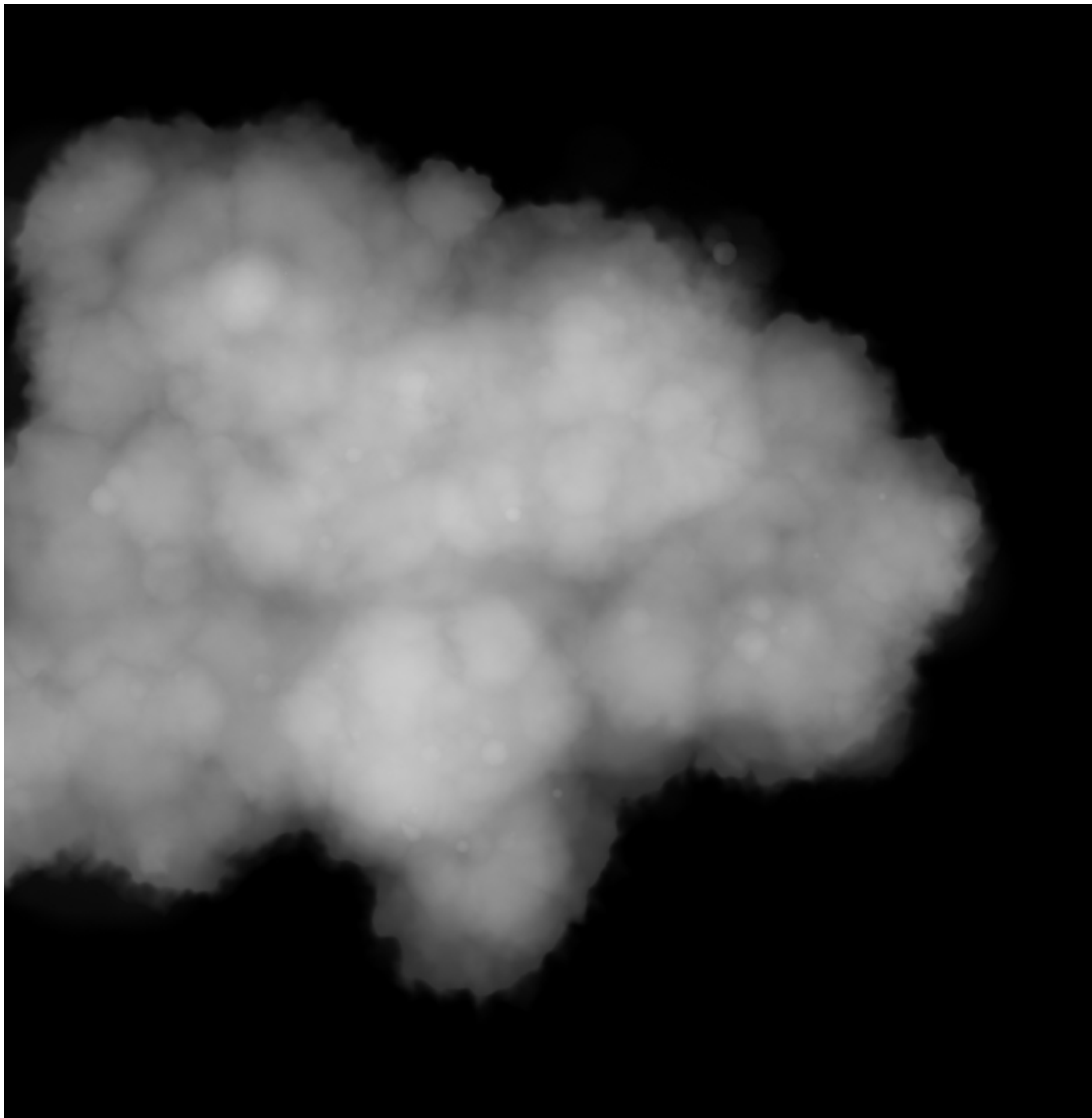




casals

Air quality in schools

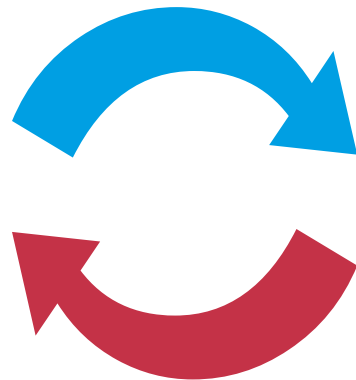


IAQ

Indoor air has become an essential element for healthy living and well-being. CASALS has solutions to reduce the risk of spreading pathogens, such as viruses, bacteria and mould, but also dust, dust mites, seasonal pollen and fine dust.

CO₂

Carbon dioxide (CO₂) is the cause of discomfort in closed interior spaces such as bars, offices, schools or meeting rooms. The more people coexist in the same space over time, the worse the indoor air quality is, and this is because we end up breathing the same air over and over again, air that other people have already exhaled.



It is necessary to renew the air inside buildings by supplying clean air from outside and extracting part of the stale air from inside. In this way it is possible to improve the quality of indoor air or IAQ (indoor air quality) in all inhabited premises or where any human activity is carried out. This indoor air quality must be in accordance with the requirements of the regulations required for each application.



Offices and meeting rooms

Universities and classrooms



Changing rooms, gyms and services



Corridors and common rooms

School canteens



Classrooms and laboratories

Air RENEWAL



KUBALIK CO2

Simple ventilation system for continuous and slow air renewal that hardly alters the indoor temperature.

Up to **180 m²** | Max **900 m³/h**



KUVIO

Low-profile mixed flow fan for in-line installation (AC) with great energy efficiency.

Up to **550 m²** | Max **2.750 m³/h**



KUVIO EEC

Low-profile mixed flow fan for in-line installation (EEC) with great energy efficiency.

Up to **530 m²** | Max **2.630 m³/h**



SB-3 & SBC-3 FILTER EEC

Inline ventilation box, low profile, high efficiency and low noise level. For air renewal in bathrooms and small premises.

Up to **1.350 m²** | Max **6.800 m³/h**



KUVIO-Q

Low-profile mixed flow fan for in-line installation (AC) with ultra-quiet operation and high energy efficiency.

Up to **380 m²** | Max **2.890 m³/h**



KUVIO-Q EEC

Low-profile mixed flow fan for in-line installation with ultra-quiet operation and high energy efficiency due to the EC motor.

Up to **530 m²** | Max **2.640 m³/h**

Air RECOVERY



KRISONA EEC & DUO

Decentralized residential recovery unit for single-stage use. For single or double rooms. Wall installation.

Up to **20 m²** | Max **41 m³/h**



MOOTA LP EEC

Double flow centralized ventilation unit with heat recovery for installation in a false ceiling. For small apartments and offices.

Up to **80 m²** | Max **122 m³/h**



REINTAIR® & WARRIOR EEC

Plug & play air purifiers to turn any indoor space into a virus-free environment. Ideal for small and medium surfaces to be purified.

Reintair® S

Up to **45 m²** | Max **300 m³/h**

Reintair® L

Up to **90 m²** | Max **600 m³/h**



OREQA EEC

Counterflow heat exchanger and EC motor for false ceiling or roof, horizontal or vertical installation. Efficiency up to 83%.

Up to **2.000 m²** | Max **4.250 m³/h**



REINTDECK & WARRIOR EEC

Centralized, integrable and combinable air purifiers for false ceilings. Designed to reduce the viral load in rooms through constant air renewals.

Up to **182 m²** | Max **1.800 m³/h**



REINTDECK EASY & WAR- RIOR EEC

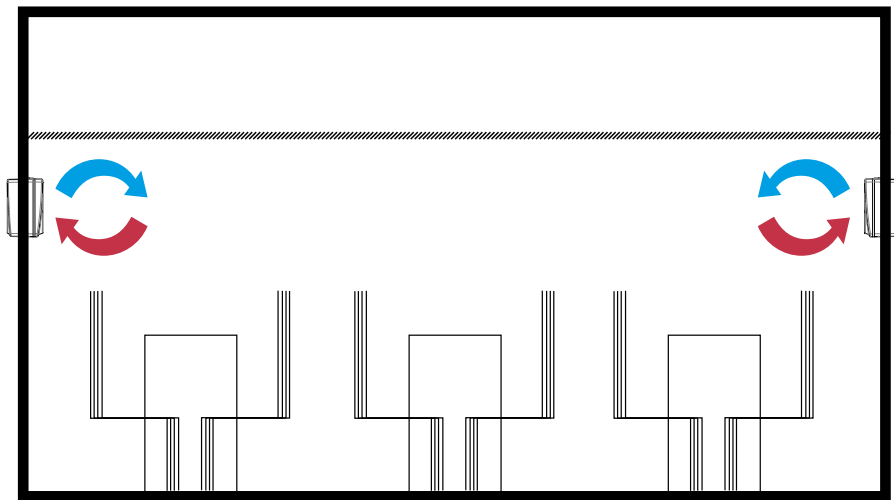
Decentralized air purifiers for hanging installation on ceilings. Designed to reduce the viral load in rooms through constant air renewals.

Up to **126 m²** | Max **1.200 m³/h**

Air renewal

KUBALIK CO2

Up to **180 m²** | Max **900 m³/h**



KUBALIK-CO2 is a system of ventilation for reducing CO₂ levels continuously and slowly without altering just the inside temperature of the local



Made up of **two reversible fans** such as **KUBALIK** (the same fan allows air to be supplied or extracted as configured) and a **CO₂ probe** called **SCO2 IAQ**.

KUBALIK-CO2 allows any interior space where people from different bubbles cohabit (an office, a school, a bar, etc.) **to have good air quality thanks to the controlled renewal** that the equipment allows.

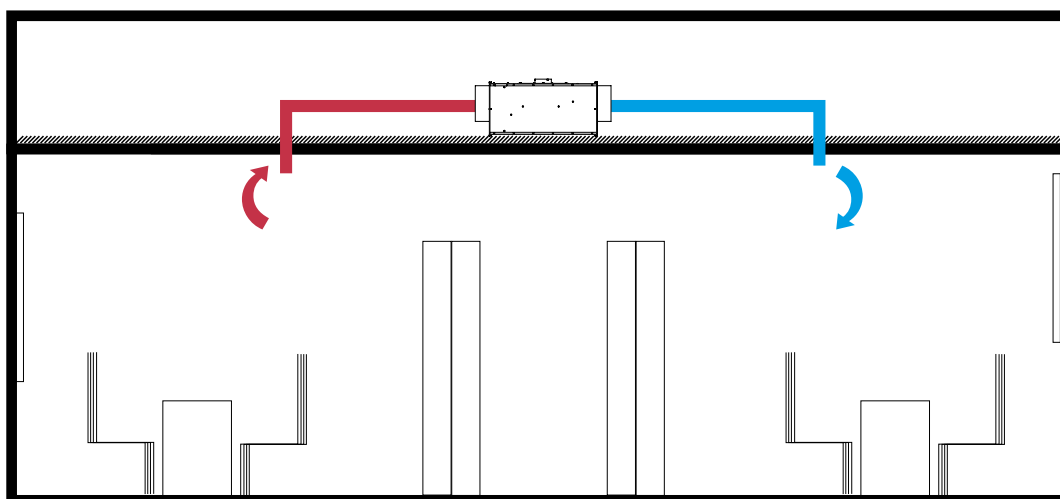
In an economical, easy and versatile way, the user will be able to provide a solution to the CO₂ load of his establishment and constantly see the quality of the air he breathes. Comfort within everyone's reach.

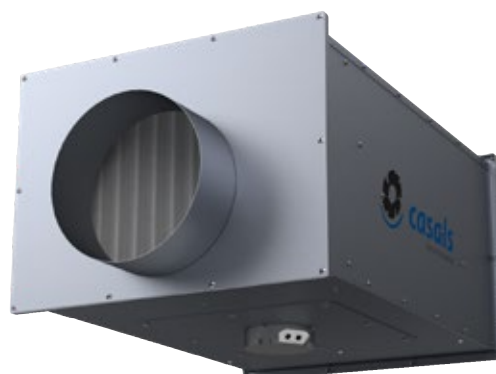
KUBALIK-CO2 **allows the air of the entire premises to be swept and renewed with new air every time the accumulation of CO₂ is harmful to health.** At all times the user will be able to see on a screen the amount of accumulated dioxide and how it is reduced thanks to the intervention of the KUBALIK fan. In addition, the contribution of clean air will be so smooth that it will not cause a high reduction in temperature in winter.

Air renewal

SB-3 & SBC-3 FILTER EEC

Up to **1.350 m²** | Max **6.800 m³/h**





SB-3 & SBC-3 FILTER EEC in-line fan, low profile and double stage filtration

EC electronic motor

The new SB-3 EEC are equipped with a **high-efficiency EC electronic motor** that allows us to **reduce consumption** and **increase performance**, as well as having full regulation.

Versions

The SB-3 EEC family are low profile boxed centrifugal fans with EC external rotor, available with:

Double filtration stage: SB-3 FILTER EEC and SBC-3 FILTER EEC

Acoustic insulation: SB-3 PLUS EEC and SBC-3 FILTER EEC

Double stage of filtration and sound insulation: SB-3 PLUS FILTER EEC and SBC-3 PLUS FILTER EEC.

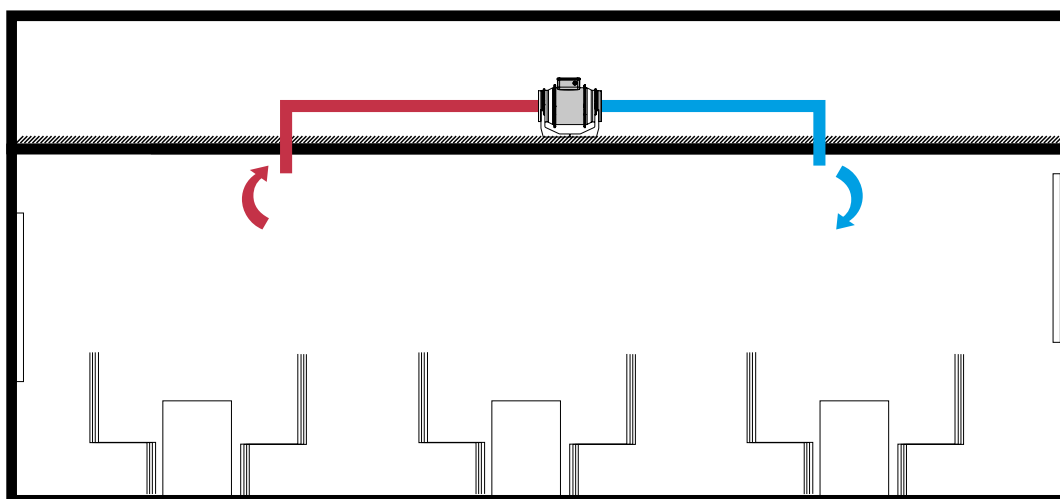
All **versions** are available in a **circular (SBC-3)** and **rectangular (SB-3) inlet** to adapt to any type of duct.

Air renewal

KUVIO & KUVIO EEC

KUVIO | Up to **550 m²** | Max **2.750 m³/h**

KUVIO EEC | Up to **530 m²** | Max **2.630 m³/h**





high efficiency mixed flow fan for small and medium installations

Helicocentrifugal **ducted extractors**, with **AC and EC motor**.

Designed for **horizontal or vertical duct installation** for the ventilation of **residential, commercial or industrial premises**.

KUVIO series fans have 2 and 3 speed induction motors.

Flexibility and simplicity of installation, ideal for meeting specific installation requirements linked to performance, consumption and operating costs.

Versions

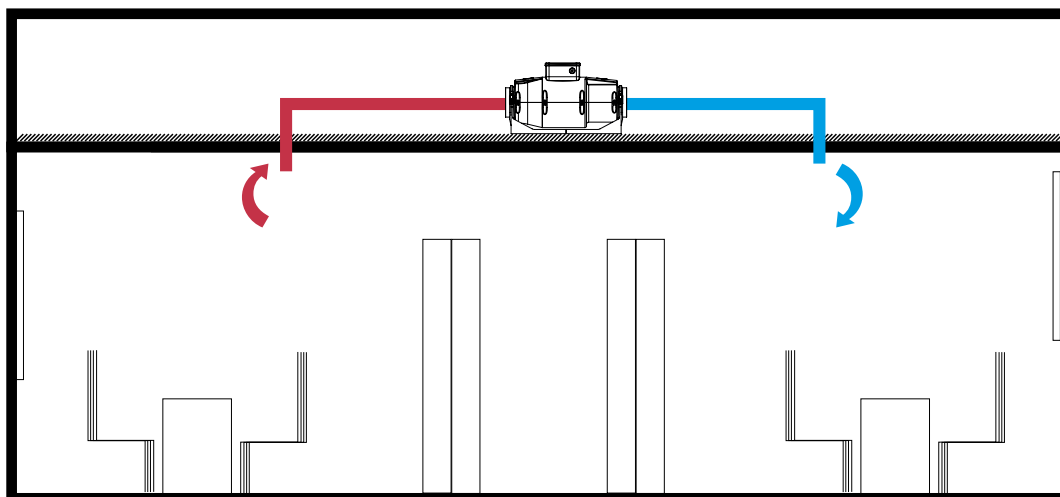
Standard and **timer** version (**T**).

Air renewal

KUVIO-Q & KUVIO-Q EEC

KUVIO-Q | Up to **580 m²** | Max **2.890 m³/h**

KUVIO-Q EEC | Up to **530 m²** | Max **2.640 m³/h**



**Low-profile
mixed flow fan for
in-line installation
with ultra-quiet,
energy-efficient
operation**



KUVIO-Q fans are equipped with traditional 3 speed **AC** induction motors, thermally protected, with shaft mounted on ball bearing supports, coupled to a centrifugal turbine.

For small and medium-sized ventilation installations for air renewal.

**Completely sound
absorbing lining
integrated into
the outer shell,
optimized to mini-
mize irradiated
sound emissions in
the environment**



The **KUVIO-Q EEC** version has **EC brushless** (low consumption) electronically controlled motors. Each speed can be configured at installation. Alternatively the units can run at a single speed, adjustable by the user via a 0-10V signal.

For **spaces** where **silence is paramount**.

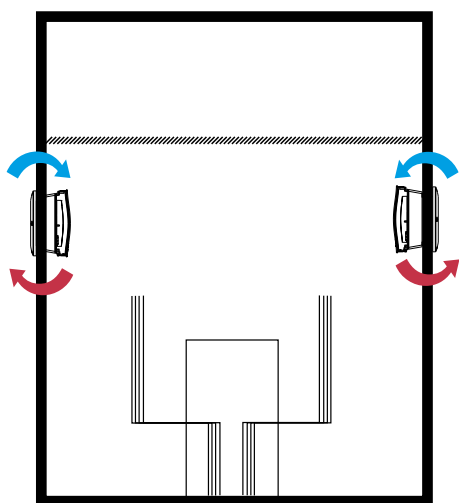
Recovery energy

KRISONA EEC & KRISONA EEC DUO

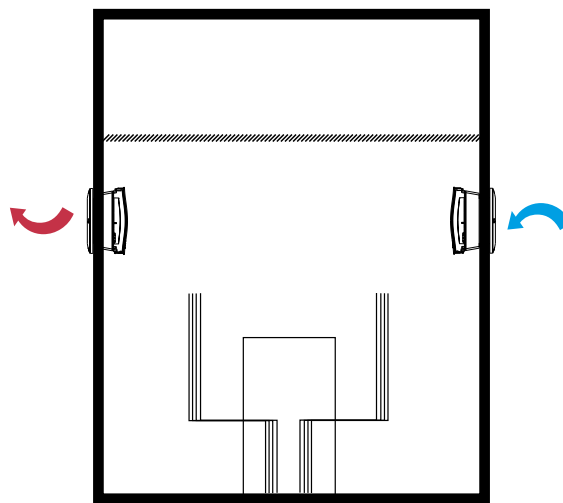
KRISONA EEC & KRISONA EEC DUO

Up to **20 m²**

Max **41 m³/h**



The two heat recovery units they can **SUPPLY** and **EXTRACT** air as configured.



The heat recovery units **SUPPLY**, and the other **EXTRACT** air.

Decentralized residential recovery unit for single-stage use, **with integrated control**



KRISONA EEC

Decentralized heat recovery unit for a room of up to 20 m², wall installation and with **integrated control**. Applicable in lounges, living rooms, bedrooms, home gyms, small apartments without installation of ducts in the false ceiling. 90% efficiency.

Decentralized residential recovery unit for single-stage use, **with remote control (duo version)**



KRISONA EEC DUO

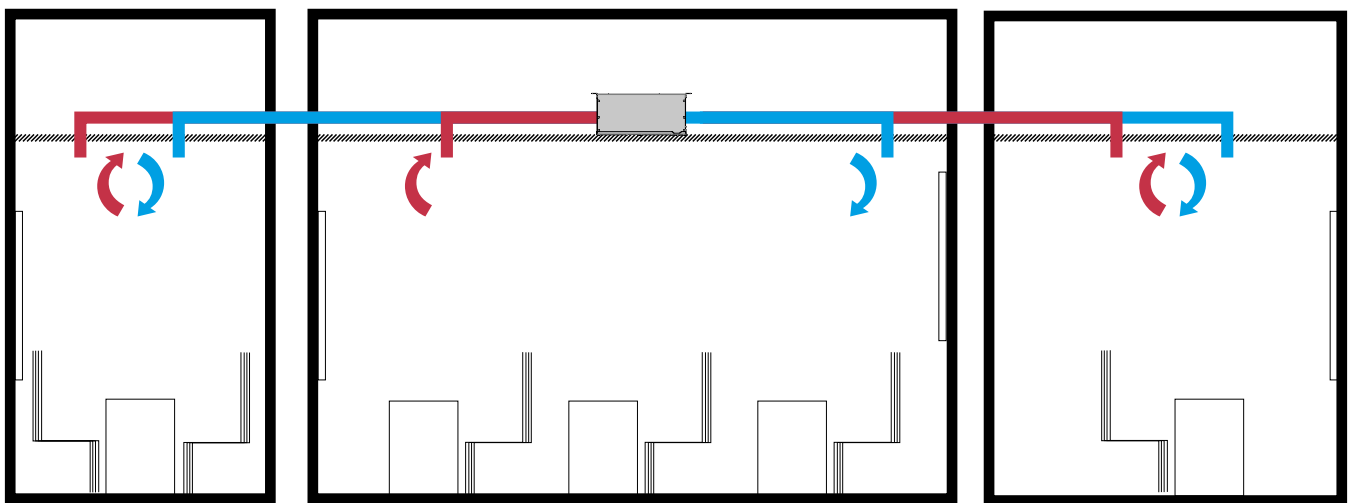
Decentralized heat recovery unit for a room of Up to 20 m², wall installation and with **remote control** to be able to manage **up to 6 KRISONA EEC** decentralized heat recovery units. Applicable in lounges, living rooms, bedrooms, home gyms, floors without installation of ducts in false ceilings. 90% efficiency.

Recovery energy

MOOTA LP EEC

Up to **80 m²**

Max **122 m³/h**



Centralized double flow unit ventilation with heat recovery for installation in false ceiling



Moving air safely and efficiently has become a maxim for these recuperators that meet the requirements of the ErP directive and, in turn, have been manufactured in accordance with the provisions of established safety standards.

All **desigNtial by Casals** recuperators are equipped with an EEC electronic motor that ensures very low consumption and extremely silent operation, in addition to intelligent controls that allow it to work adapting to the needs of each moment depending on the presence of more or fewer users or the load of the environment.

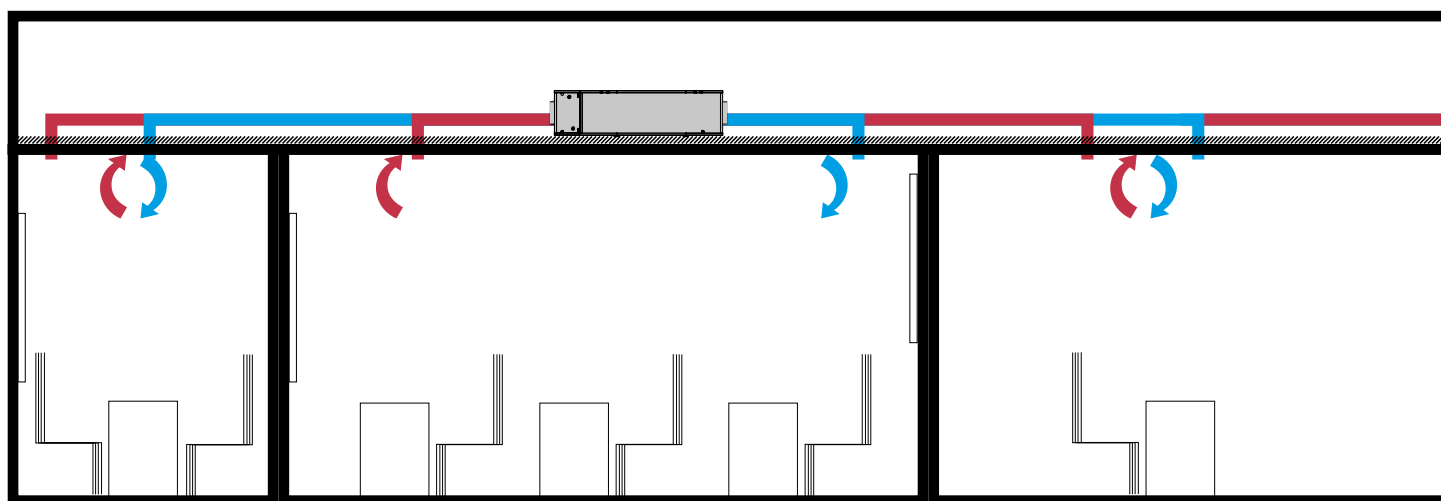
MOOTA LP EEC, residential heat recovery for false ceiling Up to 80 m² with EEC motor and remote control. Ideal for single-family homes and medium-sized apartments. 85% efficiency.

Recovery of energy

OREQA EEC

Up to **2.000 m²** | Max **4.250 m³/h**

The function of energy recovery units is to take advantage of the psychometric properties (temperature and humidity) of the air extracted from the room and exchange them with the air supplied from outside. In this exchange process, the indoor and outdoor air do not mix but, as the name suggests, exchange properties to achieve the most suitable temperature and humidity for the space where the recuperator is installed.



Heat recovery counterflow and EC motor for false ceiling. Efficiency up to 83%.



Heat recovery units for commercial or tertiary use

At tertiary or commercial level, Casals has energy recovery units to maintain air quality in closed environments avoiding heat loss from heating or air conditioning. EC motor, medium-high efficiency (Up to 83%) and Eurovent certified counterflow exchanger cell.

Maximum flow rate 4,250 m³/h.

For horizontal floor or false ceiling installation.

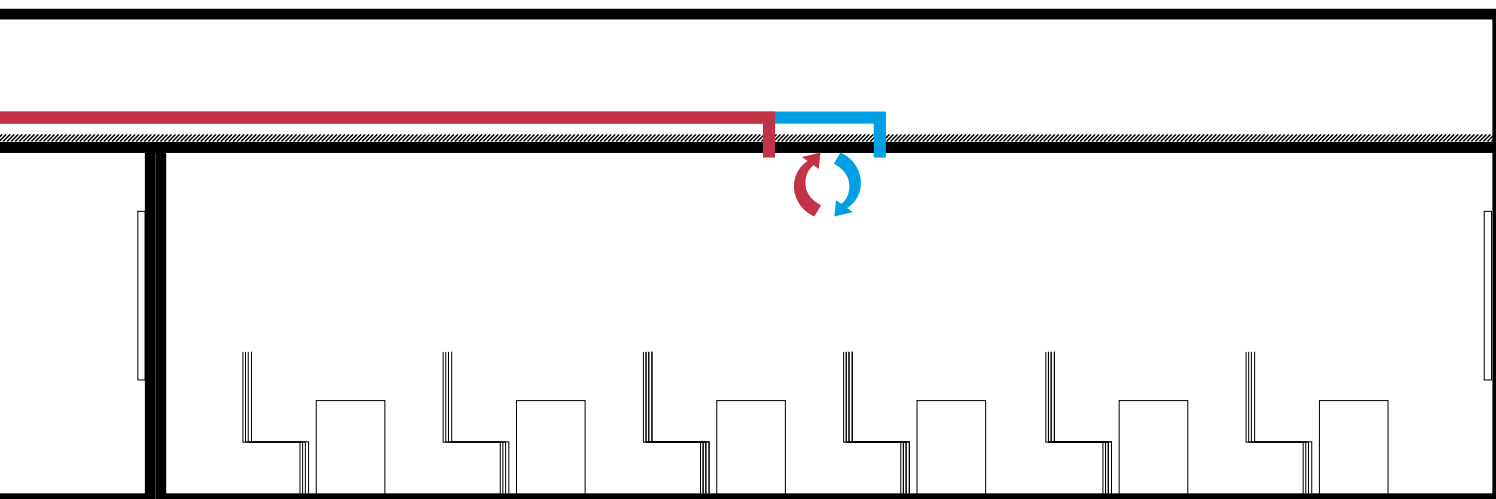
Supplied with advanced electronic control with temperature probes and 3 operating modes.

With automatic full bypass (100%).

Outer casing of insulated panels, designed for easy opening and access for filter maintenance.

Filters

With a filter ePM1≥50% (F7) in extraction and another ePM1≥50% (F7) in supply.



Purification air

REINTAIR® & REINTAIR® WARRIOR EEC

REINTAIR® & WARRIOR S 300 EC

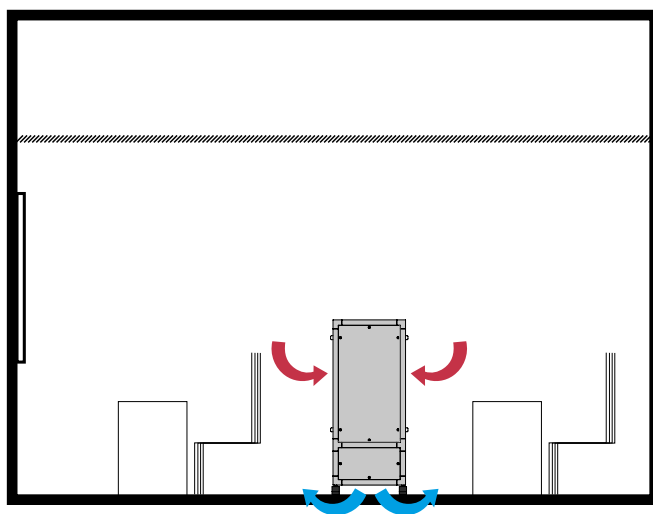
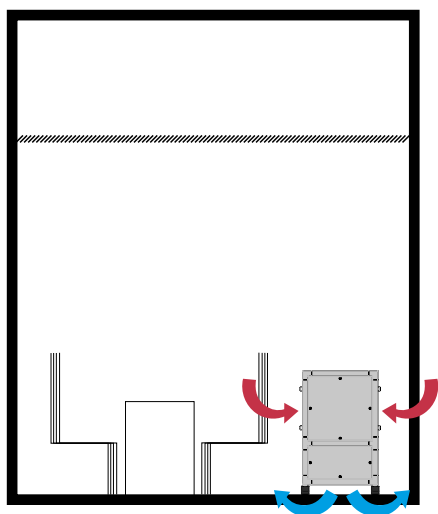
Up to **45 m²**

Max **300 m³/h**

REINTAIR® & WARRIOR L 600 EC

Up to **90 m²**

Max **600 m³/h**





Portable air purifiers REINTAIR® EEC with electronic motor, without installation, plug and play type

How REINTAIR® EEC works

REINTAIR® EEC is responsible for recirculating indoor air and reducing the viral load in the room, trapping particles, including viruses, in the 2x HEPA H14 and 2x ISO Coarse $\geq 60\%$ (G4) filters. Suitable for any closed space that may have a viral load, including ICUs.

Just by plugging it in you get healthy air by filtering suspended particles, viruses and micro-organisms.

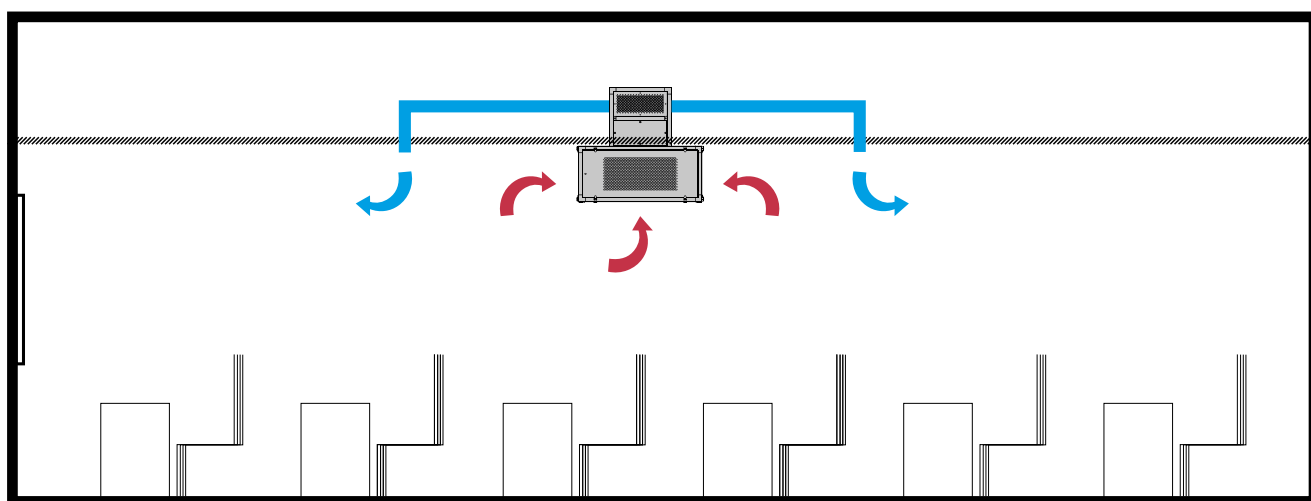
Versions

REINTAIR® EEC: portable on wheels for small surfaces to purify REINTAIR® WARRIOR EEC: portable with wheels and integrated photocatalysis and ultraviolet light system.

Purification air

REINTDECK & REINTDECK WARRIOR EEC

Up to **182 m²** | Max **1.800 m³/h**





Centralized air purifiers for false ceiling, integrable and combinable. With electronic motor

Versions

REINTDECK EEC: centralized, for false ceilings in large areas of commercial or tertiary buildings.
REINTDECK WARRIOR EEC: centralized, for false ceilings in large areas of commercial or tertiary buildings and with an integrated photocatalysis and ultraviolet light system.

How REINTDECK EEC works

They reduce the viral load of any indoor space where an activity takes place. They are especially recommended in industrial processes with high humidity concentrations and workplaces with little distance between people.

Centralized version whose installation is carried out through a duct. Aspiration by replacing the false ceiling recordable plate.

Model with electronic motor, 1800 m³/h, for interior spaces of Up to 182 m², with 3 renewals/hour, at an installation height of 3m.

Triple filtration stage in each panel with the following composition:

5 filters ISO Coarse \geq 60% (G4)

5 filters ISO ePM1 \geq 70% (F7)

5 HEPA 14 filters

15 filters per purification unit.

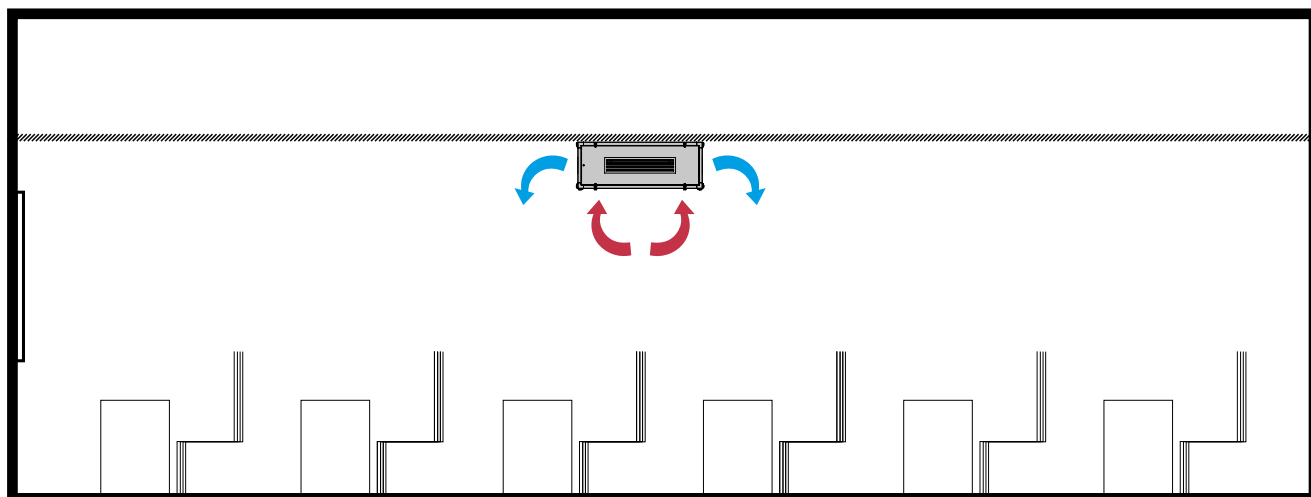
ISO Coarse \geq 60% (G4) and ISO ePM1 \geq 50% (F7) pre-filters increase the life of HEPA 14 absolute filters.

Ideal to be installed in interior spaces in a false ceiling, or by simple hanging as in sanitary, tertiary and industrial sectors.

Purification air

REINTDECK EASY & REINTDECK EASY WARRIOR EEC

Up to **126 m²** | Max **1.200 m³/h**





Decentralized air purifiers for hanging installation on ceilings. With electronic motor

Versions

REINTDECK EASY EEC: decentralized with EC motor. To be installed in interior spaces by simple hanging as in sanitary, tertiary and industrial sectors.

REINTDECK EASY WARRIOR EEC: decentralized with EC motor and integrated photocatalysis and ultraviolet light system. To be installed in interior spaces by simple hanging as in sanitary, tertiary and industrial sectors.

How REINTDECK EASY EEC works

Decentralized version with hanging installation on ceilings without plates. You do not need to conduct the air through ducts.

Aspiration of polluted air through the lower panel and supply of clean air through the 4 side panels. Model with electronic motor, 1200 m³/h, for interior spaces of Up to 126 m², with 3 renewals/hour, at an installation height of 3m.

Double stage of filtration in the suction panel with the following composition:

1 ISO Coarse filter $\geq 60\%$ (G4)

1 ISO filter ePM1 $\geq 70\%$ (F7)

Simple filtration stage in 4 contribution panels with adjustable diffusers. Composed of 1 HEPA 14 absolute filter in each panel (4 in total).

6 filters per purification unit.

ISO Coarse $\geq 60\%$ (G4) and ISO ePM1 $\geq 50\%$ (F7) pre-filters increase the life of HEPA 14 absolute filters.

Ideal to be installed in interior spaces by simple hanging as in sanitary, tertiary and industrial sectors.

KUBALIK CO2 01

KRISONA EEC & KRISONA EEC DUO 04 02

MOOTA LP EEC 01 02 03 04 05 06 07

REINTAIR® EEC & REINTAIR® WARRIOR EEC 01 02 03 05

REINTDECK (EASY) EEC & REINTDECK (EASY) WARRIOR EEC 06

OREQA EEC 01 02 03 04 05 06 07

KUVIO & KUVIO EEC 06 07

KUVIO-Q & KUVIO-Q EEC 03 05 06 07

SB-3 & SBC-3 FILTER EEC 03 07

