-D80
	75	2	324X105X135*	PSDVMC300X50P-2XD75	PSDVMC300X50S-2XD75	-
	90	2	324X105X135*	PSDVMC300X50P-2XD90	PSDVMC300X50S-2XD90	-
	80	2	324X105X135*	PSDVMC300X50P-2XD80	PSDVMC300X50S-2XD80	-
400x50	75	1	424X105X135*	-	-	PSDVMC400X50L-D75
	90	1	424X105X135*	-	-	PSDVMC400X50L-D90
	80	1	424X105X135*	-	-	PSDVMC400X50L-D80
	75	2	424X105X135*	PSDVMC400X50P-2XD75	PSDVMC400X50S-2XD75	-
	90	2	424X105X135*	PSDVMC400X50P-2XD90	PSDVMC400X50S-2XD90	-
	80	2	424X105X135*	PSDVMC400X50P-2XD80	PSDVMC400X50S-2XD80	-
600x50	75	1	624X105X135*	-	-	PSDVMC600X50L-D75
	90	1	624X105X135*	-	-	PSDVMC600X50L-D90
	80	1	624X105X135*	-	-	PSDVMC600X50L-D80
	75	2	624X105X135*	PSDVMC600X50P-2XD75	PSDVMC600X50S-2XD75	-
	90	2	624X105X135*	PSDVMC600X50P-2XD90	PSDVMC600X50S-2XD90	-
	80	2	624X105X135*	PSDVMC600X50P-2XD80	PSDVMC600X50S-2XD80	-
800x50	75	1	824X105X135*	-	-	PSDVMC800X50L-D75
	90	1	824X105X135*	-	-	PSDVMC800X50L-D90
	80	1	824X105X135*	-	-	PSDVMC800X50L-D80
	75	2	824X105X135*	PSDVMC800X50P-2XD75	PSDVMC800X50S-2XD75	-
	90	2	824X105X135*	PSDVMC800X50P-2XD90	PSDVMC800X50S-2XD90	-
	80	2	824X105X135*	PSDVMC800X50P-2XD80	PSDVMC800X50S-2XD80	-
1000x50	75	1	1024X105X135*	-	-	PSDVMC1000X50L-D75
	90	1	1024X105X135*	-	-	PSDVMC1000X50L-D90
	80	1	1024X105X135*	-	-	PSDVMC1000X50L-D80
	75	3	1024X105X135*	PSDVMC1000X50P-3XD75	PSDVMC1000X50S-3XD75	-
	90	3	1024X105X135*	PSDVMC1000X50P-3XD90	PSDVMC1000X50S-3XD90	-
	80	3	1024X105X135*	PSDVMC1000X50P-3XD80	PSDVMC1000X50S-3XD80	-

1.1 Residential systems

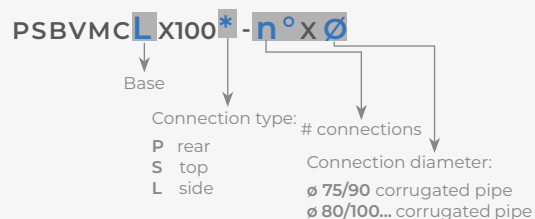


NEW!

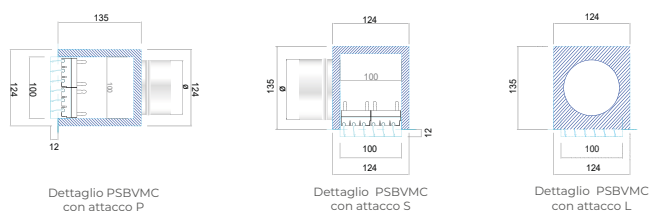
CONCEALED VENT PLENUM

Concealed vent plenum (h 100 mm) for both ceiling and wall installation (drywall or masonry). Reduced depth. L-profile (depth 12 mm) for easier installation on drywall. Includes sleeves for corrugated pipe \varnothing 75/90 or flexible pipe \varnothing 80:

CODE DESCRIPTION



DIMENSIONAL DATA



Example of new code creation: concealed vent plenum 600X100 with 1 rear connection for corrugated pipe \varnothing 75; code **PSBVMC600X100P-D75** (sleeve code **AIR10034**).

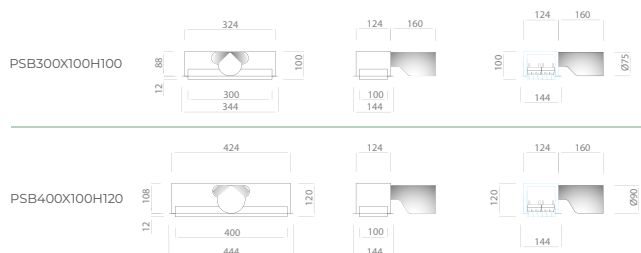
* For versions with TOP (S) and SIDE (L) connection, reverse HxD values for dimensions

slot dimensions LxH (mm)	Ø connection (mm)	# outlet connections (mm)	plenum dimensions LxHxD (mm)	Rear connection P	Top connection S	Side connection L
				Code	Code	Code
200x100	75	1	224X124X135*	PSBVMC200X100P-D75	PSBVMC200X100S-D75	PSBVMC200X100L-D75
	90	1	224X124X135*	PSBVMC200X100P-D90	PSBVMC200X100S-D90	PSBVMC200X100L-D90
	80	1	224X124X135*	PSBVMC200X100P-D80	PSBVMC200X100S-D80	PSBVMC200X100L-D80
300x100	75	1	324X124X135*	-	-	PSBVMC300X100L-D75
	90	1	324X124X135*	-	-	PSBVMC300X100L-D90
	80	1	324X124X135*	-	-	PSBVMC300X100L-D80
	75	2	324X124X135*	PSBVMC300X100P-2XD75	PSBVMC300X100S-2XD75	-
	90	2	324X124X135*	PSBVMC300X100P-2XD90	PSBVMC300X100S-2XD90	-
	80	2	324X124X135*	PSBVMC300X100P-2XD80	PSBVMC300X100S-2XD80	-
400x100	75	1	424X124X135*	-	-	PSBVMC400X100L-D75
	90	1	424X124X135*	-	-	PSBVMC400X100L-D90
	80	1	424X124X135*	-	-	PSBVMC400X100L-D80
	75	2	424X124X135*	PSBVMC400X100P-2XD75	PSBVMC400X100S-2XD75	-
	90	2	424X124X135*	PSBVMC400X100P-2XD90	PSBVMC400X100S-2XD90	-
	80	2	424X124X135*	PSBVMC400X100P-2XD80	PSBVMC400X100S-2XD80	-
600x100	75	1	624X124X135*	-	-	PSBVMC600X100L-D75
	90	1	624X124X135*	-	-	PSBVMC600X100L-D90
	80	1	624X124X135*	-	-	PSBVMC600X100L-D80
	75	2	624X124X135*	PSBVMC600X100P-2XD75	PSBVMC600X100S-2XD75	-
	90	2	624X124X135*	PSBVMC600X100P-2XD90	PSBVMC600X100S-2XD90	-
	80	2	624X124X135*	PSBVMC600X100P-2XD80	PSBVMC600X100S-2XD80	-
800x100	75	1	824X124X135*	-	-	PSBVMC800X100L-D75
	90	1	824X124X135*	-	-	PSBVMC800X100L-D90
	80	1	824X124X135*	-	-	PSBVMC800X100L-D80
	75	2	824X124X135*	PSBVMC800X100P-2XD75	PSBVMC800X100S-2XD75	-
	90	2	824X124X135*	PSBVMC800X100P-2XD90	PSBVMC800X100S-2XD90	-
	80	2	824X124X135*	PSBVMC800X100P-2XD80	PSBVMC800X100S-2XD80	-

1000x100	75	1	1024X124X135*	-	-	PSBVMC1000X100L-D75
	90	1	1024X124X135*	-	-	PSBVMC1000X100L-D90
	80	1	1024X124X135*	-	-	PSBVMC1000X100L-D80
	75	3	1024X124X135*	PSBVMC1000X100P-3X75	PSBVMC1000X100S-3X75	-
	90	3	1024X124X135*	PSBVMC1000X100P-3X90	PSBVMC1000X100S-3X90	-
	80	3	1024X124X135*	PSBVMC1000X100P-3X80	PSBVMC1000X100S-3X80	-

REDUCED DEPTH VERSION

Concealed vent plenum (h 100 mm) special version with reduced depth. Includes sleeve for corrugated pipe Ø 75/90.



slot dimensions LxH (mm)	Ø connec- tion (mm)	# outlet connections (mm)	Depth (mm)	Code
300x100	75	1	100	PSBVMC300X100-P100D75
	90	1	100	PSBVMC300X100-P100D90
400X100	75	1	120	PSBVMC400X100-P120D75
	90	1	120	PSBVMC400X100-P120D90



CMV PLENUM KIT FOR MICRO-PERFORATED GRILLE

FEATURES

Universal ABS plenum kit with polypropylene connectors for "CMV GRILLE" series grilles.

Designed to solve any installation requirement for supply and return air grilles.

Includes:

- provision for 5 corrugated pipe connections Ø 75/90 (2 rear + 2 top + 1 side)
- 1 sleeve Ø 75 **MANICOTTO-VMC 75** for pipe Ø 75
- 4 end caps **TAPPO-VMC 75/90**
- 1 **COPERCHIO-VMC** and 2 brackets

Dimensions (mm)	Code
290x110x80	PLENUMVMC-KIT




Note: see the complete data sheet on page 116 of the DISTRIBUTION catalogue



KIT COMPOSITION

	Description	Code
A	COMPLETE PLENUM KIT	PLENUMVMC-KIT
B	CONNECTOR Ø 75 mm	MANICOTTO-VMC 75
C	COVER	COPERCHIO-VMC
D	END CAP 75/90 mm	TAPPO-VMC 75/90

OPTIONAL ACCESSORIES

	Description	Code
	CONNECTOR Ø 90 mm	MANICOTTO-VMC 90
	DAMPER 75/90 mm	SERRANDA-VMC 75/90
	FILTER	FILTRO-VMC

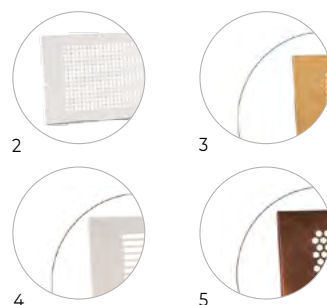
1.1 Residential systems

1

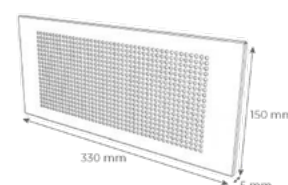
GRILLE FOR PLENUMCMV-KIT

FEATURES
 Rectangular micro-perforated supply/re-turn grille for PLENUMCMV-KIT.
 Steel, white RAL 9003 finish.
 Wall installation.
 Dimensions (LxHxD): 330 x 150 x 5 mm

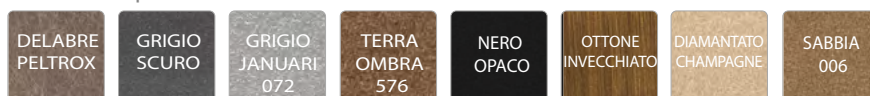
Note: see the complete data sheet on page 117 of the DISTRIBUTION catalogue



Code
GRIGLIAVMC-1
GRIGLIAVMC-2
GRIGLIAVMC-3
GRIGLIAVMC-4
GRIGLIAVMC-5



Colours on request:



DOUBLE ROW S/R VENT

FEATURES
 Supply grille with double row of fins, 20 mm pitch, adjustable individually. Aluminium, white RAL 9016 finish.
 Installation using clips, wall or duct.
 Installation height: 2.5 - 3.5 m.

ACCESSORIES
 Galvanised steel calibration damper with opposed-movement fins.

Note: see the complete data sheet on page 132 of the DISTRIBUTION catalogue

Dimensions (mm)	Air flow rate m³/h (2 m/s)	Code	Code Damper
200x100	135	BMA-OV-200X100	SC-200X100
300x100	200	BMA-OV-300X100	SC-300X100
400x100	250	BMA-OV-400X100	SC-400X100
200x150	175	BMA-OV-200X150	SC-200X150
300x150	275	BMA-OV-300X150	SC-300X150
400x150	350	BMA-OV-400X150	SC-400X150

FIXED BAR S/R VENT

FEATURES
 Supply/return VENT with single row of fixed fins, 12.5 mm pitch, version with fins, deflection 15°.
 Aluminium, white RAL 9016 finish.
 Installation using clips: wall, ceiling, floor (non-walkable area).
 Installation height: 2.5 - 3.5 m.

ACCESSORIES
 Galvanised steel calibration damper with opposed-movement flaps.

Note: see the complete data sheet on page 134 of the DISTRIBUTION catalogue

Dimensions (mm)	Air flow rate m³/h (2 m/s)	Code	Code Damper
200x100	40	LAF15-200X100	SC-200X100
300x100	160	LAF15-300X100	SC-300X100
400x100	270	LAF15-400X100	SC-400X100

S/R DESIGN VENT

FEATURES

Design supply/return grille in white RAL 9016 steel, to be combined with diffuser AIR10067.

Installation on frame AIT10067-T.

Steel frame (required) for design vent.

Dimensions LxHxD (mm)	Code
350x130x1.5	AIR10067-B
298x80x30	AIR10067-T



S/R LINEAR DIFFUSER

FEATURES

DLF are linear slot diffusers with an aerodynamic aluminium profile and adjustable deflectors for optimised air throw control. Diffuser suitable for both supply and return air. Material: aluminium.

Finish: painted white RAL9016 with black deflectors (standard).

Finish code "A" aluminium with black deflectors.

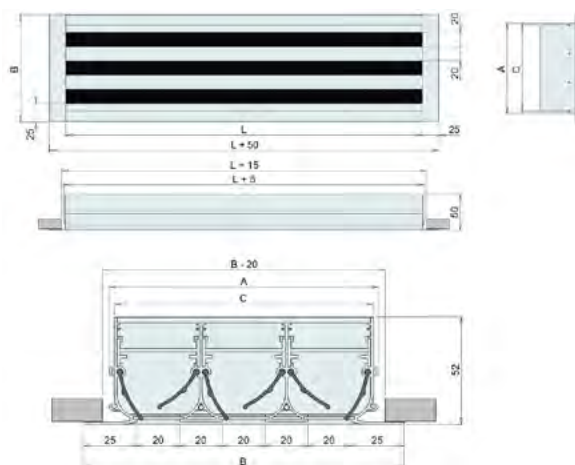
Slots: 1 to 4 in standard version.

Duct or plenum installation with bridge mounting system.

Ceiling installation is generally between 2.5 and 3.1 m high.

Note: see the complete data sheet on page 160 of the DISTRIBUTION catalogue

Dimensions (mm)	Air flow rate m³/h (2 m/s)	Code
400X50	125	DLF20-400-1F
800X50	180	DLF20-800-1F
1000X50	225	DLF20-1000-1F



ACCESSORIES FOR LINEAR DIFFUSER

FEATURES

CVL are fixing bridges and are applied to anchor the linear diffuser to the plenum (2 per diffuser).

Product	Code
stands (2 pcs)	CVL-V
continuity kit	KIT-DLF

The continuity kit is an accessory that lets you create continuous lines of linear diffusers longer than 2 metres. The kit consists of two junction plates for aligning and connecting two components.

1.1 Residential systems



STEEL VALVE - SUPPLY

FEATURES

Steel supply valve painted white RAL 9010 with adjustable central cone.
Installation: ceiling mounted with invisible screws.

Note: see the complete data sheet on page 156 of the DISTRIBUTION catalogue

Ø (mm)	Air flow rate (m³/h)	Code
80	60/80/100	EAV-CM-D80
100	100/125/150	EAV-CM-D100
125	130/160/190	EAV-CM-D125
160	160/190/220/250	EAV-CM-D160
200	300/350/400	EAV-CM-D200



STEEL VALVE - RETURN

FEATURES

Steel return valve painted white RAL 9010 with adjustable central cone.
Installation: ceiling mounted with invisible screws.

Note: see the complete data sheet on page 156 of the DISTRIBUTION catalogue

Ø (mm)	Air flow rate (m³/h)	Code
80	40/60	EAV-CR-D80
100	80/100/120	EAV-CR-D100
125	100/140/180	EAV-CR-D125
160	160/200/250	EAV-CR-D160
200	300/350/400	EAV-CR-D200

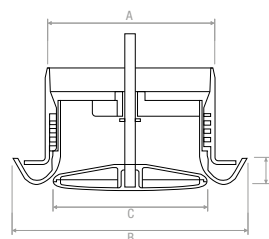
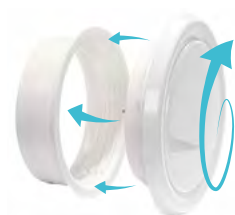


PLASTIC S/R VALVE

FEATURES

Supply/return valve in polypropylene, white RAL 9016 finish, including fixing collar.
Installation: ceiling.
Installation height: 2.5 - 3 m.

Ø (mm)	Code
100	PVR 100
125	PVR 125
160	PVR 160
200	PVR 200



Main dimensions			
A	B	C	D
97	138	90	15
122	168	115	15
157	215	130	15
195	255	189	15

1.2 KITS FOR CMV SYSTEMS

EASY KIT
CMV

Easy-kit lets you quickly produce a rough estimate of the material required for a mechanical ventilation system.

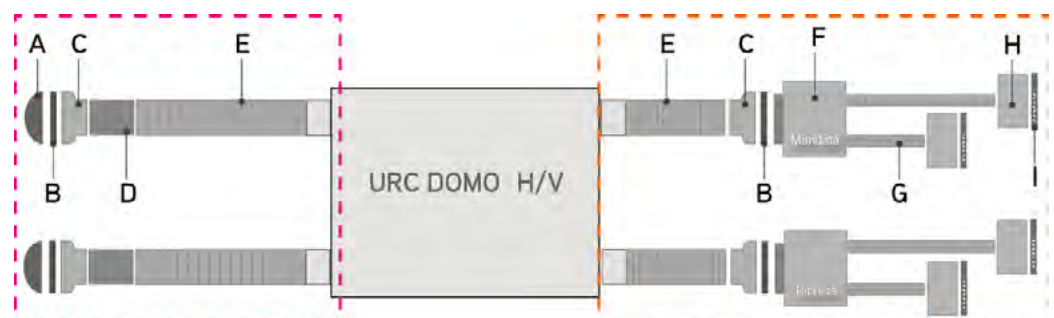
Note: EASYKIT is a tool designed to provide an outline idea of a system: it must be verified based on the executive design before ordering.

AIR CONTROL has sought to facilitate the quotation of CMV systems by means of KITS which include all the components necessary to complete the air distribution of this type of installation, both in the VENTILATION ONLY version (KITCMV) and in the VENTILATION + DEHUMIDIFICATION version (KITCMV+DEU).

It should be kept in mind that this tool is not intended to replace careful design of this type of system but it does allow a quick, simple cost estimate for the following two types of controlled mechanical ventilation systems:

KIT 1 - AIR EXCHANGE ONLY**CONTROLLED MECHANICAL VENTILATION SYSTEM WITH STANDARD CROSS-FLOW HEAT RECOVERY UNIT**

Below is an example diagram of the system and the air distribution elements included in this type of kit, which include both the components for fresh air intake and exhaust (A,B,C,D,E) and the components for supply and return air distribution (B,C,E,F,G,H) in the various rooms to be treated.

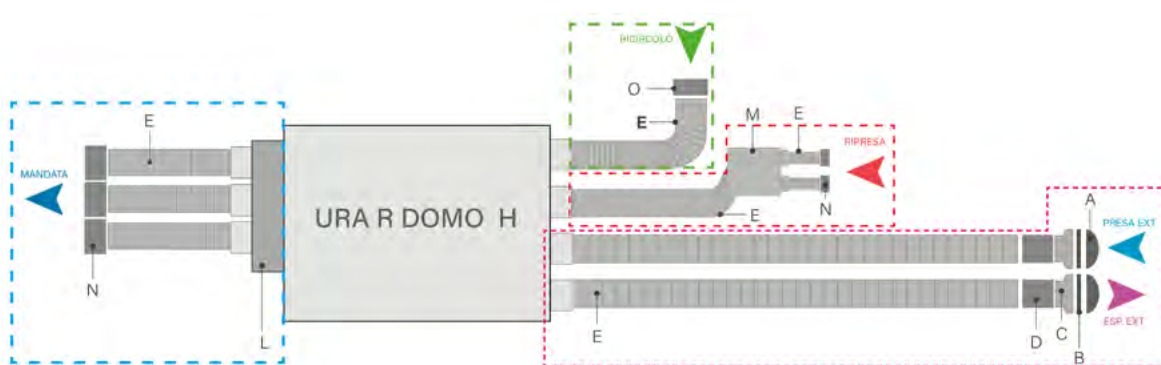


1.2 KITS FOR CMV SYSTEMS

KIT 2 - AIR EXCHANGE + DEHUMIDIFICATION

CONTROLLED MECHANICAL VENTILATION SYSTEM WITH CROSS-FLOW HEAT RECOVERY UNIT AND DEHUMIDIFICATION AND COOLING INTEGRATION (SOLUTION SUITABLE FOR SYSTEMS WITH RADIANT PANELS).

Below is an example diagram of the system and the air distribution elements included in this type of kit, which include both components for fresh air intake and exhaust (A,B,C,D,E) and the components for the air distribution of air supply (E,L,N), recirculation return (E,O) and stale air return (E,M,N) in the various rooms to be treated.



COMPONENTS AND ACCESSORIES INCLUDED IN THE KIT:

	A	ROUND STAINLESS STEEL GRILLE WITH BIRD MESH AND FLOW DIVERTER IN ALUMINIUM FINISH	PAGE 39		I	MICRO-PERFORATED RAL9003 STEEL GRILLE FOR PLENUMCMV-KIT	PAGE 55
	B	FEMALE-FEMALE GALVANISED SHEET METAL CONNECTOR	PAGE 40		L	SUPPLY MANIFOLD IN PAL FOR CMV+DEHUMIDIFICATION COMPLETE WITH COLLARS FOR CONNECTIONS TO FLEXIBLE SUPPLY PIPING	PAGE 38
	C	CIRCULAR GALVANISED SHEET METAL REDUCER FOR CONNECTION TO MANIFOLD	PAGE 40		M	RETURN COLLECTOR IN PAL COMPLETE WITH COLLARS FOR CONNECTIONS TO FLEXIBLE STALE AIR RETURN PIPING	PAGE 41
	D	GALVANISED STEEL TELESCOPIC EXTENSION	PAGE 39		N O	PLENUM COMPLETE WITH CONCEALED DIFFUSER WITHOUT FRAME FOR AMBIENT SUPPLY AND RETURN AIR	PAGE 50
	E	FLEXIBLE PIPE WITH POLYPHENOLIC RESIN FILM, ANTIBACTERIAL AND MOULD-RESISTANT MASTER HEAT-INSULATING COATING	PAGE 40			STAINLESS STEEL PIPE CLAMP	PAGE 40
	F	GALVANISED STEEL S/R MANIFOLD WITH SOUND-ABSORBING INSULATION, COMPLETE WITH 6 CONNECTORS D75 mm WITH CONTROL DAMPERS	PAGE 42			PVC FIXING CLIP FOR ROUND CORRUGATED PIPE (48 PC PACK)	PAGE 45
	G	ROUND CORRUGATED PIPE WITH ANTI-STATIC AND ANTIBACTERIAL TREATMENT	PAGE 43			DAMPER 75/90 MM	PAGE 42
	H	ABS GRILLE HOLDER PLENUM KIT FOR CMV GRILLE	PAGE 54				



KIT 1 - AIR EXCHANGE ONLY

URC DOMO

DESCRIPTION

High-efficiency heat recovery unit up to 90% with self-supporting frame and sheet metal panels with high-density EPS insulation inside. High-efficiency countercurrent cross-flow polypropylene exchanger. Brushless fans with electronic motor and constant flow control with 3 selectable levels.

Free cooling with automatic management through temperature probes.

ePM1 - 80% filters with low pressure drops.

H-HORIZONTAL INSTALLATION

V-VERTICAL INSTALLATION



CODE	Flow rate (m³/h) Useful pressure 100 Pa	Connection diameter (mm)	Controller code
URC-DOMO020HI	170	125	CNW
URC-DOMO030HI	300	160	CNW
URC-DOMO040HI	375	160	CNW
URC-DOMO050HI	480	160	CNW
URC-DOMO020VI	180	125	CNW
URC-DOMO030VI	320	160	CNW
URC-DOMO040VI	385	160	CNW
URC-DOMO050VI	480	160	CNW

URC DOMO SMALL



DESCRIPTION

High-efficiency heat recovery unit up to 90%, compact version with self-supporting frame and sheet metal panels with high-density EPS insulation inside. High-efficiency countercurrent cross-flow polypropylene exchanger. Brushless fans with electronic motor and constant flow control with 3 selectable levels. Free cooling with automatic management through temperature probes. ePM1 - 80% filters. Electrical panel complete with management board: 4-speed fan management, antifreeze, automatic bypass, temperature probes, post-heating coil management.

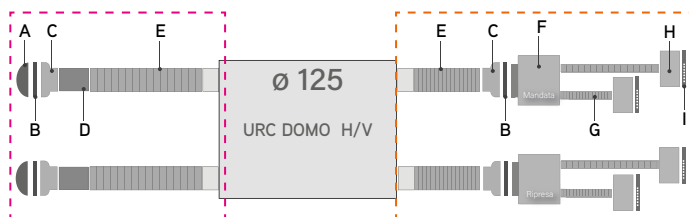
Compact dimensions
(L 580 x D 580 x H 25.5 mm).

Z-HORIZONTAL / VERTICAL
INSTALLATION

CODE	Flow rate (m³/h) Useful pressure 100 Pa	Connection diameter (mm)	Controller code
URC-DOMOSMALL15ZI	140	160	CNW
URC-DOMOSMALL20ZI	201	160	CNW

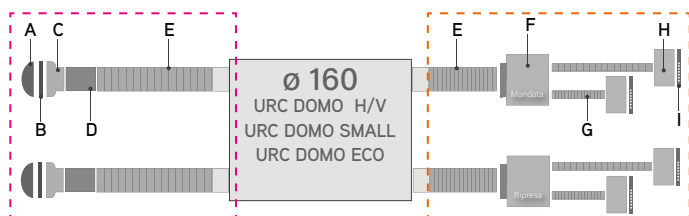
1.2 Kits for CMV systems

KIT FOR RECOVERY UNIT Ø 125 CONNECTIONS



SUPPLY	RETURN	KIT CODE	GR-EXT	AIR-MF	AIR-RC	PRO-E	TER127	FS160-2	PLENU	AIR100	AIR1010	PLENU	DAMP	CMV75	GRILLE
2	2	KITCMV1252M/2R	2	4	4	2	10	8	2	50	48	4	4	4	
2	3	KITCMV1252M/3R	2	4	4	2	10	8	2	50	48	5	5	5	
3	2	KITCMV1253M/2R	2	4	4	2	10	8	2	50	48	5	5	5	
3	3	KITCMV1253M/3R	2	4	4	2	10	8	2	50	48	6	6	6	
3	4	KITCMV1253M/4R	2	4	4	2	10	8	2	50	48	7	7	7	
4	2	KITCMV1254M/2R	2	4	4	2	10	8	2	50	48	6	6	6	
4	3	KITCMV1254M/3R	2	4	4	2	10	8	2	50	48	7	7	7	
4	4	KITCMV1254M/4R	2	4	4	2	10	8	2	50	48	8	8	8	
5	2	KITCMV1255M/2R	2	4	4	2	10	8	2	50	48	7	7	7	
5	3	KITCMV1255M/3R	2	4	4	2	10	8	2	50	48	8	8	8	
5	4	KITCMV1255M/4R	2	4	4	2	10	8	2	50	48	9	9	9	
6	3	KITCMV1256M/3R	2	4	4	2	10	8	2	50	48	9	9	9	
6	4	KITCMV1256M/4R	2	4	4	2	10	8	2	50	48	10	10	10	
6	5	KITCMV1256M/5R	2	4	4	2	10	8	2	50	48	11	11	11	

KIT FOR RECOVERY UNIT Ø 160 CONNECTIONS



SUPPLY	RETURN	KIT CODE	GR-EXT-	AIR-MF-	AIR-RCF-	PRO-EX-	TER160	FS160-2	PLENUM	AIR1000	AIR1010	PLENUM	DAMPE CMV75	GRILLE
2	2	KITCMV1602M/2R	2	2	2	2	10	8	2	50	48	4	4	4
2	3	KITCMV1602M/3R	2	2	2	2	10	8	2	50	48	5	5	5
3	2	KITCMV1603M/2R	2	2	2	2	10	8	2	50	48	5	5	5
3	3	KITCMV1603M/3R	2	2	2	2	10	8	2	50	48	6	6	6
3	4	KITCMV1603M/4R	2	2	2	2	10	8	2	50	48	7	7	7
4	2	KITCMV1604M/2R	2	2	2	2	10	8	2	50	48	6	6	6
4	3	KITCMV1604M/3R	2	2	2	2	10	8	2	50	48	7	7	7
4	4	KITCMV1604M/4R	2	2	2	2	10	8	2	50	48	8	8	8
5	2	KITCMV1605M/2R	2	2	2	2	10	8	2	50	48	7	7	7
5	3	KITCMV1605M/3R	2	2	2	2	10	8	2	50	48	8	8	8
5	4	KITCMV1605M/4R	2	2	2	2	10	8	2	50	48	9	9	9
6	3	KITCMV1606M/3R	2	2	2	2	10	8	2	50	48	9	9	9
6	4	KITCMV1606M/4R	2	2	2	2	10	8	2	50	48	10	10	10
6	5	KITCMV1606M/5R	2	2	2	2	10	8	2	50	48	11	11	11

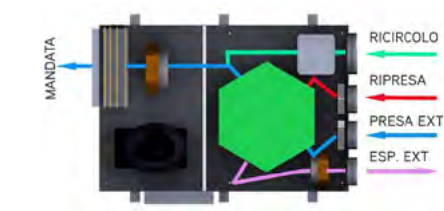


MODELS

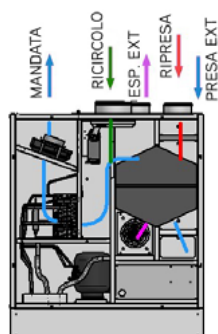
D - AIR EXCHANGE + DEHUMIDIFICATION (RECIRCULATION).

DC - AIR EXCHANGE + DEHUMIDIFICATION (RECIRCULATION)
COOLING INTEGRATION (INTEGRATED ADDITIONAL HYDRONIC COIL)

H-HORIZONTAL INSTALLATION



V-VERTICAL INSTALLATION



KIT 2-AIREXCHANGE+DEHUMIDIFICATION

URA R DOMO

Compact high-efficiency heat recovery unit up to 90%. Dehumidification and cooling integration for radiant system applications. Self-supporting frame and double sheet metal sandwich panels with adhesive polyethylene insulation inside.

High-efficiency countercurrent cross-flow polypropylene exchanger. Plug-fun Brushless fans with electronic motor and Free cooling modulating control with automatic management through temperature probes.

ePM1 - 80% filters (outside intake/supply) + Coarse filter (recirculation) with low pressure drops. Cooling circuit for dehumidification or cooling/heating integration. On-board electrical panel with microprocessor and dedicated regulation: managing fans, temperature probe display, timed dirty filters, recirculating and fresh air management. CNU control panel with integrated T/H sensor.

VERSION D

CODE	Air flow rate DEHUM. / CMV 100 Pa (m³/h)		Supply cross-section (mm)	Recirculation diameter (mm)	Connection diameter (mm)	Controller code
URAR-DOMO3015HDI	297	154	350x180	160	125	CNU
URAR-DOMO4020HDI	391	199	350x180	160	125	CNU
URAR-DOMO5025HDI	520	265	490x255	200	160	CNU
URAR-DOMO6030HDI	619	313	490x255	200	160	CNU

VERSION DC

CODE	Air flow rate DEHUM. / CMV 100 Pa (m³/h)		Supply cross-section (mm)	Recirculation diameter (mm)	Connection diameter (mm)	Controller code
URAR-DOMO3015HDCI	297	154	350x180	160	125	CNU
URAR-DOMO4020HDCI	391	199	350x180	160	125	CNU
URAR-DOMO5025HDCI	520	265	490x255	200	160	CNU
URAR-DOMO6030HDCI	610	313	490x255	200	160	CNU

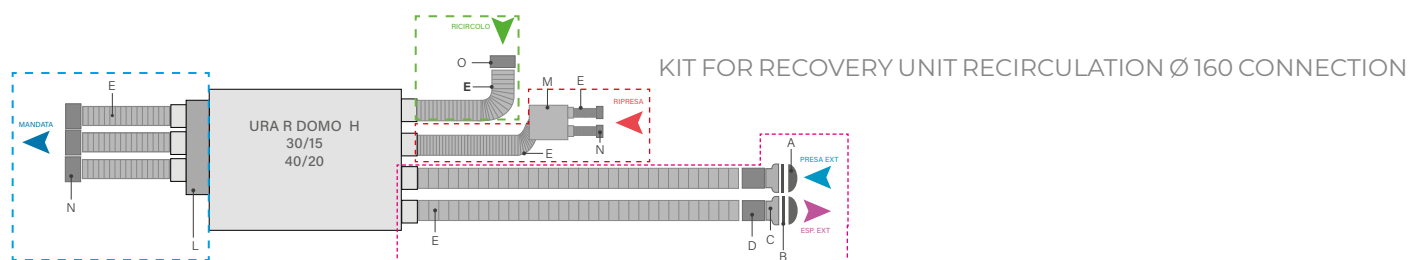
VERSION D

CODE	Air flow rate DEHUM. / CMV 100 Pa (m³/h)		Supply cross-section (mm)	Recirculation diameter (mm)	Connection diameter (mm)	Controller code
URAR-DOM3015VDI	302	161	345x175	160	125	CNU
URAR-DOM4020VDI	401	204	345x175	160	125	CNU
URAR-DOM5025VDI	538	258	510x240	200	160	CNU
URAR-DOM6030VDI	640	319	510x240	200	160	CNU

VERSION DC

CODE	Air flow rate DEHUM. / CMV 100 Pa (m³/h)		Supply cross-section (mm)	Recirculation diameter (mm)	Connection diameter (mm)	Controller code
URAR-DOM3015VDCI	302	161	345x175	160	125	CNU
URAR-DOM4020VDCI	401	204	345x175	160	125	CNU
URAR-DOM5025VDCI	538	258	510x240	200	160	CNU
URAR-DOM6030VDCI	640	319	510x240	200	160	CNU

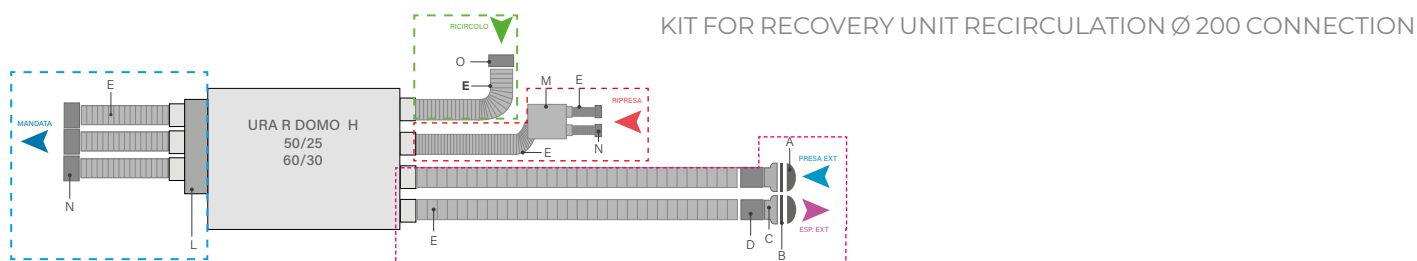
1.2 Kits for CMV systems



KIT COMPONENTS

				OUT. INTAKE / EXHAUST						SUPPLY						RETURN						RECIRCULATION				
				A	B	C	D	E	-	L	L	L	E	E	N	N	N	E	M	M	M	E	N	E	O	-
				GR-EXT-FL160	AIR-MF160	AIR-RCPL160/125	PRO-EXT-D125	TER127	FS160-270	PLM-URAR-2XD125	PLM-URAR-3XD100	PLM-URAR-4XD100	TER102	TER127	PSDCMV300x50P-D100	PSDCMV400x50P-D100	PSDCMV600x50P-D125	TER127	PLENUMCMV-120X2D100	PLENUMCMV-120X3D100	PLENUMCMV-120X4D100	TER102	PSDCMV300x50P-D100	TER160	PSD600x50S-D160	FS160-270
M*	R*	REC.*	KIT CODE	2	2	2	2	10	4	1				10			2	10	1			10	2	10	1	12
2	2	1	KITCMV+DEU160-2M/2R	2	2	2	2	10	4		1					3		10	1			10	2	10	1	14
3	2	1	KITCMV+DEU160-3M/2R	2	2	2	2	10	4				20					10		1		20	3	10	1	16
3	3	1	KITCMV+DEU160-3M/3R	2	2	2	2	10	4		1		20		4			10		1		10	2	10	1	16
4	2	1	KITCMV+DEU160-4M/2R	2	2	2	2	10	4			1	20		4			10	1			10	2	10	1	18
4	3	1	KITCMV+DEU160-4M/3R	2	2	2	2	10	4			1	20		4			10		1		20	3	10	1	18
4	4	1	KITCMV+DEU160-4M/4R	2	2	2	2	10	4			1	20		4			10			1	20	4	10	1	20

Key: M= # supplies R= # returns REC.= # recirculation



KIT COMPONENTS

				KIT COMPONENTS																							
				OUT INTAKE / EXHAUST						SUPPLY									RETURN						RECIRCULATION		
				A	B	C	D	E	-	L	L	L	E	E	N	N	N	E	M	M	M	E	N	E	O	-	
M*	R*	REC.*	KIT CODE	GR-EXT-FL200	AIR-MF200	AIR-RCPL200/160	PRO-EXT-D160	TER160	FSI60-270	PLM-URAR-5XD100	PLM-URAR-6XD100	PLM-URAR-4XD125	TER127	TER102	PSDCMV300x50P-D100	PSDCMV400x50P-D100	PSDCMV600x50P-D125	TER160	PLENUMCMV-160X3D100	PLENUMCMV-160X4D100	PLENUMCMV-160X5D100	TER102	PSDCMV300x50P-D100	TER203	PSD1000X50S-D200	FSI60-270	
4	3	1	KITCMV+DEU200-4M/3R	2	2	2	2	10	4			1	20				4	10	1			20	3	10	1	18	
4	4	1	KITCMV+DEU200-4M/4R	2	2	2	2	10	4			1	20				4	10		1		20	4	10	1	20	
5	3	1	KITCMV+DEU200-5M/3R	2	2	2	2	10	4	1				30		5		10	1			20	3	10	1	20	
5	4	1	KITCMV+DEU200-5M/4R	2	2	2	2	10	4	1				30		5		10		1		20	4	10	1	22	
6	3	1	KITCMV+DEU200-6M/3R	2	2	2	2	10	4		1			30	6			10	1			20	3	10	1	22	
6	4	1	KITCMV+DEU200-6M/4R	2	2	2	2	10	4		1			30	6			10		1		20	4	10	1	24	
6	5	1	KITCMV+DEU200-6M/5R	2	2	2	2	10	4		1			30	6			10			1	30	5	10	1	26	

Key: M= # supplies R= # returns REC.= # recirculation



Electronic S



Electronic E



URC 80 EC

H/V CMV

URC 80 EC is a ventilation unit complete with heat recovery unit dedicated to air exchange without energy waste. The unit is especially suitable for commercial or community premises and in all those cases where the nominal flow rates for air exchange do not exceed 4500 m³/h.

Up to 80% efficiency.

MACHINES WITH FLOW RATE OVER 4500 m³/h AVAILABLE (ON REQUEST).

DESCRIPTION

Electronic S *STANDARD*: electrical fitting for quick unit connection to the mains.

CNV-BPM control panel

Electronic E *ADVANCED*: solution with on-board electrical panel complete with microprocessor and dedicated regulation. Management of modulating fans, internal machine temperature probe display, management of dirty filters with pressure switches, free cooling management with temperature probes, pre- and post- water and electric heating - cooling coil management, valve on-off and 2-3 point modulating valve management, management of dehumidification by means of external coils and humidity probes. Fan operation with variable speed, constant flow or constant pressure. Extensive graphic interface with configuration menu and multilingual user menu. **CNV-EVO** advanced control panel.

FEATURES

- Self-supporting sheet metal structure with perimeter sealing gasket.
- Galvanised sheet metal sandwich panels (25 mm thick) with polyurethane foam insulation.
- Eurovent certified cross-flow aluminium exchanger.
- Summer bypass with motorised damper installed.
- Brushless fans with electronic motor and modulating control.
- Very high efficiency and low noise levels (ErP 2018).
- Filters with low pressure drop, easy extraction: ePM1 70 % (F7) on fresh air, ePM10 50 % (G4) on extracted air.
- Universal installation (Z).
- **For controller and accessories, see section (page 74).**

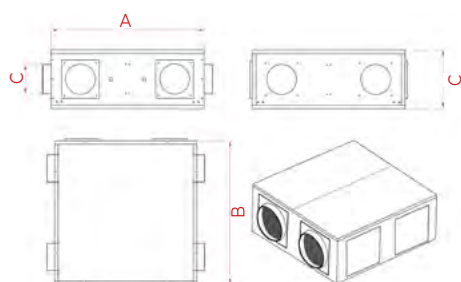
TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Flow rate (m ³ /h)	Useful head (Pa)	Max absorbed power (W)	Sound pressure Lp at 3m dB (A)	Efficiency (%)	Machine code	Controller code
URC 80 EC 050	230	440	80	2 x 100	39,2	73	URC80-EC-050-ZS	CNV-BPM
							URC80-EC-050-ZE	CNV-EVO
URC 80 EC 070	230	680	50	2 x 145	40.8	73	URC80-EC-070-ZS	CNV-BPM
							URC80-EC-070-ZE	CNV-EVO
URC 80 EC 100	230	1000	120	2 x 305	43.9	72.5	URC80-EC-100-ZS	CNV-BPM
							URC80-EC-100-ZE	CNV-EVO
URC 80 EC 150	230	1500	80	2 x 305	45.1	74.5	URC80-EC-150-ZS	CNV-BPM
							URC80-EC-150-ZE	CNV-EVO
URC 80 EC 200	230	2000	80	2 x 270	47.7	74.5	URC80-EC-200-ZS	CNV-BPM
							URC80-EC-200-ZE	CNV-EVO
URC 80 EC 250	400	2800	100	2 x 725	48.9	74	URC80-EC-250-ZS	CNV-BPM
							URC80-EC-250-ZE	CNV-EVO
URC 80 EC 350	400	3500	80	2 x 1006	52.5	77.5	URC80-EC-350-ZS	CNV-BPM
							URC80-EC-350-ZE	CNV-EVO
URC 80 EC 450	400	4500	120	2 x 1006	54.1	74.5	URC80-EC-450-ZS	CNV-BPM
							URC80-EC-450-ZE	CNV-EVO

Data refers to conditions (UNI EN 13141-7): nominal air flow - outdoor air 5 °C at 72% RH / exhaust air 25 °C at 28% RH)

1.3 Commercial systems - up to 80% efficiency

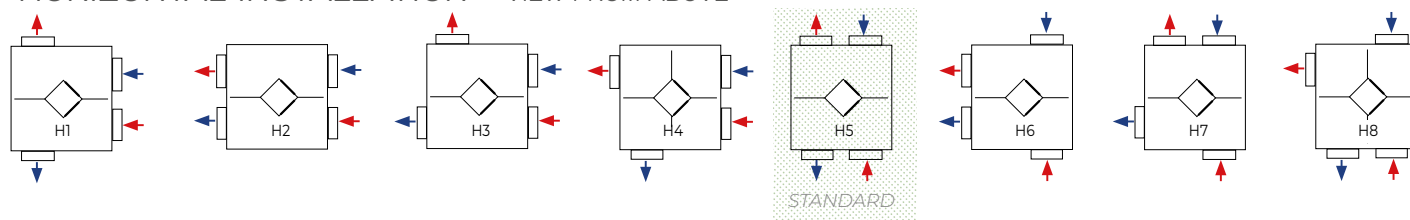
DIMENSIONAL DATA



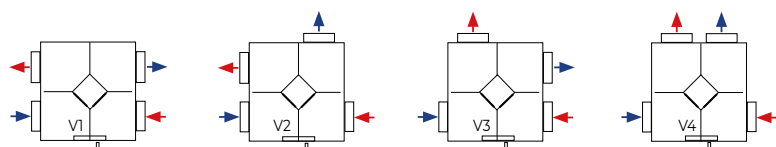
SIZES	Width A (mm)	Depth B (mm)	Height C (mm)	Ø connections (mm)	Condensate Ø (mm)	Weight (kg)
050	750	750	390	160	20	75
070	1050	1050	400	200	20	98
100	1050	1050	400	200	20	103
150	1250	1250	550	315	20	155
200	1390	1390	610	355	20	225
250	1390	1390	610	355	20	231
350	1900	1900	710	400	20	245
450	1900	1900	860	450	20	275

MACHINE CONFIGURATION

HORIZONTAL INSTALLATION - VIEW FROM ABOVE



VERTICAL INSTALLATION - FRONT VIEW



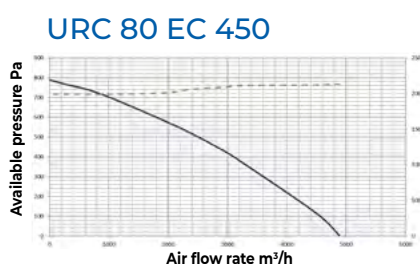
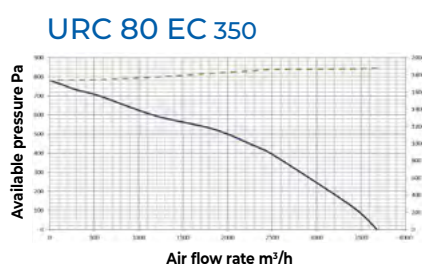
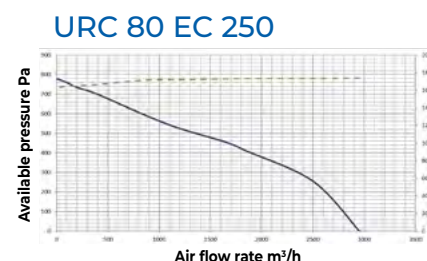
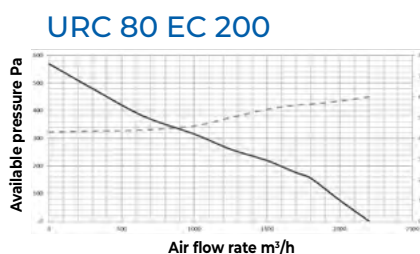
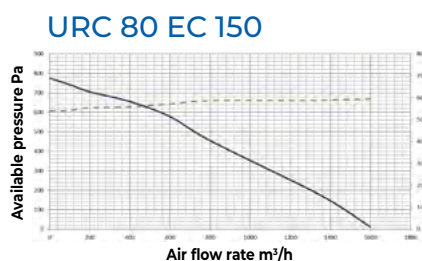
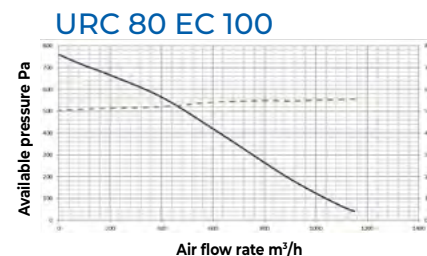
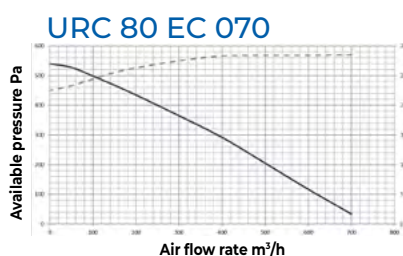
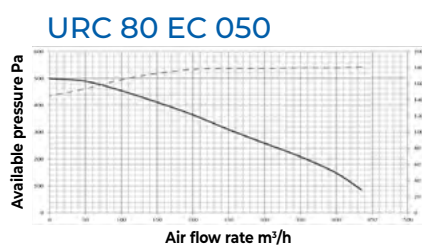
The units are shown viewed from above (horizontal installation) and from the front (vertical installation).

Units are shown with configuration: fresh air = blue arrows; stale exhaust air = red arrows (condensate trap installed on fan side red arrow).

Possibility of mirroring the indicated configurations (on request).

Note H5 is to be considered standard if no indication is made of the configuration.

PERFORMANCE CHARTS



Conditions refer to the following conditions:
Outdoor air 5° 72% R.H. - Indoor air 25° 28% R.H.



URA

CMV + ON/OFF INTEGRATION

URA is an active recovery unit for heating, cooling and air renewal of rooms. It consists of a monobloc including all components for correct operation: fans, cooling circuit with high-efficiency compressors, air filtration sections and cross-flow heat recovery unit. The unit can work as a passive heat recovery unit and as an active thermodynamic heat recovery unit and is especially suitable for residential, commercial or collective residential buildings. Over 50% efficiency.

FEATURES

- Perimeter structure with aluminium profiles, seals and no air leakage.
- Insulated double sandwich panels.
- Static cross-flow aluminium heat exchanger.
- Double-intake centrifugal fans with directly-coupled motor conforming to ErP 2018.
- Heat pump cooling circuit with hermetic scroll on-off compressor (R407C gas).
- Easily removable M5 and F7 filters upstream of the recovery unit.
- On-board electrical panel with microprocessor and dedicated regulation: managing fans, temperature probe display, timed dirty filters, defrost management.
- For controller and accessories, see section (page 74).

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Flow rate (m³/h)	Useful fresh air pressure (Pa)	Useful exhaust pressure (Pa)	MAX power (Kw)	MAX intensity (A)	Ø connections (mm)	Sound pressure 3m dB (A)* (2)	Efficiency (%) (1)	Machine code	Controller code
URA 60	230	500	200	124	1.76	7.85	200	48	55	URA-60	TGF
URA 100	230	1000	199	178	2.57	13.7	315	53	50.5	URA-100	TGF
URA 150	230	1500	163	132	3.63	19.0	315	54	50.1	URA-150	TGF
URA 250	400	2500	180	140	6.14	16.4	355	56	53.7	URA-250	TGF
URA 350	400	3500	100	85	8.73	27.8	400	61	52.6	URA-350	TGF
URA 500	400	5000	300	230	12.39	25.9	500	68	51.3	URA-500	TGF

(1) Outdoor air -5°C/80% RH - Indoor air 20°C/50% RH - nominal flow rate

(2) Data at 3 m free-field distance

WINTER OPERATING VALUES

MODEL	PASSIVE RECOVERY	ACTIVE RECOVERY			TOTAL RECOVERY			OPERATING LIMITS	
	Heat potential (Kw)*	Heat potential (Kw)*	Absorbed potential (Kw)	COP	Heat potential (Kw)*	Intake air humidity T (°C)	Overall COP	indoor air (°C)	outdoor air (°C)
URA 60	2.3	2.82	0.58	4.86	5.12	22.1	8.82	15/25	-20 / 20
URA 100	4.22	5.03	1.12	4.49	9.25	21.9	8.25	15/25	-20 / 20
URA 150	6.23	7.97	1.63	4.88	14.2	22.5	8.71	15/25	-20 / 20
URA 250	11.2	13	2.7	4.81	24.2	23.2	8.96	15/25	-20 / 20
URA 350	15.4	18.2	3.4	5.35	33.6	22.6	9.88	15/25	-20 / 20
URA 500	22.4	24.4	5.2	4.69	46.8	22.1	9.0	15/25	-20 / 20

* Outdoor air -5°C/80% RH - Indoor air 20°C/50% RH - nominal flow rate

1.3 Commercial systems - up to 80% efficiency

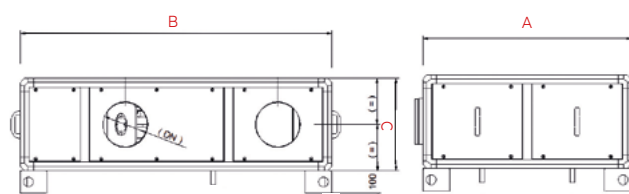
SUMMER OPERATING VALUES

MODEL	PASSIVE RECOVERY	ACTIVE RECOVERY			TOTAL RECOVERY			OPERATING LIMITS	
	Cooling potential (Kw)*	Cooling potential (Kw)*	Absorbed potential (Kw)	EER	Cooling potential (Kw)*	Intake air humidity T (°C / U%)	Overall EER	indoor air (°C)	outdoor air (°C)
URA 60	0.4	2.68	0.79	3.39	3.08	19.7 / 87.2	3.38	18/28	15 / 40
URA 100	0.76	5.32	1.29	4.12	6.08	19.6 / 87.9	4.71	18/28	15 / 40
URA 150	1.13	8.1	2.2	3.68	9.23	19.8 / 86.3	4.19	18/28	15 / 40
URA 250	2.08	12.71	3.89	3.26	14.79	19.9 / 86	3.8	18/28	15 / 40
URA 350	2.85	18.4	5.5	3.34	21.25	19.9 / 86.9	3.86	18/28	15 / 40
URA 500	4.22	25.1	7.3	3.43	29.32	19.9 / 85	4.0	18/28	15 / 40

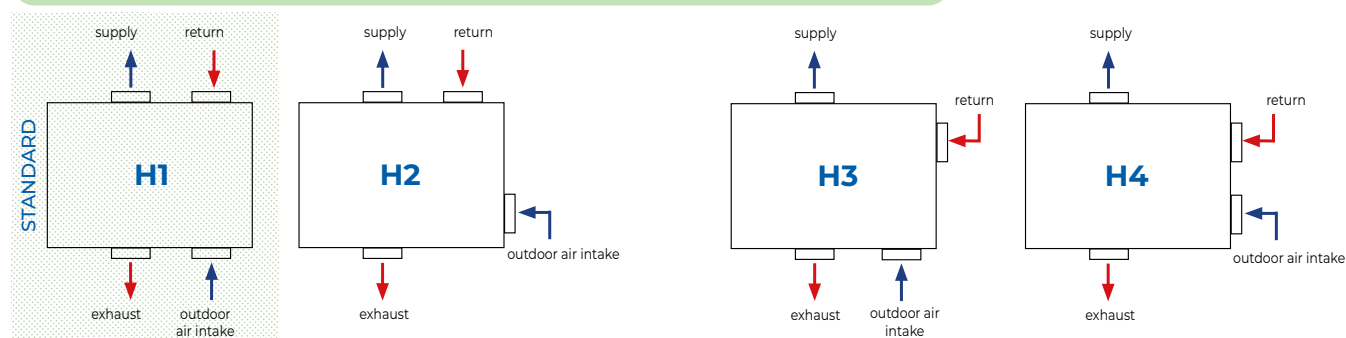
* Outdoor air -5°C/80% RH - Indoor air 20°C/50% RH - nominal flow rate

DIMENSIONAL DATA

MODEL	Width A (mm)	Depth B (mm)	Height C (mm)	Ø (mm)	Condensate Ø (mm)	Weight (Kg)
URA 60	925	1400	415	200	22	140
URA 100	1250	1680	515	250	22	230
URA 150	1250	1880	515	315	22	265
URA 250	1430	1960	620	355	22	325
URA 350	1430	1960	720	400	22	382
URA 500	1612	2240	920	500	22	570

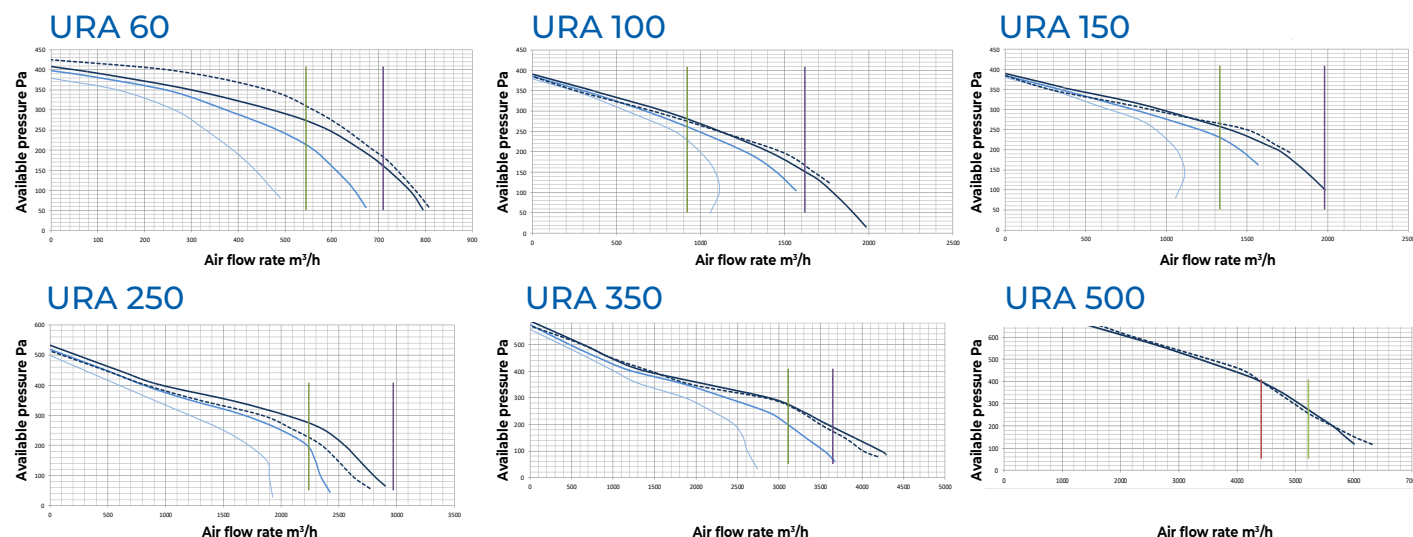


MACHINE CONFIGURATION - VIEW FROM ABOVE



Note : Air connections can be configured during installation via removable panels, an operation that can easily be performed on site.

PERFORMANCE CHARTS





URA EC INVERTER

CMV + INVERTER INTEGRATION

URA EC INVERTER is an active recovery unit for space heating, cooling and air renewal. The unit consists of a monobloc including all components for correct operation: latest-generation plug fans, cooling circuit with high-efficiency BLDC inverter compressors, air filtration sections, and cross-flow heat recovery unit. The unit can work as a passive heat recovery unit and as an active thermodynamic heat recovery unit and is especially suitable for residential, commercial or collective residential buildings. Over 50% EFFICIENCY.

FEATURES

- Plug&play supplied for quick, easy installation.
- Double sandwich panels with plasticised finish and Aluzinc inside the unit.
- Perimeter structure with aluminium profiles, seals and no air leakage.
- High performance panel insulation, low noise and transmittance.
- Cross-flow aluminium exchanger (summer and winter operation).
- Plug-fan EC centrifugal fans with directly-coupled motor conforming to ErP 2018.
- Brazed copper cooling circuit complete with: high-efficiency BLDC compressor, filter drier, finned coils, solenoid valves, electronic expansion valve, liquid receiver, pressure transducers and safety devices. Thanks to the cooling circuit, thermodynamic recovery allows more energy to be supplied to the environment than is taken away by ventilation.
- Easily removable M5 + F7 filters upstream of the recovery unit.
- On-board electrical panel with microprocessor and dedicated regulation: managing fans, temperature probe display, timed dirty filters, operation with fixed point control on the flow or with combined extraction probe and external probe, defrost management.
- For controller and accessories, see section (page 74).

TECHNICAL DATA

Data refers to sound pressure at 3 m free-field distance with fans 80% according to EN3747

MODEL	Voltage (V) 50Hz	Flow rate (m³/h)	Useful pressure (Pa)	MAX power (Kw)	MAX intensity (A)	Ø connections (mm)	Sound pressure 3m dB (A)* (2)	Efficiency (%) (1)	Machine code	Controller code
URA EC INVERTER 60	230/1	500	335	1.87	9.75	200	38	55	URA+EC 060	TGF
URA EC INVERTER 100	230/1	1500	570	3.43	17.25	250	43	50.5	URA+EC 100	TGF
URA EC INVERTER 200	400/3	2500	390	6.19	11.05	355	49	50.1	URA+EC 200	TGF
URA EC INVERTER 300	400/3	3500	460	12.4	20.95	400	50	53.7	URA+EC 300	TGF
URA EC INVERTER 450	400/3	5000	310	17.98	30.65	500	56	52.6	URA+EC 450	TGF

WINTER OPERATING VALUES

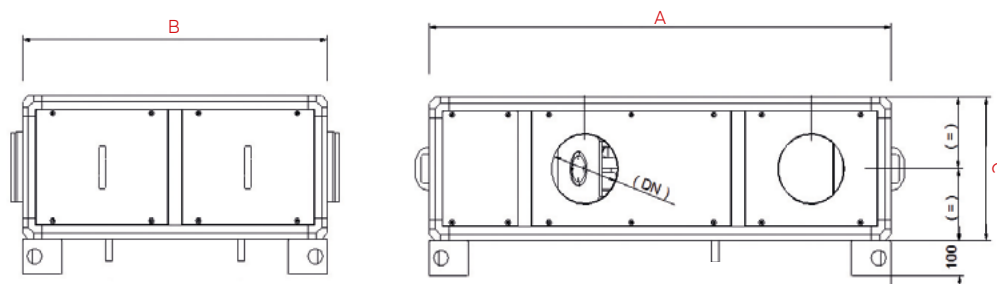
MODEL	Compressor frequency (Hz)*	Passive recovery (Kw)	Heating power (Kw)	Absorbed power (Kw)	Intake air humidity T (°C)	COP
URA EC INVERTER 60	30	3.0	1.31	0.225	16.9	5.84
	60	3.0	2.55	0.455	22.2	5.61
	90	3.0	3.64	0.85	27.3	4.27
URA EC INVERTER 100	30	4.6	3.74	0.58	18.3	6.44
	60	4.6	5.09	0.85	23.2	5.98
	90	4.6	6.90	1.35	28.1	5.11
URA EC INVERTER 200	30	9.9	5.97	0.87	18.2	6.86
	60	9.9	8.85	1.61	22.6	5.49
	90	9.9	12.00	2.40	27.2	5.00
URA EC INVERTER 300	30	14.5	10.21	1.61	19.4	6.34
	60	14.5	15.93	3.15	24.2	5.05
	90	14.5	21.62	5.65	30.2	3.82
URA EC INVERTER 450	30	21.3	13.6	2.11	18.0	6.45
	60	21.3	22.18	3.98	23.8	5.57
	90	21.3	32.10	7.90	29.4	4.06

1.3 Commercial systems - up to 80% efficiency

SUMMER OPERATING VALUES

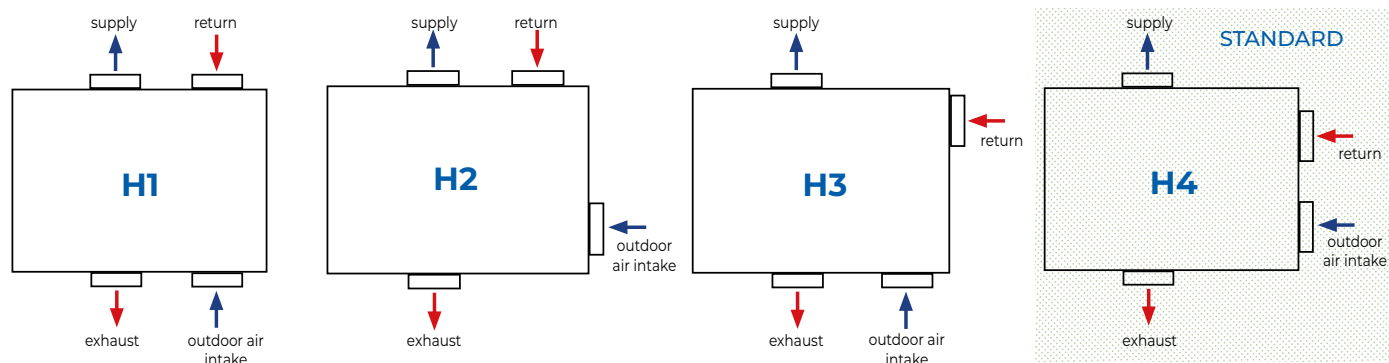
MODEL	Compressor frequency (Hz)*	Passive recovery (Kw)	Tot cooling power (kW)	Absorbed power (Kw)	Intake air humidity T (°C)	EER
URA EC INVERTER 60	30	0.2	1.46	0.78	19.3 / 81%	5.25
	60	0.2	2.51	0.629	17.3 / 80%	3.99
	90	0.2	3.55	1.12	15.5 / 79%	3.16
URA EC INVERTER 100	30	0.3	3.98	0.7	17.2 / 84%	5.66
	60	0.2	5.52	1.12	15.8 / 83%	4.92
	90	0.2	5.99	1.71	14.9 / 83%	3.50
URA EC INVERTER 200	30	0.7	5.40	0.92	18.7 / 83%	5.86
	60	0.7	9.43	1.98	15.5 / 82%	4.76
	90	0.7	11.40	3.26	15.5 / 82%	3.50
URA EC INVERTER 300	30	1.0	8.97	1.67	19.1 / 77%	5.37
	60	1.0	14.50	3.38	17.1 / 79%	4.28
	90	1.0	18.62	7.05	15.5 / 78%	2.64
URA EC INVERTER 450	30	1.5	13.4	2.40	17.2 / 84%	5.58
	60	1.5	23.1	4.31	16.8 / 80%	4.31
	90	1.5	29.6	9.71	14.9 / 80%	3.04

DIMENSIONAL DATA



MODEL	Width A (mm)	Depth B (mm)	Height C (mm)	Ø (mm)	Condensate Ø (mm)	Weight (kg)
URA EC INVERTER 60	1400	925	415	200	20	140
URA EC INVERTER 100	1680	1250	515	250	20	230
URA EC INVERTER 200	1960	1430	620	355	20	325
URA EC INVERTER 300	1960	1430	720	400	20	382
URA EC INVERTER 450	2240	1615	920	500	20	570

MACHINE CONFIGURATION - VIEW FROM ABOVE

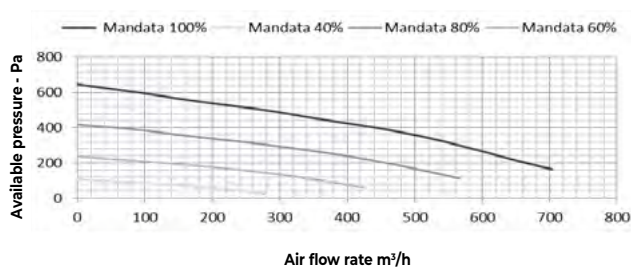


Note : Air connections can be configured during installation via removable panels, an operation that can easily be performed on site.
 If you wish to have the machine with a different configuration from the STANDARD configuration (H1), this must be specified when ordering. The reference code will be as follows: machine model H reference number desired version (URA+EC 060-H2).
 If no indication is made of the configuration, the unit will be supplied STANDARD H1.
 (red arrows refer to exhaust/return air and blue arrows to intake/outdoor air).

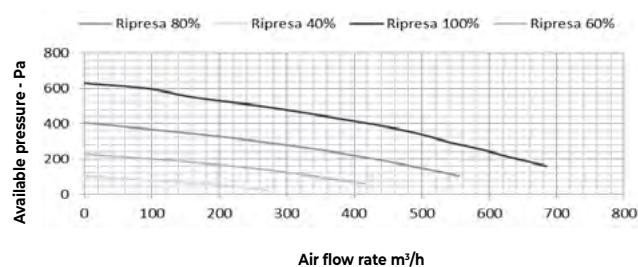
PERFORMANCE CHARTS

URA EC INVERTER 60

FRESH AIR SIDE

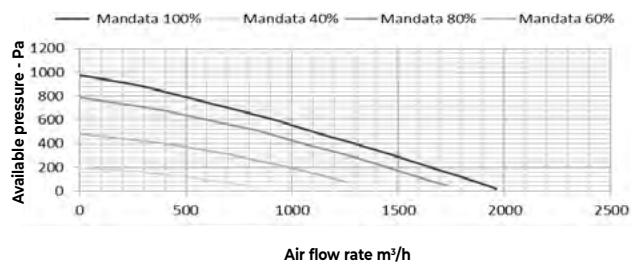


EXHAUST SIDE

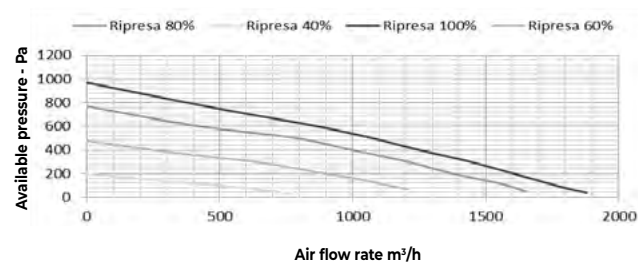


URA EC INVERTER 100

FRESH AIR SIDE

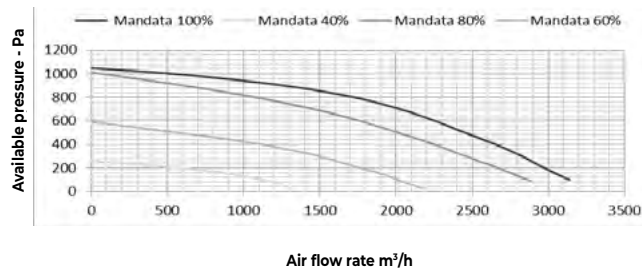


EXHAUST SIDE

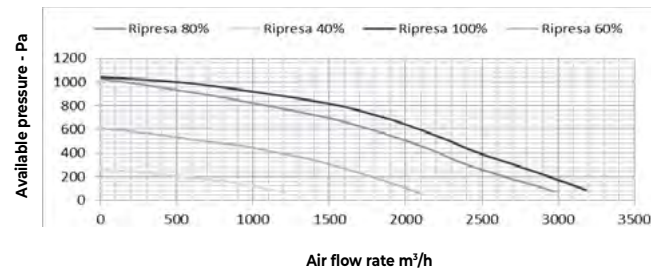


URA EC INVERTER 200

FRESH AIR SIDE



EXHAUST SIDE

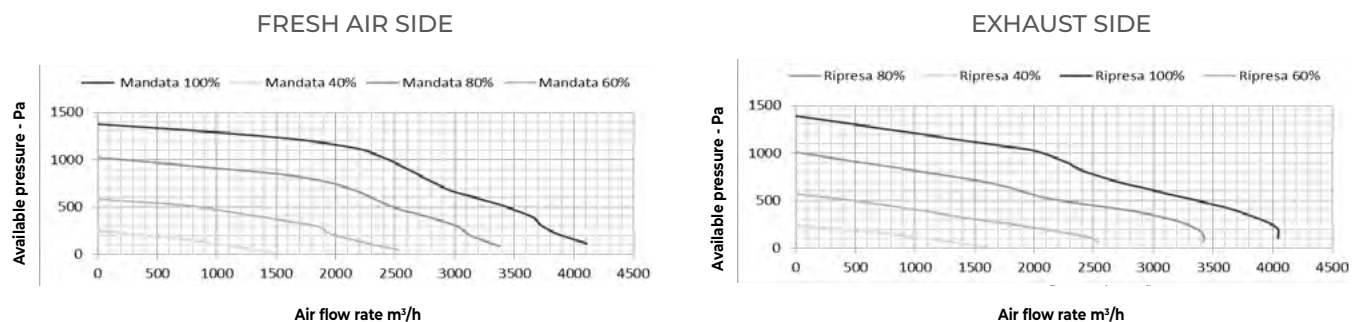


1) Outdoor air temperature -5°; relative humidity 80%, ambient temperature 20°C; relative humidity 50%.

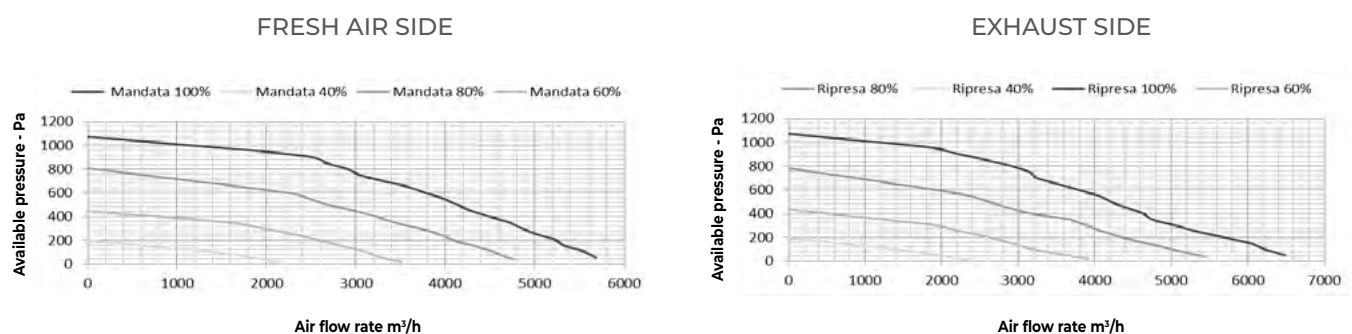
2) Outdoor air temperature 30°; relative humidity 60%, ambient temperature 25°C; relative humidity 50%.

1.3 Commercial systems - up to 80% efficiency

URA EC INVERTER 300



URA EC INVERTER 450



- 1) Outdoor air temperature -5°; relative humidity 80%, ambient temperature 20°C; relative humidity 50%
2) Outdoor air temperature 30°; relative humidity 60%, ambient temperature 25°C; relative humidity 50%



NEW!

BOREAS H

STAND ALONE CMV

Air renewal units with heat recovery, ePM1 - 70% filtration and active sanitization. Boreas is able to monitor indoor air quality with the CNW control that features an equivalent VOC/CO₂ sensor. The CNW control features an automatic mode in which the air flow rate is adjusted according to the VOC/CO₂ concentration detected in the room. Thanks to the presence of the DUST FREE® device, Boreas is able to continuously and actively sanitize the environment and surfaces.

DESCRIPTION

Boreas is a mechanical ventilation unit with heat recovery that can operate **autonomously** without the need for a complete ducted system.

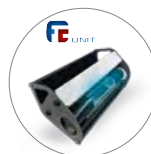
The unit is **easily installed horizontally on the ceiling** and only requires two holes with a diameter of Ø 250 mm.

The **CNW** panel that manages the unit has a Wi-Fi card for **control via APP** (CNW separately).

Reference: Budget Law 2022 approved and published on 31 December 2021.

FEATURES

- Cross-flow heat recovery unit.
- Management via CNW panel with Wi-Fi card and equivalent VOC/CO₂ probe.
- Simplified horizontal installation.
- Decentralised unit.



Equipped with active sanitization system
DUST FREE tested against SARS-CoV-2

TECHNICAL DATA

UNIT	BOREAS 60	BOREAS 120
MAX AIR FLOW RATE (m³/h)	620	1150
FILTERS	4x ePM1-70%	4x ePM1-70%
POWER SUPPLY (V/ph/Hz)	230/1/50	230/1/50
SOUND PRESSURE ¹ dB(A)	59	62
RECOVERY EFFICIENCY (EN305)	91.8%	90.4%
MACHINE CODE	BOREAS-60H	BOREAS-120H
CONTROLLER CODE	CNW-BOREAS	CNW-BOREAS

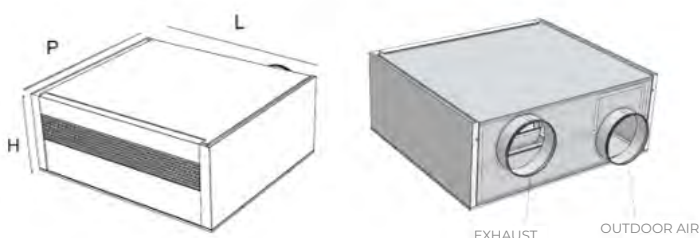
¹ Sound pressure at nominal flow V3 at 3 m free-field distance (according to 3744)

* RECOMMENDED SIZING FOR CLASSROOMS		
TYPE OF SCHOOL	BOREAS 60	BOREAS 120
PRE-SCHOOL	43 people (max)	79 people (max)
PRIMARY SCHOOL	34 people (max)	63 people (max)
MIDDLE SCHOOL	29 people (max)	53 people (max)
HIGH SCHOOL	25 people (max)	46 people (max)

* Data calculated according to UNI 10339

DIMENSIONAL DATA

UNIT		BOREAS 60	BOREAS 120
WIDTH (L)	mm	1033	1440
DEPTH (D)	mm	904	905
HEIGHT (H)	mm	403	405
Ø OUT. AIR RETURN/EXHAUST CONNECTIONS	mm	250	250
WEIGHT	kg	71	88



1.3 Commercial systems - up to 80% efficiency



NEW!

ZEPHYR H/V

STAND ALONE THERMODYNAMIC CMV

Complete air renewal unit capable of integrating the thermal-cooling requirements of rooms in the mid-season thanks to the presence of a compressor inside. In addition, the unit has triple filtration (2 ePM1 - 80% filters + 1 coarse pre-filter) and is equipped with DUST FREE® technology for active sanitization.

DESCRIPTION

The unit can operate autonomously without the need for a complete ducted system thanks to the ease of installation (ZEPHYR H horizontal ceiling-mounted - ZEPHYR V vertical wall-mounted) by means of 2 holes Ø 160 mm.

In addition to air renewal, the unit is able to monitor the quality of the indoor air thanks to the CO₂ eq probe and to continuously and actively sanitize the environment and surfaces thanks to the presence of the DUST FREE® active air sanitization device.

The unit is controlled via the on-board panel with Wi-Fi card for management via APP and remote control.

FEATURES

- Ventilation and air renewal unit with heat pump and thermodynamic recovery capable of providing a small amount of heat, cold and dehumidification.
- Management via on-board panel with Wi-Fi card and re-mote control.
- Integrated CO₂ eq. probe.



Equipped with active sanitization system
DUST FREE tested against SARS-CoV-2

TECHNICAL DATA

UNIT	ZEPHYR V	ZEPHYR H
MAX AIR FLOW RATE (m ³ /h)	381	460
FILTERS	2x ePM1 - 80% + 1x Coarse pre-filter	
POWER SUPPLY (V/ph/Hz)	230/1/50	230/1/50
SOUND PRESSURE ¹ dB(A)	41	43
HEAT POTENTIAL ² (kW)	3.1	3.62
COOLING POTENTIAL ³ (kW)	2.41	2.77
MACHINE CODE	ZEPHYR V	ZEPHYR H

¹ Sound pressure at nominal flow V3 at 3 m free-field distance (according to 3744)

² Outdoor air -5° / 80% RH - Indoor air 20° / 50% RH - nominal flow rate

³ Outdoor air 35° / 50% RH - Indoor air 27° / 60% RH - nominal flow rate

* RECOMMENDED SIZING FOR CLASSROOMS

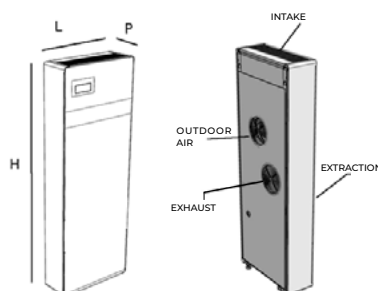
TYPE OF SCHOOL	ZEPHYR V	ZEPHYR H
PRE-SCHOOL	26 people (max)	31 people (max)
PRIMARY SCHOOL	21 people (max)	25 people (max)
MIDDLE SCHOOL	17 people (max)	21 people (max)
HIGH SCHOOL	15 people (max)	18 people (max)

* Data calculated according to UNI 10339

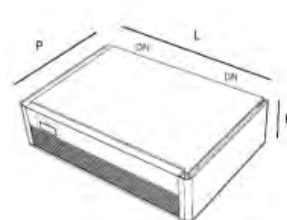
DIMENSIONAL DATA

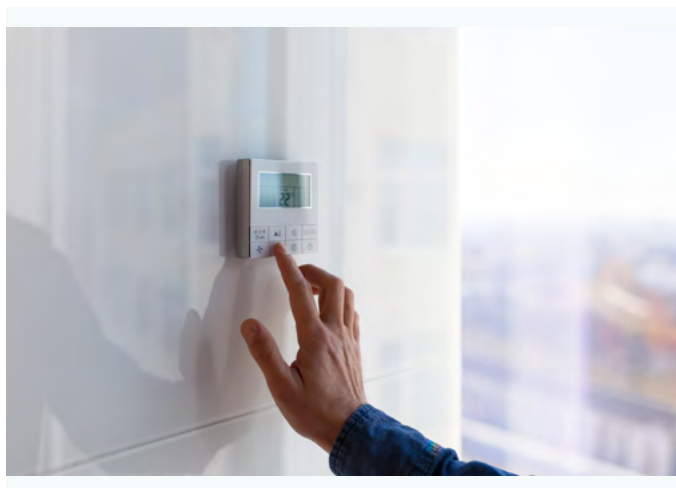
UNIT		ZEPHYR V	ZEPHYR H
WIDTH (L)	mm	500	1010
DEPTH (D)	mm	185	690
HEIGHT (H)	mm	1398	255
Ø OUT. AIR RETURN/EXHAUST CONNECTIONS	mm	160	160
WEIGHT	kg	53	74

ZEPHYR V



ZEPHYR H





RECOVERY UNIT ACCESSORIES

For the technical specifications of the following products, please refer to the data sheets on the website:
www.aircontrolclima.it

CONTROLS



CNV-BPM PANEL

Control panel for managing: fan speed regulation (3 steps), ON/OFF bypass for free-cooling, filter alarm display (timer)

SUITABLE FOR SERIES **URC 80 EC (ZS)**

Code

CNV-BPM



CNV-EVO PANEL

Advanced remotable panel. Panel-mounted, wall-mounted with or without back box housing. Static LCD display and 6 capacitive touch buttons.

Integrated temperature and humidity sensors.

Integrated Bluetooth low energy sensor.

SUITABLE FOR SERIES **URC 80 EC (ZE)**

Code

CNV-EVO



DIGITAL PANEL

Automatic digital remotable panel for mounting on horizontal or wall-mounted 503 box.

Same functions as the electronics mounted on-board the unit.

SUITABLE FOR SERIES **URA - URA EC INVERTER**

Code

TGF



CNW-BOREAS PANEL

Remotable panel for 502/503 box or wall-mounted: speed, temperature and mode control.

With VOC/CO₂ air quality sensor, humidity, temperature, integrated Wi-Fi for unit management via dedicated APP.

SUITABLE FOR SERIES **BOREAS**

Code

CNW-BOREAS

1.3 Commercial systems

CMV ACCESSORIES



DUCT CO₂ PROBE

The probe measures the presence of carbon dioxide in air ducts in the range 0...2000 or 0...5000 ppm.

The CO₂ concentration value is measured via a self-calibrating sensor that operates on an infra-red base and compensates for the presence of any impurities.

Code
SMCO

SUITABLE FOR SERIES **URC 80 EC (ZE)**



DUCT TEMPERATURE PROBE

Duct air temperature sensor to control supply temperature via electric or water coils.

Code
SMT

SUITABLE FOR SERIES **URA - URA EC INVERTER**



DUCT HUMIDITY PROBE

Duct-mounted probe for measuring relative humidity.

Code
SMU

SUITABLE FOR SERIES **URA - URA EC INVERTER**



2-WAY VALVE (0-10V)

2-way valve managed directly from the unit to adjust the water flow rate inside the heating/cooling coils, thus allowing the air supply temperature to be regulated.

VDM2 - Ø 3/4" gas valve

VDM21 - Ø 1" gas valve

Code
VDM2
VDM21

SUITABLE FOR SERIES **URC 80 EC - URA - URA EC INVERTER**



3-WAY VALVE (0-10V)

3-way valve managed directly from the unit to adjust the water flow rate inside the heating/cooling coils, thus allowing the air supply temperature to be regulated. Can also be used as a two-way valve by mechanically closing the third way.

VDM3 - Ø 3/4" gas valve

VDM31 - Ø 1" gas valve

Code
VDM3
VDM31

SUITABLE FOR SERIES **URC 80 EC - URA - URA EC INVERTER**

FILTER REPLACEMENTS



FILTER REPLACEMENT KIT

Replacement kit including:

- 1 F7 filter + 1 G4 filter.

SUITABLE FOR SERIES **URC 80 EC**

Unit combination	Code
URC 80 EC 050	FR71-URC80
URC 80 EC 070	FR72-URC80
URC 80 EC 100	FR73-URC80
URC 80 EC 150	FR74-URC80
URC 80 EC 200	FR75-URC80
URC 80 EC 250	FR76-URC80
URC 80 EC 350	FR77-URC80
URC 80 EC 450	FR78-URC80



FILTER REPLACEMENT KIT

Replacement kit including:

- 1 G4 filter + 1 F7 filter.

SUITABLE FOR SERIES **URA - URA EC INVERTER**

Unit combination	Code
URA 60 - URA EC 060	FDR1-URA
URA 100/150 - URA EC 100	FDR2-URA
URA 250 - URA EC 200	FDR3-URA
URA 350 - URA EC 300	FDR4-URA
URA 500 - URA EC 450	FDR5-URA

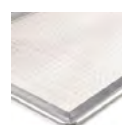


FILTER-BOREAS

Kit includes 4 EPM1-70% filters.

SUITABLE FOR SERIES **BOREAS**

Unit combination	Code
BOREAS 60 H	FDR1H-BOREAS
BOREAS 120 H	FDR2H-BOREAS



FILTER-ZEPHYR-1

Coarse pre-filter.

SUITABLE FOR SERIES **ZEPHYR**

Unit combination	Code
ZEPHYR V	FDR1V-ZEPHYR
ZEPHYR H	FDR1H-ZEPHYR



FILTER-ZEPHYR-2

Kit includes 2 EPM1 - 80% filters.

SUITABLE FOR SERIES **ZEPHYR**

Unit combination	Code
ZEPHYR V	FDR2V-ZEPHYR
ZEPHYR H	FDR2H-ZEPHYR

1.3 Commercial systems



UV LAMP

3" UV lamp to be replaced every 2 years inside the FC UNIT active sanitizing device.

SUITABLE FOR SERIES **BOREAS - ZEPHYR**

Code

DF09969

ACCESSORIES



SUPPORT FEET KIT

Kit of 4 support feet with for vertical unit installation.

SUITABLE FOR SERIES **URC 80 EC**

Code

KIT-URC-V



HORIZONTAL RAIN PROTECTION ROOF

Aluzinc hot-dip galvanised steel rain protection roof for outside horizontal installation of the unit.

SUITABLE FOR SERIES **URC 80 EC**

Unit combination	Code
URC 80 EC 050	THE1-URC80
URC 80 EC 070	THE2-URC80
URC 80 EC 100	THE3-URC80
URC 80 EC 150	THE4-URC80
URC 80 EC 200	THE5-URC80
URC 80 EC 250	THE6-URC80
URC 80 EC 350	THE7-URC80
URC 80 EC 450	THE8-URC80



VERTICAL RAIN PROTECTION ROOF

Aluzinc hot-dip galvanised steel rain protection roof for outside vertical installation of the unit.

SUITABLE FOR SERIES **URC 80 EC**

Unit combination	Code
URC 80 EC 050	TVE1-URC80
URC 80 EC 070	TVE2-URC80
URC 80 EC 100	TVE3-URC80
URC 80 EC 150	TVE4-URC80
URC 80 EC 200	TVE5-URC80
URC 80 EC 250	TVE6-URC80
URC 80 EC 350	TVE7-URC80
URC 80 EC 450	TVE8-URC80



RAIN PROTECTION ROOF

Pre-painted steel rain protection roof for outside horizontal installation of the unit.

SUITABLE FOR SERIES **URA - URA EC INVERTER**

Unit combination	Code
URA 060 / URA EC 60	THE1-URA
URA 100 / URA EC 100	THE2-URA
URA 150	THE3-URA
URA 250 / URA EC 200	THE4-URA
URA 350 / URA EC 300	THE5-URA
URA 500 / URA EC 450	THE6-URA



BER

ELECTRIC COIL

Electric pre/post heating units with a circular cross-section consist of a galvanised sheet metal frame with a wired heating element.

Electronic temperature control is carried out via a TRI-AC circuit board mounted directly inside the heater control box.

DESCRIPTION

The output temperature is continuously controlled by a probe placed inside the duct and can be adjusted by means of a potentiometer placed outside the control box. A 0-30°C plate placed underneath it allows the output DT to be set. It is designed for stand-alone installation without any communication with the unit.

FEATURES

- Galvanised sheet metal frame.
- Circular flanges for easier duct installation.

- Side electrical box fitted with cable gland and terminal box.
- Automatic reset thermal protector (inside electrical box).
- Manual reset thermal protector (inside electrical box).
- Stand-alone installation (does not communicate with unit).
- Controller (inside electrical box) - not provided for version ZS.
- Control via bulb thermostat -30°C/+30°C - not provided for version ZS.

SERIES URC 80 EC

MODEL	Voltage (V/F/Hz)	Nominal electrical power (Kw)	Supply temperature (pre) (1) °C	Fresh air temperature (pre) (2) °C	Ø (mm)	Size combination	Version ZS combination	Version ZE combination
							Code	Code
BER 1C	230/1/50	1	20	2	160	50	BER 1C-S	BER 1C-E
BER 2C	230/1/50	2	20	2	200	70	BER 2C-S	BER 2C-E
BER 3C	230/1/50	4	20	2	200	100	BER 3C-S	BER 3C-E
BER 4C	230/1/50	4	20	2	315	150	BER 4C-S	BER 4C-E
BER 5C	400/3/50	6	20	2	355	200	BER 5C-S	BER 5C-E
BER 6C	400/3/50	9	20	2	355	250	BER 6C-S	BER 6C-E
BER 7C	400/3/50	16	20	2	400	350	BER 7C-S	BER 7C-E
BER 8C	400/3/50	20	20	2	450	450	BER 8C-S	BER 8C-E

(1) Outputs and technical data with nominal flow rates and temperatures:
Air IN -8°

(2) Outputs and technical data with nominal flow rates and temperatures:
Air IN -10°

URA / URA EC INVERTER SERIES

MODEL	Voltage (V/F/Hz)	Nominal electrical power (Kw)	Ø (mm)	Size combination URA	Size combination URA EC INVERTER	Code
BER 1	230/1/50	2	200	60	60	BER 1
BER 2	230/1/50	2	250	100	100	BER 2
BER 3	400/3/50	4	315	150	100	BER 3
BER 4	400/3/50	8	315	150	100	BER 4
BER 5	400/3/50	12	355	250	200	BER 5
BER 6	400/3/50	16	400	350	300	BER 6
BER 7	400/3/50	20	400	350	300	BER 7
BER 8	400/3/50	20	500	500	450	BER 8

1.3 Commercial systems



BAC

WATER HEATING COIL

The pre/post water heating coils consist of two galvanised sheet metal flanges and a heat exchange coil made of copper pipes and aluminium fins.

DESCRIPTION

They are fitted with circular flanges for easier duct installation. They are equipped with threaded connections including valves for air venting and coil drainage.

INSTALLATION

The coil is designed for stand-alone installation without any communication with the unit.

SERIES URC 80 EC

MODEL	Nominal heating power (Kw)	Nominal water flow rate l/h	Pressure drop water side (Kpa)	Pressure drop air side (Pa)	Supply temperature (°C)	Water connections: (Ø)	Ø (mm)	Size combination	Code
BAC 1C	2.09	364	1.6	17	30.3	1/2"	160	050	BAC 1C
BAC 2C	3.10	539	3.5	36	28.9	1/2"	200	070	BAC 2C
BAC 3C	5.52	959	9.2	37	32	3/4"	200	100	BAC 3C
BAC 4C	7.75	1347	19.3	37	32.4	3/4"	315	150	BAC 4C
BAC 5C	10.42	1811	13.2	42	31.9	3/4"	355	200	BAC 5C
BAC 6C	12.03	2091	19.5	27	29.1	1"	355	250	BAC 6C
BAC 7C	15.86	2757	19.2	38	28.2	1"	400	350	BAC 7C
BAC 8C	20.84	3623	33.1	38	28.5	1-1/4"	450	450	BAC 8C

Outputs and technical data with nominal flow rates and temperatures: Water IN / OUT -45° / 40° - Air IN 15° / 20%.

Dimensions vary depending on the exchange coil in combination with the required flow rate.

URA / URA EC INVERTER SERIES

MODEL	Nominal heating power (Kw)	Nominal water flow rate (m³/h)	Pressure drop water side (Kpa)	Pressure drop air side (Pa)	Supply temperature (°C)	Water connections: (Ø)	Ø (mm)	Size combination URA	Size combination URA EC INVERTER	Code
BAC 1	4.18	0.36	10.80	29	31.80	3/4"	200	60	60	BAC 1
BAC 2	9.37	0.82	13.40	21	34.70	1"	315	100/150	100	BAC 2
BAC 3	19.32	1.69	21.60	15	30.00	1"	355	250	200	BAC 3
BAC 4	21.46	1.88	25.90	24	28.40	1"	400	350	300	BAC 4
BAC 5	38.80	3.34	18.50	17	29.70	1"	500	500	450	BAC 5

Outputs and technical data with nominal flow rates and temperatures: Water IN / OUT -70° / 60° - Air IN -8°



BAF

WATER HEATING/COOLING COIL

The pre/post water cooling coils consist of an aluminium profile frame, simple galvanised sheet metal panels with sound-absorbing mat insulation and a heat exchange coil consisting of copper pipes and aluminium fins.

DESCRIPTION

They are fitted with circular flanges for easier duct installation. They are equipped with threaded connections including valves for air venting and coil drainage and a galvanised sheet metal condensate collection tank with a Ø 20 drain at the bottom.

INSTALLATION

The coil is designed for stand-alone installation without any communication with the unit.

SERIES URC 80 EC

MODEL	Nominal cooling power Heating power (Kw)	Nominal water flow rate l/h	Pressure drop water side (Kpa)	Pressure drop air side (Pa)	Supply temperature (°C)	Water connections: (Ø)	Ø (mm)	Size combination	Code
BAF 1C	3.68	645	5	72	13.9	3/4"	160	050	BAF 1C
BAF 2C	5.88	1034	13.3	120	14.1	3/4"	200	070	BAF 2C
BAF 3C	8.12	1437	25.9	90	14.7	3/4"	200	100	BAF 3C
BAF 4C	11.69	2060	26.2	89	14.2	1"	315	150	BAF 4C
BAF 5C	15.02	2600	10.2	86	14.9	1"	355	200	BAF 5C
BAF 6C	20.59	3570	12.3	100	15	1"	355	250	BAF 6C
BAF 7C	30.65	5408	30.1	103	14.5	1"	400	350	BAF 7C
BAF 8C	39.89	7038	29.5	94	14.3	1-1/4"	450	450	BAF 8C

Outputs and technical data with nominal flow rates and temperatures:
Water IN / OUT -7° / 12° - Air IN 27° / 70%.

Dimensions vary depending on the exchange coil in combination with the required flow rate.

URA / URA EC INVERTER SERIES

MODEL	Nominal heating power (Kw)	Nominal water flow rate (m³/h)	Pressure drop water side (Kpa)	Pressure drop air side (Pa)	Supply temperature (°C)	Water connections: (Ø)	Ø (mm)	Size combination URA	Size combination URA EC INVERTER	Code
BAF 1	2.46	0.91	26.4	48	16.00	1/2"	250	60	60	BAF 1
BAF 2	5.56	2.20	29.2	59	15.40	1"	315	100/150	100	BAF 2
BAF 3	18.71	3.21	23.0	62	16.79	1"	355	250	200	BAF 3
BAF 4	21.76	3.74	19.5	66	17.06	1"	400	350	300	BAF 4
BAF 5	37.65	6.46	24.8	63	16.75	1" - 1/4"	500	500	450	BAF 5

Outputs and technical data with nominal flow rates and temperatures: Water IN / OUT 7° / 12° - Air IN 27° / 70%

1.4 Ventilation parts



CSF BOX

BOXED CENTRIFUGAL FAN

Centrifugal box fan with sheet metal panelling, suitable for civil and industrial applications. Self-supporting structure in press-folded galvanised sheet metal, with closed-cell polyurethane thermal and acoustic insulation.

Easily removable side inspection panels and cable gland for power supply cable entry. Galvanised steel forward curved blades, double suction with directly coupled motor.

TECHNICAL DATA

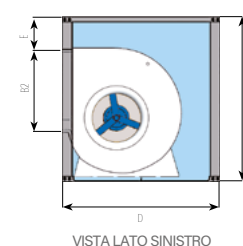
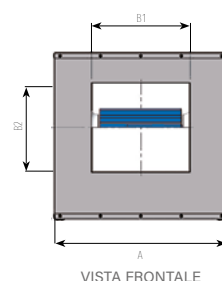


Single phase speed regulator (REM)

FAN (Inches)	Installed power Kw	Power supply (V/Hz/ph)	Speed RPM	Poles (#)	Sound pressure* (dB)	ERP point (m³h/Pa)	Flow rate (m³/h)		Head (Pa)		Code	Controller code
							A Min.	B Max.	A Min.	B Max.		
7/7	0,07	230/50/1	820	6	49	897/115	750	1150	125	50	CSF-7/7-820	REM
	0.15	230/50/1	1.230	4	55	926/208	250	1400	250	1400	CSF-7/7-1230	REM
9/7	0.25	230/50/1	830	6	57	1507/177	1430	2100	175	75	CSF-9/7-830	REM
	0.55	230/50/1	1,310	4	67	2167/412	1200	2900	400	250	CSF-9/7-1310	REM
9/9	0.25	230/50/1	830	6	58	1794/145	1700	2700	150	50	CSF-9/9-830	REM
	0.55	230/50/1	1,310	4	66	2265/374	850	3550	400	200	CSF-9/9-1310	REM
10/8	0.25	230/50/1	830	6	63	2066/206	1190	2820	225	100	CSF-10/8-830	REM
	0.55	230/50/1	1,310	4	64	2319/490	1380	3570	500	300	CSF-10/8-1310	REM
10/10	0.25	230/50/1	830	6	58	2277/189	2090	2900	200	75	CSF-10/10-830	REM
	0.55	230/50/1	1,310	4	66	3138/394	1330	3890	450	225	CSF-10/10-1310	REM
12/9	0.75	230/50/1	850	6	66	3826/304	3970	5490	300	100	CSF-12/9-850	REM
12/12	0.75	230/50/1	850	6	67	4377/274	1790	5920	300	200	CSF-12/12-850	REM
	1.1	400/50/3	850	6	71	5035/303	5000	7750	300	100	CSF-12/12-850-A	REM

DIMENSIONAL DATA

FAN (Inches)	Inlet port B1xB2 (mm)	A (mm)	H (mm)	D (mm)	E (mm)	weight (kg)
7/7	230x208	450	460	500	120	20
9/7	230x263	500	520	550	110	30
9/9	300x263	500	520	550	110	30
10/8	260x292	550	575	600	120	35
10/10	326x292	550	575	600	115	35
12/9	300x345	650	650	700	115	50
12/12	387x345	650	650	700	115	50





SMT EXTRACTION FAN

DUCT EXTRACTOR

Tubular extractor for circular duct installation (rigid or flexible)

DESCRIPTION

Compact extractor made of plastic.
Easy to install and extremely quiet.

FEATURES

Adjustable via accessory:

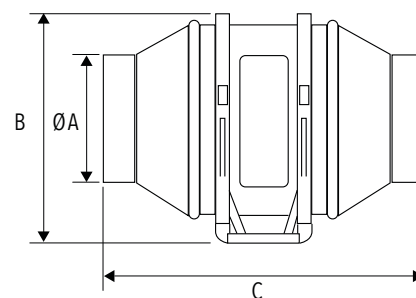
- **REGSMT1** single-speed potentiometer for SMT-100, 125 and 150
- **REGSMT2** 3-speed controller for SMT-200

TECHNICAL DATA

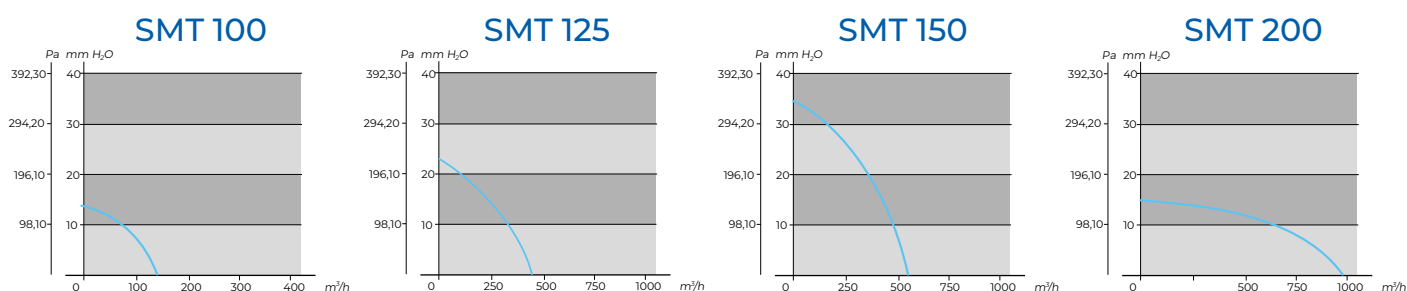
MODEL	Voltage (V) 50Hz	Power (W)	Ø (mm)	Flow rate (m³/h)	Head (m.m. H ₂ O)	Sound pressure dB (A)	Weight (kg)	Code	Controller code
SMT 100	230	25	100	130	14	14	1.2	SMT-100	REGSMT1
SMT 125	230	25	125	320	23	25	2.1	SMT-125	REGSMT1
SMT 150	230	80	150	420 / 560	26 / 36	31 / 39	3.2	SMT-150	REGSMT1
SMT 200	230	75	200	720 / 910	14 / 30	34 / 39	4.5	SMT-200	REGSMT2

DIMENSIONAL DATA

MODEL	Ø A (mm)	B (mm)	C (mm)
SMT 100	98	177	238
SMT 125	122	217	262.4
SMT 150	147	244	293.4
SMT 200	197	278.5	353.6



PERFORMANCE CHARTS



1.4 Ventilation parts



B EXTRACTION FAN

HELICAL FAN

B Flat profile helical extractor fan for wall or ceiling installation.

Possibility of installation in 28 mm double glazing.

FEATURES

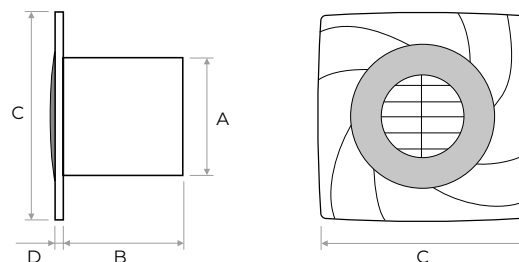
- Easy to install.
- Extremely silent.
- Available in various diameters.

TECHNICAL DATA

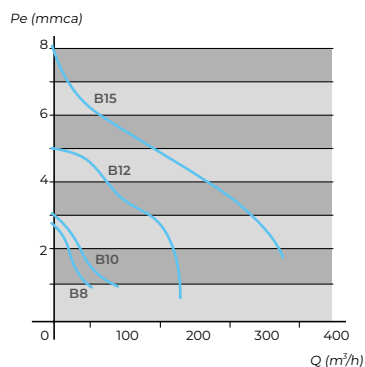
MODEL	Voltage (V) 50Hz	Power (W)	Flow rate (m ³ /h)	Head (m.m. h ₂ O)	Sound pressure dB (A)	Ø (mm)	code
B 8	230	15	70	3	39	90	B-8
B 10	230	15	98	3	39	100	B-10
B 12	230	20	190	5	41	120	B-12
B 15	230	25	320	8	43	150	B-15

DIMENSIONAL DATA

MODEL	Ø A (mm)	B (mm)	C (mm)	D (mm)
B 8	86	88	140	10
B 10	98	85	140	10
B 12	118	100	170	13
B 15	148	112	190	15



PERFORMANCE CHARTS



2.0 AIR HANDLING SOLUTIONS



COMPLETING THE VENTILATION RANGE WITH AIR TREATMENT SOLUTIONS

Air treatment is the process of maintaining and achieving certain temperature, relative humidity and air purity conditions in closed rooms. This process makes it possible to maintain personal well-being.

An air treatment system must be effective regardless of outside climatic conditions and is based on the control of four fundamental variables: temperature, humidity, movement and air quality.

Air-conditioning for well-being, as well as satisfying people's thermo-hygrometric needs, integrates with other disciplines such as architectural design, meteorology, energy and acoustics to recreate the ideal conditions for human psychological and physiological well-being, including IAQ.

The main process underlying air-conditioning is the exchange of heat and water vapour between indoor and outside environments and the people living in them. The need to keep air parameters such as humidity, temperature, velocity and purity within rooms under control increasingly occurs today in all areas: residential, commercial and tertiary, all covered by AIR CONTROL.

2.1 Dehumidification and air-conditioning solutions

NEW!



UDE + H/V
DEHUMIDIFIER H/V
max dehumidification capacity 18 L/24h
PAGE 86



UDE H
HORIZONTAL DEHUMIDIFIER
max dehumidification capacity 36 L/24h
PAGE 88



UDE V
VERTICAL DEHUMIDIFIER
max dehumidification capacity 30 L/24h
PAGE 90

NEW!



UFC
FAN COIL H/V
heating power up to 6 kW
PAGE 92



UMC
MONOBLOC CONDITIONER
max flow rate 500 m³/h
PAGE 94



ACCESSORIES
PAGE 96



NEW!

UDE+ H/V

DEHUMIDIFIER H/V

UDE+ is a dehumidification unit designed for specific dehumidification/climate control needs in low power consumption environments, especially suitable for single family units/flats/offices in combination with a radiant air-conditioning system or where effective dehumidification is necessary (basement rooms/bathrooms/laundry rooms/pool and spa areas).

DESCRIPTION

VERSION H DUCTED for horizontal installation in false ceilings.

VERSION V BUILT-IN for vertical wall installation.

MODEL D STANDARD: for neutral air dehumidification (isothermal). Unit for dehumidifying only the air coming from the EC recirculation fan, thus allowing the cooling circuit to operate, obtaining dehumidified air during the summer period (compressor active).

Equipped with a hydronic pre- and post-cooling/heating coil which, when powered, allows for the integration of cooling/heating power to the radiant air-conditioning system (connection to the heating/cooling system is optional and does not affect air dehumidification).

FEATURES

- High-strength structure with self-supporting frame in galvanised sheet metal (version H) / painted (version V).
- Polyethylene panel insulation.
- Low-consumption, double-intake EC Brushless centrifugal fans.
- Cooling circuit for dehumidification or cooling/heating integration in brazed copper complete with high-efficiency reciprocating compressor, finned coils, water exchanger, thermostatic valve.
- Coarse filter with low pressure drop on recirculating air.
- On-board electrical panel with microprocessor and dedicated regulation for managing: fans, timed dirty filters, recirculating air.
- Remote panel with integrated T/H sensor **CNV-UDE**.
- **For controller and accessories, see section (page 96).**

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Flow rate (m³/h)	Intensity (A)	Dehumidification capacity (L/24h)	Pressure drop (Kpa)	Water flow rate (m³/h)	Heating power output (1) (kW)	Hydronic coil cooling power output (2) (kW)	Sound pressure Lp at 3m dB (A)	Machine code	Controller code
UDE + 35 HD	230	320 - 90 Pa	4.2	18.2	5.5	0.23	1.16	1.32	36	UDE+35-HD	CNV-UDE
UDE + 35 VD	230	320 - 70 Pa	4.2	18	5.2	0.22	1.1	1.25	35	UDE+35-VD	CNV-UDE

1) T ambient 20°C; relative humidity 50%; Water 45/40°C nominal air flow rate

2) T ambient 26°C; relative humidity 65%; Water 7/12°C nominal air flow rate



PLENUM

Supply/return PLENUM in PAL for HD ducted version.

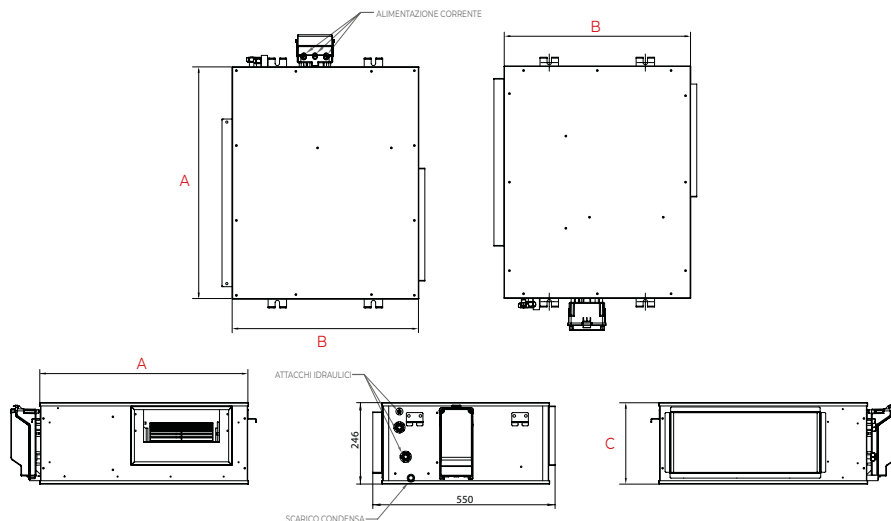
Note: Specify number and of outlet connections.
Example: supply plenum with 3 Ø 100 connections
code: **PLM-UDE+H** / description: **3xD100**

	Number of connections	Ø connections (mm)	Code
SUPPLY	to be specified	to be specified	PLM-UDE+H
RETURN	to be specified	to be specified	PLR-UDE+H

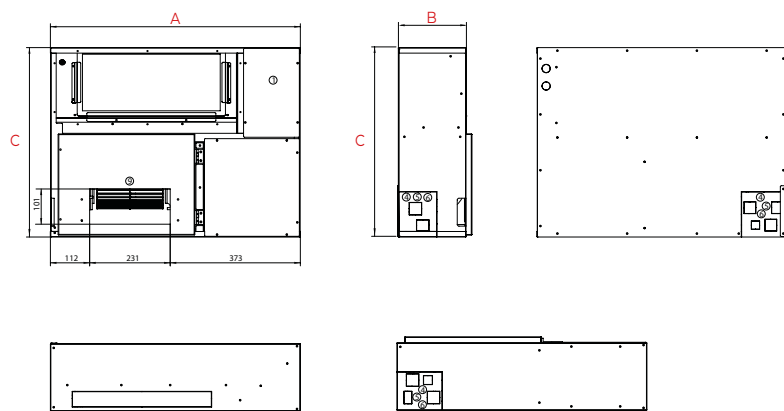
2.1 Dehumidification and air-conditioning solutions

DIMENSIONAL DATA

HORIZONTAL INSTALLATION (version H)



VERTICAL STAND ALONE INSTALLATION (version V)



MODEL	Width A (mm)	Depth B (mm)	Height C (mm)	Supply b x h (mm)	Return b x h (mm)	Water Inlet-Outlet Ø	Condensate (mm)	Weight (kg)
UDE + 35 HD	630	506	246	359x179	455x184	1/2"	16	35
UDE + 35 VD	720	195	543	400x195	340 x 210	1/2"	16	31

VERSION V ACCESSORIES



CASE

CASE for built-in version VD

Dimensions LxHxD (mm)	Weight (kg)	Code
720x195x543	8.8	CS4



COVER PANEL

COVER PANEL for built-in version VD

Dimensions LxHxD (mm)	Weight (kg)	Code
720x195x543	7	GRF4



UDE H

HORIZONTAL DEHUMIDIFIER

UDE is a dehumidification unit designed for specific dehumidification/climate control needs in low power consumption environments.

The unit is especially suitable for single family units, flats, offices with a radiant air-conditioning system.

DESCRIPTION

MODEL D STANDARD: for neutral air dehumidification (isothermal). Unit for dehumidifying only the air coming from the EC recirculation fan, thus allowing the cooling circuit to operate, obtaining dehumidified air during the summer period (compressor active). Equipped with a hydronic pre- and post-cooling/heating coil which, when powered, allows for the integration of cooling/heating power to the radiant air-conditioning system (connection to the heating/cooling system is optional and does not affect air dehumidification).

MODEL DC WITH INTEGRATION: for dehumidification and cooling/heating integration. Unit for dehumidifying air from the recirculating EC fan allowing integration of cooling/heating power to the radiant air-conditioning system. The unit can operate in 2 modes during the summer (compressor on):

Dehumidification-> the unit condenses partially in air and partially in water through the plate condenser, obtaining dehumidified air;

Dehumidification + Cooling integration-> the unit completely condenses in water, thus obtaining dehumidified and cooled air. During the winter period (compressor off) the hydronic coils are supplied with hot water from the heating system and behave like a fan coil.

FEATURES

- Self-supporting galvanised sheet metal structure and polyethylene panel insulation.
- Equipped with high-efficiency reciprocating compressor.
- Low-consumption, double-intake EC Brushless centrifugal fans.
- Coarse filter on recirculating air with low pressure drop.
- Adjustable air flow speed.
- Cooling circuit complete with high-efficiency compressor, water exchanger, high-pressure switches, finned coils.
- Refrigerant gas R134a.
- Horizontal ceiling installation.
- On-board electrical panel with microprocessor and dedicated regulation for managing: fans, timed dirty filters, recirculating air.
- Remote panel with integrated T/H sensor **CNV-UDE**.
- **For controller and accessories, see section (page 96).**

TECHNICAL DATA

MODEL	Voltage (V) 50Hz	Flow rate (m³/h)	Intensity (A)	Dehumidification capacity (Lt/24h)	Nom. water flow rate (L/h)	Pressure drop (Kpa)	Heating power output (Kw) (1)	Hydronic coil cooling power output (Kw) (2)	Total cooling power output (Kw) (3)	Sound pressure Lp 3m dB (A)	Machine code	Controller code
UDE 30 HD	230	300 - 150 Pa	3.2	18.90	0.15	4.5	0.62	0.58	-	36	UDE-30-H-D	CNV-UDE
UDE 50 HD	230	500 - 98 Pa	5.3	36.20	0.3	9	1.3	1.22	-	38	UDE-50-H-D	CNV-UDE
UDE 30 HDC	230	300 - 150 Pa	3.2	18.90	0.15	4.5	0.62	-	1.27	36	UDE-30-H-DC	CNV-UDE
UDE 50 HDC	230	500 - 98 Pa	5.3	36.20	0.3	9	1.3	-	2.39	38	UDE-50-H-DC	CNV-UDE

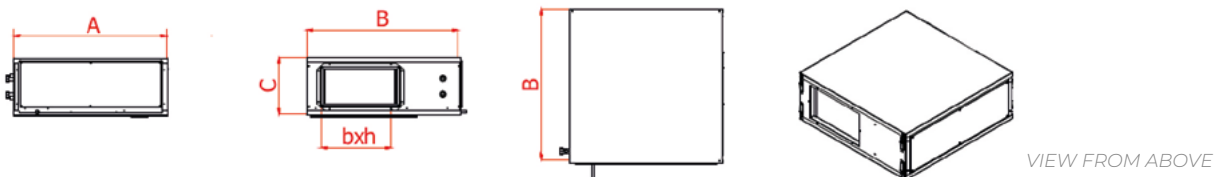
(1) T ambient 26 °C/65% RH, Water in 16°C nominal flow rate

(2) T ambient 26 °C/65% RH, Water in 16°C nominal flow rate

(3) T ambient 20 °C/60% RH, Water in 35°C nominal flow rate

2.1 Dehumidification and air-conditioning solutions

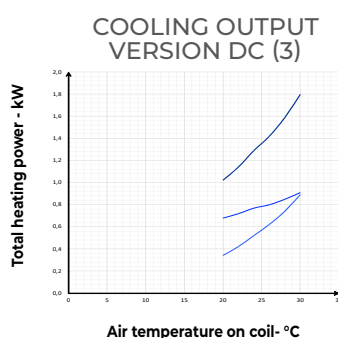
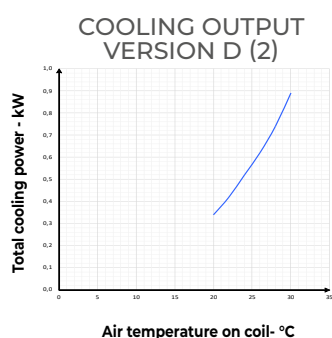
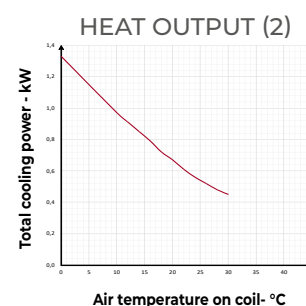
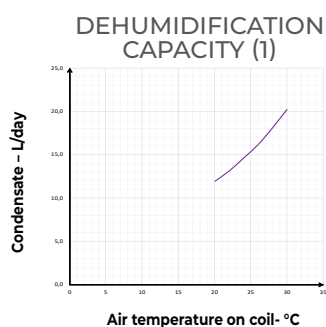
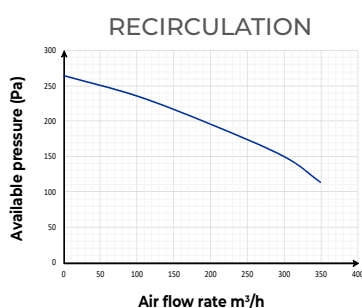
DIMENSIONAL DATA



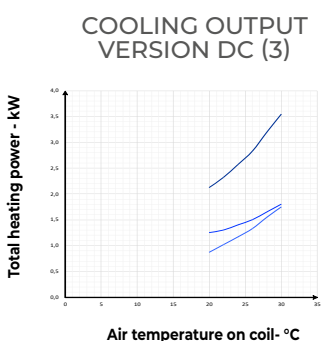
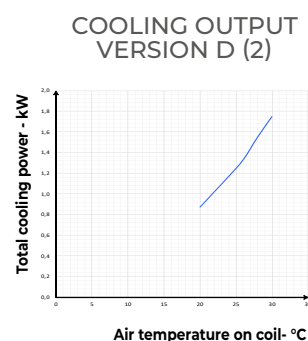
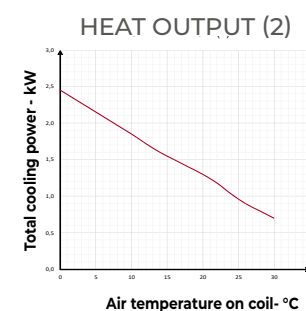
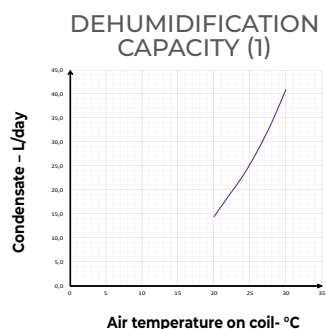
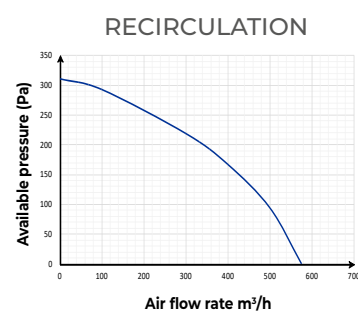
MODEL	Width A (mm)	Depth B (mm)	Height C (mm)	Supply/Return (bxh)	Water inlet outlet ø	Condensate (mm)	Weight (Kg)	
							D	DC
UDE 30 H	690	690	250	350x180	1/2"	16	40	42
UDE 50 H	690	800	310	520x250	1/2"	16	53	55

PERFORMANCE CHARTS

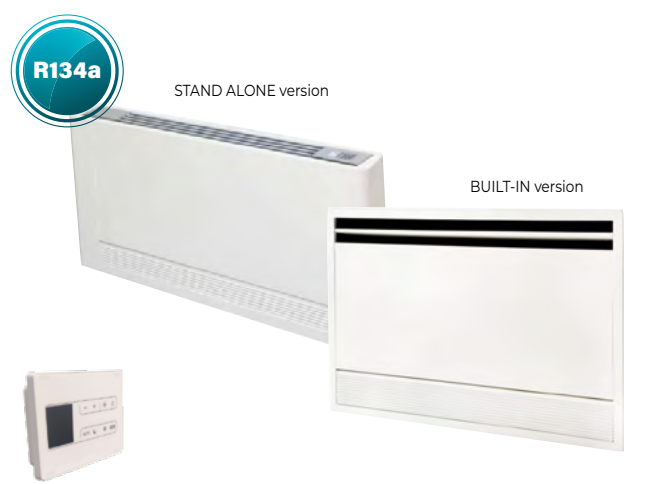
UDE 30 D-DC



UDE 50 D-DC



1. T water IN 16°C, 50% r.h.
2. T ambient 20°C; 50% r.h., T water IN 35°C – nominal out flow rate
3. T water IN 16°C, 50% r.h.



UDE V

VERTICAL DEHUMIDIFIER

UDE is a dehumidification unit designed for specific dehumidification/climate control needs in low power consumption environments.

The unit is especially suitable for single family units, flats, offices with a radiant air-conditioning system.

STAND ALONE VERSION: vertical wall installation.

White RAL 9003 painted finish.

BUILT-IN VERSION: vertical installation flush with the wall with accessories: **case (CS1/CS2/CS3) and grille (GRF1/GRF2/GRF3)** painted white RAL 9003 (can be ordered separately).

DESCRIPTION

MODEL D STANDARD: for neutral air dehumidification (isothermal). Unit for dehumidifying only the air coming from the EC recirculation fan, thus allowing the cooling circuit to operate, obtaining dehumidified air during the summer period (compressor active). Equipped with a hydronic pre- and post-cooling/heating coil which, when powered, allows for the integration of cooling/heating power to the radiant air-conditioning system (connection to the heating/cooling system is optional and does not affect air dehumidification).

MODEL DC WITH INTEGRATION: for dehumidification and cooling/heating integration. Unit for dehumidifying air from the recirculating EC fan allowing integration of cooling/heating power to the radiant air-conditioning system. The unit can operate in 2 modes during the summer (compressor on): **Dehumidification**-> the unit condenses partially in air and partially in water through the plate condenser, obtaining dehumidified air; **Dehumidification + Cooling integration**-> the unit completely condenses in water, thus obtaining dehumidified and cooled air. During the winter period (compressor off) the hydronic coils are supplied with hot water from the heating system and behave like a fan coil.

FEATURES

- Galvanised sheet metal structure, internally insulated
- High-efficiency rotary (size 20) or reciprocating (size 30/50) compressor
- Fans with low power consumption Brushless BLDC motor
- Coarse filter on recirculating air with low pressure drop
- Electronics with motor control, two-function management: with digital inputs with CNV-UDE remote panel.
- **For controller and accessories, see section (page 96)**

TECHNICAL DATA

	MODEL	Voltage (V) 50Hz	Flow rate (m³/h)	Max. Power (W)	Intensity (A)	Nom. dehumidification water flow rate (L/h) 24h A*	Cooling power (Kw) B	Pressure drop (Kpa) C	Sound pressure (dB) A	Machine code	Controller code
STAND ALONE	UDE 20 VD	230	220 - 8 Pa	340	1.76	12.2	-	11	36	UDE-20-VD	CNV-UDE
	UDE 30 VD	230	320 - 10 Pa	544	3.35	16.5	-	14	38	UDE-30-VD	CNV-UDE
	UDE 50 VD	230	500 - 10 Pa	813	4.51	29.8	-	22	40	UDE-50-VD	CNV-UDE
	UDE 30 VDC	230	320 - 10 Pa	544	3.35	16.5	1.1	14	38	UDE-30-VDC	CNV-UDE
	UDE 50 VDC	230	500 - 10 Pa	813	4.51	29.8	1.84	22	40	UDE-50-VDC	CNV-UDE
BUILT-IN	UDE IN 20 VD	230	220 - 8 Pa	360	1.76	12.2	-	11	36	UDE-IN-20-VD	CNV-UDE
	UDE IN 30 VD	230	320 - 10 Pa	570	3.35	16.5	-	14	38	UDE-IN-30-VD	CNV-UDE
	UDE IN 50 VD	230	500 - 10 Pa	850	4.51	29.8	-	22	40	UDE-IN-50-VD	CNV-UDE
	UDE IN 30 VDC	230	320 - 10 Pa	570	3.35	16.5	1.1	14	38	UDE-IN-30-VDC	CNV-UDE
	UDE IN 50 VDC	230	500 - 10 Pa	850	4.51	29.8	1.84	22	40	UDE-IN-50-VDC	CNV-UDE

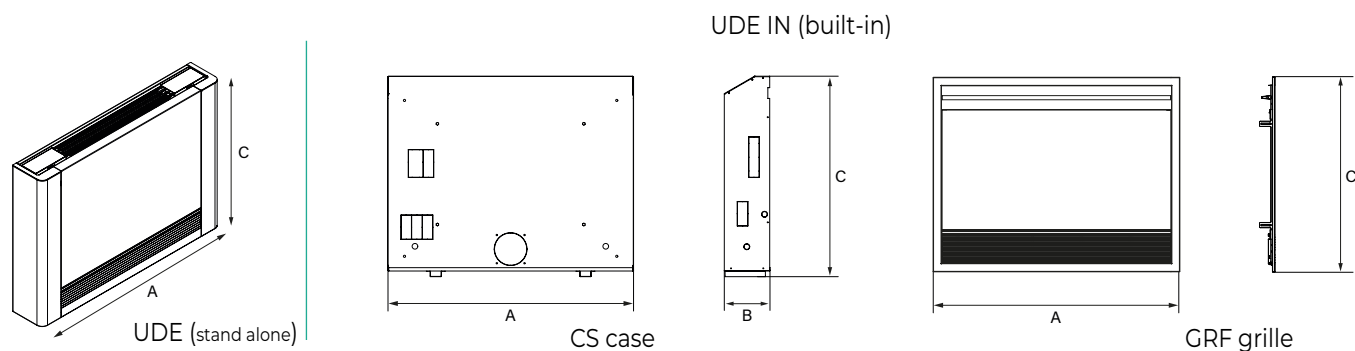
A T ambient 26°C/65% RH

B T ambient 26°C/65% RH; Water In 16°C

C T supply 16°C; T return 18°C

2.1 Dehumidification and air-conditioning solutions

DIMENSIONAL DATA

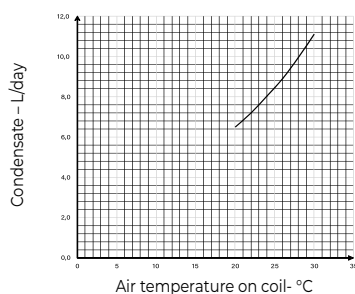


MODEL	CS case			dehumidifier							
	Width A (mm)	Depth B (mm)	Height C (mm)	Width A (mm)	Depth B (mm)	Height C (mm)	Water inlet Ø	Water outlet Ø	Condensate Ø (mm)	weight (Kg)	
UDE 20	-	-	-	900	150	650	1/2"	1/2"	16	36	37
UDE 30	-	-	-	1140	190	650	1/2"	1/2"	16	43	44
UDE 50	-	-	-	1340	190	650	1/2"	1/2"	16	47	48
				GRF grille							
UDE IN 20	915	175	725	972	9	754	1/2"	1/2"	16	36	37
UDE IN 30	1115	210	725	1172	9	754	1/2"	1/2"	16	43	44
UDE IN 50	1315	210	725	1372	9	754	1/2"	1/2"	16	47	48

PERFORMANCE CHARTS

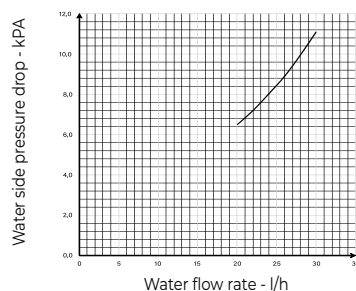
UDE 20 D-DC

DEHUMIDIFICATION CAPACITY



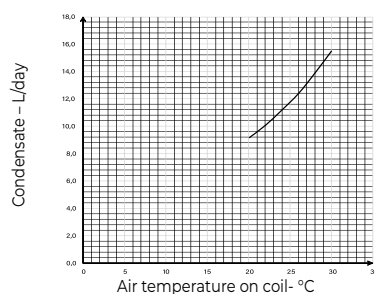
UDE 20 D/DC

WATER SIDE PRESSURE DROP



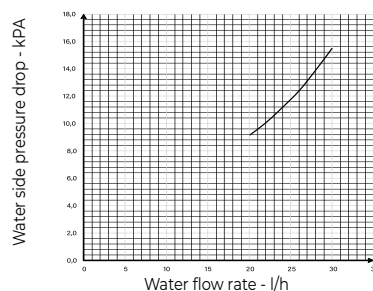
UDE 30 D-DC

DEHUMIDIFICATION CAPACITY



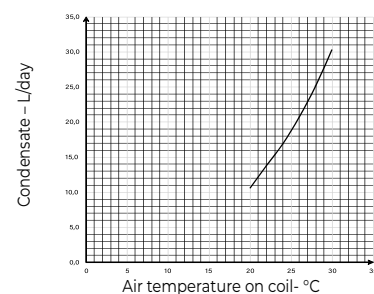
UDE 30 D-DC

WATER SIDE PRESSURE DROP



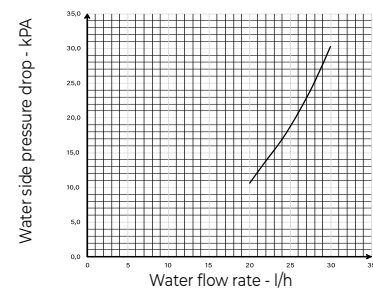
UDE 50 D-DC

DEHUMIDIFICATION CAPACITY



UDE 50 D-DC

WATER SIDE PRESSURE DROP

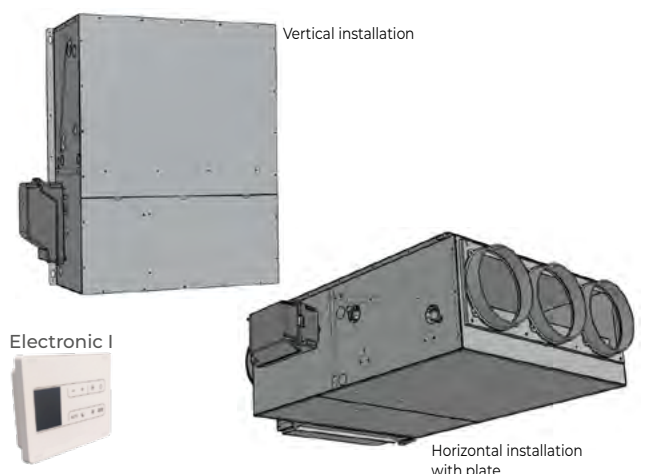


NEW!

UFC

FAN COIL H/V

UFC is a compact unit for air-conditioning systems for concealed ceiling and wall installation. Heating and cooling power up to 6 kw.



DESCRIPTION

ELECTRONICS: the unit is controlled via external 0-10 VDC signals that can regulate the air flow of the fan coil unit.

ELECTRONIC I: the unit is controlled via the **CNW** remote panel with management .

FEATURES

- High-strength, self-supporting galvanised sheet metal frame with internal thermal and acoustic insulation.
- Constant flow EC motors for self-adaptation to the implemented system.
- The units are equipped with hydronic coils with water-air exchange.
- Accessories are provided to facilitate ducting installation.
- Coarse class filters pre-installed inside the unit.
- Universal installation (Z): both horizontally and vertically.
- **For controller and accessories, see section (page 96).**

TECHNICAL DATA

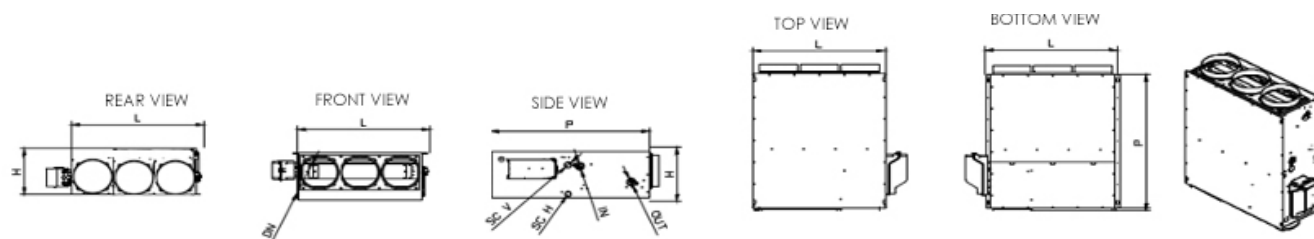
MODEL	Voltage (V) 50Hz	Max. speed flow rate (m³/h)	Useful pressure (Pa)	Recirculating fan nominal absorbed power (kW)	Total cooling power (1) (kW)	Total heating power (2) (kW)	Average sound pressure Lp at 1 m dB(A)	Water flow rate (m³/h)	Machine code	Controller code
UFC 40	230	390	90	0.085	1.9	2.3	43	0.39	UFC-40-ZS	-
									UFC-40-ZI	CNW
UFC 60	230	560	130	0.15	3.0	3.2	46	0.55	UFC-60-ZS	-
									UFC-60-ZI	CNW
UFC 80	230	730	110	0.17	3.5	3.9	48	0.67	UFC-80-ZS	-
									UFC-80-ZI	CNW
UFC 100	230	905	140	0.17	4.4	5.3	49	0.91	UFC-100-ZS	-
									UFC-100-ZI	CNW
UFC 120	230	1150	140	0.24	5.9	6.2	50	1.1	UFC-120-ZS	-
									UFC-120-ZI	CNW

(1) Coil water temperature 7/12 °C, ambient air temperature 27 °C d.b. and 19 °C w.b. (regulation EU 2016/2281)

(2) Coil water temperature 45/40 °C, ambient air temperature 20 °C (regulation EU 2016/2281)

2.1 Dehumidification and air-conditioning solutions

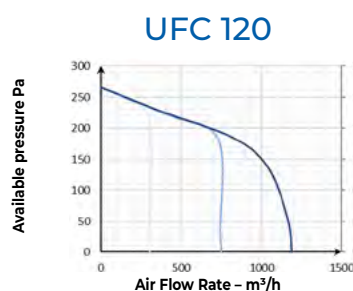
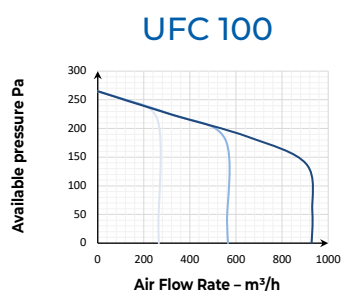
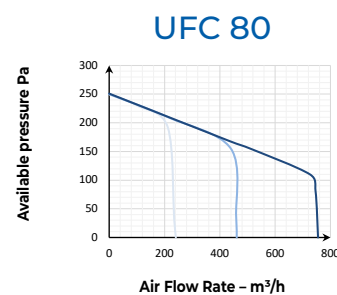
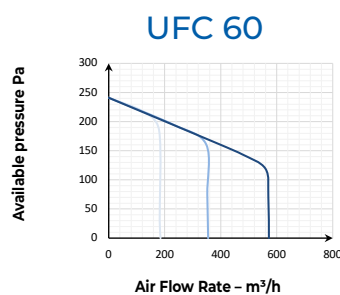
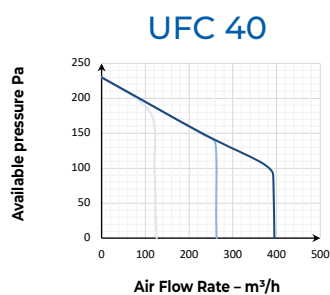
DIMENSIONAL DATA



MODEL	Width L (mm)	Depth D (mm)	Height H (mm)	Supply b x h (mm)	Water inlet-outlet Ø	Condensate (mm)	Weight (kg)
UFC 40	590	695	240	460x150	3/4"	16/20	32
UFC 60	790	695	240	660x150	3/4"	16/20	42
UFC 80	990	695	240	860x150	3/4"	16/20	46
UFC 100	1190	695	240	1060x150	3/4"	16/20	54
UFC 120	1480	695	240	1320x150	3/4"	16/20	65

Note STANDARD configuration with water connections and electrical panel as per drawing (front view: left). It is possible (on request) to provide the machine with a mirrored configuration (with water connections and electrical panel on the right).

PERFORMANCE CHARTS



ACCESSORIES



PLATE

Insulated sheet metal plate for the inlet and outlet port of the unit.

Number of connections	Ø connections (mm)	Size combination	SUPPLY	RETURN
			Code	Code
2	160	40	PSTM1-UFC	PSTR1-UFC
3	160	60	PSTM2-UFC	PSTR2-UFC
4	160	80	PSTM3-UFC	PSTR3-UFC
6	160	100	PSTM4-UFC	PSTR4-UFC
7	160	120	PSTM5-UFC	PSTR5-UFC



version H



version HD



version V

UMC

MONOBLOC CONDITIONER

UMC is an autonomous full inverter air-conditioning unit for summer and winter air-conditioning of residential and commercial environments: the characteristic of being a monobloc unit without an outside unit allows installation both on walls and ceilings and installation through two holes in the outside wall for air intake and expulsion.

DESCRIPTION

MODEL H: Horizontal wall unit.

MODEL V: Vertical wall unit.

MODEL HD: Horizontal ducted unit.

FEATURES

- Self-supporting sheet metal frame.
- Radial backward-curved fans with low power consumption electronic motor.
- High-efficiency rotary compressor with BLDC motor and control driver.
- Fully modulating inverter units for high COP SCOP, EER, ES-EER values.
- G2 filter (1 for H/V version; 2 for HD version).
- The control electronics for managing the set point, component modulation, exchanger temperatures, cooling circuit control to adapt each component to the logic of the unit control panel/remote control for stand alone versions.
- Unit modulation allows maximum adaptation even to partial loads.
- **For controller and accessories, see section (page 96).**

TECHNICAL DATA

MODEL	Voltage (1) (V) 50Hz	In/out air flow rate at min. speed (kPA)	In/out air flow rate at aver- age speed (m³/h)	In/out air flow rate at max. speed (m³/h)	Inside/outside side useful pressure (Pa)	Speed number	Sound pressure Lp(A) at 2 m db(A)	Max absorbed current A(2)	Machine code	Controller code
UMC 10 H	230	260/330	310/380	380/460	-	3	39	4	UMC-10H	CNT-W
UMC 12 H	230	270/340	320/390	400/480	-	3	41	5.2	UMC-12H	CNT-W
UMC 10 V	230	260/330	310/380	380/460	-	3	39	4.2	UMC-10V	CNT-W
UMC 12 V	230	270/340	320/390	400/480	-	3	41	5.5	UMC-12V	CNT-W
UMC 10 HD	230	260/330	310/380	380/460	130 / 150	3	42	4.8	UMC-10HD	CNT-W
UMC 12 HD	230	270/340	320/390	400/480	130 / 150	3	44	6	UMC-12HD	CNT-W

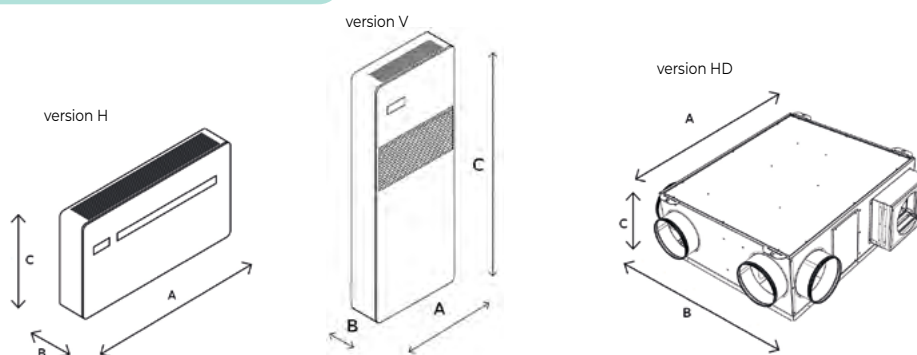
(1) Tolerance on voltage $\pm 10\%$

(2) At the maximum permitted conditions

MODEL	10 H	12 H	10 V	12 V	10 HD	12 HD
UMC	A+	A+	A	A	A	A

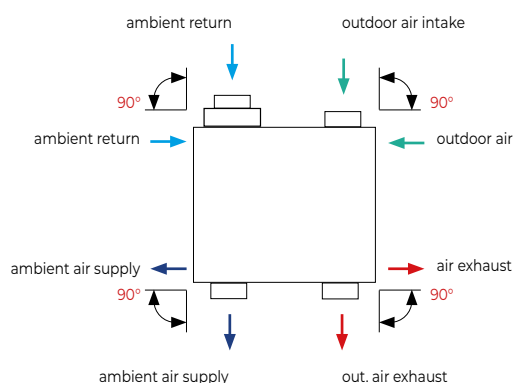
2.1 Dehumidification and air-conditioning solutions

DIMENSIONAL DATA



MODEL	Width A (mm)	Depth B (mm)	Height C (mm)	Weight (Kg)	Indoor air connections Ø (mm)	Outdoor air connections Ø (mm)
UMC H	1010	165	549	125	-	160
UMC V	500	185	1398	125	-	160
UMC HD	895	750	325	125	200	160

MACHINE CONFIGURATION - VIEW FROM ABOVE (VERSION HD)



Notes: Different configurations possible as each connection can rotate 90°.

To change the configurations, remove the screws on the plate with the circular port and replace it with the blind plate and vice versa.

SUMMER/WINTER OPERATING VALUES

COOLING

MODEL	Nominal cooling potential (min-max) (Kw)	Nominal absorbed power (Kw)	EER
10 H	2.04 (0.83-2.64)	0.63	3.24
12 H	2.35 (0.92-3.10)	0.73	3.22
10 V	2.04 (0.92-3.11)	0.75	2.72
12 V	2.35 (0.92-3.10)	0.86	2.75
10 HD	2.04 (0.81-2.60)	0.75	2.72
12 HD	2.04 (0.92-3.11)	0.86	2.75

Indoor DB 27°C - WB 19 °C / Outdoor DB 35°C - WB 24 °C
(standard EN 14511 conditions)

HEATING

MODEL	Nominal heating potential (min-max) (Kw)	Nominal heating power (Kw)	COP	Nominal heating power (-7°C) (Kw)
10 H	2.1 (0.71-2.64)	0.64	3.29	0.98
12 H	2.36 (0.79-3.05)	0.72	3.28	1.1
10 V	2.1 (0.68-2.64)	0.75	3.1	0.98
12 V	2.36 (0.79-3.05)	0.86	3.15	1.1
10 HD	2.1 (0.68-2.64)	0.75	3.1	0.98
12 HD	2.36 (0.79-3.05)	0.86	3.15	1.1

Indoor DB 20°C - WB 15 °C / Outdoor DB 7°C - WB 6 °C
(standard EN 14511 conditions)



ACCESSORIES

For the technical specifications of the following products, please refer to the data sheets on the website:
www.aircontrolclima.it



CNV-UDE PANEL

Remotable panel for mounting on 503 box or wall-mounting.
Speed, temperature and operating mode control functions.

SUITABLE FOR SERIES UDE+ H/V - UDE H/V D and DC

Code

CNV-UDE



CNW PANEL

Remotable panel for mounting on 503 box or wall-mounting:
Speed, temperature and operating mode control.
Internal WIFI module for local and remote APP communication and management.

SUITABLE FOR SERIES UFC (ZI)

Code

CNW



CNT-W PANEL

Remotable panel for mounting on 503 box or wall-mounting.
Speed, temperature and operating mode control functions.

SUITABLE FOR SERIES UMC H/V/HD

Code

CNT-W



BUILT-IN CASE

Galvanised sheet steel case to be embedded in masonry for fixing the unit.

- **CS1** for UDE IN 20
- **CS2** for UDE IN 30
- **CS3** for UDE IN 50

SUITABLE FOR SERIES UDE V (IN)

Code

CS1

CS2

CS3



COVER GRILLE

Galvanised steel cover grille in colour RAL 9003

- **GRF1** for UDE IN 20
- **GRF2** for UDE IN 30
- **GRF3** for UDE IN 50

SUITABLE FOR SERIES UDE V (IN)

Code

GRF1

GRF2

GRF3



SQA CONTROLLER

Room VOC controller with integrated sensor (power supply 230 Volt AC;
dim. W96.4 x H101 x D39 mm)

SUITABLE FOR SERIES UDE+ H/V - UDE H/V D and DC

Code

SQA

2.1 Dehumidification and air-conditioning solutions



UMR HUMIDISTAT

Room humidistat, ON/OFF signal for humidification/dehumidification control via external manual potentiometer, wall mounting. (Field: 30...90% RH; dim. L76 x H76 x P34 mm)

SUITABLE FOR SERIES UDE+ H/V - UDE H/V D e DC

Code

UMR



PROGRAMMABLE THERMOSTAT/HUMIDISTAT

Integrated programmable thermostat/humidistat: controls ambient temperature and humidity through the control of two separate relays and the management of time ranges.

SUITABLE FOR SERIES UDE+ H/V - UDE H/V D and DC

Code

CTH



2/3-WAY VALVE

1/2" gas 2/3-way ON/OFF zone valve.

SUITABLE FOR SERIES UDE+ H/V - UDE H/V D and DC

Valve

Code

2-way

VDM2

3-way

VDM3



2/3-WAY VALVE

3/4" gas 2/3-way ON/OFF zone valve.

SUITABLE FOR SERIES UFC (ZI)

Valve

Code

2-way

VDZ2-UFC

3-way

VDZ3-UFC



2/3-WAY VALVE

3/4" gas 2/3-way 0-10V zone valve.

SUITABLE FOR SERIES UMC

Valve

Code

2-way

VDM2C

3-way

VDM3C



FILTER REPLACEMENT KIT

Coarse filter replacement kit.

SUITABLE FOR SERIES UDE+ H/V

Code

FDR1-UDE+H

FDR1-UDE+V



FILTER REPLACEMENT KIT

Filter kit (2 EPM1 - 70% filters + 1 Coarse filter):

- **FDR1-UDEH** for unit UDE 30 H
- **FDR2-UDEH** for unit UDE 50 H

- **FDR1-UDEV** for unit UDE 20 V
- **FDR2-UDEV** for unit UDE 30 V
- **FDR3-UDEV** for unit UDE 50 V

SUITABLE FOR SERIES UDE H/V D and DC

Code

FDR1-UDEH

FDR2-UDEH

FDR1-UDEV

FDR2-UDEV

FDR3-UDEV



FILTER REPLACEMENT KIT

Coarse filter replacement kit.

- **FDR1-UFC** for unit UFC 40
- **FDR2-UFC** for unit UFC 60

- **FDR3-UFC** for unit UFC 80
- **FDR4-UFC** for unit UFC 100
- **FDR5-UFC** for unit UFC 120

SUITABLE FOR SERIES UFC

Code

FDR1-UFC

FDR2-UFC

FDR3-UFC

FDR4-UFC

FDR5-UFC

REPLACEMENT FILTERS

G2 filter:

- **FDR1-UMC** for version H
- **FDR2-UMC** for version V

- **FDR3-UMC** for version HD (kit composed of 2 G4 filters)

SUITABLE FOR SERIES UMC H/V/HD

Code

FDR1-UMC

FDR2-UMC

FDR3-UMC

3.0 ACTIVE SANITIZATION DEVICES FOR PLANTS

"Breathe The Difference"

Active Sanitizing systems  **DUST FREE®**
Breathe The Difference.

It acts actively 24 hours a day in the air and on surfaces!



TEST COVID-19 CERTIFIED

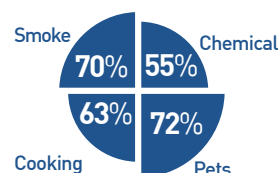
EFFECTIVE TECHNOLOGY AGAINST COVID-19, ABATEMENT IN THE LABORATORY UP TO 99.7% *

* Test carried out in collaboration with the Department of Biomedical and Clinical Sciences "Luigi Sacco" of the State University of Milan

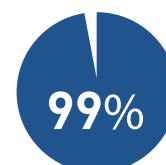
The last 2 years have been of great vitality for air treatment technologies due to the tremendous acceleration in research and development of new solutions by numerous manufacturers in the field of Indoor Air Quality, related to the recent SARS-CoV-2 pandemic.

Hygiene plays an essential role in everyday life and this health emergency has highlighted its importance. For this reason, it is widely believed that this SARS-CoV-2 pandemic that developed in Europe at the beginning of 2020 will leave an indelible mark on the very concept of "hygiene and health" in environments frequented by humans and this phenomenon will certainly have an impact on future air treatment choices.

REDUCTION OF ODOURS



REDUCTION OF BACTERIA AND MOULD



3.0 ACTIVE SANITIZATION DEVICES FOR PLANTS



Not only it's expected that consumption of detergents for "hygiene" and "disinfection" for the home, workplace and community will remain high even in the post-pandemic scenario (which during the pandemic increased by over +100% depending on the product line), but also that completely new attention will be paid to the more technological parts of the places where we live, which define a broader concept of health and hygiene of the air we breathe as well as the surfaces we come into contact with.

For this reason, the recent events in the field of epidemiological health emergencies have warranted the marked need for new solutions to cope with safeguarding the health of environments, as well as limit possible infections from viral diseases that have an impact on ventilation systems and air renewal, purification, disinfection, hygienisation and sanitization devices.

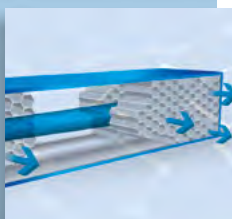
3.1 Foreword



FOREWORD
PAGE 101



PROBLEM
PAGE 103



SOLUTION
PAGE 105

3.2 Products



MICROPURE 5"
DUCT MODULE
max air flow rate 1500 m³/h
PAGE 117



ACTIVE 6"
DUCT MODULE
max air flow rate 2000 m³/h
PAGE 118



ACTIVE 12"
DUCT MODULE
max air flow rate 3000 m³/h
PAGE 119



AIR KNIGHT 7"
DUCT/AHU MODULE
max air flow rate 2500 m³/h
PAGE 120



AIR KNIGHT 14"
DUCT/AHU MODULE
max air flow rate 4000 m³/h
PAGE 121



FC UNIT 3"
FANCOIL MODULE
max air flow rate 800 m³/h
PAGE 122



SANITIZATION KIT
PLENUM MODULE
max air flow rate 1600 m³/h
PAGE 123



DUPLEX MINI-UV
SPLIT MODULE
max air flow rate 600 m³/h
PAGE 124



KITS AND ACCESSORIES
PAGE 125

FOREWORD

WHAT IS INDOOR AIR QUALITY?

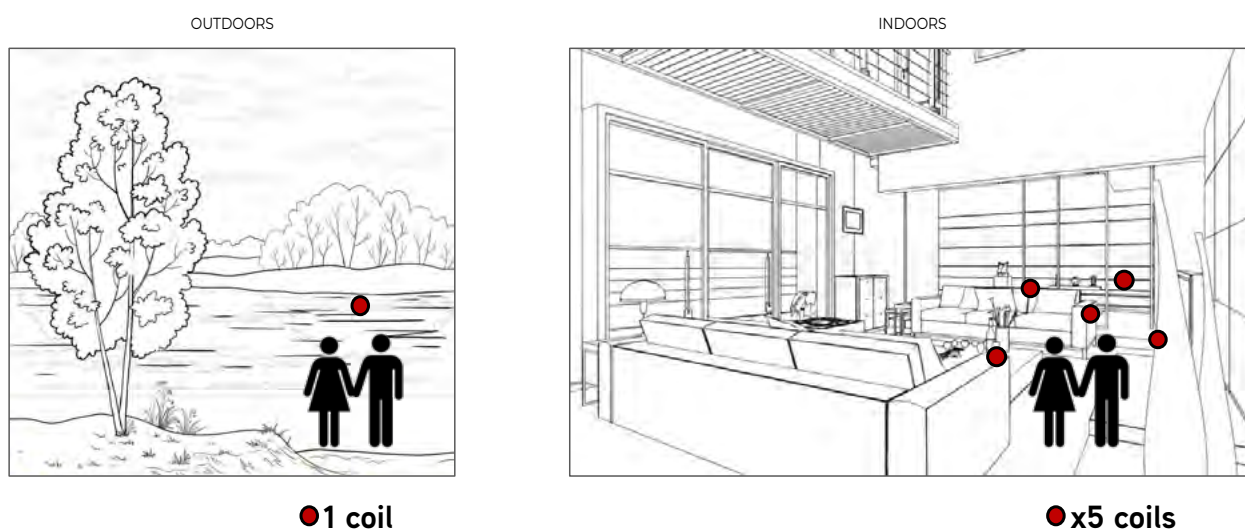
DEFINITION “Characteristic of treated air that meets purity requirements. It contains no known contaminants that are harmful to health or cause occupant discomfort. Contaminants, contained in both fresh and recirculated air, are gases, vapours, microorganisms, smoke and other particulate matter”.

People currently spend up to **90%** of their time **indoors** and about 30-40% of this in workplaces. For this reason, **indoor pollution** is potentially more dangerous than outdoor pollution: 40% of absences from work due to illness are thought to be due to problems with indoor air quality in offices.

INDOOR AND OUTDOOR COMPARISON

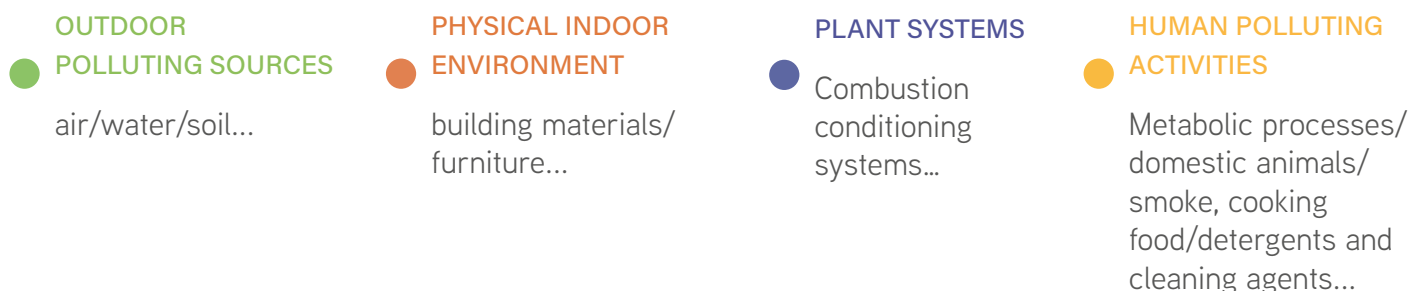
The IEMB (Indoor Environment Management Branch) of the EPA (Environmental Protection Agency - USA) compared the **concentration/exposure** level to numerous air pollutants recorded **indoors** with the level recorded outdoors.

Analysis of the data confirmed that indoor versus outdoor concentrations are generally **1 to 5 times higher**...



...and that **indoor exposure** is 10 to 50 times higher than outdoor exposure.

FACTORS INFLUENCING IAQ



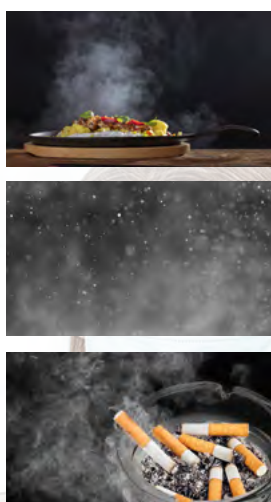
INDOOR AND OUTDOOR COMPARISON

Common activities such as cooking, heating, smoking and cleaning release gases and particles into the air, many of which are potentially harmful to humans.

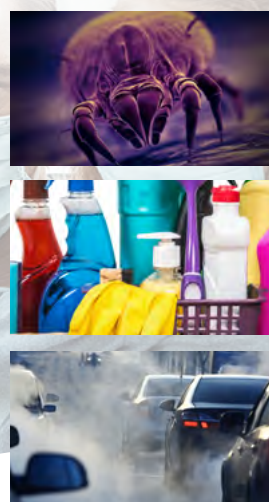
Formaldehyde is another potentially harmful substance that is released from building, cladding and insulation materials and can therefore be found in any home.

Dust, pollen, micro-particles generated by vehicular traffic, tobacco smoke, cooking food, bacteria are just some of the substances that remain suspended in the air until they settle on walls, furniture and floors or creep into ducts, forming layers of **biofilm**.

PERCEIVABLE POLLUTANTS



NON-PERCEIVABLE POLLUTANTS



NEW BUILDING METHODS

New generation buildings are constructed with highly insulating materials:

ADVANTAGE -> ensuring that there is no heat loss. This facilitates heating and cooling, reducing energy consumption and waste.

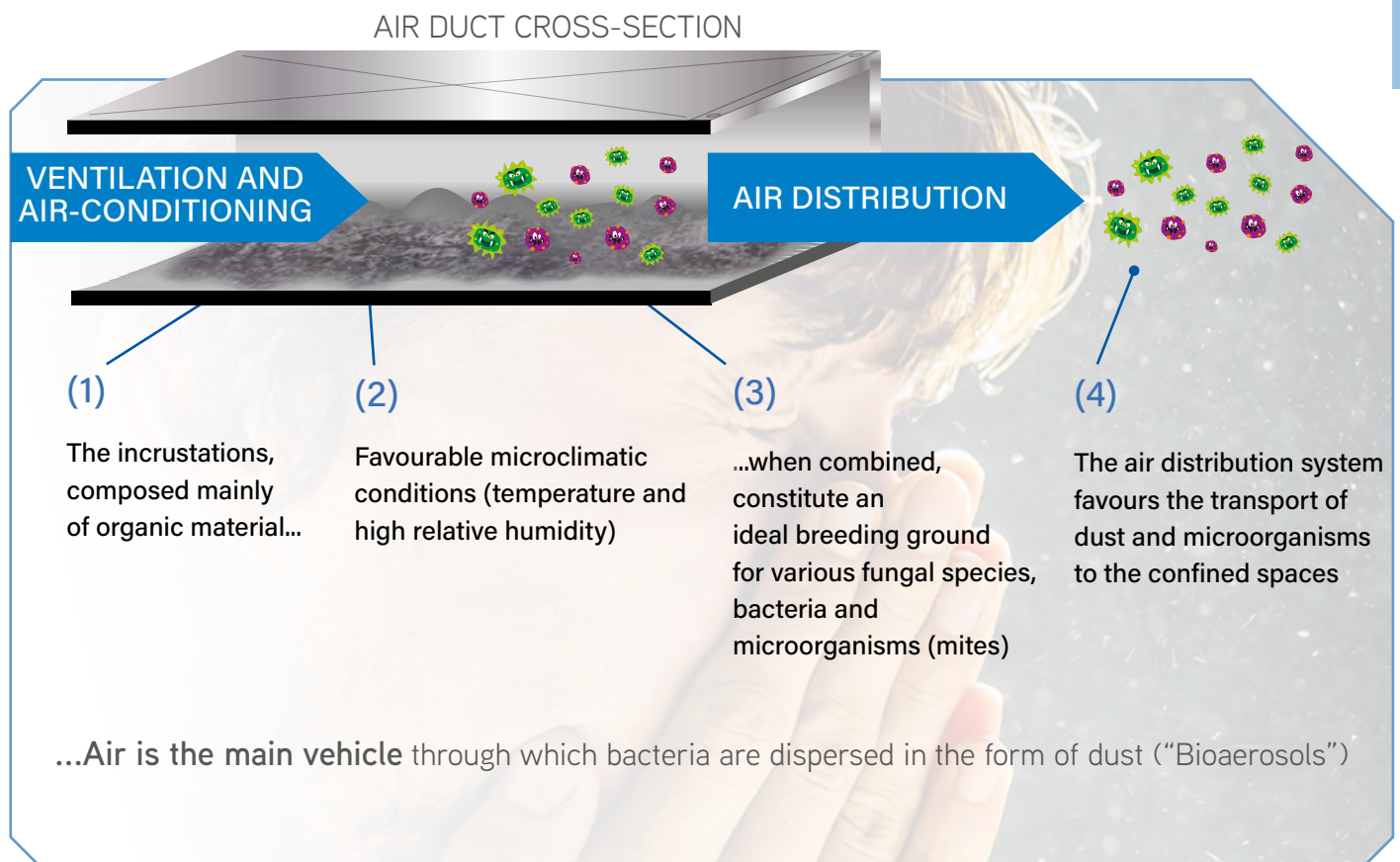
DISADVANTAGE -> buildings need special forced mechanical ventilation systems to breathe which, over time, can become an additional element of indoor pollution if they become contaminated.



THE PROBLEM

AIR DUCTS

Over time, ducts can easily become prey to microorganisms such as bacteria, mould and fungi which, due to the flow of air, significantly increase the potential for infection of people in the room.

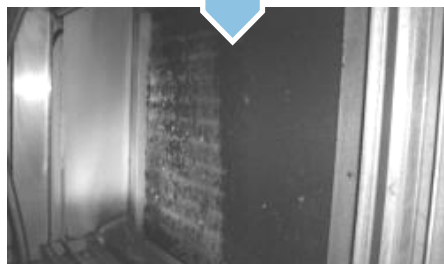


INDOOR POLLUTION - THE RISKS

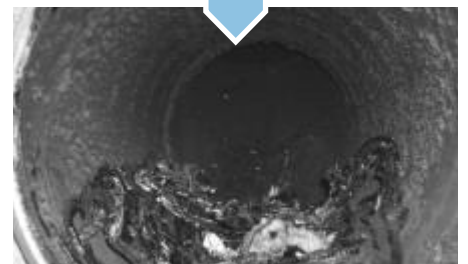
HYGIENE-HEALTH



ENERGY



FIRE



Pollution from fine dust, dust, pollen, fibres and spores can make life truly difficult for **allergy** sufferers (damage to eye mucous membranes, skin, respiratory system) and also accelerate the deterioration of equipment inside the premises.

Bacteria, viruses and fungi are potentially the **cause of contamination and disease**.

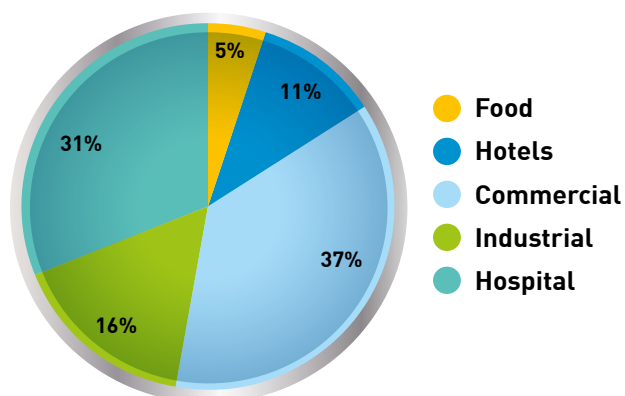


INDOOR POLLUTION - THE EFFECTS

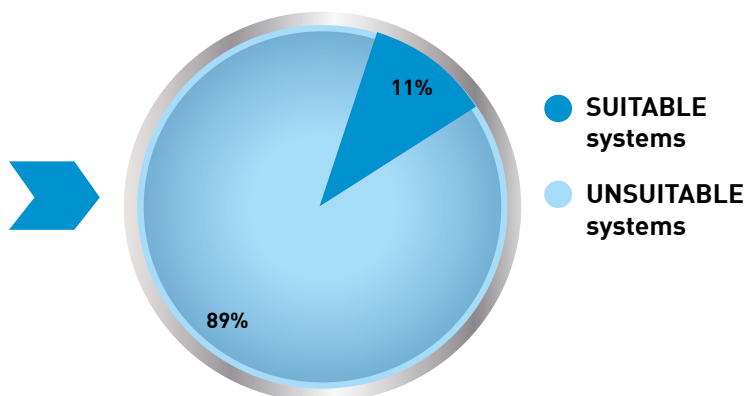
Statistical surveys carried out on a sample of 112 buildings in northern Italy showed that:

- » **65%** of ducts are contaminated
- » **65%** of systems do not provide adequate air exchange
- » allergy problems were found in **35%** of the buildings sampled
- » **10%** of sampled buildings are infected with pathogenic bacteria
- » glass fibre particles were detected in the air in **8%** of the buildings sampled
- » carbon monoxide produced by vehicle traffic was detected in the air in **4%** of the buildings sampled

SYSTEMS INSPECTED BY TYPE OF SECTOR



SYSTEM HYGIENE AND HEALTH SUITABILITY



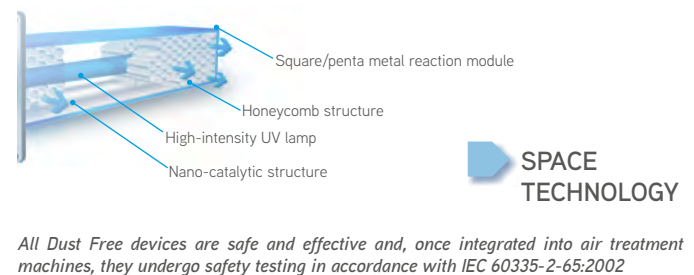
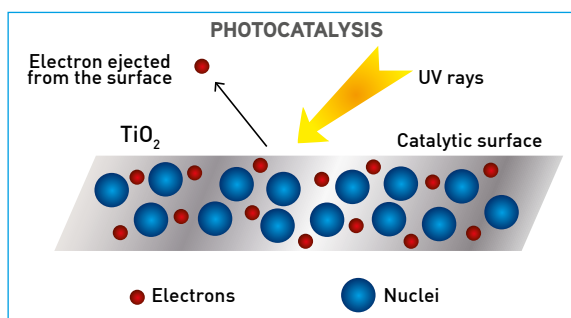
3.1 Foreword

THE SOLUTION

PCO™ TECHNOLOGY

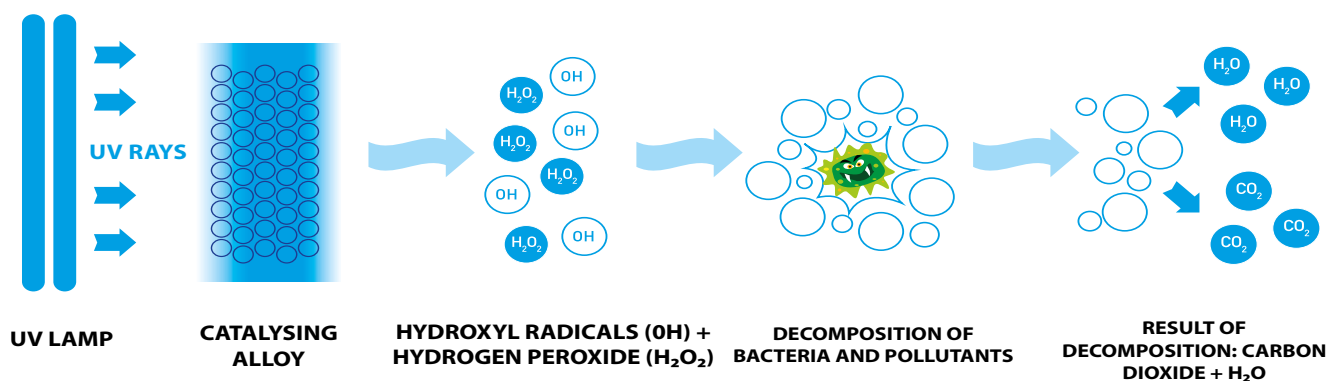
» PCO™ (Photocatalytic Oxidation) technology was developed and used in the aerospace industry for the sanitization of environments intended for space exploration, where one of the main prerogatives is the quality and health of the air.

» PCO™ technology mimics and reproduces what occurs in nature by means of photocatalysis; the photochemical reaction generated by PCO™ enables pollutants, in particular bacteria, viruses and moulds, to be destroyed with an active natural ingredient.



The PCO™ technology of the Dust Free® modules exploits the combined action of UV rays, produced by a special lamp, and a catalyst structure consisting of a quadri/penta metal alloy with a honeycomb matrix, composed mainly of TiO₂ (titanium dioxide) and other noble metals to a lesser extent.

ACTIVE SANITIZATION



When the Dust Free® modules are hit by a flow of moisture-laden air (H₂O), they give rise to a photochemical reaction that binds an oxygen atom (O) to the pre-existing hydrogen and oxygen atoms of the moisture in the air (H₂O), thus generating **hydrogen peroxide** (H₂O₂) and **hydroxyl radicals** (•OH).

The hydrogen peroxide (H₂O₂), generated by the photocatalytic reaction in very small quantities – no more than 0.02 PPM – has a very high effectiveness in **destroying the microbial load**: diffused and entrained by the air flow, it allows safe, effective and complete sanitization both in the ducts and in the air and by contact even on the surfaces of the rooms.

» For optimal operation, the **relative humidity** of the air must be at least **20%**.

DIFFERENCES IN TECHNOLOGIES

PASSIVE SYSTEMS



These retain and destroy part of the harmful substances only at the point where they are installed.

They have no direct effect on harmful substances in the environment.

- » Traditional filtration
- » Germicidal lamps



With the photocatalytic reaction, the H_2O_2 generated is able to attack and destroy the molecular structure of pollutants, subtracting protons from the cell and giving rise to water recombination.

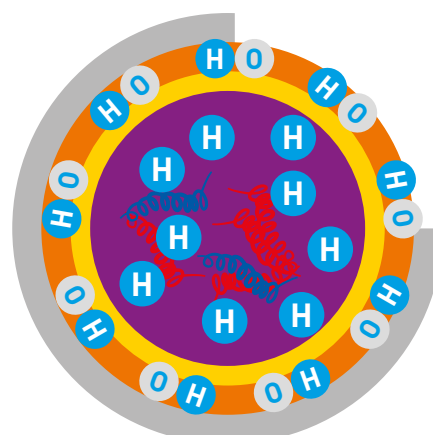
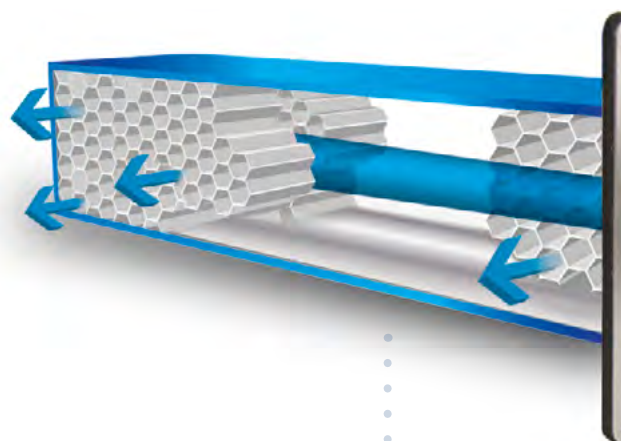
ACTIVE SYSTEMS



Thanks to the OXIDISING agents that are generated by PCO™, there is a sanitizing effect not only at the point where the module is installed but on the entire air circuit and also in the treated rooms.

PCO™ TECHNOLOGY

Photocatalytic Oxidation



DIFFERENCES IN ACTIVE SYSTEMS

OZONE



CHARACTERISTIC

Ozone (O_3) is formed from oxygen molecules that are usually stressed by electrical discharges. The additional oxygen atom is known as a loose radical that seeks organic compounds with which to initiate an oxidation reaction.

PRO

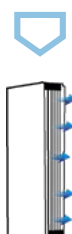
Ozone (O_3) is a highly unstable gas that can propagate in treated environments oxidising all organic compounds. It is also capable of neutralising odours.

CON

Exposure to ozone can be very dangerous if prolonged for both humans and materials.

It does not act on non-organic particulates.

IONIZATION



CHARACTERISTIC

Ionization is usually produced by high-voltage electrical discharges.

PRO

The positive and negative ions aggregate the microparticles suspended in the air which, as they are no longer ultrafine, no longer remain suspended in the air and are therefore less harmful because they are not inhaled by humans.

CON

It is highly unstable and therefore cannot have an effect over long stretches of ducts. It very often produces high concentrations of ozone.

It must be combined with a filter capable of retaining medium particulates.

PCO™ WITH IPG



CHARACTERISTIC

Advanced photocatalytic oxidation technology. The hydroperoxides generated systematically reduce microbes and gases in the space to be conditioned. The IPG system is able to generate bipolar ionization without the production of ozone.

PRO

Thanks to the variety of oxidants, this treatment is made extremely effective on a larger number of microbes and gases. The H_2O_2 molecules and oxidants created by this technology are much more stable than normal ionization.

This makes sanitization effective even over long stretches of ducts and in treated rooms.

CON

It must be combined with a filter capable of retaining medium particulates.

Types of filters	HIGH-EFFICIENCY HEPA FILTERS	MEDIUM EFFICIENCY SYNTHETIC FILTERS	ACTIVATED CARBON FILTERS	ELECTROSTATIC IONIZER FILTERS	IONIZER	OZONE GENERATORS	UV LAMPS	PCO™ IPG
Fine particulate	✓			✓	✓			✓
Medium particulate	✓	✓	✓	✓	✓			
ATM particulate	✓	✓	✓	✓	✓			✓
Microbes/ Bacteria	✓			✓	✓	✓	✓	✓
Viruses	✓			✓	✓	✓	✓	✓
Fungi	✓					✓	✓	✓
Moulds	✓					✓	✓	✓
Gases			✓			✓		✓
Odours			✓			✓		✓

BENEFITS OF PCO™ TECHNOLOGY

The benefits of installing Dust Free® modules with PCO™ technology can be summarised as follows:

- » **Continuous sanitization** able to reduce the risk of contamination and exposure 24 hours a day
- » **Active treatment** of ducts, in the rooms and on the surfaces themselves
- » **Elimination of germs, bacteria and viruses** which, as they proliferate, cause the spread of diseases and allergies
- » **Reduction of dust clusters and elimination of odours**
- » **Reduction of harmful microparticles** in the air, including ultra-fine particles not generally treated by common filters
- » **Reduction of periodic interventions** (and related costs) for cleaning air ducts
- » **Reduction of periodic interventions** (and related costs) for the sanitization and remediation of air ducts



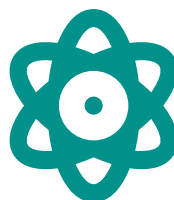
Air Control products utilise the **Dust Free®** system which exploits the synergy of **3 different technologies** capable of lowering the bacterial load within environments and minimising **SARS-COV-2 infection**.

Oxidative Photocatalysis (PCO™)



One of the most advanced technologies on the market: in addition to being used in aerospace, it is based on a process that occurs in nature, generating ROS (reactive oxygen species) that are able to break down VOCs (volatile organic compounds) and microorganisms.

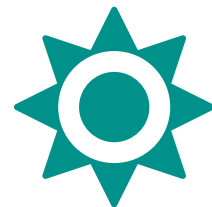
Ionization



Ionizing the air means contributing to a cleaner environment.

Ionization makes it possible to electrostatically charge ultrafine particles in suspension (such as particulate matter, PM), thus reducing them.

UV rays



UV rays identify a range of electromagnetic radiation. They are characterised by a wavelength band that can destroy bacteria, viruses and other microorganisms by modifying their DNA or RNA.

"Breathe the difference"
Active sanitization systems



Acts actively 24 hours a day in the air and on surfaces!

3.1 Foreword



UNIVERSITY OF MILAN
“LUIGI SACCO” DEPARTMENT OF
BIOMEDICAL AND CLINICAL SCIENCES

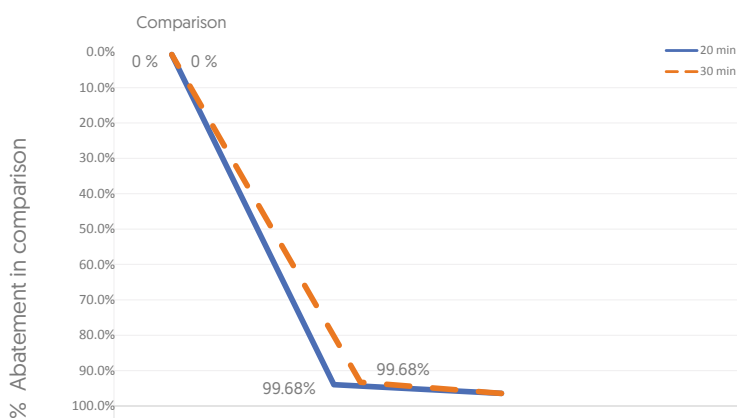


TEST ON SARS-CoV-2

AT THE “LUIGI SACCO” DEPARTMENT OF
BIOMEDICAL AND CLINICAL SCIENCES



Abatement %SARS-CoV-2 via Dust free technology



The “**Luigi Sacco**” department of biomedical and clinical sciences at the University of Milan, whose laboratory has been designated as a national reference for the response to bioterrorism and infectious emergencies, carried out the following clinical trials.

On **9 November 2020** a report evaluating the virucidal activity of the Dust Free technology was compiled, with very good results, meaning **99.68 % abatement** of SARS-CoV-2 in 20 minutes.



DOWNLOAD THE TEST
RESULT



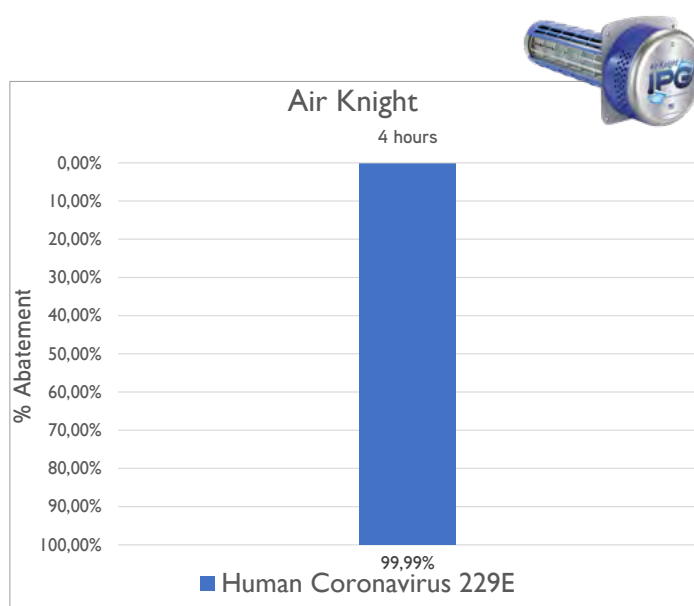
eurofins

Biotech-Germande



TEST ON HUMAN CORONAVIRUS

EVALUATION OF THE BIOCIDAL ACTIVITY OF THE DUST FREE PROCESS ACCORDING TO A METHOD BASED ON EN 17272



Through its subsidiaries, **Eurofins Scientific** is a **world leader** in food, environmental, pharmaceutical and cosmetics testing and in agroscience CRO services. It is also one of the global independent market leaders in laboratory testing and services for genomics, discovery pharmacology, forensics, advanced materials science and clinical trial support.

Eurofins tested the **Dust Free Air Knight** device according to European standard **EN-17272**, which is suitable for determining the disinfectant activity of surfaces by aerial diffusion without an operator.

Assessment of the virus: **Human Coronavirus 229E**

Title of the test viral suspension: IgDICT50 = 8.25.

No cytotoxicity was observed on the bare carrier which was previously treated by the disinfection device according to the treatment performed.

	Degree of cytopathic effect IgDICT50	Reduction (log ₁₀)
Sensibility of cells to virus		
- With treatment (S1)		
Carrier 1	8.50	Difference < 1 log
Carrier 2	8.13	
Mean	8.32	
- Without treatment (S2)		
Carrier 1	8.25	
Stop of disinfection activity		
- With treatment (S1)		
Carrier 1	8.25	Difference < 0,5 log
Carrier 2	8.13	
Mean	8.19	
- Without treatment (S2)		
Carrier 1	8.38	
Test controls		
Carrier 1	6.75	4.07
Carrier 2	6.88	
Mean	6.82	
Test		
Carrier 1	2.50	
Carrier 2	3.00	
Carrier 3	2.75	
Mean	2.75	



**DOWNLOAD THE TEST
RESULT**



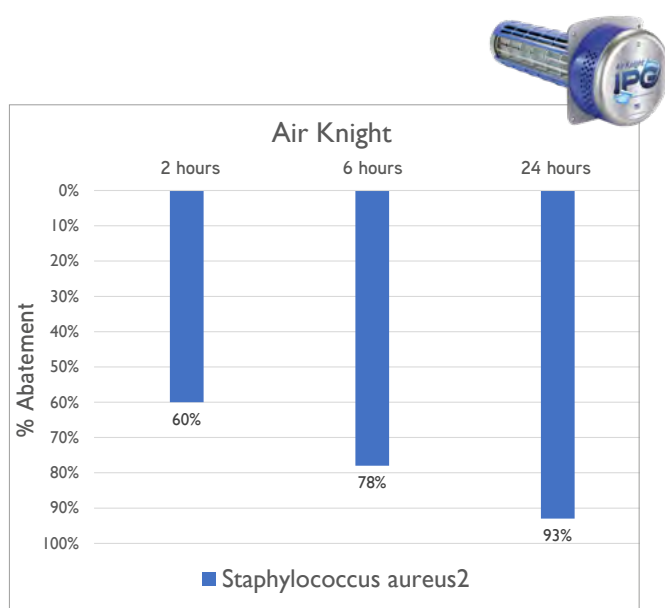
eurofins

Biotech-Germade



TEST ON STAPHYLOCOCCUS AUREUS

EVALUATION OF THE BIOCIDAL ACTIVITY OF THE DUST FREE PROCESS ACCORDING TO A METHOD BASED ON EN 17272

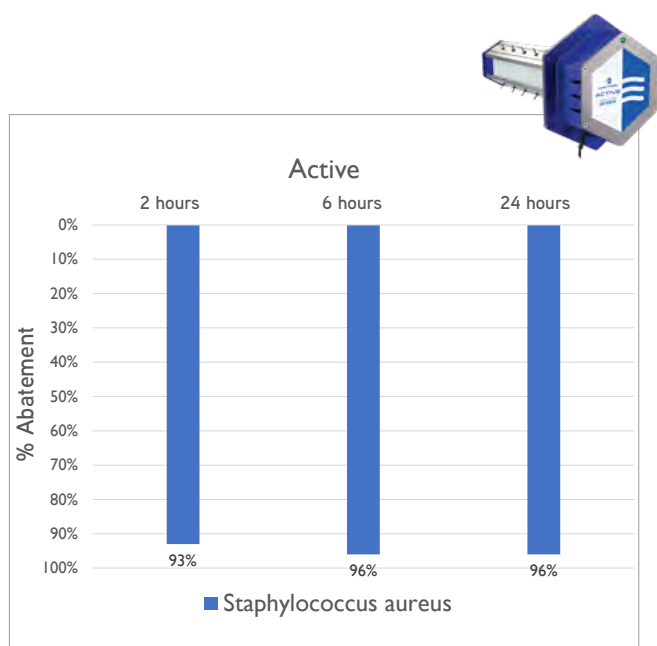


Eurofins tested the **Dust Free Air Knight** devices according to European standard **EN-17272**, which is suitable for determining the disinfectant activity of surfaces by aerial diffusion without an operator.

Assessment of the bacteria: **Staphylococcus aureus**



DOWNLOAD THE TEST RESULT



Eurofins tested the **Dust Free Active** devices according to European standard **EN-17272**, which is suitable for determining the disinfectant activity of surfaces by aerial diffusion without an operator.

Assessment of the bacteria: **Staphylococcus aureus**



DOWNLOAD THE TEST RESULT



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TEST ON STAPHYLOCOCCUS AUREUS

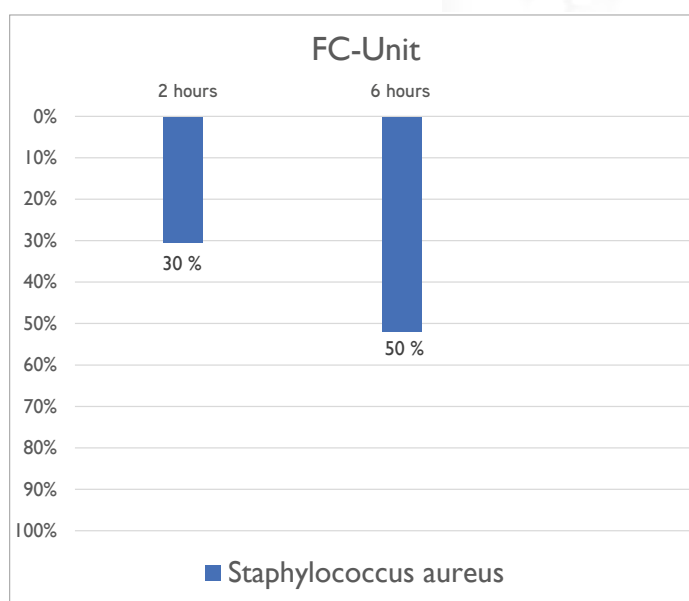
EVALUATION OF THE BIOCIDAL ACTIVITY OF THE DUST FREE PROCESS ACCORDING TO A METHOD BASED ON EN 17272



Through its subsidiaries, **Eurofins Scientific** is a **world leader** in food, environmental, pharmaceutical and cosmetics testing and in agroscience CRO services. It is also one of the global independent market leaders in laboratory testing and services for genomics, discovery pharmacology, forensics, advanced materials science and clinical trial support.

Eurofins tested the **Dust Free FC-Unit** device according to European standard **EN-17272**, which is suitable for determining the disinfectant activity of surfaces by aerial diffusion without an operator.

Assessment of the bacteria: **Staphylococcus aureus**



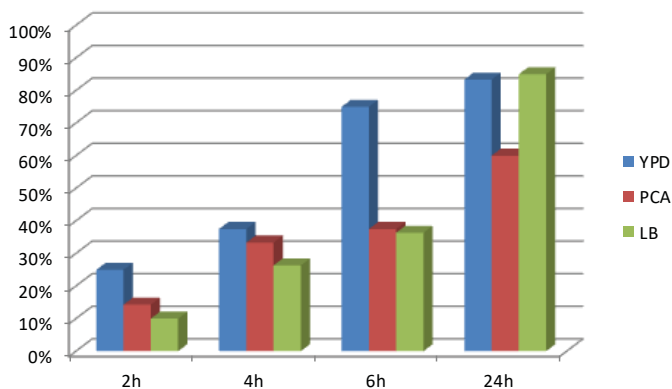
**DOWNLOAD THE TEST
RESULT**

3.1 Foreword



MICROBIAL TESTS ON PHOTOCATALYTIC SYSTEM

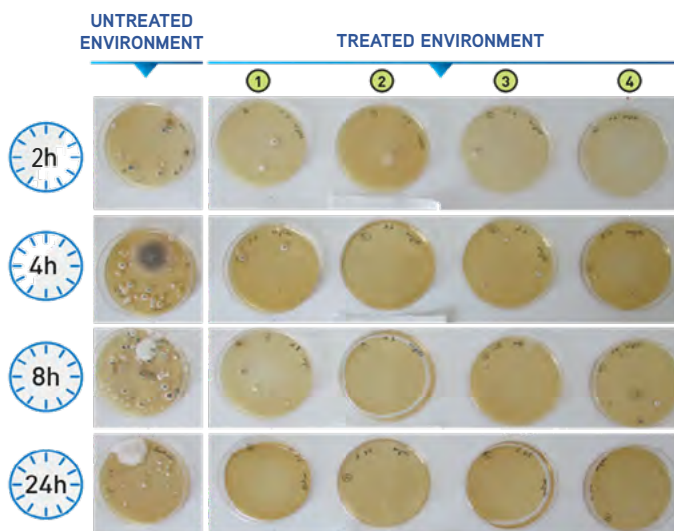
EVALUATION OF MICROBIAL ACTIVITY AT THE DEPARTMENT OF INDUSTRIAL ENGINEERING OF THE UNIVERSITY OF SALERNO



Reduction of bacterial colonies on LB, YPD and PCA culture media in the environment after 2, 4, 6 and 24 hours of using the fan coil equipped with a photocatalytic device.

The Department of Industrial Engineering at the University of Salerno has laboratories, some of which are UNI EN ISO 9001-2000 certified, equipped with advanced analytical instruments and pilot plants for the study of materials and nanomaterials, process analysis, and the testing of new technologies and materials. The tests performed demonstrate that the photo-catalytic system supplied by Air Control succeeded in significantly limiting the growth of aero-dispersed microorganisms present in the investigated environment on LB, PCA and YPD type media.

It is possible to estimate that after 24 hours of treatment, the microbial load found on the agarised medium (mainly moulds normally present in the environment) in the presence of PCO-001 is approximately 100 times lower than that of the control, i.e. that present on the plate left in the same environment but in the absence of Dust Free.



DOWNLOAD THE TEST
RESULT



The **European Medical Association (EMA)** is a non-profit organisation that enables European doctors to participate in a key network and **contribute to the development of European healthcare.**

On 6 June 2021, the EMA evaluates and declares that Air Control products with PCO™ DUST FREE® technology meet the criteria of quality, health and safety.



MAIN SECTORS OF USE



MEDICAL/HOSPITAL

Abatement of bacterial proliferation.
Healthcare environment less stand alone to
bacterial contamination.



RESIDENTIAL CMV SYSTEMS

Elimination of bacteria, allergens and odours.
Healthier and more comfortable environment.



OFFICES/WORKPLACES

Elimination of bacteria, allergens and odours.
Decreased sickness rates.



RESTAURANTS/HOTELS

Elimination of odours and bacteria.
More pleasant and longer-lasting stay in premises.



INDUSTRIAL

Sanitization of ducts and environments with
elimination of chemical/biological pollutants.
Healthier work environment.



FOOD

Elimination of mould and bacteria.
Better preservation = more freshness and quality.

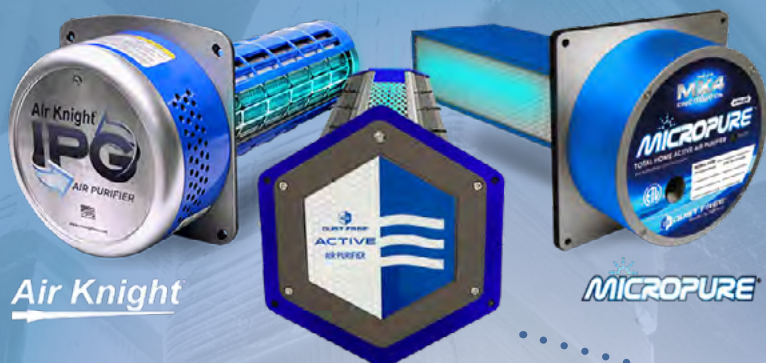


TRANSPORT

Elimination of bacteria.
Less exposure to bacterial contamination.
Healthier and more comfortable environment.

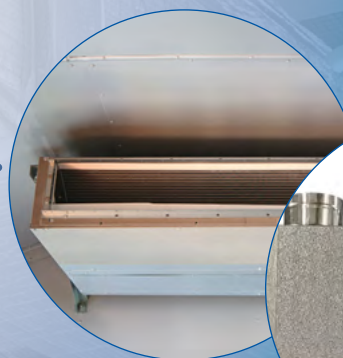
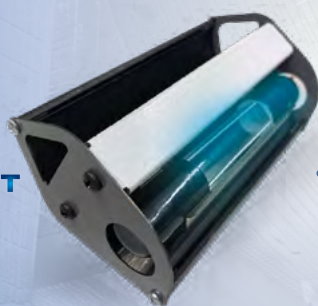
PLANT MODULES

DUCT / AHU / FANCOIL / SPLIT SYSTEMS



ACTIVE
TOTAL HOME AIR PURIFICATION

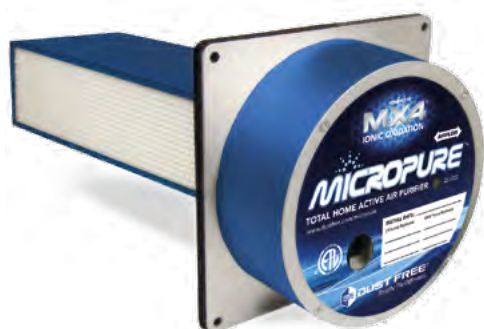
FE UNIT



DUPLEX MINI-UV



3.2 Products



MICROPURE 5"

DUCT MODULE

Maximum air flow rate

1500 m³/h



DESCRIPTION OF PCO™ TECHNOLOGY

The **PCO™ technology** of the Micropure modules exploits the combined action of a **special UV lamp** with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide)** and **3 other noble metals to a lesser extent**.

When the Micropure modules are hit by the air flow, they give rise to a photocatalytic reaction capable of producing hydroxyl radicals (·OH) and hydrogen peroxide (H₂O₂) in minute quantities – no more than 0.02 PPM. H₂O₂ and ·OH sanitize both the air flow and the surfaces of ventilation ducts due to their high effectiveness in decomposing pathogens.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds.

INSTALLATION METHODS

- In new and existing installations
- In controlled mechanical ventilation systems
- In supply plenum/ducts

*Note: transformer included 220 V-24 V
UV lamp replacement every two years*

AREAS OF APPLICATION

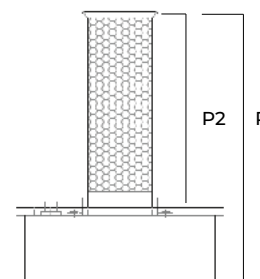
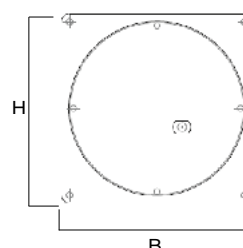
- Residential
- Small offices



TECHNICAL DATA

Module dimensions (BxHxD)	15.2 x 15.2 x 20.2 cm
Min. duct depth (P2)	14.5 cm
Weight	1.1 Kg
Electrical characteristics	24 V 50/60 Hz
Electrical current intensity	0.6 A
Max. operating temperature	60° C
Min. operating temperature	-20° C
Mechanics	Plug&play safety switch monitoring system for correct UV lamp operation

Device	Code
Micropure 5"	DF14015-24V





ACTIVE 6"

DUCT MODULE

Maximum air flow rate

2000 m³/h

ACTIVE
TOTAL HOME AIR PURIFICATION

6"

DESCRIPTION OF PCO™ TECHNOLOGY

The **PCO™ technology** of the ACTIVE modules exploits the combined action of a **special UV lamp** with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide)** and **3 other noble metals to a lesser extent**.

When the ACTIVE modules are hit by the air flow, they give rise to a photocatalytic reaction capable of producing hydroxyl radicals ($\cdot\text{OH}$) and hydrogen peroxide (H_2O_2 in minute quantities – no more than 0.02 PPM. H_2O_2 and $\cdot\text{OH}$ sanitize both the air flow and the surfaces of ventilation ducts due to their high effectiveness in decomposing pathogens.

ACTIVE modules are also equipped with two devices with **negative ionization technology** that makes these models more effective in reducing odours and also active against ultrafine dust, which is the most dangerous if inhaled.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds, ultrafine dust.

INSTALLATION METHODS

- In new and existing installations
- On-board AHU
- In controlled mechanical ventilation systems
- In supply plenum/ducts

*Note: transformer included 220 V-24 V
UV lamp replacement every two years*

AREAS OF APPLICATION

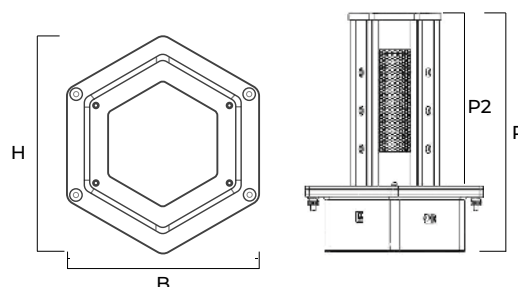
- Residential
- Offices
- Tertiary



TECHNICAL DATA

Module dimensions (BxHxD)	18 x 20 x 24 cm
Min. duct depth (P2)	17.5 cm
Weight	1.3 Kg
Electrical characteristics	24 V 50/60 Hz
Electrical current intensity	1.4 A
Max. operating temperature	60° C
Min. operating temperature	-20° C
Mechanics	Plug&play safety switch monitoring system for correct UV lamp operation

Device	Code
Active 6"	DF13070



3.2 Products



ACTIVE 12"

DUCT MODULE

Maximum air flow rate

3000 m³/h

ACTIVE
TOTAL HOME AIR PURIFICATION

12"

DESCRIPTION OF PCO™ TECHNOLOGY

The **PCO™ technology** of the ACTIVE modules exploits the combined action of a **special UV lamp** with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide)** and **3 other noble metals to a lesser extent**.

When the ACTIVE modules are hit by the air flow, they give rise to a photocatalytic reaction capable of producing hydroxyl radicals (·OH) and hydrogen peroxide (H₂O₂) in minute quantities – no more than 0.02 PPM. H₂O₂ and ·OH sanitize both the air flow and the surfaces of ventilation ducts due to their high effectiveness in decomposing pathogens.

ACTIVE modules are also equipped with two devices with **negative ionization technology** that makes these models more effective in reducing odours and also active against ultrafine dust, which is the most dangerous if inhaled.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds, ultrafine dust.

INSTALLATION METHODS

- In new and existing installations
- On-board AHU
- In controlled mechanical ventilation systems
- In plenum/supply ducts

*Note: transformer included 220 V-24 V
UV lamp replacement every two years*

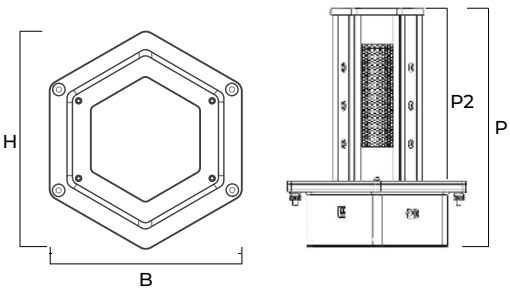
AREAS OF APPLICATION

- Residential
- Offices
- Tertiary



TECHNICAL DATA

Module dimensions (BxHxD)	18 x 20 x 35.5 cm
Min. duct depth (P2)	29 cm
Weight	1.4 Kg
Electrical characteristics	24 V 50/60 Hz
Electrical current intensity	1.4 A
Max. operating temperature	60° C
Min. operating temperature	-20° C
Mechanics	Plug&play safety switch monitoring system for correct UV lamp operation



Device	Code
Active 12"	DFI3071



AIR KNIGHT 7"

DUCT/AHU MODULE

Maximum air flow rate

2500 m³/h



Tested against SARS-CoV-2

Air Knight®

7"

DESCRIPTION OF PCO™ TECHNOLOGY

The **PCO™ technology** of the AIR KNIGHT modules exploits the combined action of a **special UV lamp** with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide)** and **4 other noble metals to a lesser extent**.

When the AIR KNIGHT modules are hit by the air flow, they give rise to a photocatalytic reaction capable of producing hydroxyl radicals (·OH) and hydrogen peroxide (H₂O₂ in minute quantities – no more than 0.02 PPM. H₂O₂ and ·OH sanitize both the air flow and the surfaces of ventilation ducts due to their high effectiveness in decomposing pathogens.

AIR KNIGHT modules are also equipped with two devices with **positive and negative bipolar ionization technology**, thanks to which they become more effective in reducing odours and are also effective against ultrafine dust. These dusts are the most dangerous if inhaled.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds, ultrafine dust.

INSTALLATION METHODS

- On-board AHU
- In controlled mechanical ventilation systems
- In supply plenum/ducts

Note: transformer included 220 V-24 V

UV lamp replacement every two years

AREAS OF APPLICATION

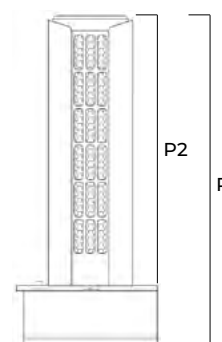
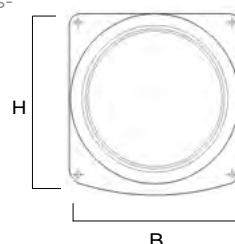
- Hospital/medical
- Industrial
- Commercial



TECHNICAL DATA

Module dimensions (BxHxD)	15 x 15.8 x 25.2 cm
Min. duct depth (P2)	17.5 cm
Weight	1.3 Kg
Electrical characteristics	24 V 50/60 Hz
Electrical current intensity	1.2 A
Max. operating temperature	60° C
Min. operating temperature	-20° C
Mechanics	Plug&play safety switch monitoring system for correct UV lamp operation

Device	Code
Air knight 7"	DF09998



3.2 Products



AIR KNIGHT 14"

DUCT/AHU MODULE

Maximum air flow rate

4000 m³/h



Tested against SARS-CoV-2

Air Knight®

14"

DESCRIPTION OF PCO™ TECHNOLOGY

The **PCO™ technology** of the AIR KNIGHT modules exploits the combined action of a **special UV lamp** with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide)** and **4 other noble metals to a lesser extent**.

When the AIR KNIGHT modules are hit by the air flow, they give rise to a photocatalytic reaction capable of producing hydroxyl radicals ($\cdot\text{OH}$) and hydrogen peroxide (H_2O_2 in minute quantities – no more than 0.02 PPM. H_2O_2 and $\cdot\text{OH}$ sanitize both the air flow and the surfaces of ventilation ducts due to their high effectiveness in decomposing pathogens.

AIR KNIGHT modules are also equipped with two devices with **positive and negative bipolar ionization technology**, thanks to which they become more effective in reducing odours and are also effective against ultrafine dust. These dusts are the most dangerous if inhaled.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds, ultrafine dust.

INSTALLATION METHODS

- In new and existing installations
- On-board AHU
- In controlled mechanical ventilation systems
- In supply plenum/ducts

Note: transformer included 220 V-24 V

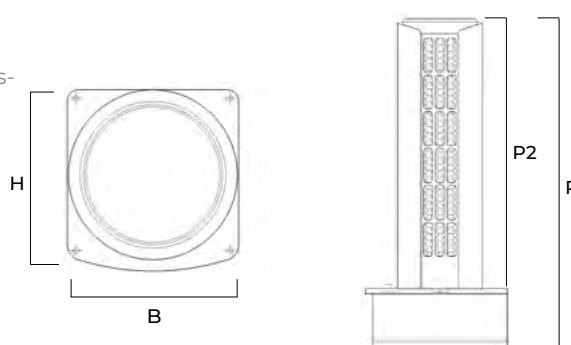
UV lamp replacement every two years

AREAS OF APPLICATION

- Hospital/medical
- Industrial
- Commercial

TECHNICAL DATA

Module dimensions (BxHxD)	15 x 15.8 x 37 cm
Min. duct depth (P2)	30 cm
Weight	1.4 Kg
Electrical characteristics	24 V 50/60 Hz
Electrical current intensity	1.2 A
Max. operating temperature	60° C
Min. operating temperature	-20° C
Mechanics	Plug&play safety switch monitoring system for correct UV lamp operation



Device	Code
Air knight 14"	DF09963

PX5



FC UNIT 3"

FANCOIL MODULE

Maximum air flow rate

800 m³/h



Tested against SARS-CoV-2



DESCRIPTION OF PCO™ TECHNOLOGY

The **PCO™ technology** of the FC UNIT modules exploits the combined action of a **special UV lamp** with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide)** and **3 other noble metals to a lesser extent**.

When the FC UNIT modules are hit by the air flow, they give rise to a photocatalytic reaction capable of producing hydroxyl radicals ($\cdot\text{OH}$) and hydrogen peroxide (H_2O_2) in minute quantities – no more than 0.02 PPM. H_2O_2 and $\cdot\text{OH}$ sanitize both the air flow and the surfaces of ventilation ducts due to their high effectiveness in decomposing pathogens.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds.

INSTALLATION METHODS

- In new and existing installations
- On-board FANCOIL units
- On-board 4-way cassettes

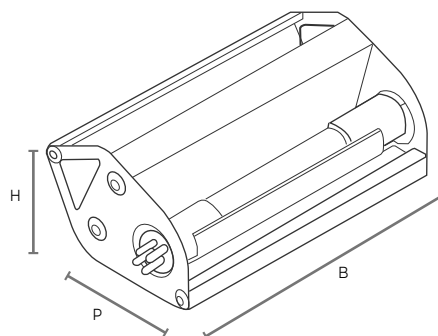
UV lamp replacement every two years

AREAS OF APPLICATION

- Residential
- Tertiary
- Offices

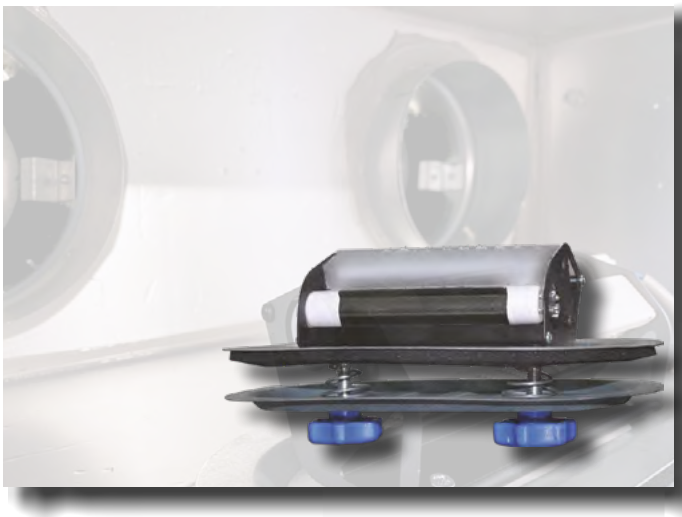
TECHNICAL DATA

Module dimensions (BxHxD)	12.6 x 7.9 x 5 cm
Power supply unit dimensions	8 x 2.2 x 3.7 cm
Weight	0.45 Kg
Electrical characteristics	230 V - 50/60 Hz
Electrical current intensity	0.15 A
Maximum operating temperature	60° C
Ambient temp (Max)	40° C
Ambient temp (Min)	-10 °C
Maximum enclosure temp.	75 °C



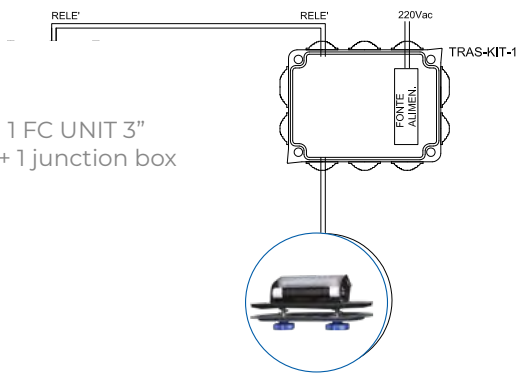
Device	Code
FC UNIT 3"	DF09960

3.2 Products



CONNECTION DIAGRAM

SANI 1 KIT: 1 FC UNIT 3" with 1 hatch + 1 junction box



Pre-wired kit ideal for quick, easy installation inside air supply plenums.
The kit consists of the FC UNIT 3" device pre-assembled on a metal inspection hatch for quick installation in plenums and ducts.
The pre-wired junction box allows quick connection of the UV lamp and power supply.
The junction box is also equipped with a cable for the lamp ON/OFF contact.

SANITIZATION KIT

PLENUM MODULE

Installed inside the supply plenum, it allows sanitization of the system and the rooms.

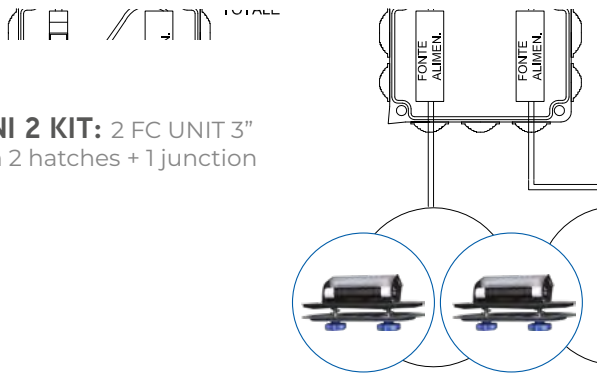


Tested against SARS-CoV-2



CONNECTION DIAGRAM

SANI 2 KIT: 2 FC UNIT 3" with 2 hatches + 1 junction box



SYSTEM UP TO 7 KW

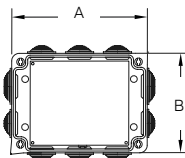
CODE KIT-SANI-1		
CODE	COMPONENT	QUANTITY
DF09960	FC UNIT MODULE	1
BOTOLA	HATCH	1
TRAS-F-KIT-1	TRANSFORMER CASE	1

SYSTEM FROM 7 UP TO 14 KW

CODE KIT-SANI-2		
CODE	COMPONENT	QUANTITY
DF09960	FC UNIT MODULE	2
BOTOLA	HATCH	2
TRAS-F-KIT-2	TRANSFORMER CASE	1

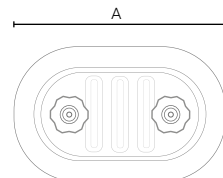
• X2 •

CASE

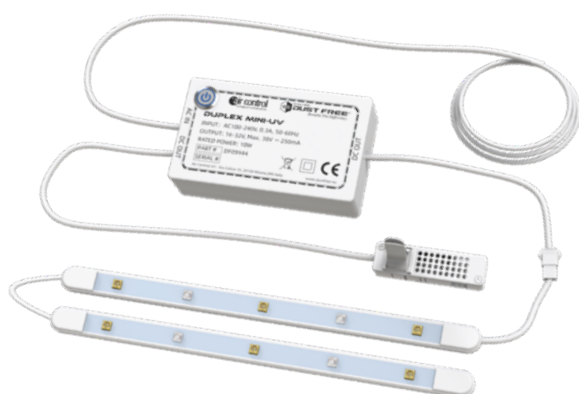


A - 13cm
B - 13 cm
H - 6 cm

HATCH



A - 19.5 cm
B - 10 cm



DUPLEX MINI-UV

SPLIT MODULE

Maximum air flow rate

600 m³/h



DUPLEX MINI-UV

DESCRIPTION OF THE TECHNOLOGY

Air sanitization device for mini-splits. The DUPLEX MINI-UV device comprises two technologies:

The first **technology**, **PCO™**, is provided by the action of **UV LEDs** that irradiate the **2 catalyser filters** treated with titanium dioxide nanotechnology.

PCO™ was developed and used for the sanitization of environments intended for **space exploration**, where one of the main prerogatives is the quality and health of the air. This technology mimics and reproduces what occurs in nature by means of photocatalysis, a process that generates natural oxidants capable of destroying most pollutants and toxins, especially bacteria, viruses and moulds.

The second **technology with germicidal action** is provided by 6 UVC LEDs that continuously irradiate the inner parts of the split, thus drastically reducing the possibility of microbiological contamination that could be spread in the treated rooms.

Thanks to both technologies, DUPLEX MINI-UV can be considered an important accessory in reducing the risk of air contamination in indoor environments.

INSTALLATION METHODS

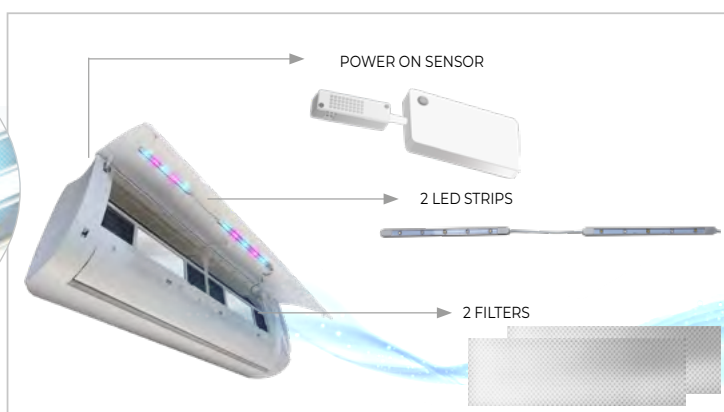
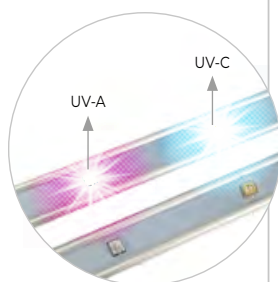
- On-board SPLIT units

AREAS OF APPLICATION

- Residential
- Tertiary

WARRANTY

- 2 years - power supply module.
- 6 months - UV LED strips.



TECHNICAL DATA

Catalytic filter dimensions (BxHxD)

Power supply unit dimensions

LED strip dimensions

Electrical characteristics

Absorbed power

Hours of operation LED

Catalytic filter duration

LED type

20 x 6 x 0.25 cm

Polypropylene + Titanium Dioxide

23 cm (composed of 2 connected strips)

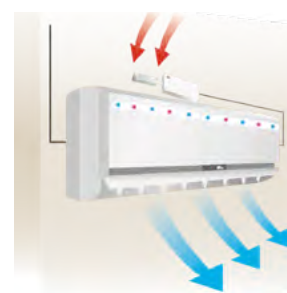
100-240 V

8 W

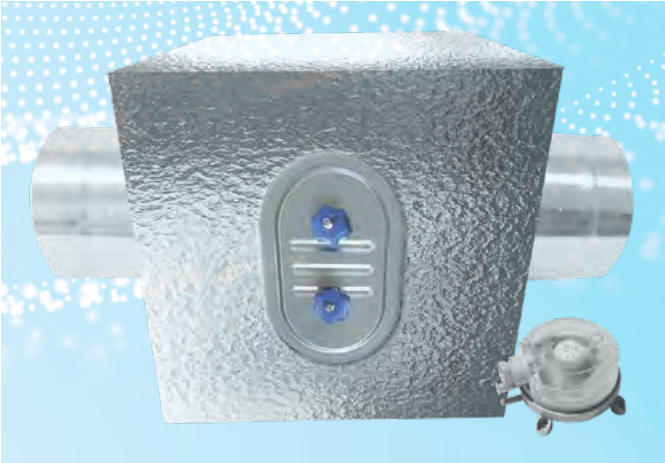
10,000 hours (duration up to 4 years)

10 washes

6 UVC and 4 UVA



3.2 Products



KITS AND ACCESSORIES

Installed inside the supply plenum, it allows sanitization of the system and the rooms.



SANIVMC-FC

Maximum air flow rate

800 m³/h

FEATURES

PAL manifold including active duct sanitization module, ideal for existing controlled mechanical ventilation systems.

Installation between heat recovery unit and supply manifold.

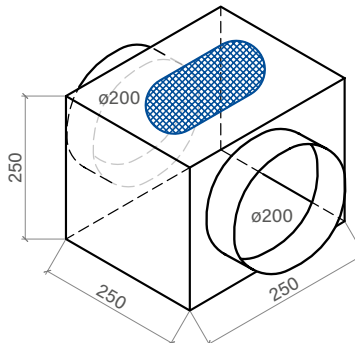
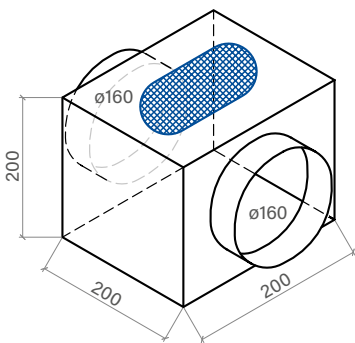
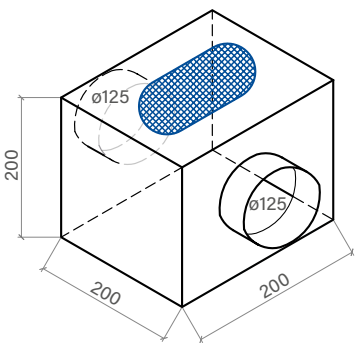
Equipped with 2 ducts (variable DN), 1 inspection hatch and 1 FC UNIT 3".

Areas of application: residential environments or small offices.



PAL FITTING + SANITIZATION	Ø (mm)	Code
PAL fitting - 2 x Ø 120 mm + KIT-SANI I	120	SANIVMC120-FC
PAL fitting - 2 x Ø 160 mm + KIT-SANI I	160	SANIVMC160-FC
PAL fitting - 2 x Ø 200 mm + KIT-SANI I	200	SANIVMC200-FC
PAL FITT.-2 X Ø 120 MM +KIT SANI I +PRESSURE SWITCH	120	SANIVMC120-FC-P
PAL FITT.-2 X Ø 160 MM +KIT SANI I +PRESSURE SWITCH	160	SANIVMC160-FC-P
PAL FITT.-2 X Ø 200 MM +KIT SANI I +PRESSURE SWITCH	200	SANIVMC200-FC-P

DIMENSIONAL DATA





SANIVMC-MC

Maximum air flow rate

1500 m³/h

FEATURES

PAL manifold including active duct sanitization module, ideal for existing controlled mechanical ventilation systems.

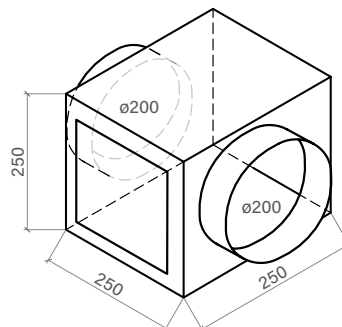
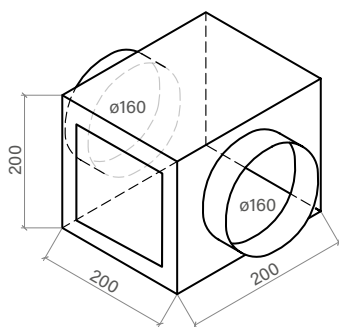
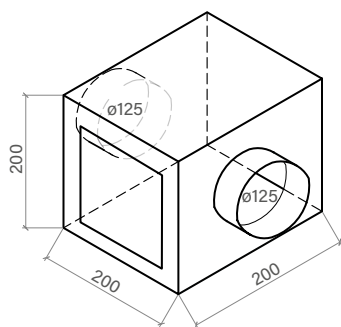
Installation between heat recovery unit and supply manifold.

Equipped with 2 ducts (variable DN), 1 inspection hatch and 1 MICROPURE 5".

Areas of application: residential environments or small offices.

PAL FITTING + SANITIZATION	Ø (mm)	code
PAL fitting 2 x Ø 120 mm + MC 5"	120	SANIVMC120-MC
PAL fitting 2 x Ø 160 mm + MC 5"	160	SANIVMC160-MC
PAL fitting 2 x Ø 200 mm + MC 5"	200	SANIVMC200-MC
PAL FITT.-2 X DN 120 MM +MC 5"+PRESSURE SWITCH	120	SANIVMC120-MC-P
PAL FITT.-2 X DN 160 MM +MC 5"+PRESSURE SWITCH	160	SANIVMC160-MC-P
PAL FITT.-2 X DN 200 MM +MC 5"+PRESSURE SWITCH	200	SANIVMC200-MC-P

DIMENSIONAL DATA

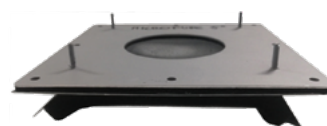


ACCESSORIES

SADDLE

FEATURES

Saddle for installation of Dust Free® modules on circular ducts from Ø 250 to 700 mm.



Example:
Saddle with module plate
Micropure 5"

item	Code
SADDLE	SELLA-DF

3.2 Products

PRESSURE SWITCH

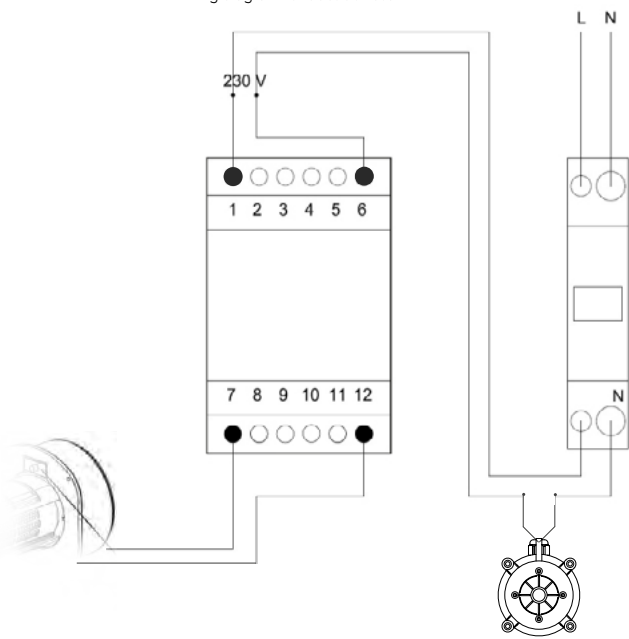
FEATURES

The differential air pressure switch monitors overpressure, vacuums and differential air pressures. The pressure value can be adjusted without a pressure gauge by means of the setting knob with graduated scale.

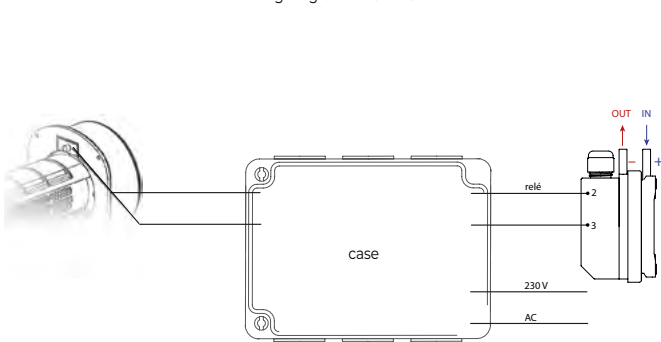
PRESSURE SWITCH DF allows the **Dust Free®** active sanitizing devices to be switched on as air passes through without the need to connect devices to the electrical panel of the AHU.



Wiring diagram for duct devices



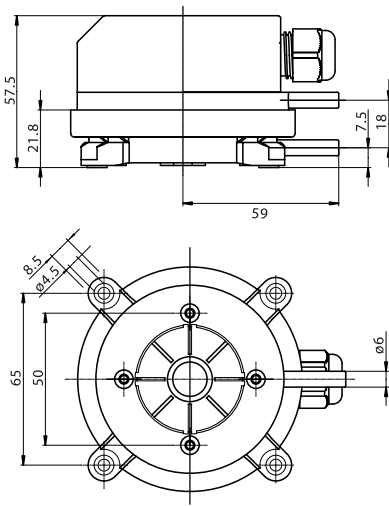
Wiring diagram for SANICMv



TECHNICAL DATA

Medium	Air, other non-flammable gases
Measuring range	20...300 Pa (0.2...3 mbar)
Accuracy	±15%
Contact flow rate	Max 1.0 (0.4) A / 250 V AC
Maximum operating pressure	10 kPa (100 mbar)
RH operating range	0...95% RH, non-condensing
Operating temperature	-20...+85°C

item	Code
PRESSURE SWITCH	PRESSOSTATO-DF



4.0 AIR PURIFICATION PRODUCTS FOR ROOMS



WHERE CMV SYSTEMS ARE NOT POSSIBLE, THERE IS ANOTHER SOLUTION

“IN ROOM DEVICE”

It is not always possible to insert air exchange systems both because of the configuration of the rooms and problems related to the existing building, which does not always facilitate the passage of air ducts, as well as difficulties in reaching external air intakes and expulsion.

In all these cases, an off-the-shelf solution is available that can be positioned directly in the room and that allows for excellent IAQ results with appropriately sized and maintained in-room devices.

Ready-to-use “stand-alone” solutions for active filtration and sanitization

With regular air exchange, the use of high-efficiency air filters and with the help of specific active air sanitization systems, it is possible to significantly reduce the leakage rate of pathogens, viruses, germs, mould and bacteria.

As a result, the spread of airborne diseases (specifically SARS-CoV-2) can be similarly reduced and the perceived comfort of people within a given environment can be significantly increased.

Stand-alone devices work in their environment by actively filtering and sanitizing the treated air, thus influencing the air quality and hygiene of the environment in which they are located.

4.1 Air purification products for rooms

NEW!



RESPIRO 06
*PURIFICATION/SANITIZATION
DEVICE*
max treatable volume 225 m³
PAGE 130

NEW!



RESPIRO 10
*PURIFICATION/SANITIZATION
DEVICE*
max treatable volume 350 m³
PAGE 131



AIRBEE HOME
*DESIGNER SANITIZATION
DEVICE*
max treatable volume 90 m³
PAGE 132



FC-IONIX
SANITIZATION DEVICE
max treatable volume 120 m³
PAGE 134



FC-CASE
FC-IPG-CASE
SANITIZATION DEVICE
max treatable volume 200 m³
PAGE 135



NEW!

RESPIRO 06

PURIFICATION/SANITIZATION DEVICE

Maximum treatable volume

225 m³



Tested against H1N1.

DESCRIPTION

RESPIRO 06 is a PLUG-IN air purification and sanitization system made of ABS.

The device has four speeds, a sleep mode, a child protection mode, an operation timer mode and an AUTO mode. The latter adjusts the air flow rate automatically, or rather according to the air quality detected by the PM sensor.

The system is equipped with six purification and sanitization stages:

two pre-filters, two HEPA H13, two activated carbon filters, two PCOTM photocatalytic filters, two UVC lamps and a negative ionizer.

The RESPIRO 06 can be controlled via an integrated display, remote control and APP.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds, ultrafine dust.



INSTALLATION METHODS

- Floor

MAINTENANCE

- Special UV lamp replacement once a year
- HEPA H13 filter replacement every six months
- Activated carbon filter replacement every six months
- Pre-filter cleaning every two months

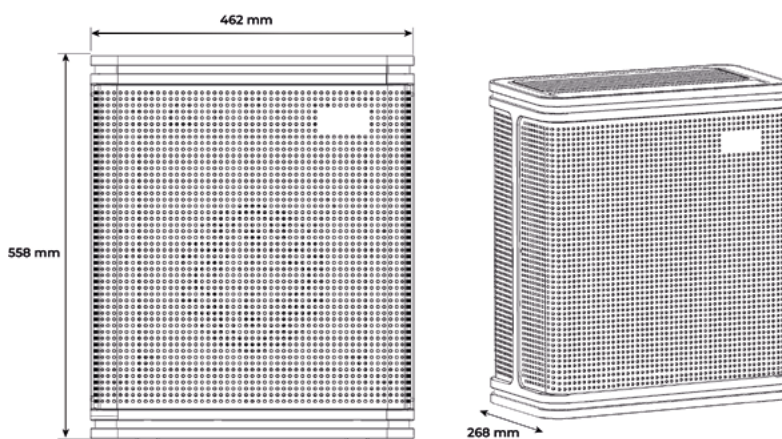
AREAS OF APPLICATION

- Classrooms
- Hotels
- Social Care Residences - in-patient rooms
- Medical/dental practices
- Offices
- Shops/pharmacies

TECHNICAL DATA

Power supply:	230-1-50 V-ph-Hz
Air flow rate from:	630 m ³ /h
Absorbed power:	67 W
Sound pressure:	40.1-65.1 dB(A)
Weight:	12 Kg
CADR	
(clean air delivery rate):	630 m ³ /h

Device	Code
RESPIRO	RESPIRO-06



4.1 Air purification products for rooms



NEW!

RESPIRO 10

PURIFICATION/SANITIZATION DEVICE

Maximum treatable volume

350 m³



Equipped with active sanitization system
DUST FREE tested against SARS-CoV-2

DESCRIPTION

RESPIRO 10 is a PLUG-IN air purification and sanitization system made of painted sheet metal.

The device has an integrated control that allows you to adjust the two speeds, to activate SLEEP mode and AUTO mode. The latter adjusts the air flow rate automatically, or rather according to the air quality detected by the VOC/CO₂ eq sensor.

The system is also equipped with two COARSE G2 pre-filters and a HEPA H14 filter, which are able to filter out fine particulate matter, potentially dangerous if inhaled.

The PCO™ technology integrated in the RESPIRO 10 device exploits the combined action of a **special UV lamp** with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide)** and **3 other noble metals to a lesser extent**.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds, ultrafine dust.

INSTALLATION METHODS

- Floor

MAINTENANCE

- Special UV lamp replacement every two years
- UV lamp replacement once a year
- HEPA H14 filter replacement every three months
- COARSE filter cleaning every three months

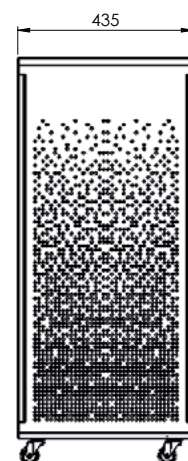
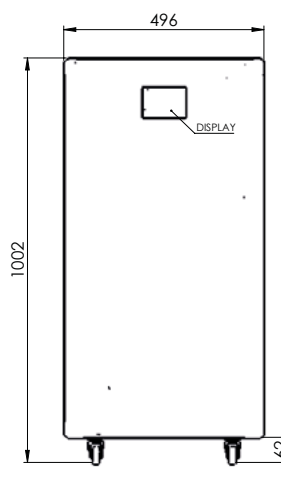
AREAS OF APPLICATION

- Hotels
- Social Care Residences - in-patient rooms
- Medical/dental practices
- Offices
- Shops/pharmacies
- Waiting rooms

TECHNICAL DATA

Power supply:	230-1-50 V-ph-Hz
Air flow rate from:	930 m ³ /h
Absorbed power:	58.3 W
Weight:	40 Kg

Device	Code
RESPIRO	RESPIRO-10





AIRBEE HOME

DESIGNER SANITIZATION DEVICE

Maximum treatable volume

90 m³



Equipped with active SANITIZATION system tested against SARS-CoV-2

DESCRIPTION

Active, smart and designer **filtration** and **active sanitization device** with **certified** air quality **sensors**.

Quick PLUG-IN activation, no installation required, STAND ALONE



FEATURES

- "Made in Italy" design
- Eco-friendly materials
- Maximum silence
- HEPA filter (filter that captures ultrafine particles)
- Washable nanotechnology filter
- Continuous monitoring with ENEA-certified IAQ probes
- Lighting according to air quality
- Display of IAQ (indoor air quality) parameters via app
- Tested DUST FREE® technology
- Virus, bacteria, mould and odour abatement

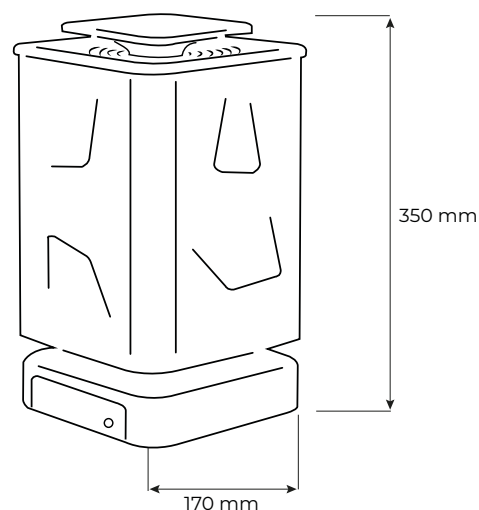
AREAS OF APPLICATION

- Residential
- Hotels
- Offices
- Waiting rooms

TECHNICAL DATA

Power supply:	230-1-50 V-ph-Hz
Motor connections:	Mono
Nominal air flow rate:	191 m ³ /h
Sound pressure Lw:	48 dB(A)
Intensity:	0.47 A
Absorbed electrical power:	27 W
Dimensions (LxHxD)	170x350x170 mm
Weight:	10 kg

Device	Code
HOME	DF-HOME



4.1 Air purification products for rooms

airBee HOME



This innovative sensor board monitors ambient air quality by changing the colour of the LEDs positioned in the device. The intuitive graphic interface managed via APP (iOS and Android) allows easy management and accurate reading of air quality parameters in real time, including remotely, with up to a seven-day history display.

FUNCTIONS

- **Auto:** the device regulates itself intelligently, varying the fan speed according to the air quality in the room as detected by the probes. It also provides continuous sanitization cycles of 6 hours followed by 1 hour of stand-by (Auto LED and Off LED on).
- **I and II speed:** the "Auto-Power off" function is activated (red LED on) after complete and impeccable sanitization of the environment for 8 hours.
- **Sleep:** LED off and fan at minimum speed to reduce noise emissions. It also provides for 3 hours of continuous sanitization after which the "Red Off LED" and "Blue Sleep LED" will light up and the device will automatically switch off.
- **Off:** shut-down.





FC-IONIX

SANITIZATION DEVICE

Maximum treatable volume

120 m³



Equipped with active sanitization system
DUST FREE tested against SARS-CoV-2

ACTIVE SANITIZATION SYSTEM

PLUG-IN product suitable for both surface and wall installation.

FC-IONIX is a room air purification system made of steel, equipped with an ON/OFF push-button panel on the side of the device.

The PCO™ technology integrated in the FC-IONIX devices exploits the combined action of a special UV lamp with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide) and 4 other noble metals to a lesser extent.**

When the FC-IONIX devices are hit by the air flow, they give rise to a photocatalytic reaction capable of producing hydroxyl radicals ($\cdot\text{OH}$) and hydrogen peroxide (H_2O_2) in minute quantities – no more than 0.02 PPM. H_2O_2 and $\cdot\text{OH}$ sanitize both the air flow and the surfaces of ventilation ducts due to their high effectiveness in decomposing pathogens.

FC-IONIX devices are also equipped with **positive and negative bipolar ionization technology.**

Bipolar ionization provides PCO™ with an increased supply of positive and negative ions effective in **neutralising pathogens and pollutants.**

FC-IONIX is designed to be installed in small rooms.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds, ultrafine dust.

INSTALLATION METHODS

- Wall / Surface

MAINTENANCE

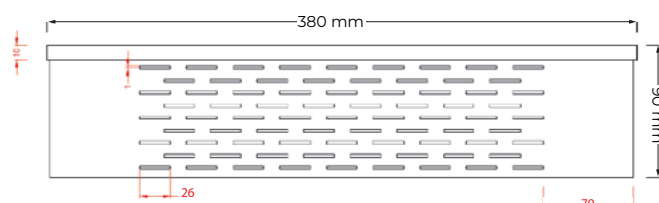
- UV lamp replacement every two years

AREAS OF APPLICATION

- Schools
- SOCIAL CARE RESIDENCES – in-patient rooms
- Medical / dental practices
- Analytical laboratories
- Toilets
- Lifts
- Food pantries

TECHNICAL DATA

Power supply:	230-1-50 V-ph-Hz
UV lamp pwr. supply V50/60 Hz:	10 W
Air flow rate from:	73 m ³ /h
Sound pressure Lp:	32 dB(A)
Tot. absorbed power:	29 W
Fan IN:	0.1 A
Weight:	5 Kg



Device	Code
FC-IONIX MODULE	FC-IONIX

4.1 Air purification products for rooms



FC-CASE/ FC-IPG-CASE

SANITIZATION DEVICE

Maximum treatable volume

200 m³



Equipped with active sanitization system
DUST FREE tested against SARS-CoV-2

2 IN 1 ACTIVE SANITIZATION SYSTEM

PLUG-IN product suitable for both surface and built-in installation.

FC-CASE is a room air purification system made of stainless steel, equipped with an ON/OFF push-button panel located on-board the device.

The ventilation system has been designed to be silent while still having sufficient head to be able to channel the air supply and return of the device with short sections of flexible piping.

Furthermore, the dust filter installed on the suction valve is washable and thus allows easy maintenance without frequent filter changes. The **PCO™** technology integrated in the FC-CASE devices exploits the combined action of a **special UV lamp** with a catalyst structure consisting of a metal alloy with a honeycomb matrix, composed mainly of **TiO₂ (titanium dioxide)** and **3 other noble metals** to a lesser extent.

When the FC-CASE devices are hit by the air flow, they give rise to a photocatalytic reaction capable of producing hydroxyl radicals ($\cdot\text{OH}$) and hydrogen peroxide (H_2O_2) in minute quantities – no more than 0.02 PPM. H_2O_2 and $\cdot\text{OH}$ sanitize both the air flow and the surfaces of ventilation ducts due to their high effectiveness in decomposing pathogens.

FC-IPG-CASE devices are also equipped with two devices with **positive and negative bipolar ionization technology**, thanks to which they become more effective in reducing odours and are also effective against ultrafine dust. These dusts are the most dangerous if inhaled.

Effective against bacteria, viruses, moulds, allergens, odours, organic and volatile compounds, ultrafine dust.

INSTALLATION METHODS

Wall / Ceiling (built-in or surface)

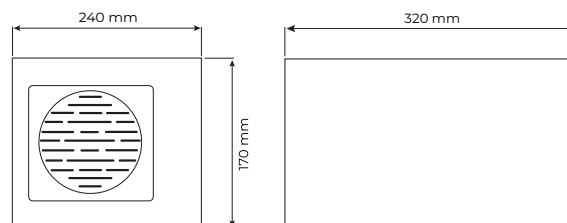
UV lamp replacement every two years

AREAS OF APPLICATION

- Hotels
- SOCIAL CARE RESIDENCES – in-patient rooms
- Medical / dental practices
- Offices
- Toilets
- Shops / Pharmacies

TECHNICAL DATA

Power supply:	230-1-50 V-ph-Hz
UV lamp pwr. supply V50/60 Hz:	10 W
Motor connections:	Mono
Air flow rate from:	180 m ³ /h
Sound pressure Lp:	44 dB(A)
Fan PM:	16 W
Fan IN:	0.100 A
Weight:	8 Kg



Cover cabinet made of AISI 304 stainless steel sheet metal

Device	Code
STAND ALONE PCO DEVICE	FC-CASE
STAND ALONE PCO + IONIZATION DEVICE	FC-IPG-CASE



AIRQUALITY SAFE S.L.

AHU-CMV VENTILATION CONTROL

ENERGY SAVINGS

Intelligently improves air quality while respecting the environment

AQSENSOR
more than monitoring

ANALYSIS OF REAL TIME DATA OF REAL

REAL CO₂ • PM_{1, 2.5, 10} • VOC
Temperature • Humidity

AQ.S

CERTIFIED SENSORS

JUST BREATHE

5.0 AIR QUALITY MONITORING SYSTEMS

**THE NEW GENERATION OF INDOOR COMFORT CONTROLS IN THE RANGE IAQ MONITORING**

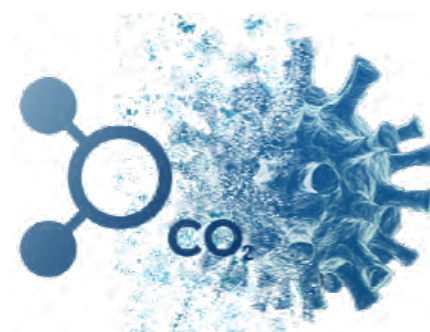
Monitoring indoor air quality is the first step to becoming aware of how polluted the air you breathe in an indoor environment can be, so that you can seek out the right solutions to improve how healthy it is.

It is not only outside air that is polluted. Even the air we breathe every day at home, at work or on public transport can be contaminated by various harmful biological, chemical and physical sources of pollution. A contaminated space can compromise the well-being of those living and working in a confined environment for an extended period of time.

Air quality monitoring is an essential step in making the health conditions of an indoor environment visible through numbers and parameters and allows actions to be taken to make it safe for those who frequent it.

The Italian Ministry of Health defines indoor pollution as: “the modification of the normal composition or physical state of the indoor atmospheric air due to the presence of substances with characteristics that alter its normal environmental and health conditions”. Pollutants, which constitute a direct or indirect danger to human health, can be classified as:

- » Chemical agents (tobacco smoke, sulphur and nitrogen oxides, carbon monoxide, ozone, particulate matter, benzene, formaldehyde, asbestos, volatile organic compounds)
- » Biological agents (moulds, allergens, mites, fungi, bacteria, viruses and various parasites)
- » Physical agents (radon, electromagnetic fields and noise)



5.0 AIR QUALITY MONITORING SYSTEMS



PARAMETERS FOR MEASURING AIR QUALITY

Many studies confirm that people spend an average of 90% of their time indoors.

Although this circumstance should have long ago given indoor air quality (IAQ) a fundamental role in everyday life, the reality is that, unfortunately, we have had to go through a pandemic to see its true value and raise awareness of its importance and influence on our health.

We have been working for the past ten years on solutions aimed at improving indoor air quality and have decided, together with our partners Koolnova and Dust Free, to start a column that focuses on this issue and aims to show how we can breathe healthier indoor air, always prioritising saving energy in buildings.

Today more than ever, considering that it has been officially recognised by the Istituto Superiore della Sanità (Italian National Health Institute) that air is one of the pathways for the spread of pathogens and specifically also for COVID-19, it is essential to understand which air quality factors can increase and influence the risk of infection in closed environments and which are the correct tools and sensors for monitoring these factors in real time.

First of all, we must be aware that no technology is currently available that is able to eliminate the risks of infection, but they do exist and we need to recognise which devices can contribute to minimising these risks and which instead are only speculative and commercial proposals.

Let's start by defining the parameters that characterise air quality and why it would be important to monitor them continuously with appropriate and reliable sensors.

5.0 AIR QUALITY MONITORING SYSTEMS



**Sensore
CO₂ reale**

CO₂

One of the main indicators of indoor air quality, as mentioned by ISS (Istituto Superiore della Sanità- Italian National Health Institute) is CO₂.

When we breathe, we release CO₂ in concentrations about 100 times higher than normal concentrations in the air. Therefore, high levels of di CO₂ not only make the air potentially toxic but also indicate a probable excessive presence of people or poor ventilation in the environment, conditions that certainly contribute to an increased risk of contagion.

It would therefore be essential to constantly monitor CO₂ levels.

At this point, a distinction must be made between two types of sensors, "real CO₂" and "equivalent CO₂". The difference lies in the accuracy of the measurement. CO₂ equivalent sensors are unreliable because they use statistical methods to obtain the actual CO₂ value. Only real CO₂ sensors are able to provide precise, accurate data.

Having ascertained the importance of this parameter, it would be essential to monitor it continuously with specific real CO₂ sensors.



**Sensore
PM1-2.5-10**

SUSPENDED PARTICULATE MATTER

These are various size microparticles that can be present and remain suspended in the air, generally known as PM1, PM2.5 and PM10.

A high concentration of PM in air is not only harmful if inhaled but can also act as a transport vehicle for pathogens including COVID-19.



**Sensore
VOC**

VOCS

Volatile organic compounds (VOC) are compounds that contain carbon and other chemical elements with varying degrees of potential toxicity.

Therefore, most of them should be considered as pollutants in the air we breathe.



**Sensore
°T umidità**

TEMPERATURE AND HUMIDITY

These are parameters that must be monitored for environmental comfort and to minimise the proliferation of pathogens.

In summary, air monitoring that does not include all these parameters would be INCOMPLETE and will not achieve the necessary levels of protection and safety of the indoor environment.

If you need to learn more about this issue, please do not hesitate to contact us.

5.0 AIR QUALITY MONITORING SYSTEMS

5.1 Air quality monitoring systems



SURFACE
WALL PROBE
PAGE 142



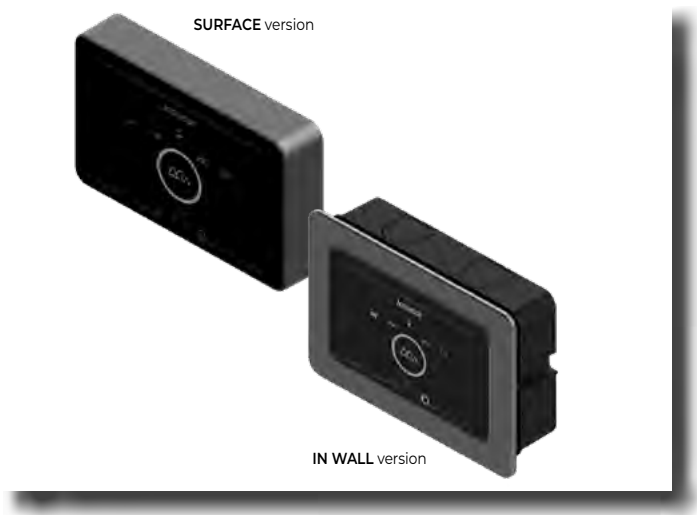
IN WALL
BUILT-IN PROBE
PAGE 142



DESKTOP
SURFACE PROBE
PAGE 144



PLUG IN
PLUG-IN PROBE
PAGE 144



AQ SENSOR PROFESSIONAL

WALL AND BUILT-IN PROBE

AQ Sensor lets you control indoor air quality in every area and optimise building energy performance. In addition,

AQ Sensor PROFESSIONAL can act to activate air purification devices such as DUST FREE®.

SURFACE includes a wall-mounting bracket.

IN WALL includes built-in mounting box and casing frame.

SPECIFICATIONS

Measures: Temperature, RH, real CO₂, volatile organic compounds and PM, 1, 2, 5, 10 suspended particles.

Visual indication of: Global air quality; Individual levels of: real CO₂, Volatile organic compounds, Suspended particles, connected Dust free status.

Display modes: AQ; PM; VOC; CO₂; Sequential (PM, VOC, CO₂) Night (front off), Decor (white).

Remote access to all devices via the AQSAFE App (available in 6 languages).

OPTIONS

Connection: Wireless (Wi-Fi) / Cable (ModBus)
Remote control: APP / WEB
APP: Android/IOS

TECHNICAL DATA

Voltage	85-264Vac 120-370Vcc
Frequency	47-63 Hz
Maximum consumption	0.3 A
Inrush current (tip)	20A 230 Vac

INPUTS AND OUTPUTS

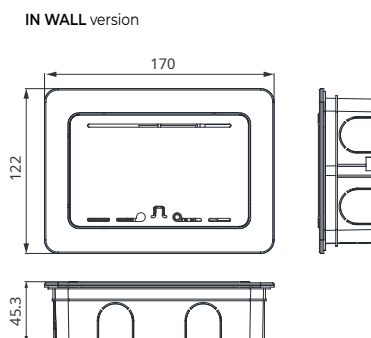
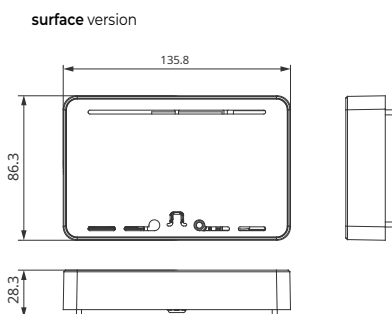
2 digital outputs with relay.
1 analogue 0-10v output.
2 digital low-voltage inputs.

DETAILS

Screen with RGB LED monitor and metallic grey finish.

TECHNICAL DATA

MODEL	Dimensions (mm)	Assembly	Code
SURFACE	86.3x135.8x28.3mm (with support)	Surface (includes support)	100-AQSENO
IN-WALL	122x170x45.3 mm (with box and frame).	Built-in (includes built-in mounting box and finishing frame)	100-AQSEN1



5.1 Air quality monitoring systems



OPERATING MODE

In addition to the modes explained on page 145, the PROFESSIONAL (Surface and In-Wall) versions of the AQ SENSOR devices can control:

- CMV, with 0-10V signal
- DUST FREE, with a digital signal (relay and current monitoring)
- ELECTROSTATIC FILTER, with a digital signal (relay)

The PROFESSIONAL versions can therefore automatically improve air quality.

Below are some examples:

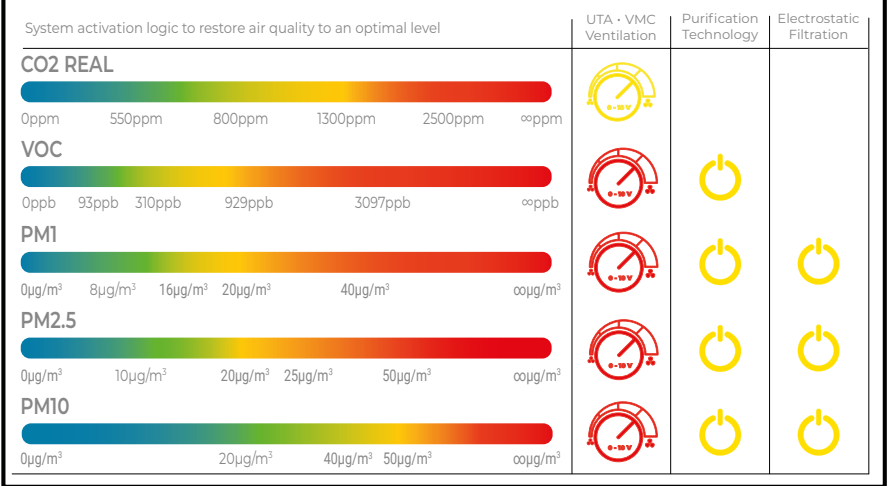
- CO₂ > 800 ppm (yellow), the AQ Sensor increases the 0-10 V signal, i.e. the air flow rate of the CMV.
- VOC > 929 ppb, the AQ Sensor activates the DUST FREE devices.

Critical case: VOC > 3097 ppb (red), the AQ Sensor also activates the CMV via the 0-10V signal.

- PM > 16-40 µg/m³(yellow), the AQ Sensor activates the DUST FREE devices and the ELECTROSTATIC FILTER.

Critical case: PM > 40-50 µg/m³(red), the AQ Sensor also activates the CMV via the 0-10V signal to optimise energy consumption.

Monitoring + control + alarm



Intervals based on values provided by: EUROPEAN ENVIRONMENT AGENCY (EEA), GERMAN ENVIRONMENT AGENCY (UBA), INSHT, ASHRAE.

The AQSensor display lights up quickly and intuitively, showing the detected indoor air quality.



DESKTOP version



PLUG IN version



AQ SENSOR END USER

SURFACE AND PLUG-IN PROBE

AQ Sensor lets you control indoor air quality in every area and optimise building energy performance.

DESKTOP includes cable with plug.

SPECIFICATIONS

Measures: Temperature, RH, real CO₂, volatile organic compounds and PM, 1, 2, 5, 10 suspended particles.

Visual indication of: Global air quality; Individual levels of: real CO₂, Volatile organic compounds, Suspended particles, connected Dust free status.

Display modes: AQ; PM; COV; CO₂; Sequential (PM, VOC, CO₂) Night (front off), Decor (white).

Remote access to all devices via the AQSAFE App (available in 6 languages).

TECHNICAL DATA

PLUG IN and DESKTOP

Voltage	85-264 Vac 120-370 Vcc
Frequency	47-63 Hz
Maximum consumption	0.3 A
Inrush current (tip)	20A 230Vac

OPTIONS

Connection:	Wireless (Wi-Fi) / Cable (ModBus)
Remote control:	APP / WEB
APP:	Android/IOS

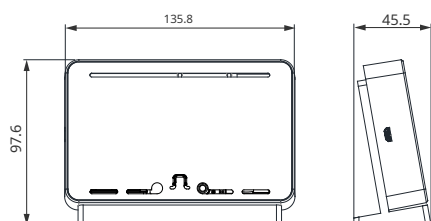
DETAILS

Screen with RGB LED monitor and metallic grey finish.

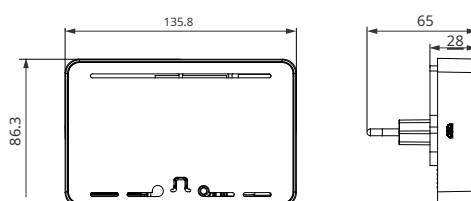
TECHNICAL DATA

MODEL	Dimensions (mm)	Assembly	Code
DESKTOP	97.6 x 135.8 x 45.5 mm (with support)	No installation	100-AQSEN2
PLUG IN	86.3x135.8x65mm	No installation	100-AQSEN3

desktop version



plug in version



5.1 Air quality monitoring systems



Monitoring + Control + Alarm

System activation logic to restore air quality to an optimal level

CO2 REAL



VOC



PM1



PM2.5



PM10



Infrared T° sensor



Humidity sensor

Intervals based on values provided by:
EUROPEAN ENVIRONMENT AGENCY (EEA), GERMAN ENVIRONMENT AGENCY (UBA), INSHT, ASHRAE.

OPERATING MODE

All AQ SENSOR devices have six operating modes (see diagram on the left):

- **"AQ"**: general air quality value, "AQ" illuminated and colour associated with worst parameter value (PM, VOC and/or CO₂), worst parameter value abbreviation flashing.
- **"PM"**: "PM" illuminated, colour of worst detected PM1-PM2.5-PM10 value.
- **"VOC"**: "VOC" illuminated, colour associated with the detected VOC value.
- **"CO₂"**: "CO₂" illuminated, colour associated with the detected CO₂ value.
- **"Alternating"**: alternates "PM", "VOC" and "CO₂" modes.
- **"Aesthetic"**: white ring to hide the colours of the measured parameters.
- **"Night"**: light signals excluded, the device functions normally.

The AQSensor display lights up quickly and intuitively, showing the detected indoor air quality.



Excellent

Good

Fair

Poor

Bad

6.0 TECHNICAL DESIGN SUPPORT



DESIGN SUPPORT FOR DUCTED AND CMV SYSTEM

The design phase of a system is crucial as it ensures optimal system efficiency through professional implementation and timely maintenance.

Air Control offers a support service for the design of ducted and CMV systems that lets you obtain an example diagram of the system in dwg and pdf formats. This technical service does not replace the actual design of the system but is intended as a service that can simply provide an indicative diagram of how the system and its air distribution has been designed.

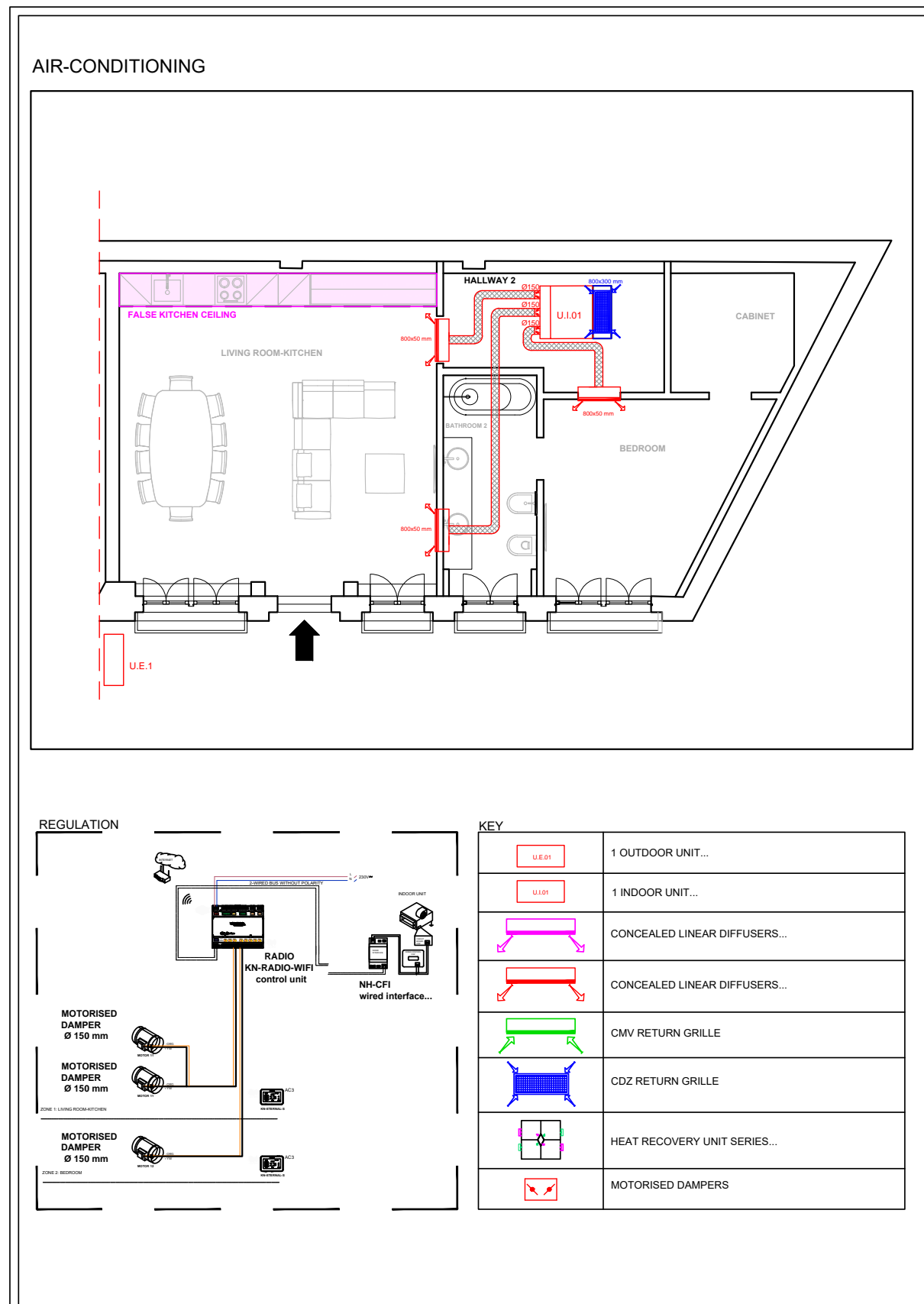
For more complex systems, Air Control recommends contacting professionals capable of developing an accurate, certified design. This technical assistance service therefore has no value in terms of system certification and the information shown in the tables must always be verified and approved by the installation company, which takes full responsibility.

CODE	DESCRIPTION
DWG-CDZ	CDZ UNIT DISTRIBUTION DIAGRAM
DWG-AGG-CDZ	ADDITIONAL CDZ DISTRIBUTION DIAGRAM
DWG-VMC	CMV UNIT DISTRIBUTION DIAGRAM
DWG-AGG-VMC	ADDITIONAL CMV DISTRIBUTION DIAGRAM
DWG-CDZ-VMC	CDZ + CMV DISTRIBUTION DIAGRAM

CHECK THE PRICES ON THE PRICE LIST. PRICES ARE NOT SUBJECT TO DISCOUNTS OR PREMIUMS.

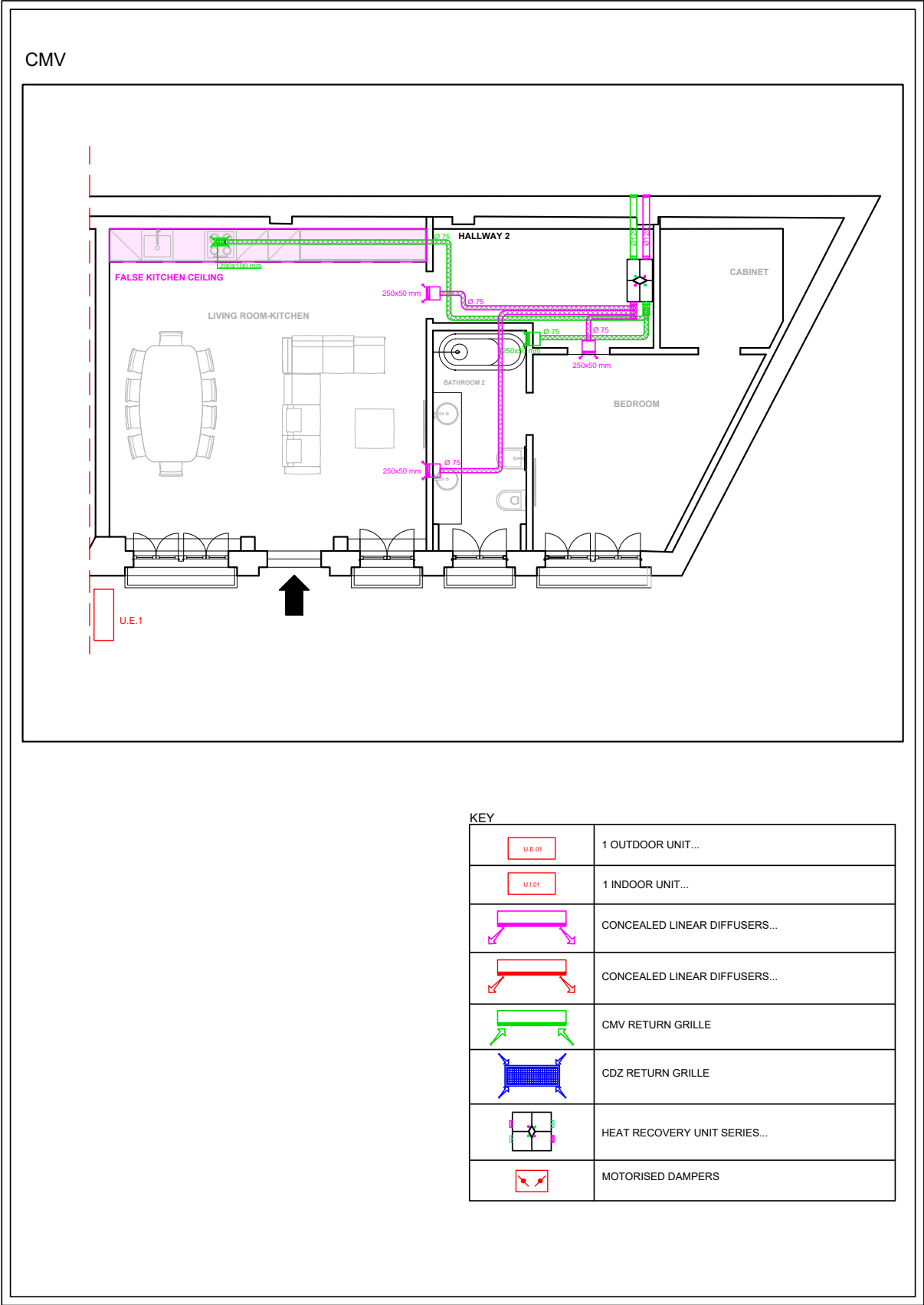
6.0 TECHNICAL DESIGN SUPPORT

EXAMPLE OF AIR-CONDITIONING ONLY SYSTEM



6.0 TECHNICAL DESIGN SUPPORT

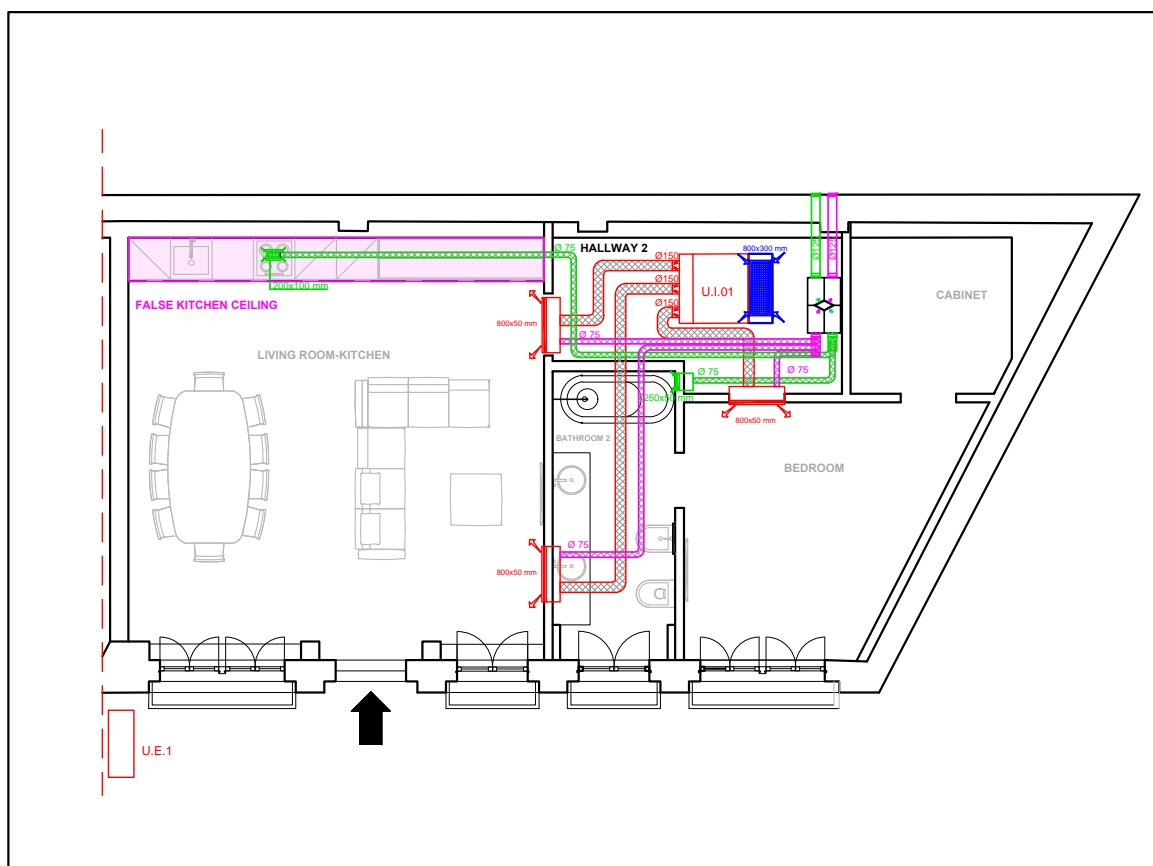
EXAMPLE OF CMV ONLY SYSTEM



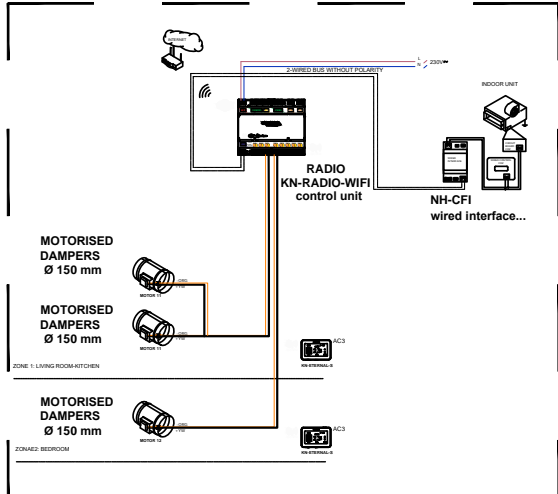
6.0 TECHNICAL DESIGN SUPPORT

EXAMPLE AIR-CONDITIONING AND CMV SYSTEM

AIR-CONDITIONING AND CMV



REGULATION



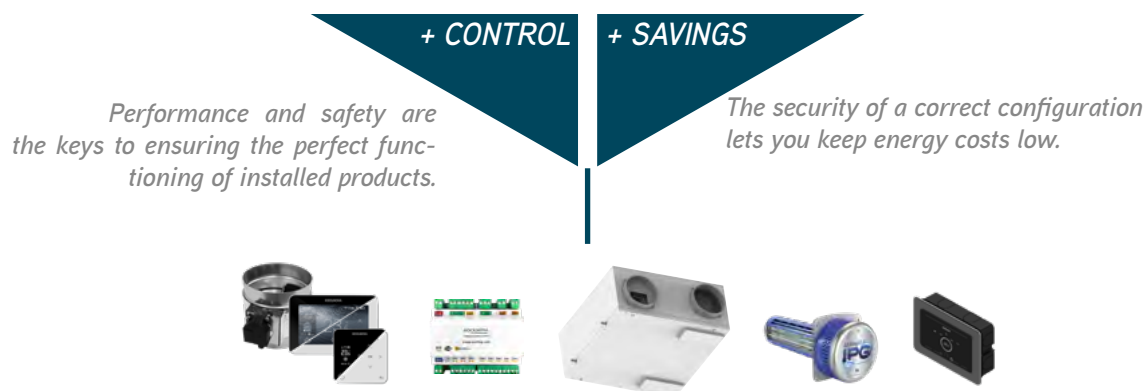
KEY

	1 OUTDOOR UNIT...
	1 INDOOR UNIT...
	CONCEALED LINEAR DIFFUSERS...
	CONCEALED LINEAR DIFFUSERS...
	CMV RETURN GRILLE
	CDZ RETURN GRILLE
	HEAT RECOVERY UNIT SERIES...
	MOTORISED DAMPERS

AIR CONTROL SERVICE

AIR CONTROL TECHNOLOGIES

Air Control provides a team of professionals for pre-installation inspection and commissioning for zoning and cmv systems. The company is able to operate throughout Italy thanks to a trained, qualified network of technical assistance centres.



"THE BEST SERVICE IS IF THE CUSTOMER DOESN'T NEED TO CALL YOU, DOESN'T NEED TO TALK TO YOU. IT JUST WORKS."

Jeff Bezos -CEO of Amazon

COMMISSIONING

When placing an order for one or more zoning systems or one or more mechanical ventilation units, please also include the commissioning proposed by Air Control srl.

Once the system or unit has been installed, simply contact us to ensure intervention by one of our technicians within 5/10 working days.

ZONING COMMISSIONING

Installation compliance

- control or sensor positioning check
- correct positioning check of motorised dampers or vents

Electrical connections

- control unit connection check
- interface connection check
- motorised element connection check
- thermostat and accessory connection check

Programming and configuration

- complete system configuration
- correct operation check
- APP configuration for remote management



CMV COMMISSIONING

Installation compliance

- unit structure check
- IP tightness check
- correct installation check

Hydraulic, air and electrical connections

- congruity check between ducts and the unit
- tightness check of ducts connecting to the unit
- correct unit slope and condensate drain installation check
- unit electrical connections and control check

Programming and configuration

- remote control unit configuration
- correct operation check
- APP configuration (if available) for the unit



INSTRUCTIONS AND REPORTS

- functionality training
- operation and maintenance advice
- commissioning report

**DOWNLOAD THE
COMMISSIONING
FORM**



CODE	DESCRIPTION
VISITA-PRE-ZON	ZONING PRE-INSTALLATION INSPECTION
MIS-ZON	SINGLE INTERFACE ZONING COMMISSIONING
AGG-MIS-ZON	MAX. 4 INTERFACE ZONING COMMISSIONING
AGG-MIS-RAD	SINGLE NH-SR COMMISSIONING
AGG-MIS-MDZ	SINGLE MDZ COMMISSIONING
AGG-MIS-ZON-SANI	SINGLE SANI KIT ZONING COMMISSIONING
KIT-PRE-MIS-ZON	SINGLE INTERF. ZONING INSPECTION + COMM.

CHECK THE PRICES ON THE PRICE LIST. PRICES ARE NOT SUBJECT TO DISCOUNTS OR PREMIUMS.

CODE	DESCRIPTION
VISITA-PRE-VMC	CMV PRE-INSTALLATION INSPECTION
MIS-VMC	SINGLE UNIT CMV COMMISSIONING
AGG-MIS-VMC	MAX. 3 UNIT CMV COMMISSIONING
AGG-MIS-VMC-SANI	SINGLE SANI CMV COMMISSIONING
KIT-PRE-MIS-VMC	INSPECTION + COM - SINGLE UNIT CMV

CHECK THE PRICES ON THE PRICE LIST. PRICES ARE NOT SUBJECT TO DISCOUNTS OR PREMIUMS.

AIR CONTROL SERVICE



**MORE THAN 50
SERVICE CENTRES
NATIONWIDE**

*FIND YOUR LOCAL SER-
VICE CENTRE*



SERVICE CONTACTS
TEL. +39 02.45482147
assistenza@aircontrolclima.it

CATALOGUE DELIVERY FORM

Delivered by

(mandatory field)

Name

Surname

Delivered to

(mandatory field)

Name

Surname

Company name

Address

Postal
code

City

E-mail

Mobile
phone

Sector

(mandatory field)

☐ INSTALLER

☐ HEAT PROVIDER

☐ PRIVATE ENTITY

☐ PROFESSIONAL

☐ BUILDER

☐ HOTEL

☐ DESIGNER

☐ OEM BUILDER

☐ OTHER

☐ DEALER

☐ PUBLIC ENTITY

Documentation

(mandatory field)

☐ ZONING AND AIR DISTRIBUTION SYSTEMS 2023

Nr.

☐ MECHANICAL VENTILATION, AIR HANDLING, SANITIZATION AND MONITORING SYSTEMS 2023

Nr.

Terms of trade

☐ RESERVED DISCOUNTS

INFORMATION ON THE PROTECTION OF PERSONAL DATA ART. 13 OF REGULATION (EU) 679/2016

In compliance with the Regulation on the protection of individuals with regard to the processing of personal data and on the free movement of such data (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016), Air Control Srl, with registered office in Via Colico 10, 20158 Milan - Tel. (+39) 0245482147 - PEC: aircontrolsl@pec.it, as "Data Controller", is required to provide some information regarding the use of personal data. The Data Protection Officer can be contacted at the following e-mail address: info@aircontrolclima.it. The personal data held by the Company is collected directly from its customers or from third parties, meaning primarily those entities authorised to place the products and services offered by the Company or entities that have delegated the exercise of certain activities to the Company. Such data may also be acquired from outside Companies, authorised by customers themselves to communicate the same data to third parties, for the purposes of commercial information, market research, or direct offers of products or services. Processing of the above-mentioned data is carried out in compliance with the aforementioned Regulation and confidentiality obligations. The purposes of the processing for which the personal data are intended and the obligatory or optional nature of data. The personal data are processed as part of the Company's normal activity for the following purposes:

1. Purposes strictly related and instrumental to the management of customer relations (e.g. acquisition of information prior to the conclusion of a contract, execution of transactions on the basis of obligations arising from the customer contract, checks and assessments of the results and performance of relations, as well as on the risks associated with them, etc.). The provision of personal data necessary for these purposes is not obligatory, but refusal to provide such data may make it impossible for the Company to carry out what has been requested. Data processing does not require the consent of the Data Subject. The legal basis of the processing is execution of the contract.

2. Purposes related to the obligations established by laws, regulations as well as provisions issued by the Authorities and the financial system Supervisory Bodies. The provision of personal data necessary for these purposes is obligatory and its processing does not require consent; the legal basis of the processing lies in the fulfilment of a legal obligation and/or the existence of a legitimate interest of the Data Controller. Purposes functional to the Company's business, such as: - Promotion and sale of the Company's products and services by e-mail, telephone, information and advertising material, automated communication systems, etc. - Market surveys. The provision of personal data for these purposes is not obligatory and their processing requires the consent of the Data Subject. The legal basis for the processing is the consent of the Data Subject. Categories of persons to whom data may be disclosed in order to carry out part of its activities, the Company makes use of the following entities in addition to the companies belonging to the "Crédit Agricole" Group, i.e. subsidiaries or associated companies pursuant to Article 2359 of the Italian Civil Code. - Third parties, including in particular the following categories: - Companies that provide banking and financial services (e.g. services offered jointly by Air Control Srl and banks/intermediary placement agents of our products); - Subjects that offer services for the acquisition, registration and processing of data deriving from documents and supports supplied or originated by customers and having as their object mass processing; - Subjects that carry out printing, transmission, enveloping, transport and sorting of communications to customers; - Subjects that carry out archiving activities of documentation relating to customer relations; - Subjects that provide hardware outsourcing and data processing services. Personal data is not subject to diffusion. The Company will retain personal data for a period of 10 (ten) years starting from the termination of the contractual relationship with the customer, subject to the provisions of Article 17 of the Regulation. Right of access to personal data and other rights of access; In relation to the personal data provided, the Data Subject may exercise the rights set out in EU Regulation 679/2016: - Right to obtain rectification, integration, erasure of personal data or restriction of the processing of personal data; Right to object to the processing; Right to data portability; Right to withdraw consent; Right to lodge a complaint with the Data Protection Authority. The interested party may exercise the rights referred to in the Regulation by sending a written communication by registered letter or by PEC to the headquarters of Air Control Srl, Via Colico 10, 20158 Milan, Italy, addressing it to the attention of the Air Control srl Management.

☐ I AUTHORIZE THE USE OF MY PERSONAL DATA

Place and Date

Stamp and Signature



GENERAL TERMS AND CONDITIONS OF SALE, WARRANTY AND SERVICES

PRICES

The prices indicated in our price lists are not binding. AIR CONTROL reserves the right to change list prices and product characteristics without prior notice. The price is per truckload at Air Control warehouses in Milan and includes packaging, unless the customer's request indicates otherwise. Prices do not include VAT.

ORDERS

Orders will only be accepted in writing. AIR CONTROL will send the relevant order confirmation as soon as possible, correcting any anomalies or discrepancies and indicating the estimated date of shipment. Partial deliveries are possible in the event of special customer requirements or non-availability in stock of all the material ordered.

TERMS OF PAYMENT

Different terms may be agreed upon by written agreement with AIR CONTROL SRL sales personnel.

Any deadlines that are not paid by the due date shall result in application of the statutory interest in force from that date and payment of the related ancillary costs. In the event of non-compliance, AIR CONTROL reserves the right to stop any orders still outstanding and to require payment of the customer's total debt.

SHIPPING AND PACKAGING

The material will be shipped in cardboard boxes, carriage paid, with charges on the invoice. For further information, please contact AIR CONTROL SRL sales staff. Material shall travel at the customer's risk. Any special packaging requested directly by the Customer will be charged separately.

ORDER CANCELLATION

Orders may only be cancelled if previously approved by AIR CONTROL Sales Management. All related costs shall be borne by the customer.

DEFECTIVE MATERIAL UNDER WARRANTY

AIR CONTROL shall deliver/ship material under warranty on account of replacement only upon prior receipt of the returned goods, which have been checked and verified in the company and were previously authorised. Otherwise, the following shall apply.

In case of request for replacement under warranty of material that has not yet been received and checked by AIR CONTROL, the goods shall be delivered/shipped upon receipt of the "returns" form which has been duly completed and signed, with regular issuance of a bill of sale and related invoice.

Upon return of the replaced material, to be received in AIR CONTROL, within 15 days from the date of the transport document mentioned in the previous point, the relative invoice will be totally reversed with the issue of a credit note, subject to verification of the effective defect/conditions of the material. The faulty goods shall be collected at the expense of AIR CONTROL upon notification of goods ready by the customer, then proceeding to the appropriate defectiveness checks in the company in order to provide for the possible reversal.

Once 15 days have elapsed from the date of the transport document of the material requested for replacement, relative returns will no longer be accepted and payment of the corresponding invoice will still be required, considering it subject to the normal sales policy in force.

NON-CONFORMITY ATTRIBUTABLE TO THE CUSTOMER

The customer has 8 days from the date of delivery to return the material. Return authorisation is given after emailing the request form duly completed and stamped by AIR CONTROL. All transport costs in appropriate packaging shall be borne by the customer and acceptance of the return does not imply the reversal of the items on the invoice. Returned material will only be reversed if it is in perfect condition and in working order. AIR CONTROL will however retain 20% of the total amount of the relative credit note as compensation for handling costs. Returns will not be accepted for non-catalogue material, material with special dimensions, made of PAL or incomplete with original box, except in special cases to be agreed upon with the management. Request forms that are not duly completed will not be considered valid. Transport of any replacement material shall be borne by the Customer.

WARRANTY CONDITIONS

AIR CONTROL products are guaranteed for two years against any manufacturing defect. After 10 days from the date of delivery, claims will only be accepted for problems relating to component defects.

SPECIAL SIZES

For special sizes, the price of the standard size directly above will be applied and returns will not be accepted under any circumstances. Please consult AIR CONTROL sales staff for possible delivery times and availability.

DISPUTE RESOLUTION

Any dispute, of any kind or nature whatsoever, arising directly or indirectly from the sale of AIR CONTROL material, products or services shall be subject to Italian law and the competent court shall be Milan (Italy).

By signing the order, the customer declares acceptance of all the conditions set out.

Follow Air Control Srl



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20158 Milan (MI)
Tel. +39 0245482147
info@aircontrolclima.it
www.aircontrolclima.it