BUS & COACH
HVAC SYSTEMS

EASY INSTALLATION

MAINTENANCE FREE

Functions and Installation

TESTED BY INTA Proven to be 99.7% effective

eco3

Air Purifier

99,7% effective inactivation of SARS-CoV-2

hispacold

TESTED BY SGS Prevention and Environment division

eco3 Air Purifier

Functions

TESTED BY SGS Prevention and Environment division

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CHARACTERISTICS

> Eliminates harmful elements present in bioaerosols such as bacteria, viruses (including SARS-CoV-2), mould, allergens and germs.

> Increases the concentration of oxygen to maintain healthy air levels and prevent the sensations of being unable to breathe indoors

> Reduces driver drowsiness.

> Reduces the risk of infection.

> Avoids dizziness and nausea in passengers.

> It can be fitted in new equipment or in systems already in operation.

> Removes dust in the air.

> Eliminates certain pollutant gases.

> Neutralises bad odours.

FACT SHEET

Voltage	24 VDC
Consumption	40 mA
Weight	230 g
Temperature range	from -10 ºC a +65 ºC
Service Life	20.000 h
Minimum required air speed	0,3 m/s
Electromagnetic Compatibility ECE No 10 R5	
Generation of negative ions	$3x10^6$ ions/cm^3
Generation of Ozone	< 0,05 ppm

THE RESULTS OF POOR QUALITY INDOOR AIR

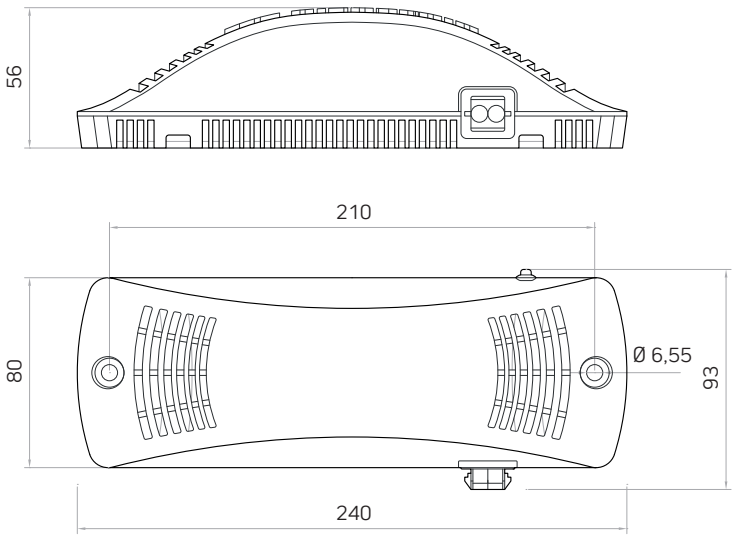
> Unpleasant environment
> Concentration of germs, bacteria, viruses, etc.
> Increase in respiratory illnesses
> Unpleasant odours
> Fatigue
> Nausea

To improve air quality in buses and coaches, Hispacold has developed **eco3**, an air purifier that eliminates bad odours and neutralises microorganisms, germs and allergens. The **eco3** air purifier functions by generating negative ions and ozone (<0.05 ppm) and releasing them in adequate proportions to increase oxygen levels, thereby preventing air inside the vehicle becoming polluted.

With the **eco3** air purifier, the total number of colony forming units of bacteria (CFU/m^3) is reduced by 93%, and plate-forming units of virus (PFU/m^3) reduced by 99.7%.

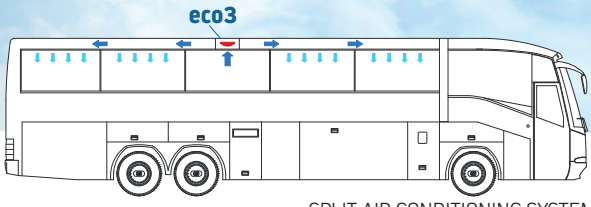
The eco3 air purifier has proved to be highly effective in the vehicles in which it has been installed. In addition, it has been scientifically tested and approved by prestigious international environmental expert body, SGS Tecnos, and by the Department of Defense Systems of Spain, CBN, at the National Institute of Aerospace Technology (INTA), depended of the Defense Ministry of the Government of Spain.

DIMENSIONS (mm)

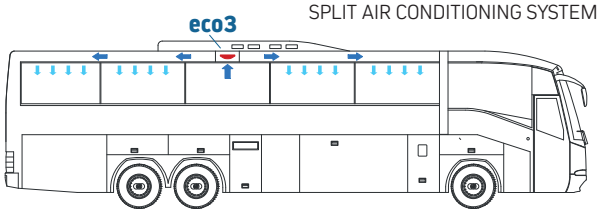


**Tests on a 15-meter coach equipped with the eco3 air purifier, where the MS2 virus was present, were carried out by the Biological Defence Area of the CBN Defence Systems Department of the National Institute of Aerospace Technology (INTA).*

Installation



SPLIT AIR CONDITIONING SYSTEM



⬆ *Air Inlet grilles*

ROOF TOP AIR CONDITIONING SYSTEM

USE

- Can be fitted in buses and coaches from 5 to 18 metres in length and also on articulated and bi-articulated buses.
- Can be used with roof top air conditioning or with split air conditioning.
- 1 module for vehicles with equal or less than 7 metres.
- 2 modules for 12-metre buses.
- 4 modules for articulated or double-decker buses.

If the air conditioning system is already a **Hispacold** brand, the **eco3** device will be already fitted in it.

Where the **eco3** needs to be integrated or installed in vehicles with other air conditioning equipment brands, the **eco3** device can be installed by following these instructions:

HOW TO FIT THE eco3

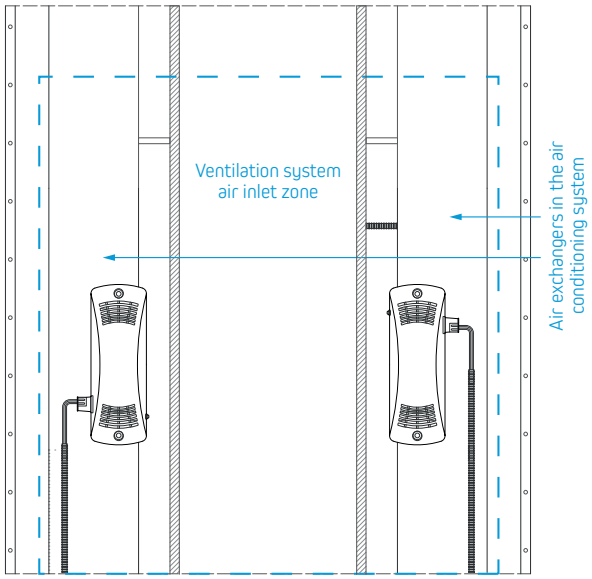
1. Identify the opening where air from the ventilation system enters the vehicle interior.
2. To start the device, use the connection socket now accessible on it.
3. Connect the power supply using the connection included in the device.
4. To ensure the specified minimum air speed through the eco3 device, the power supply must be available only when the air condition system's ventilation blowers are in operation.

MAINTENANCE-FREE

Ensure the minimum air speed through the eco3 is 0.3 m/s

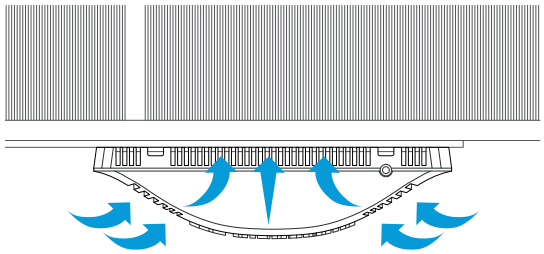
Check that the green LED is lit up

LOCATION



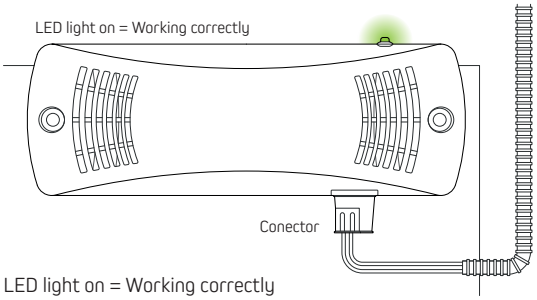
Bottom view: An air intake area of the air conditioning inside the vehicle.

POSITION



Recommended position.

CHECKS



LED light on = Working correctly

hispacold

Established in more than **100 countries**

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In collaboration with

UNIVERSIDAD DE SEVILLA

ISO 9001
ISO 14001
OHSAS 18001
BUREAU VERITAS Certification

BUREAU VERITAS
Certified EN15085-2
N° 6038937-2

IRIS Certification

SGS
Prevention and Environment division

INTA