



Catalogues and Products > Mechanical Ventilation > Single-room controlled mechanical ventilation system > **Single Room System AIRE**

SINGLE ROOM SYSTEM AIRE

Decentralized alternating-flow heat recovery unit

Product informations

Do you want to assure the right air exchange at home or at work?

We introduce you **AIRE**, the Controlled Mechanical Ventilation system specific for large rooms to install both in case of renovations and new constructions. *AIRE* permits to obtain alternate air flows both in extraction and intake up to 100 m³/h (version Ø 200 mm). For 70 seconds *AIRE* extracts outside the warm and stale air of the room. During the passage into the duct, the air releases its thermal energy to the ceramic exchanger; once this phase finishes, the fan reverses the direction of rotation and starts the intake phase for another 70 seconds. The cold external air, passing through the heat exchanger, recovers the thermal energy and releases it into the room at a more comfortable temperature. This allows to achieve significant energy savings because it prevents the heating system from operating at maximum intensity as would happen in the event of air exchange by opening the windows.

Product features

- Motor fan positioned after the exchanger, inside the wall, to make the product extremely silent
- High efficiency ceramic thermal exchanger (**up to 93%**)
- ABS high-tight tilting front cover to avoid bad air returns when the device is off
- External grille in ASA, a noble plastic material that is highly resistant to UV rays, heat, and ageing, designed to minimize noise from the outside
- Standard length of the duct **500 mm (only model 160)**
- The duct is **NOT included** in 200 mm version
- Minimum wall depth 250 mm for the external wall version and 300 mm for the built-in version. Maximum length of the duct 3 m (2.5 m if 90° bend is present)



Single Room System AIRE

- DC motor fan, brushless with control electronics, on ball bearings
- Simplicity of maintenance and cleaning
- Double dust filter, washable and easily accessible for maintenance
- LED visual indicators for receiving commands and cleaning filters
- Humidity and twilight sensor
- The last function set is memorized and automatically restored in the event of a power failure
- Does not require condensation drain
- Protection degree *IPX4 (Protected against splashing water from any direction)*
- Operating temperature: $-30^{\circ}\text{C} \div +50^{\circ}\text{C}$

Technical features of the product

AIRE is equipped with a high-efficiency ceramic heat exchanger with an efficiency of up to 93% and is considered a class A appliance thanks to its low energy consumption. The motor-fan is positioned after the exchanger, inside the wall, for this reason it is very silent (max 32 dB(A)3m in the 200 mm version at speed 3). Furthermore, the external grill is designed to minimize noise and is made of ASA, a noble material that is very resistant to atmospheric aging and UV rays. The ABS front cover closes every time the device turns off to prevent unwanted air from entering. The degree of protection is IPX4.

AIRE is available in diameters 160 mm and 200 mm. In the 200 mm version the tube is NOT included in the box. Each system can be installed either externally to the wall or built-in for a more elegant design, thanks to the kit included in the package.

Functioning

For 70 seconds *AIRE* extracts the hot and stale air present in the room towards the outside. During the passage through the duct the air releases its thermal energy which is accumulated by the ceramic exchanger; at the end of this phase the fan reverses the direction of rotation and starts the intake phase for another 70 seconds

Accessories available for AIRE 2.0 and 3.0

AIRE is equipped with a remote control with display thanks to which it is possible to



Single Room System AIRE

turn the system on and/or off, activate the night function, adjust the desired humidity level, and manage up to 16 units in a Master/Slave system with simple configuration via dip switches.

You can also purchase the remote-control panel with display which includes the same functionality as the remote control.

Modes and functions of the remote control with display

- **ON/OFF:** the product runs in automatic mode as per factory settings
- **AUTOMATIC MODE:** the product runs in automatic mode as per factory settings
- **SURVEILLANCE MODE:** the unit remains in sleep mode but keeps the sensors activated; in case of parameters like humidity change, it will automatic start running
- **AIR FLOW DIRECTION:** this function is available if the products are at least two: it allows to only intake or only extract air simultaneously for a desired time
- **MANUAL FUNCTION:** Running mode with heat recovery at the manually set speed (the sensors excluded)
- **SPEED:** 3 adjustable speed levels
- **HUMIDITY LIMIT SELECTION:** humidity sensor with 3 set levels: min 40%, medium 55%, max 70%
- **BOOST FUNCTION:** it allows the air extraction at the maximum speed for a certain time
- **FILTER:** after 3000 hours operations the unit requires ordinary maintenance. Pushing this button, after maintenance, the normal operation can be restored
- **NIGHT FUNCTION:** it allows to minimize the flow rate and noise during night

Optional filter

The **ISO COARSE** filters, compared to the standard anti-dust filter, allow a more efficient filtration of particles with a diameter greater than 10 microns (such as fur, pollen, sand, dust in general). The filters are only available for the 160 mm diameter and with different degrees of filtration:

- **ISO COARSE 30%:** reduces the nominal flow rate by approximately 5%
- **ISO COARSE 45%:** reduces the nominal flow rate by approximately 15%
- **ISO COARSE 60%:** reduces the nominal flow rate by approximately 25%



Single Room System AIRE

Acoustic damper

The acoustic damper allows you to reduce the noise coming from outside when the product is turned off and is only available for the **160 mm** diameter version.

VERSIONS AVAILABLE

ACTIVE 2.0	WIRELESS 3.0
CABLE COMMUNICATION BETWEEN UNITS	WIRELESS COMMUNICATION BETWEEN UNITS
REMOTE CONTROL WITH DISPLAY (INCLUDED)	REMOTE CONTROL WITH DISPLAY (INCLUDED)
INTEGRATED HUMIDITY AND TWILIGHT SENSOR	INTEGRATED HUMIDITY AND TWILIGHT SENSOR
POSSIBILITY OF MANAGING UP TO 16 UNITS WITHIN A SYSTEM IN MASTER/SLAVE MODE	POSSIBILITY OF MANAGING UP TO 16 UNITS WITHIN A SYSTEM IN MASTER/SLAVE MODE
3 ADJUSTABLE SPEEDS + NIGHT FUNCTION	3 ADJUSTABLE SPEEDS + NIGHT FUNCTION

Technical Features

SKU	MODEL	HOLE	VOLTAGE (V)	FREQUENCY (HZ)	IN/OUT FLOW (M ³ /H)	P(PA)	POWER	NOISE LEVEL DB(A) _{3M}	WALL DEPTH
14431	ACTIVE 2.0	Ø160 MM	220 - 240	50	60	35	6,5	25	MIN. 200 MM - MAX 3 M*
14432	WIRELESS 3.0	Ø160 MM	220 - 240	50	60	35	6,5	25	MIN. 200 MM - MAX 3 M*
14441	ACTIVE 2.0	Ø200 MM	220 - 240	50	100	49	11,9	32	MIN. 250 MM - MAX 3 M*
14442	WIRELESS 3.0	Ø200 MM	220 - 240	50	100	49	11,9	32	MIN. 250 MM - MAX 3 M*

***2.5 m if a 90° bend is present**



Single Room System AIRE

PERFORMANCE DATA

SKU	NIGHT SPEED			SPEED 1			SPEED 2			SPEED 3		
	FLOW RATE M ³ /H	POWER W	NOISE DB(A) _{3M}	FLOW RATE M ³ /H	POWER W	NOISE DB(A) _{3M}	FLOW RATE M ³ /H	POWER W	NOISE DB(A) _{3M}	FLOW RATE M ³ /H	POWER W	NOISE DB(A) _{3M}
14431	10	3.9	4	20	4.1	8	40	4.9	18	60	6.5	25
14432	10	3.9	4	20	4.1	8	40	4.9	18	60	6.5	25
14441	20	3.9	6.5	40	4.9	14	70	7.4	22	100	11.9	32
14442	20	3.9	6.5	40	4.9	14	70	7.4	22	100	11.9	32

DIMENSIONS

A	B	C	D	E	F	G	H	L	M
300 MM	261 MM	44,5 MM	500MM *	Ø160/200 MM	93,5 MM	265 MM	260 MM	264 MM	304 MM

****only for diameter 160 mm***

SKU	MODEL	PRICE
00000014431	AIRE ACTIVE 2.0 - Ø 160 MM - MASTER	€625.8 VAT EXCLUDED
00000014435	AIRE ACTIVE 2.0 - Ø 160 MM - SLAVE	€583.8 VAT EXCLUDED
00000014432	AIRE WIRELESS 3.0 - Ø 160 MM - MASTER	€730.8 VAT EXCLUDED
00000014436	AIRE WIRELESS 3.0 - Ø 160 MM - SLAVE	€688.8 VAT EXCLUDED
00000014441	AIRE ACTIVE 2.0 - Ø 200 MM - MASTER	€693.0 VAT EXCLUDED
00000014446	AIRE ACTIVE 2.0 - Ø 200 MM - SLAVE	€651.0 VAT EXCLUDED
00000014442	AIRE WIRELESS 3.0 - Ø 200 MM - MASTER	€840.0 VAT EXCLUDED
00000014447	AIRE WIRELESS 3.0 - Ø 200 MM - SLAVE	€798.0 VAT EXCLUDED



Single Room System AIRE

