

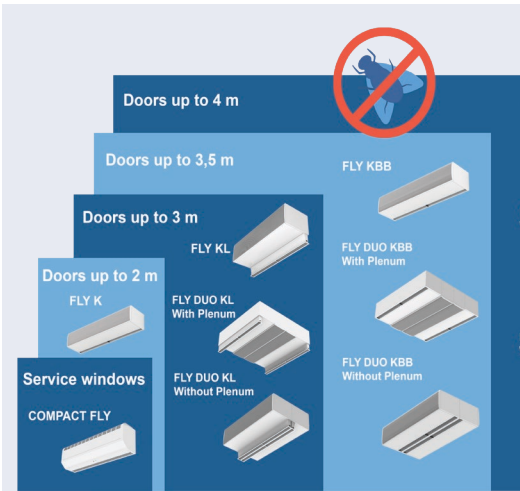
INSECT CONTROL AIR CURTAINS

Catalogue



INTRODUCTION

| | |
|---------------------|---|
| The insects problem | 3 |
| Case study | 4 |



INSECT CONTROL

| | |
|-------------------------|---|
| Airtècnics air curtains | 5 |
| Selection criteria | 6 |



AIR CURTAINS

| | |
|----------------|----|
| COMPACT FLY | 7 |
| FLY K | 8 |
| FLY KBB | 9 |
| FLY KL-KXL | 10 |
| FLY DUO SYSTEM | 11 |



CONTROL / ACCESSORIES

| | |
|---------------------|----|
| Advanced regulation | 16 |
| Accessories | 18 |

The insects problem

Pest control in food business, whether in the food industry, warehouses or establishments selling packaged or table-top food products, is of great importance.

Insects can contaminate any of the facilities where food is processed and stored. When in contact with food products, they can transmit diseases known as "vector-borne", which accounts for more than 17% of infectious diseases globally. Catering businesses can attract insects such as flies or mosquitoes since their raw material is organic. This is not only annoying but can also mean a public health problem and the consequent fines. How can we combat this problem successfully?

The least invasive way to prevent insect infestation is to restrict their access to buildings with air curtains, rather than eliminating them with electronic devices, traps or pesticides, which can be harmful to humans and the Earth.

Airtècnics offers a complete range of high-performance air curtains to minimize the entrance of flies or other flying insects in establishments, hospitals, factories or clean areas.



Restaurants and food establishments



Industry



Farming



Health sector

More than 100 successful clients have solved the problem of insects entry with Airtècnics air curtains:



Case study

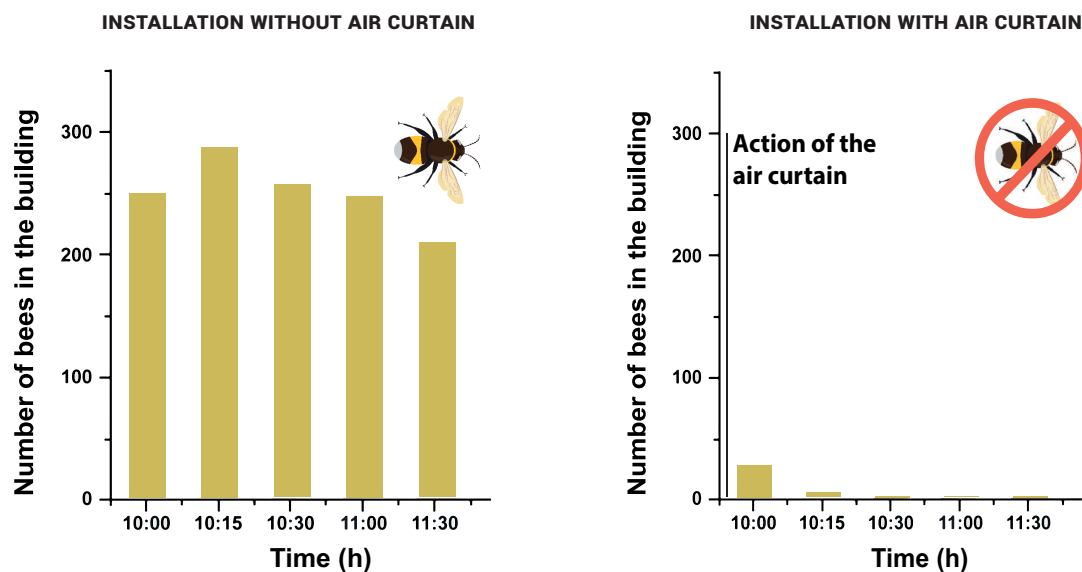
Effectiveness of an air curtain as an insect barrier by taking the honey bee as a model insect

Scope

Test the possible deterrent effect of an air curtain against strong flying insects using the honey bee as a model insect to measure the effectiveness of air curtains against insects.

Procedure

A 7500 worker bees are placed in a tunnel (8 m × 20 m) covered by an insect-proof net. The tunnel is connected to a building by a corridor, also covered by the net, through which the bees have access to a building where there is a food source. An air curtain is introduced between the food source and the colony. The bees that enter the chamber with the food at different times with and without an air curtain activated are measured in order to make a comparison between both results. The velocity of the air flow produced by the curtain at a height of 91 cm from the ground is measured as a reference value to compare the anti-insect effectiveness of the air curtain against different airflow velocities.



Results

The results show that an airflow velocity of 7.25m/s prevents insects from entering a building. This study demonstrates that air curtains with a high jet speed according to NSF-37 have an efficacy against insects up to 99.9%.

An air curtain can prevent a strong flyer, such as the honey bee, from entering buildings. The results suggest that air curtains might also be efficient against other strong flyers that acquire kinetic energies below or near that of the honey bee. Thus, air curtains may represent a preventive approach for limiting the infestation of buildings by flying insects and thereby decrease the health impacts of vector-borne and food-borne diseases.

Bibliography

Authors of the article: The study was carried out by Guillaume Kairo, Maryline Pioz, Sylvie Tchamitchian, Michel Pelissier, Jean-Luc Brunet and Luc P Belzunces in INRA, Laboratoire de Toxicologie Environnementale, UR 406 Abeilles & Environnement, Avignon, France. Published online in Wiley Online Library: 22 July 2018. Source - bibliography Guillaume Kairo, Maryline Pioz, Sylvie Tchamitchian, Michel Pelissier, Jean-Luc Brunet and Luc P Belzunces. (2018). Efficiency of an air curtain as an anti-insect barrier: the honeybee as a model insect. Wiley Online Library. Society of Chemical Industry. Pest Manag Sci 2018; 74 2707-2715. DOI 10.1002/ps.5090.

INSECT CONTROL AIR CURTAINS



Airtècnics Air Curtains

The new range of Airtècnics insect control air curtains FLY is composed of 5 models and all them comply with the requirements of the American NSF / ANSI Standard 37 "Air curtains for Entrance ways in Food and Food Services Establishments" guideline of the Federal Department of Agriculture and Pharmaceutical that regulates the use of air curtains to avoid the entrance of insects in buildings dedicated to food handling.

According to **NSF/ANSI 37-2012**, the minimum performance depending on the type of door is:



In **service windows**:

The air jet must have a minimum velocity of 3,05 m/s at 1/3 distance from the vertical opening above the base of the service window.

At **service doors**:

The air jet must have a minimum velocity of 8,1 m/s at 0,91 metres above the floor.

At **customer entrances**:

the air jet minimum velocity at 0,91 metres from the floor must be 3,05 m/s.



FLY KL / KBB / KXL

High power and efficiency models recommended for service doors up to 3/3,5/4 meters high.



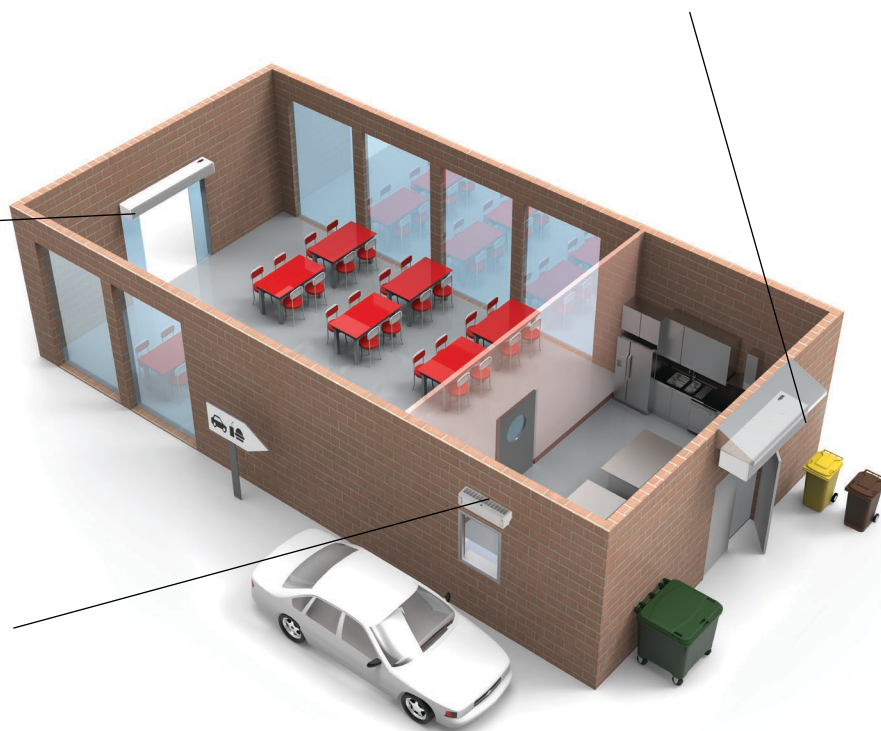
FLY K

Compact and sleek design for clients doors up to 2 metres high.



COMPACT FLY

Recommended to reduce the passage of insects in service windows or small openings.



WATCH VIDEO

INSECT CONTROL AIR CURTAINS

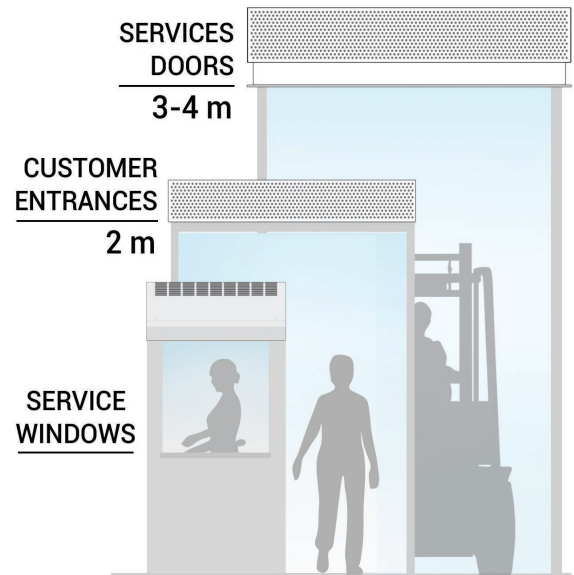


Selection criteria

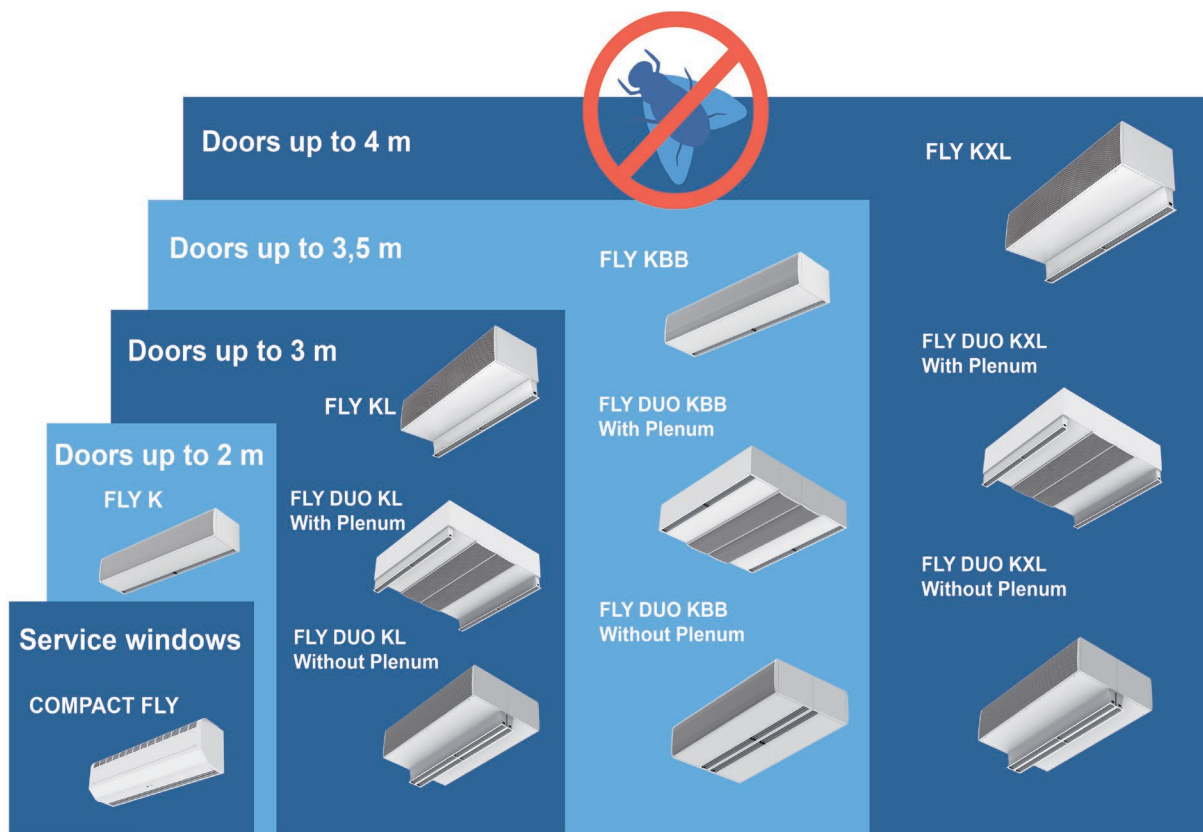
Standard air curtains designed for climate control are not suitable for insects control because a higher air velocity air stream across an opening is required.

Other requirements to protect properly the entrance of insects are:

- It is required an air curtain with adjustable outlet vanes that can angle the air stream away from the area to be protected. An angle of about 15° from the vertical is usually optimal.
- Cover the entire doorway and even slightly surpass it so that there are no gaps for the insects to enter.
- Automatic activation of the air curtain when the door is opened.
- In case of odours that may attract insects, it is recommended to install the air curtains outdoors to prevent the air stream from containing these odours.



The following picture shows all available models and its maximum installation height:





Technical Features



RAL 9016
standard



Other colors
on request



Range
Up to 3,5 m



Airflow
1150 - 1725 m³/h



Fans
**EC Double Inlet
Centrifugal**



Heating types
A (without heating)



Heating capacity
-



Casing
**Galvanised Steel
Self-Supporting**



Grille type
Slotted



Outlet vanes
**Airfoil type
Adjustable 0-15° each side**



Control
**Inbuild LED keypad with
IR remote control**

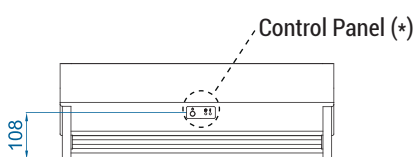
COMPACT FLY is the most compact model from the insect control air curtains range. It has been specially designed to prevent flying insects from entering drive-thru windows, food shops, toll booths or kiosks.

It incorporates two stages of ventilation, depending on the speed: Comfort Mode, with a softer jet, and Insect Mode, with a more powerful jet.

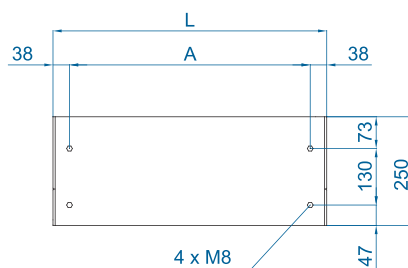
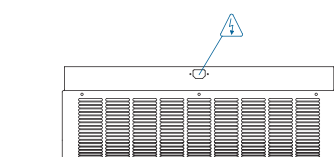
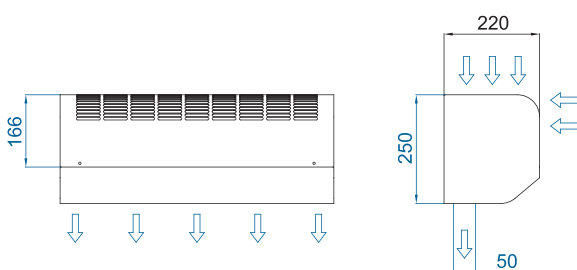
 AIR ONLY

| Model | Airflow m³/h | Power Fans 230V-50/60Hz W | Current Fans 230V-50/60Hz A | Noise Level (5 m) dB(A) | Weight kg |
|-------------------|-----------------|------------------------------------|--------------------------------------|----------------------------------|--------------|
| COMPACT FLY 600 A | 1150 | 318 | 1,43 | 51/67 | 13 |
| COMPACT FLY 900 A | 1725 | 478 | 2,15 | 52/68 | 18,5 |

Dimensions

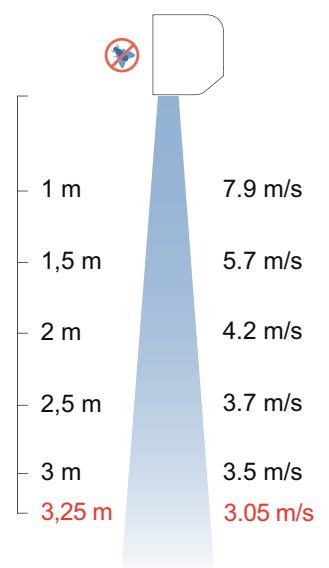


| | L | A |
|-----------------|-----|-----|
| COMPACT FLY 600 | 630 | 554 |
| COMPACT FLY 900 | 930 | 854 |



(*) Manual regulation
using inbuild keypad
or by infrared remote
control.

INSECTS
COMFORT
OFF



According to standard NSF-37-2012, in service windows must be an air jet at **3,05m/s** of 200mm width at 1/3 of the window counter top.



Technical Features



RAL 9016
standard



Stainless
steel



Other colors
on request



Range
Up to 2 m



Airflow
2700 - 7200 m³/h



Fans
**EC Double Inlet
Centrifugal**



Heating types
A (without heating)



Heating capacity
-



Casing
**Galvanised Steel
Self-Supporting**



Grille type
Perforated Ø5



Outlet vanes
**Airfoil type
Adjustable 0-15° each side**



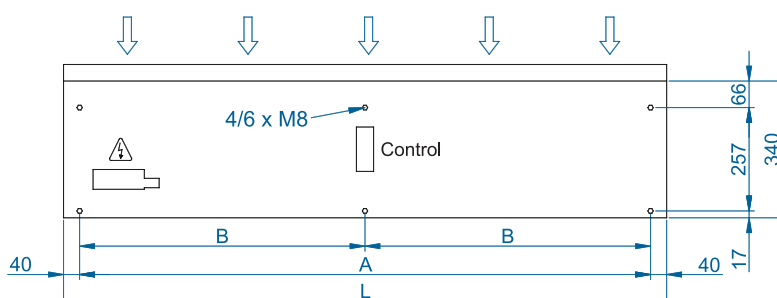
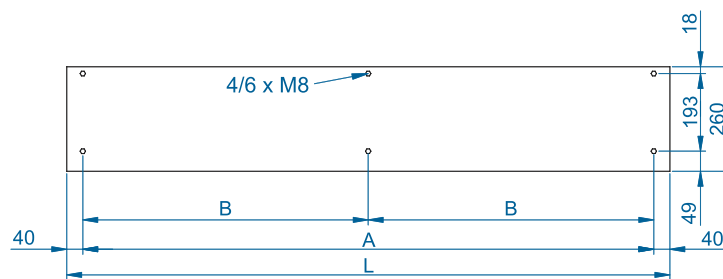
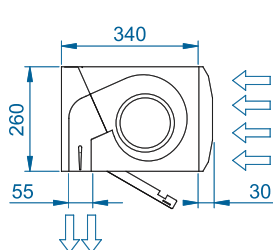
Control
**Plug&Play Hand Auto Control
(Optional Clever Control)**

FLY K air curtain generates a high velocity air jet that minimizes the entrance of insects in buildings through openings up to 2 meters, with very low consumption efficiency fans. Specially designed for insects control at entranceways such as food establishments and industry, hospitals or clean zones.

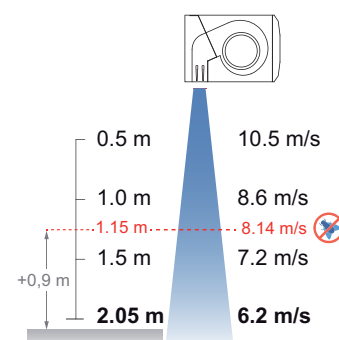
AIR ONLY

| Model | Airflow m³/h | Power Fans 230V-50/60Hz kW | Current Fans 230V-50/60Hz A | Noise Level (5 m) dB(A) | Weight kg |
|--------------|-----------------|----------------------------------|-----------------------------------|-------------------------------|--------------|
| FLY K 1000 A | 2700 | 0,213 | 1,86 | 61 | 37 |
| FLY K 1500 A | 3600 | 0,284 | 2,48 | 62 | 56 |
| FLY K 2000 A | 5400 | 0,426 | 3,72 | 63 | 71 |
| FLY K 2500 A | 6300 | 0,497 | 4,34 | 64 | 78 |
| FLY K 3000 A | 7200 | 0,568 | 4,96 | 65 | 86 |

Dimensions



| L | A | B |
|------|------|------|
| 1000 | 920 | - |
| 1500 | 1420 | 710 |
| 2000 | 1920 | 960 |
| 2500 | 2420 | 1210 |
| 3000 | 2920 | 1460 |



According to standard NSF-37-2012, the maximum installation height is the speed profile point at 8,14m/s plus 0,9m.
So FLY K can be used until 1,15m+0,9m=2,05m.



Technical Features



RAL 9016
standard



Stainless
steel



Other colors
on request



Range
Up to 3.5 m



Airflow
3900 - 10400 m³/h



Fans
EC Double Inlet
Centrifugal



Heating types
A (without heating)



Heating capacity
-



Casing
Galvanised Steel
Self-Supporting



Grille type
Perforated Ø5



Outlet vanes
Airfoil type
Adjustable 0-15° each side



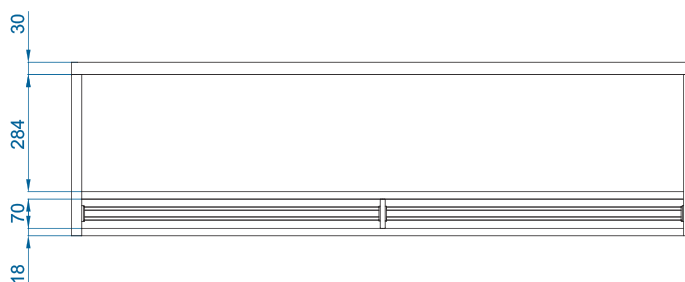
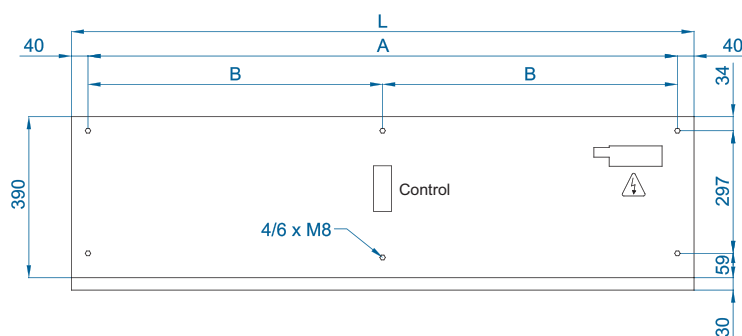
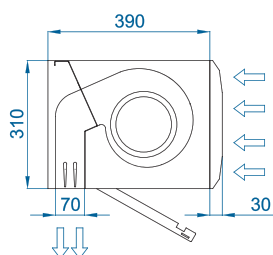
Control
Plug&Play Hand Auto Control
(Optional Clever Control)

Commercial size unit with a power equivalent to an industrial air curtain. FLY KBB combines all the latest innovations and offers very high performance with very low consumption efficiency fans. Recommended to minimize the passage of insects in doors up to 3.5 meters high.

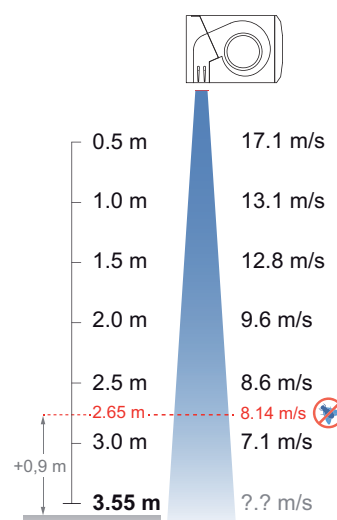
AIR ONLY

| Model | Airflow m ³ /h | Power Fans 230V-50/60Hz kW | Current Fans 230V-50/60Hz A | Noise Level (5 m) dB(A) | Weight kg |
|----------------|------------------------------|-------------------------------------|--------------------------------------|----------------------------------|--------------|
| FLY KBB 1000 A | 3900 | 0,921 | 4,08 | 67 | 38 |
| FLY KBB 1500 A | 5200 | 1,228 | 5,44 | 67,5 | 62 |
| FLY KBB 2000 A | 7800 | 1,842 | 8,16 | 68 | 77 |
| FLY KBB 2500 A | 9100 | 2,149 | 9,52 | 68,5 | 93 |
| FLY KBB 3000 A | 10400 | 2,456 | 10,88 | 69 | 106 |

Dimensions



| L | A | B |
|------|------|------|
| 1000 | 920 | - |
| 1500 | 1420 | 710 |
| 2000 | 1920 | 960 |
| 2500 | 2420 | 1210 |
| 3000 | 2920 | 1460 |



According to standard NSF-37-2012, the maximum installation height is the speed profile point at 8,14m/s plus 0,9m.
So FLY KBB can be used until 2,65m+0,9m=3,55m.



Technical Features



Range
Up to 3 m



Heating types
A (without heating)



Grille type
Perforated Ø10



Airflow
4000 - 12000 m³/h



Heating capacity
-



Outlet vanes
Airfoil type
Adjustable 0-15° each side



Fans
Double Inlet
Centrifugal



Casing
Galvanised Steel
Self-Supporting



Control
Plug&Play Hand Auto Control
(Optional Clever Control)

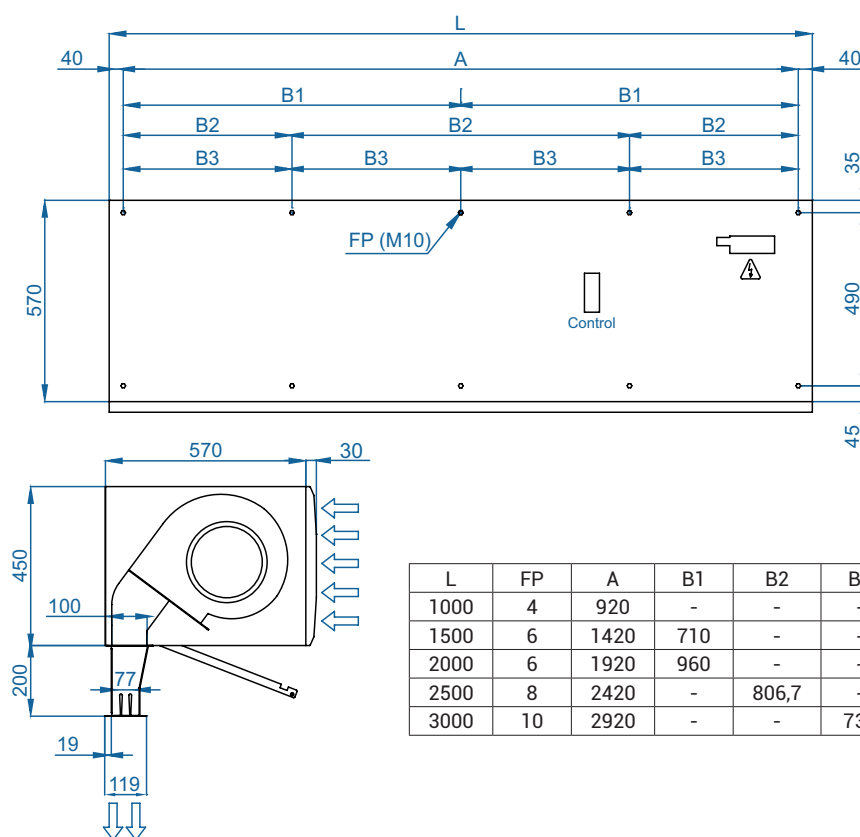
RAL 9016 standard  Stainless steel  Other colors on request 

Robust and versatile insect control air curtain, provided with an extensor outlet kit to optimize the air outlet with the minimum turbulence at maximum speed. FLY KL is recommended to reduce the passage of insects across entrances up to 3 meters high.

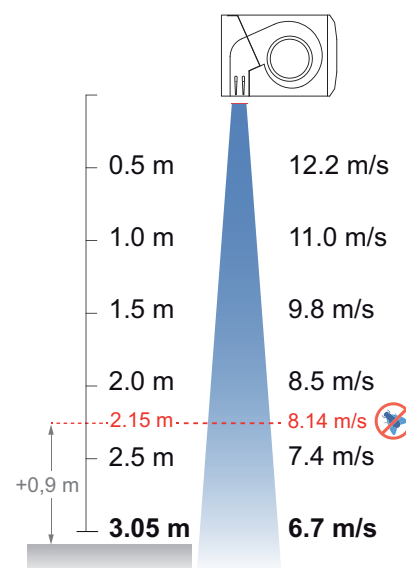
* AIR ONLY

| Model | Airflow m³/h | Power Fans | | Current Fans | | Noise Level (5 m) dB(A) | Weight kg |
|---------------|-----------------|-----------------|-----------------|----------------|----------------|-------------------------------|--------------|
| | | 230V-50Hz kW | 230V-60Hz kW | 230V-50Hz A | 230V-60Hz A | | |
| FLY KL 1000 A | 4000 | 1,04 | 1,37 | 1,04 | 6,15 | 63 | 76 |
| FLY KL 1500 A | 6000 | 1,56 | 2,05 | 1,56 | 9,22 | 64 | 114 |
| FLY KL 2000 A | 8000 | 2,08 | 2,73 | 2,08 | 12,30 | 65 | 153 |
| FLY KL 2500 A | 10000 | 2,60 | 3,41 | 2,60 | 15,37 | 66 | 187 |
| FLY KL 3000 A | 12000 | 3,12 | 4,09 | 13,20 | 18,44 | 67 | 225 |

Dimensions



| L | FP | A | B1 | B2 | B3 |
|------|----|------|-----|-------|-----|
| 1000 | 4 | 920 | - | - | - |
| 1500 | 6 | 1420 | 710 | - | - |
| 2000 | 6 | 1920 | 960 | - | - |
| 2500 | 8 | 2420 | - | 806,7 | - |
| 3000 | 10 | 2920 | - | - | 730 |



According to standard NSF-37-2012, the maximum installation height is the speed profile point at 8,14m/s plus 0,9m. So FLY KL can be used until 2,15m+0,9m=3,05m.



Technical Features



Range
Up to 4 m



Airflow
5300 - 15900 m³/h



Fans
**Double Inlet
Centrifugal**



Heating types
A (without heating)



Heating capacity
-



Casing
**Galvanised Steel
Self-Supporting**



Grille type
Perforated Ø10



Outlet vanes
**Airfoil type
Adjustable 0-15° each side**



Control
**Plug&Play Hand Auto Control
(Optional Clever Control)**

RAL 9016
standard



Stainless
steel



Other colors
on request

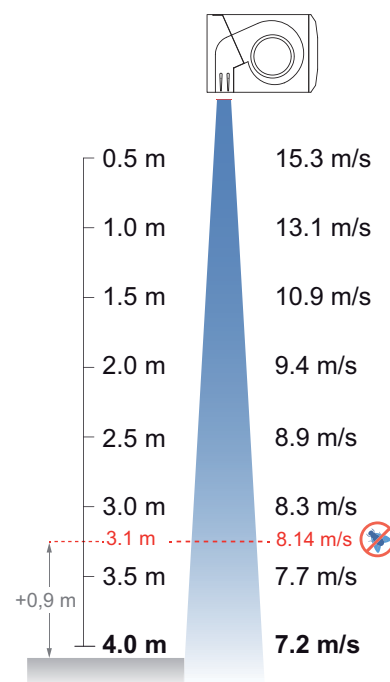
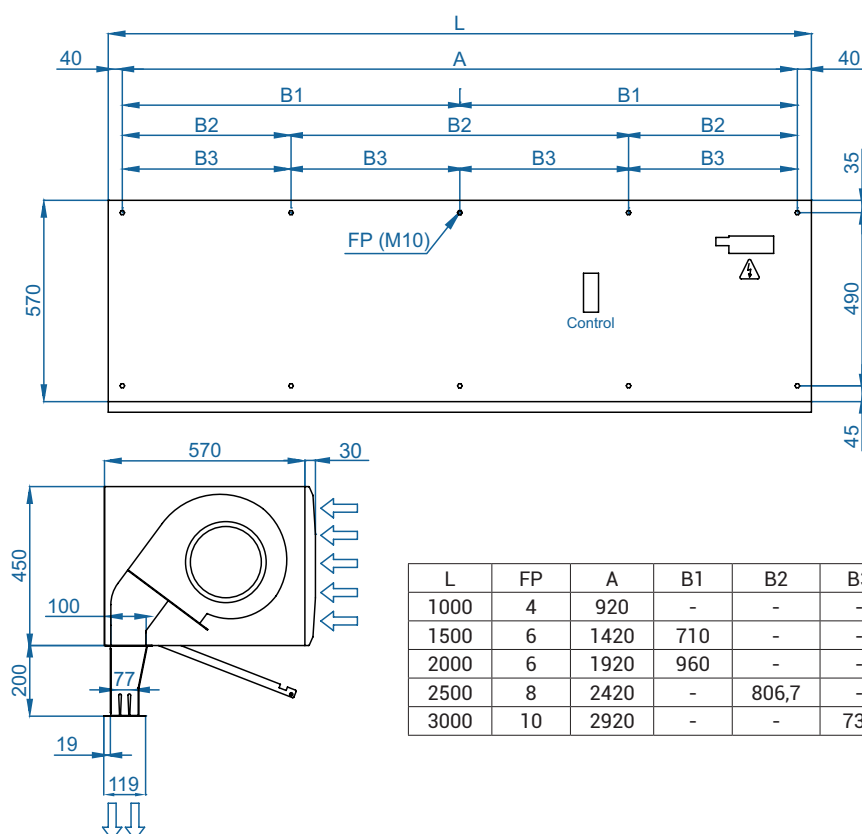


FLY KXL is the most powerful insect repellent industrial air curtain of FLY series, specially designed to prevent the insect passage across entranceways up to 4 meters high. Provided with an extensor outlet kit to optimize the air outlet with the minimum turbulence at maximum speed.

* AIR ONLY

| Model | Airflow m³/h | Power Fans | | Current Fans | | Noise Level (5 m) dB(A) | Weight kg |
|----------------|-----------------|-----------------|-----------------|----------------|----------------|-------------------------------|--------------|
| | | 230V-50Hz kW | 230V-60Hz kW | 230V-50Hz A | 230V-60Hz A | | |
| FLY KXL 1000 A | 5300 | 1,04 | 2,28 | 6,00 | 10,20 | 65 | 82 |
| FLY KXL 1500 A | 7950 | 2,10 | 3,42 | 9,00 | 15,30 | 66 | 123 |
| FLY KXL 2000 A | 10600 | 2,80 | 4,55 | 12,00 | 20,40 | 67 | 165 |
| FLY KXL 2500 A | 13250 | 3,50 | 5,69 | 15,00 | 25,50 | 68 | 202 |
| FLY KXL 3000 A | 15900 | 4,20 | 6,83 | 18,00 | 30,60 | 69 | 243 |

Dimensions



According to standard NSF-37-2012, the maximum installation height is the speed profile point at 8,14m/s plus 0,9m. So FLY KXL can be used until **3,1m+0,9m=4,0m**.

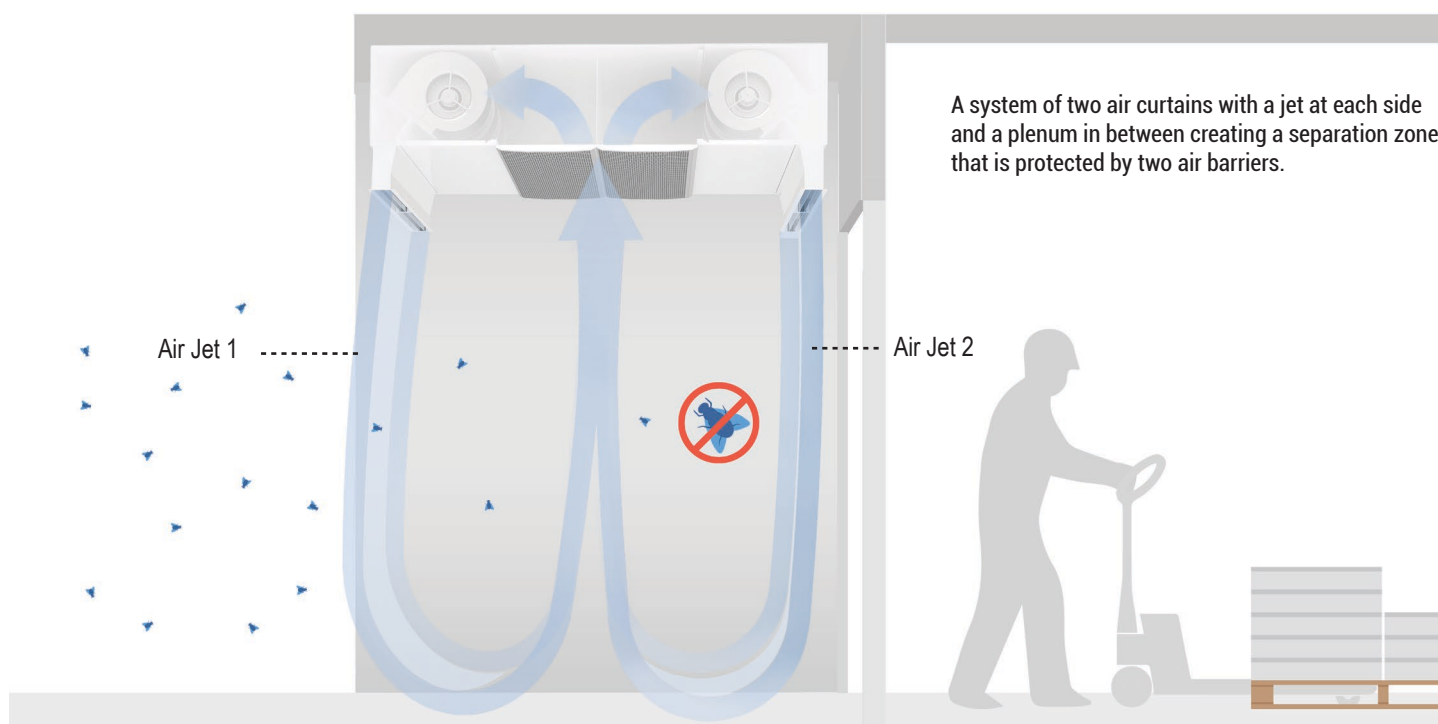
FLY DUO SYSTEM



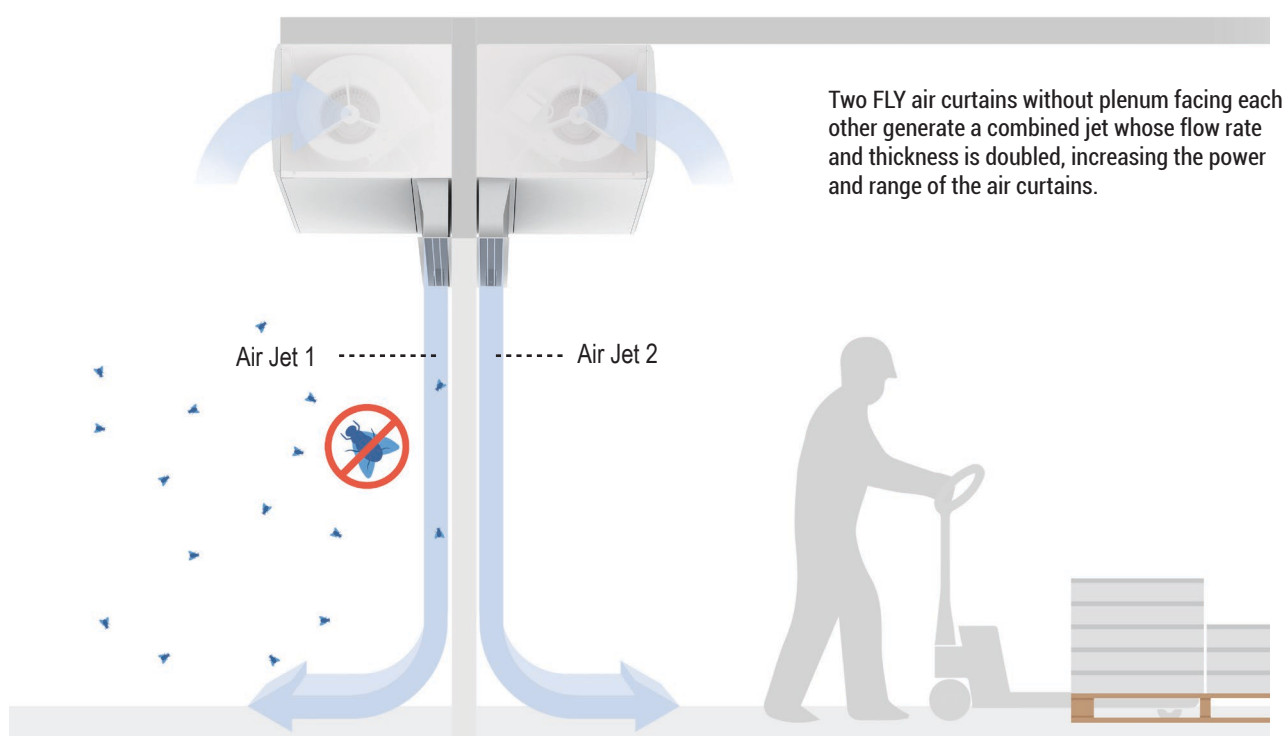
FLY DUO System consists of double protection barrier with two air jets that increases the insect control effect in the most critical installations. This double jet system works as a closed circuit creating a separation zone at the door entrance.

The first air jet fights directly against external insects infiltration. The air jet direction can be adjusted towards outside depending on the conditions of each installation. The second jet collects the possible insects infiltrations, guiding them to the central inlet plenum in order to drive them out.

Fly Duo System with plenum

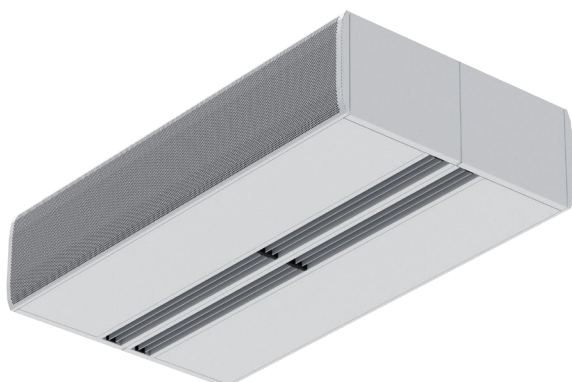


Fly Duo System without plenum





WITHOUT PLENUM



WITHOUT PLENUM



RAL 9016
standard



Stainless
steel



Other colors
on request



Technical Features



Range
Up to 3 m



Heating types ^[1]
A (without heating)



Grille type
Perforated Ø5



Airflow
7800 - 20800 m³/h



Heating capacity
-



Outlet vanes
Airfoil type
Adjustable 0-15° each side



Fans
EC Double Inlet
Centrifugal



Casing
Galvanised Steel
Self-Supporting



Control
Plug&Play Hand Auto Control
(Optional Clever Control)

Specially designed to be installed in places with higher insect and pest control requirements with maximum screening capacity.

System composed by two air curtains to increase the efficiency against insects with very low consumption fans. Two available configurations depending on installation conditions "Without Plenum" or "With Plenum". Side walls to cover from the door to the jets should be provided by others.

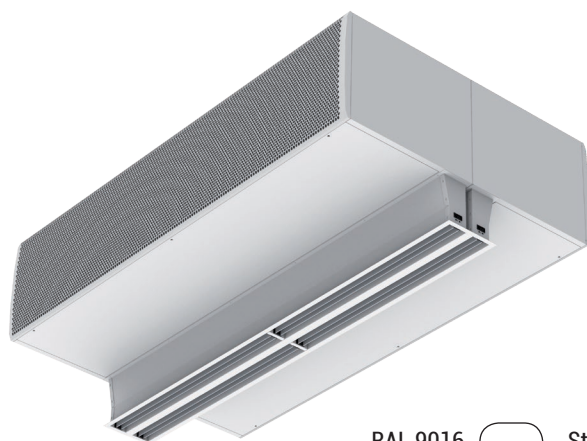
[1] "A" type without heating, air only. On option, for climate separation, the inside air curtain can be "P" type with water heated coil or "E" type with electrical shielded elements, three stages with integrated regulation.

 AIR ONLY

| Model | Airflow m³/h | Power Fans 230V-50/60Hz kW | Current Fans 230V-50/60Hz A | Noise Level (5 m) dB(A) | Weight kg |
|--------------------|-----------------|-------------------------------------|--------------------------------------|----------------------------------|--------------|
| FLY DUO KBB 1000 A | 7.800 | 1,842 | 8,16 | 70 | - |
| FLY DUO KBB 1500 A | 10.400 | 2,456 | 10,88 | 70,5 | - |
| FLY DUO KBB 2000 A | 15.600 | 3,684 | 16,32 | 71 | - |
| FLY DUO KBB 2500 A | 18.200 | 4,298 | 19,04 | 71,5 | - |
| FLY DUO KBB 3000 A | 20.800 | 4,912 | 21,76 | 72 | - |



WITHOUT PLENUM



WITHOUT PLENUM



RAL 9016
standard



Stainless
steel



Other colors
on request



Technical Features



Range
Up to 3 m



Heating types^[1]
A (without heating)



Grille type
Perforated Ø10



Airflow
8000 - 31800 m³/h



Heating capacity
-



Outlet vanes
Airfoil type
Adjustable 0-15° each side



Fans
Double Inlet
Centrifugal



Casing
Galvanised Steel
Self-Supporting



Control
Plug&Play Hand Auto Control
(Optional Clever Control)

Specially designed to be installed in places with higher insect and pest control requirements with maximum screening capacity.

System composed by two air curtains to increase the efficiency against insects with very low consumption fans. Two available configurations depending on installation conditions "Without Plenum" or "With Plenum". Side walls to cover from the door to the jets should be provided by others.

[1] "A" type without heating, air only. On option, for climate separation, the inside air curtain can be "P" type with water heated coil or "E" type with electrical shielded elements, three stages with integrated regulation.

AIR ONLY

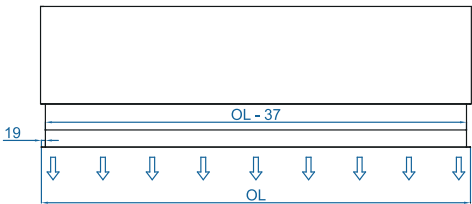
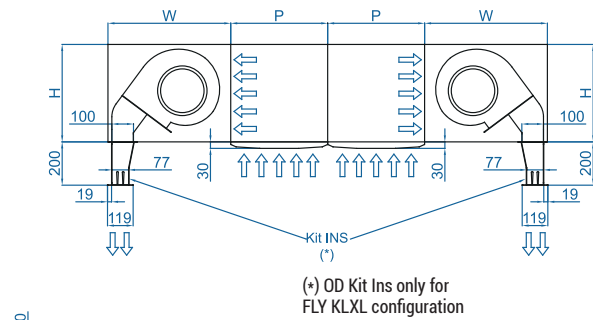
| Model | Airflow m ³ /h | Power Fans | | Current Fans | | Noise Level (5 m) dB(A) | Weight kg |
|-----------------|------------------------------|-----------------|-----------------|----------------|----------------|-------------------------------|--------------|
| | | 230V-50Hz kW | 230V-60Hz kW | 230V-50Hz A | 230V-60Hz A | | |
| FLY DUO KL 1000 | 8.000 | 2,08 | 2,74 | 8,8 | 12,30 | 66 | - |
| FLY DUO KL 1500 | 12.000 | 3,12 | 4,10 | 13,2 | 18,44 | 67 | - |
| FLY DUO KL 2000 | 16.000 | 4,16 | 5,46 | 17,6 | 24,60 | 68 | - |
| FLY DUO KL 2500 | 20.000 | 5,20 | 6,82 | 22,0 | 30,74 | 69 | - |
| FLY DUO KL 3000 | 24.000 | 6,24 | 8,18 | 26,4 | 36,88 | 70 | - |

AIR ONLY

| Model | Airflow m ³ /h | Power Fans | | Current Fans | | Noise Level (5 m) dB(A) | Weight kg |
|-------------|------------------------------|-----------------|-----------------|----------------|----------------|-------------------------------|--------------|
| | | 230V-50Hz kW | 230V-60Hz kW | 230V-50Hz A | 230V-60Hz A | | |
| FLY DUO KXL | 10.600 | 2,8 | 4,56 | 12,0 | 20,40 | 68 | - |
| FLY DUO KXL | 15.900 | 4,2 | 6,84 | 18,0 | 30,60 | 69 | - |
| FLY DUO KXL | 21.200 | 5,6 | 9,10 | 24,0 | 40,80 | 70 | - |
| FLY DUO KXL | 26.500 | 7,0 | 11,38 | 30,0 | 51,00 | 71 | - |
| FLY DUO KXL | 31.800 | 8,4 | 13,66 | 36,0 | 61,20 | 72 | - |



FLY DUO System With Plenum

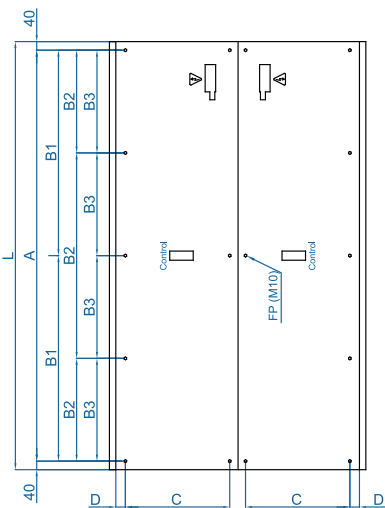
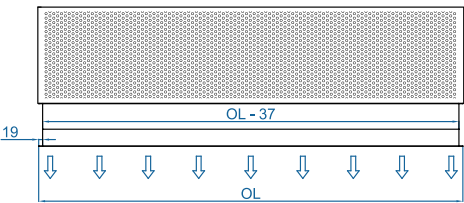
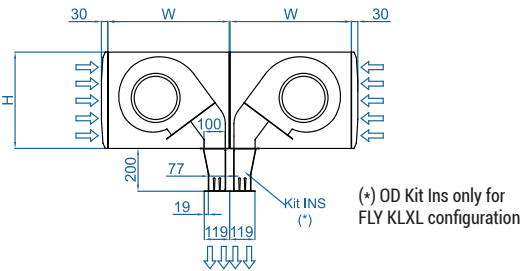


| FLY Duo K - Plenum | | | | | | | | | | | |
|--------------------|-----|-----|-----|----|------|------|-----|----|----|-----|------|
| L | H | W | P | FP | A | B1 | C | D | E | F | OL |
| 1000 | 260 | 340 | 260 | 4 | 920 | - | 257 | 17 | 40 | 305 | 998 |
| 1500 | | | | 6 | 1420 | 710 | | | | | 1498 |
| 2000 | | | | 6 | 1920 | 960 | | | | | 1998 |
| 2500 | | | | 8 | 2420 | 1210 | | | | | 2498 |
| 3000 | | | | 10 | 2920 | 1460 | | | | | 2998 |

| FLY Duo KBB - Plenum | | | | | | | | | | | |
|----------------------|-----|-----|-----|----|------|------|-----|----|----|-----|------|
| L | H | W | P | FP | A | B1 | C | D | E | F | OL |
| 1000 | 310 | 390 | 310 | 4 | 920 | - | 297 | 34 | 40 | 349 | 998 |
| 1500 | | | | 6 | 1420 | 710 | | | | | 1498 |
| 2000 | | | | 6 | 1920 | 960 | | | | | 1998 |
| 2500 | | | | 8 | 2420 | 1210 | | | | | 2498 |
| 3000 | | | | 10 | 2920 | 1460 | | | | | 2998 |

| FLY Duo KLXL + Kit INS - Plenum | | | | | | | | | | | | | |
|---------------------------------|-----|-----|-----|----|------|-----|-------|-----|-----|----|----|-----|------|
| L | H | W | P | FP | A | B1 | B2 | B3 | C | D | E | F | OL |
| 1000 | 450 | 570 | 450 | 4 | 920 | - | - | - | 490 | 35 | 40 | 475 | 998 |
| 1500 | | | | 6 | 1420 | 710 | - | - | | | | | 1498 |
| 2000 | | | | 6 | 1920 | 960 | - | - | | | | | 1998 |
| 2500 | | | | 8 | 2420 | - | 806,7 | - | | | | | 2498 |
| 3000 | | | | 10 | 2920 | - | - | 730 | | | | | 2998 |

FLY DUO System Without Plenum



| FLY Duo K | | | | | | | | | | | |
|-----------|-----|-----|----|------|------|-----|----|------|--|--|--|
| L | H | W | FP | A | B1 | C | D | OL | | | |
| 1000 | 260 | 340 | 4 | 920 | - | 257 | 66 | 998 | | | |
| 1500 | | | 6 | 1420 | 710 | | | 1498 | | | |
| 2000 | | | 6 | 1920 | 960 | | | 1998 | | | |
| 2500 | | | 8 | 2420 | 1210 | | | 2498 | | | |
| 3000 | | | 10 | 2920 | 1460 | | | 2998 | | | |

| FLY Duo KBB | | | | | | | | | | | |
|-------------|-----|-----|----|------|------|-----|----|------|--|--|--|
| L | H | W | FP | A | B1 | C | D | OL | | | |
| 1000 | 310 | 390 | 4 | 920 | - | 297 | 59 | 998 | | | |
| 1500 | | | 6 | 1420 | 710 | | | 1498 | | | |
| 2000 | | | 6 | 1920 | 960 | | | 1998 | | | |
| 2500 | | | 8 | 2420 | 1210 | | | 2498 | | | |
| 3000 | | | 10 | 2920 | 1460 | | | 2998 | | | |

| FLY Duo KLXL + Kit INS - Plenum | | | | | | | | | | | |
|---------------------------------|-----|-----|----|------|-----|-------|-----|-----|----|------|--|
| L | H | W | FP | A | B1 | B2 | B3 | C | D | OL | |
| 1000 | 450 | 570 | 4 | 920 | - | - | - | 490 | 35 | 998 | |
| 1500 | | | 6 | 1420 | 710 | - | - | | | 1498 | |
| 2000 | | | 6 | 1920 | 960 | - | - | | | 1998 | |
| 2500 | | | 8 | 2420 | - | 806,7 | - | | | 2498 | |
| 3000 | | | 10 | 2920 | - | - | 730 | | | 2998 | |

Advanced regulation

Air curtains regulation is essential to reduce energy consumption substantially.

Our latest technology control system allows to manage the operation of the air curtains automatically according to each situation, maintaining indoors comfort with maximum energy savings.

Clever control automatically adapts the functioning of the air curtain to the entrance conditions, maintaining comfort while saving energy. It optimizes the ventilation and heating to make an efficient barrier for an optimal climate separation.



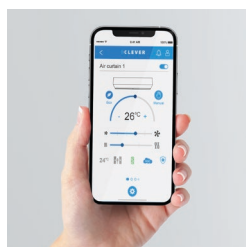
INTELLIGENT
PROACTIVE
REGULATION



It includes manual or automatic functioning with many different programs depending on heating type and installed temperature sensors. Special program for insect control.



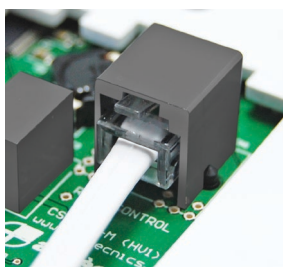
**Basic and
advanced
modes**



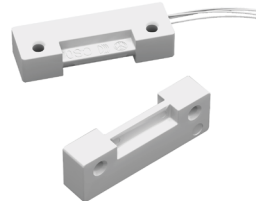
Conectivity
Modbus BMS
and control
via APP



**Easy
Plug & Play
installation**



Regulation
with **valves**:
thermostatic,
solenoid,
modulating



Ambient
thermostat
and external
temperature
sensors

Airtècnics can produce units with special requirements under request.

- External alarm signals: unit working, heating ON, airflow switch, dirty grille, electronic overheating signal, fans overheating thermo contact TK, electrical heating blocked, etc.
- Water or steam coils for higher temperatures or different power than standard.
- Special heating elements at desired power and power supply.
- Dummies (empty air curtains) to combine with working units.
- Industrial air curtains with ATEX fans.

Clever Control features:



USER FRIENDLY DESIGN

Multilanguage and easy icons for fully understanding. Main state screen: ventilation speed, heating, temperatures, door state, working mode and program, filter state, day/hour, timer, etc. 3 different menu configurations depending on who is managing the equipment.



FILTER ALARM

Indicates when filter needs replacing/cleaning. 2 options: by "Timer" of functioning hours or by "Pressure Sensor" switch.



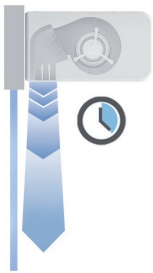
CLEAN
FILTER



DIRTY
FILTER



REPLACE
FILTER



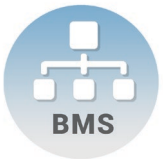
ADAPTIVE DOOR DELAY

Air curtain delay: when the door closes, the air curtain remains working at door open conditions for certain time to be ready if it opens again. The door remains closed until the air curtain achieve the nominal speed to protect against insects.



TIMER

To turn ON or OFF automatically the unit depending on each different day of the week or predefined groups of days. User can select between Day or Night modes with 2 different Set temperatures.



COMPATIBLE

BMS communication with Modbus RTU protocol or using digital and analogical IN/OUT to control or monitor directly the unit. Modbus TCP/Bluetooth optional modules. PC Windows program (RS485).



ENERGY SAVING

3 grades of comfort and energy efficiency.



ECO
MODE



MEDIUM
MODE



COMFORT
MODE



FULLY PROGRAMMABLE

All parameters can be configured at Basic or Advanced menu. Lots of extra functions to fulfill all clients applications. Editable device names for easy identification.



MULTI-EQUIPMENT

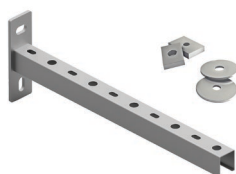
Clever works with different types of units: air curtains, fan heater, AHU, etc. Once programmed, PCB can work by itself without any controller.

Other Characteristics:

- Clever Control is factory adjusted according to the device/s and client requirements.
- Once installed, the system checks automatically all connected units and its temperature sensors.
- Different integrated programs and functions for particular applications.
- Multiple programs depending on installed temperature sensors: inside, outside and air jet.
- Able to regulate by itself the ventilation and heating depending on: door state, temperature sensors, selected working mode, grade of energy saving, program and other parameters.
- Alarms: general, filter state, anti freezing, overheating, fans overheating, airflow, fire, external, heating locked, etc.
- Security control buttons lock option by code.
- Modulating valve for water heated (includes 24VDC power supply).
- Multiple functions: temporized door, excessive temperature of water return, cooling mode and others.

Accessories

Airtècnics offers a wide range of accessories and supports for the installation and fixing of the entire range of air curtains.



Wall rail support



Wall rail support + vertical rail



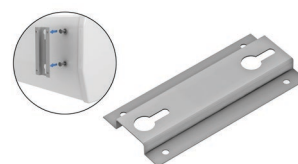
Suspensory cable fastener



Silentblock suspender for rods



Silentblock angle



Wall omega support



Basic control



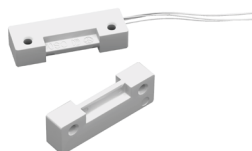
Clever advanced control



Cable RJ45



External temperature sensor



Magetical door contact

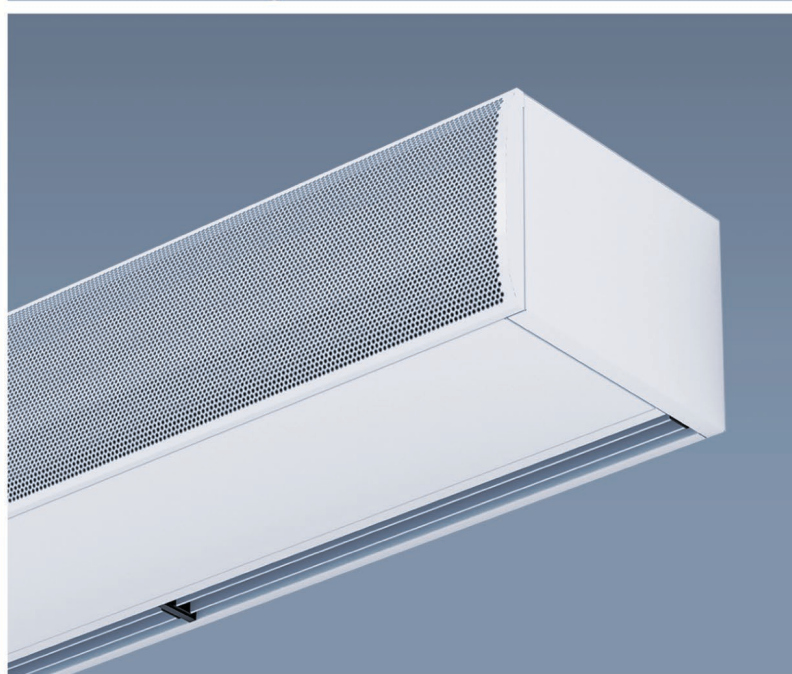
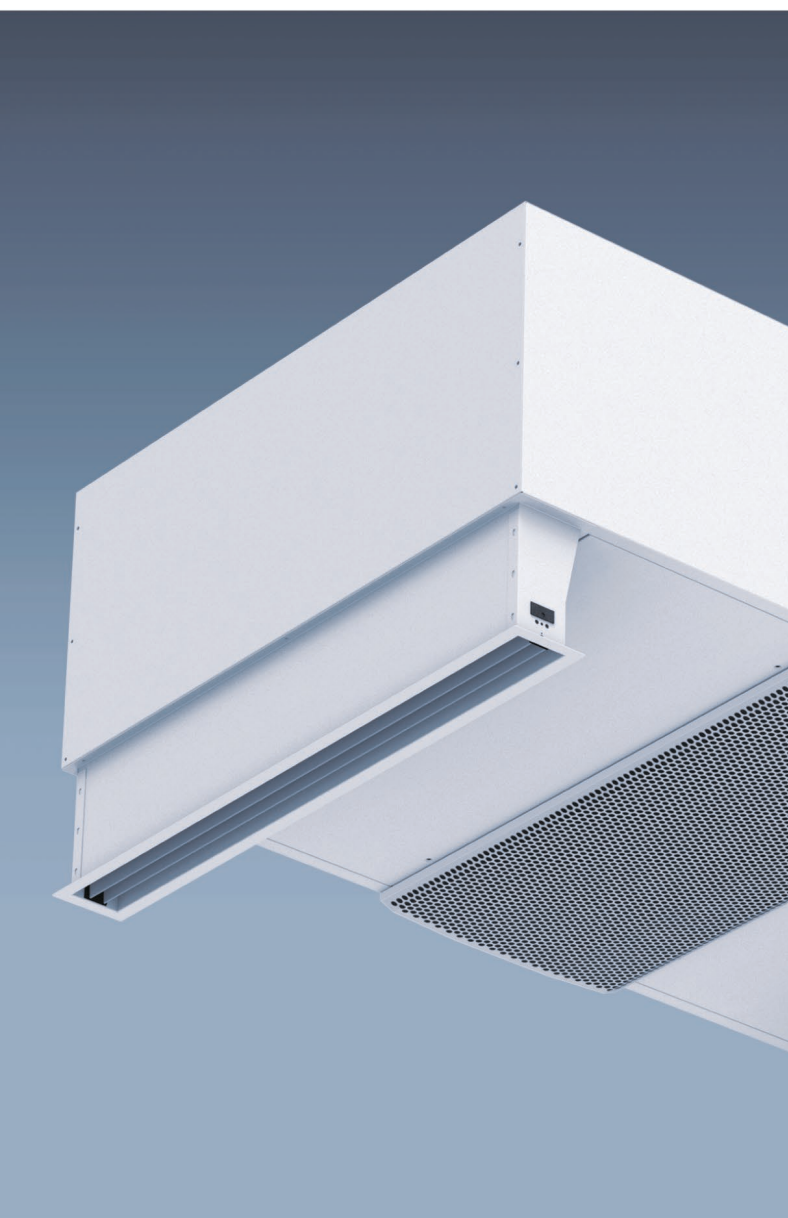


Analogical door contact

Special requirements:

Airtècnics, as an air curtains specialist, can produce units with special requirements under request. Here there are some of the possibilities:

- External alarm signals as: unit working, heating ON, airflow detector, dirty grille sensor, electronic overheating signal, fans overheating thermo contact TK, electrical heating blocked, etc.
- Special water or steam coils for higher temperatures or different power than standard.
- Tailor made electrical heating elements at desired heating power (kW) and electrical power supply (400Vx3 to 230Vx3 or 230Vx1).
- Dummies (empty air curtains) to combine with working units
- Industrial air curtains at 400Vx3 with the same advantages of electronic regulation 5 speed range.
- Industrial MAX/MXW with higher volume (MAX/MXW L).
- Industrial MAX/MXW with explosion proof EX fans.



Conca de Barberà, 6 - Pol. Ind. Pla de la Bruguera
E-08211 Castellar del Vallès (Barcelona) Spain
☎ + 34 93 715 99 88
airtechnics@airtechnics.com

www.airtechnics.com



NOFCAT03601 2023R0 (17/02)
We reserve the right to modify design and specifications without prior notice.

