

### 5 – EC135

#### ❖ Air-Distribution principle

##### Cockpit Ventilation: Fresh Air Supply possible?

**In HC with Ventilation & Air conditioning HC: Yes**

Action: Pull up Recirc Valve knob (FRESH AIR MODE), see sketch below  
Apply duct tape to recirculation air inlet behind LH Pilot seat (close recirc air inlet with tape) additionally

Sketch : Recirc Valve Knob on center console, two knob position UP (Fresh Air) Down (Recirc Air).



##### Cabin Ventilation: Fresh Air Supply possible?

**In HC with Basic Ventilation: Yes**

Action: Turn on Pax Fan (ON), Open all Air Gaspers in Cabin ceiling ( 5 air gaspers)

**In with Airconditioning Version : No**

Action: Turn off Pax Fan (from CKPT or CAB),  
Alternatively: set Cabin Ventilation Inoperative by pulling CB

##### Heating System Fresh Air Supply possible ?

**In all HC (Ventilation version and Airconditioning Version : No**

Action: Minimise Use of Heating Function (Demisting Cases only)

Note: the Heating system utilizes bleed air from the engine (fresh air from outside) and it utilizes recirculation air from inside. Therefore heating air always contains a certain ration of recirculation air from the cabin. We recommend to minimize the use of heating air as much as possible in demisting cases only

##### Minimise or avoid the circulation from Cabin to Cockpit:

⇒ Avoid: No (EC135 has a "one room" cabin)

⇒ Minimise:

We recommend to turn up Cockpit Ventilation to maximum (CKPT Fan = MAX) and turn OFF PAX Ventilation, as well as to close all PAX air outlets in cabin (Pax outlets gaspers in ceiling)

### 6-1 – BK117-C2

#### ❖ Air-Distribution principle

Cockpit Ventilation: Fresh Air Supply possible?

**In HC with Basic Ventilation : Yes**

Action for HC with Basic Ventilation:

PUSH Recirc Valve into Fresh air mode on center console Bowdenknob PUSH FOR AIR, see sketch below

Apply duct tape to recirculation air inlet under LH & RH Pilot seat (close recirc air inlet)



Cabin Ventilation: Fresh Air Supply possible ?

**In HC with Basic Ventilation : YES**

Action: Turn on Pax Fan (ON) Open Air Gaspers in Cabin Ceiling

Heating System : Fresh Air Supply only possible ?

**In all HC (Ventilation version): NO**

Action: Minimise the use of Heating Function (apply for Demisting Cases only)

Note:

The Heating system utilizes bleed air from the engine (fresh air from outside) and it utilizes recirculation air from inside. Therefore heating air always contains a certain ration of recirculation air from the cabin. We recommend to minimize the use of heating air as much as possible in demisting cases only

Minimise or avoid the circulation from Cabin to Cockpit:

⇒ **Avoid: NO**

Reason: H145 has a “one room” cabin

⇒ **Minimise:**

We recommend to turn up Cockpit Ventilation to maximum (CKPT Fan = MAX) and turn OFF PAX Ventilation, as well as to close all PAX air outlets in cabin (Pax outlets gaspers are located in the ceiling)

### 6-2 – BK117-D2 / D2m / EC145T2

#### ❖ Air-Distribution principle

##### Cockpit Ventilation: Fresh Air Supply possible?

**In HC with Ventilation & Airconditioning: Yes**

##### Action for HC with Basic Ventilation:

Switch Recirc Valve into FRESH AIR MODE (Bowden Plug on center console)  
Apply duct tape to recirculation air inlet under LH & RH Pilot seat (close recirc air inlet)

##### Action for HC with Air Conditioning ACS and Enhanced ECS:

Push RECIRC Button on CHCU (RECIRC ON = NOT illuminated / black)  
Apply duct tape to recirculation air inlet under LH and RH pilot seat (close recirc air inlet)  
See Amendment 1

##### Action for HC with Supplemental Air Conditioning System (these HC also have ACS):

On OHP switch SACS system OFF (see Amendment 2)

##### Cabin Ventilation: Fresh Air Supply possible ?

**In HC with Basic Ventilation : Yes**

Action: Turn on Pax Fan (ON) Open Air Gaspers in Cabin Ceiling

In HC with Airconditionig Version - NO

Action: Turn off Pax Fan (from CKPT or CAB)

On CHCU: Zone Switch Selector in CAB

Push VENT Rotary Knob. Vent Display shows NOT illuminated (three bars display dark)

See Amendment 1

Alternatively: Set Cabin Ventilation Inoperative by pulling CB

### Heating System Fresh Air Supply possible ?

In all HC (Ventilation version and Airconditioning Version) : No

Action: Minimise Use of Heating Function (Demisting Cases only)

Note: the Heating system utilizes bleed air from the engine (fresh air from outside) and it utilizes recirculation air from inside. Therefore heating air always contains a certain ration of recirculation air from the cabin. We recommend to minimize the use of heating air as much as possible in demisting cases only

### Minimise or avoid the circulation from Cabin to Cockpit:

⇒ Avoid: No

Reason: H145 has a "one room" cabin

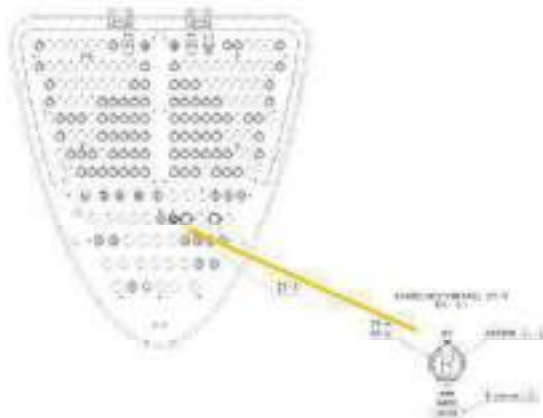
⇒ Minimise:

We recommend to turn up Cockpit Ventilation to maximum (CKPT Fan = MAX) and turn OFF PAX Ventilation, as well as to close all PAX air outlets in cabin (Pax outlets gaspers are located in cabin ceiling)

### HC with ACS and ECS (Airconditioning and Enhanced Ventilation ECS):

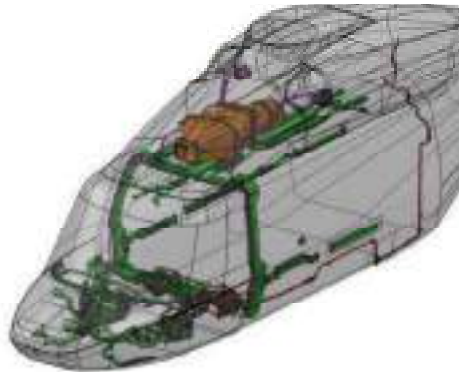


### HC with SACS (supplemental air conditioning System):



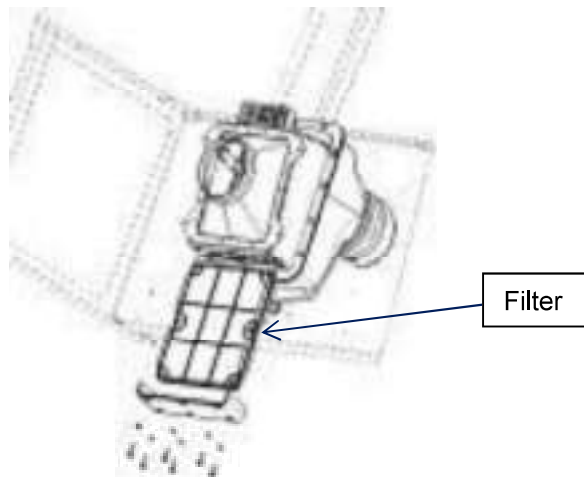
### 7- EC175 (prior to Step 3.2)

- ❖ Air-Distribution principle (O&G and Public Services mission packages only (not valid for VIP mission package) :



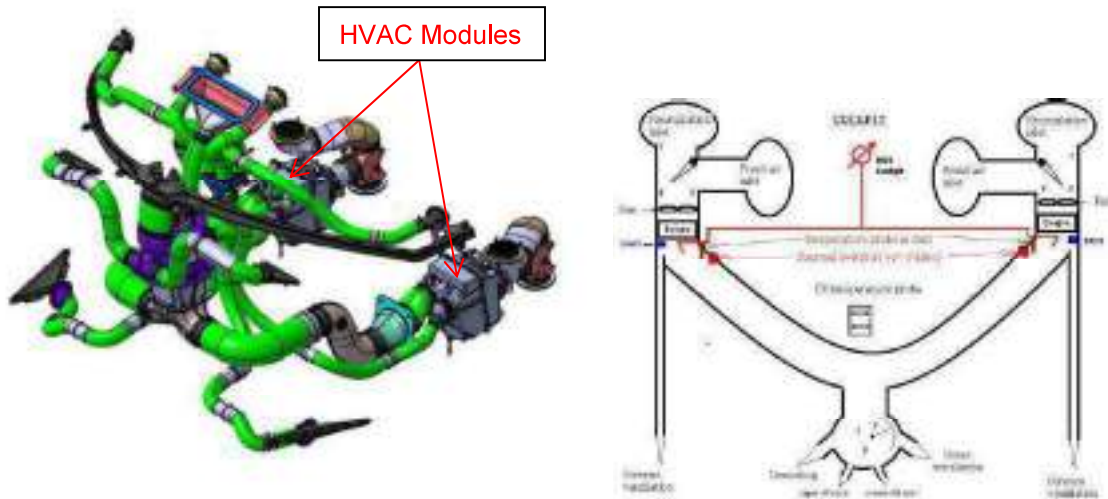
The cabin and cockpit have two different air circuits but no separation between cabin and cockpit compartments.

A filter is integrated in both circuits inside HVAC modules (active for fresh air and recirculation modes).



See localization of HVAC in the description of cabin and cockpit air distribution below.

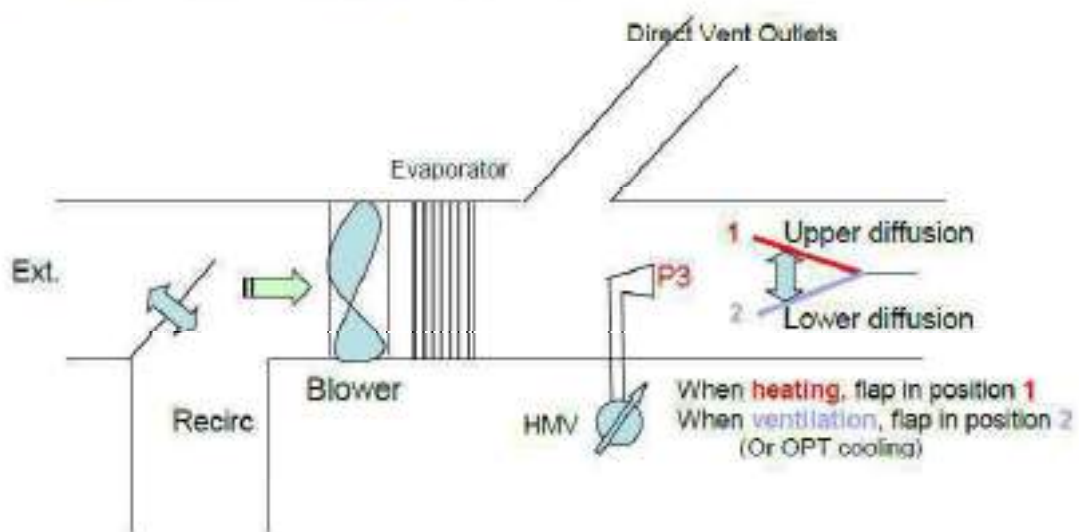
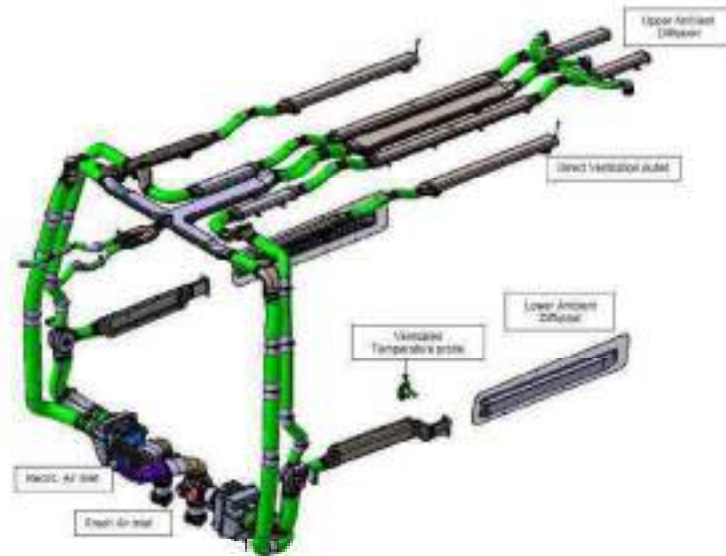
### Cockpit:



⇒ Conclusion: Only fresh Air possible ? : Yes for all air distribution modes except when the landing gear is down or extended.

If pilot wants fresh air when landing gear is out, the bad weather window can be opened.

Cabin:



⇒ Conclusion: Only fresh Air possible ? : Yes for all air distribution modes except when the landing gear is out.



### Minimise the circulation from Cabin to Cockpit

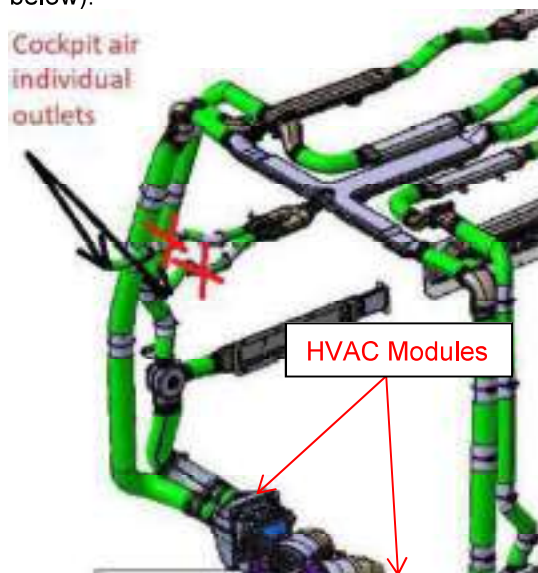
⇒ Avoid: No

⇒ Minimise:

A important recommendation:

In the cabin air distribution circuit 2 ducts are defined to supply cockpit with 2 individual outlets in case of cockpit ventilation failure.

In order to minimize the circulation from cabin to cockpit, these outlets can be closed (see picture below):



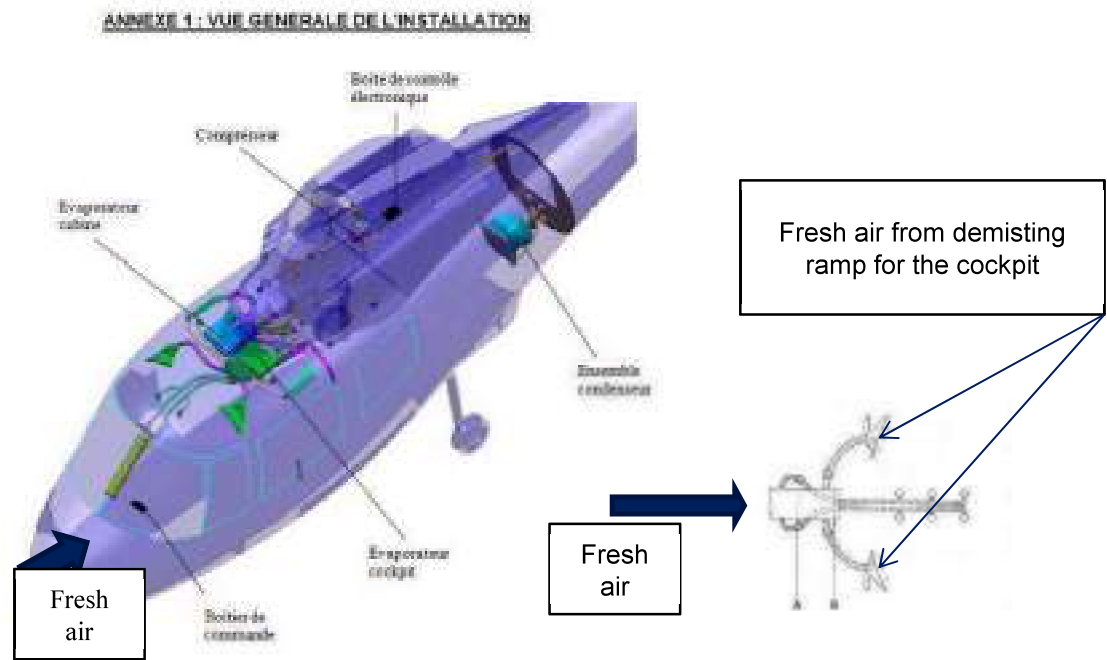
**8-1 – AS365 N3 with air-conditioning system**

❖ **Air-Distribution principle**

There are 2 different installation, A compact one and a split one.

The two installations are functioning in recirculation mode only, no fresh air available when the air conditioning system is on.

There is fresh air on cockpit area when the pilot uses the external scoop in front on the aircraft. The air comes from the demisting ramp.



Cockpit:

⇒ Conclusion: Only fresh Air possible ? : Yes

Cabin:

⇒ Conclusion: Only fresh Air possible ? : No

Minimise or avoid the circulation from Cabin to Cockpit:

⇒ Avoid: No

⇒ Minimise:

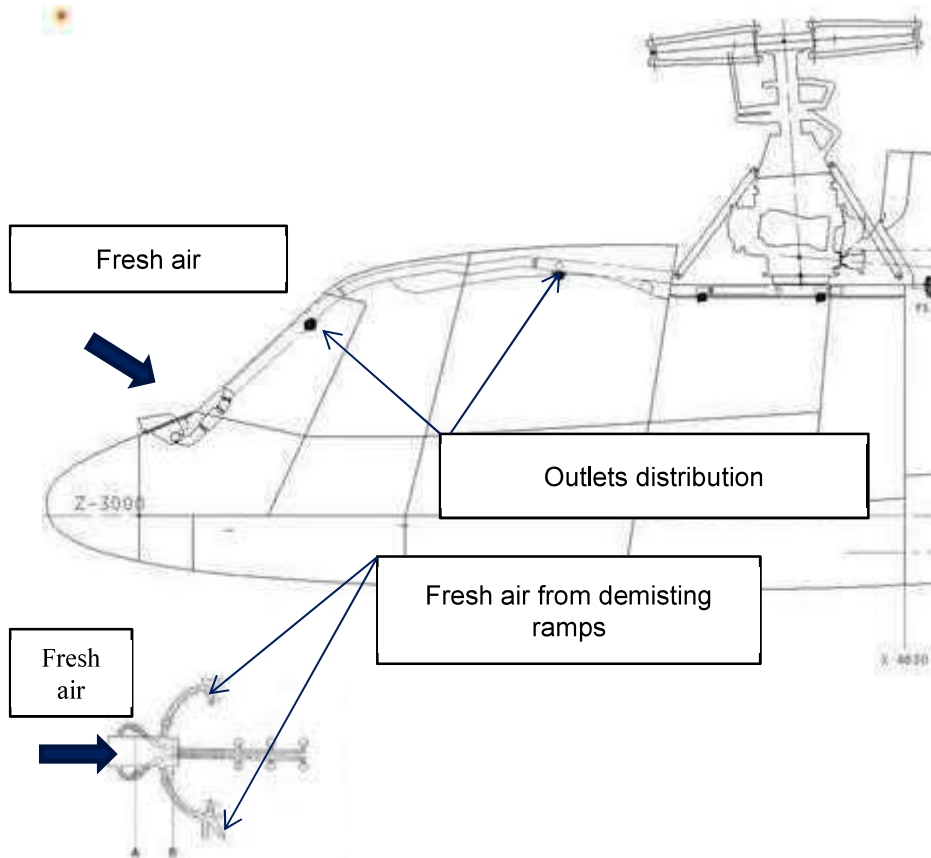
A recommendation:

- Do not use the air conditioning system but use only the fresh air (which come from the demisting ramp by the scoop installed on the nose of the aircraft).

### 8-2 – AS365N3 without air-conditioning system

#### ❖ Air-Distribution principle.

A scoop is installed on the nose of the aircraft and ensures the air distribution in cockpit and cabin area.



Cockpit:

⇒ Conclusion: Only fresh Air possible: Yes

Cabin:

⇒ Conclusion: Only fresh Air possible: Yes

Minimise or avoid the circulation from Cabin to Cockpit:

⇒ Avoid: No

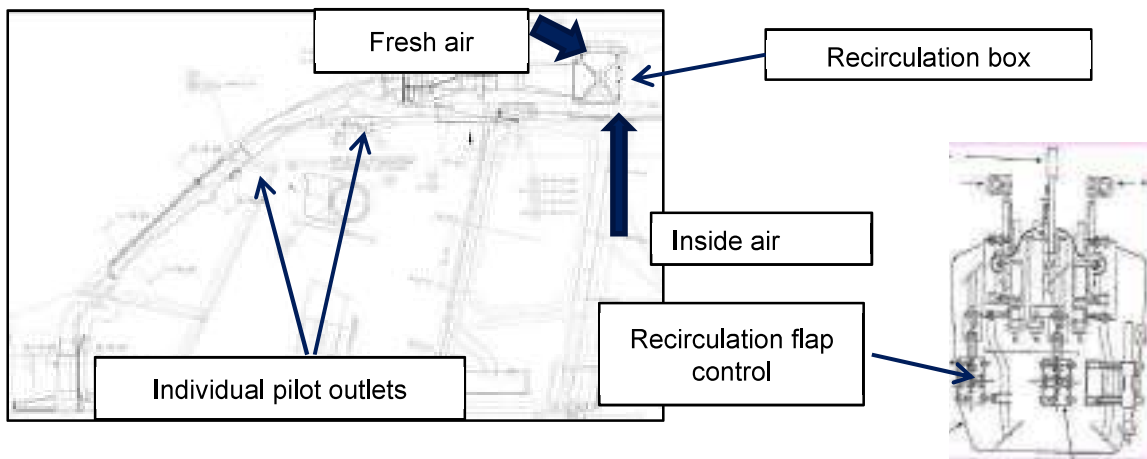
⇒ Minimise: Close the outlet in cabin area to reduce air circulation between cabin area and cockpit area.

### 8.3 – EC155 with air conditioning system

#### ❖ Air-Distribution principle

The system can operate in two modes: Recirculation or Fresh Air

A fan ensures the air distribution in the two areas



Cockpit:

⇒ Conclusion: Only fresh Air possible ? : Yes (with the recirculation box in mode "fresh air")

Cabin:

⇒ Conclusion: Only fresh Air possible: Yes (with the recirculation box in mode "fresh air")

Minimise or avoid the circulation from Cabin to Cockpit:

⇒ Avoid: No

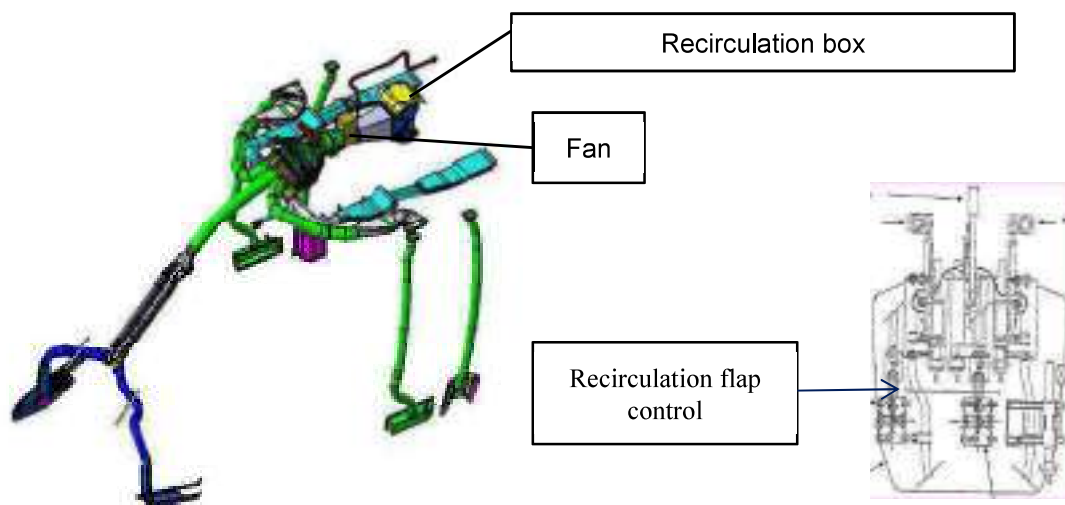
⇒ Minimise: Put the system in fresh air mode. Close the outlet in cabin area to reduce air circulation between cabin area and cockpit area.

### 8-4 – EC155 without air-conditioning system

#### ❖ Air-Distribution principle

The system can operate in two modes: Recirculation or Fresh Air

A fan ensures the air distribution in the two areas



#### Cockpit:

⇒ Conclusion: Only fresh Air possible ? : Yes (with the recirculation box in mode "fresh air")

#### Cabin:

⇒ Conclusion: Only fresh Air possible ? : Yes (with the recirculation box in mode "fresh air")

#### Minimise or avoid the circulation from Cabin to Cockpit:

⇒ Avoid: No

⇒ Minimise: Put the system in fresh air mode. Close the outlet in cabin area to reduce air circulation between cabin area and cockpit area.