



## INSTALLATION AND MAINTENANCE MANUAL

# MINIBEL Air Curtain



*Read instructions carefully before attempting installation.  
Deliver this manual to end user.*

### SECURITY ADVISE SYMBOLS



*Attention, Danger, Safety Advice!*



*Danger from electric current or high voltage!*



*Injuries risk!*



*Danger! Do not stay underneath: Heavy load.*

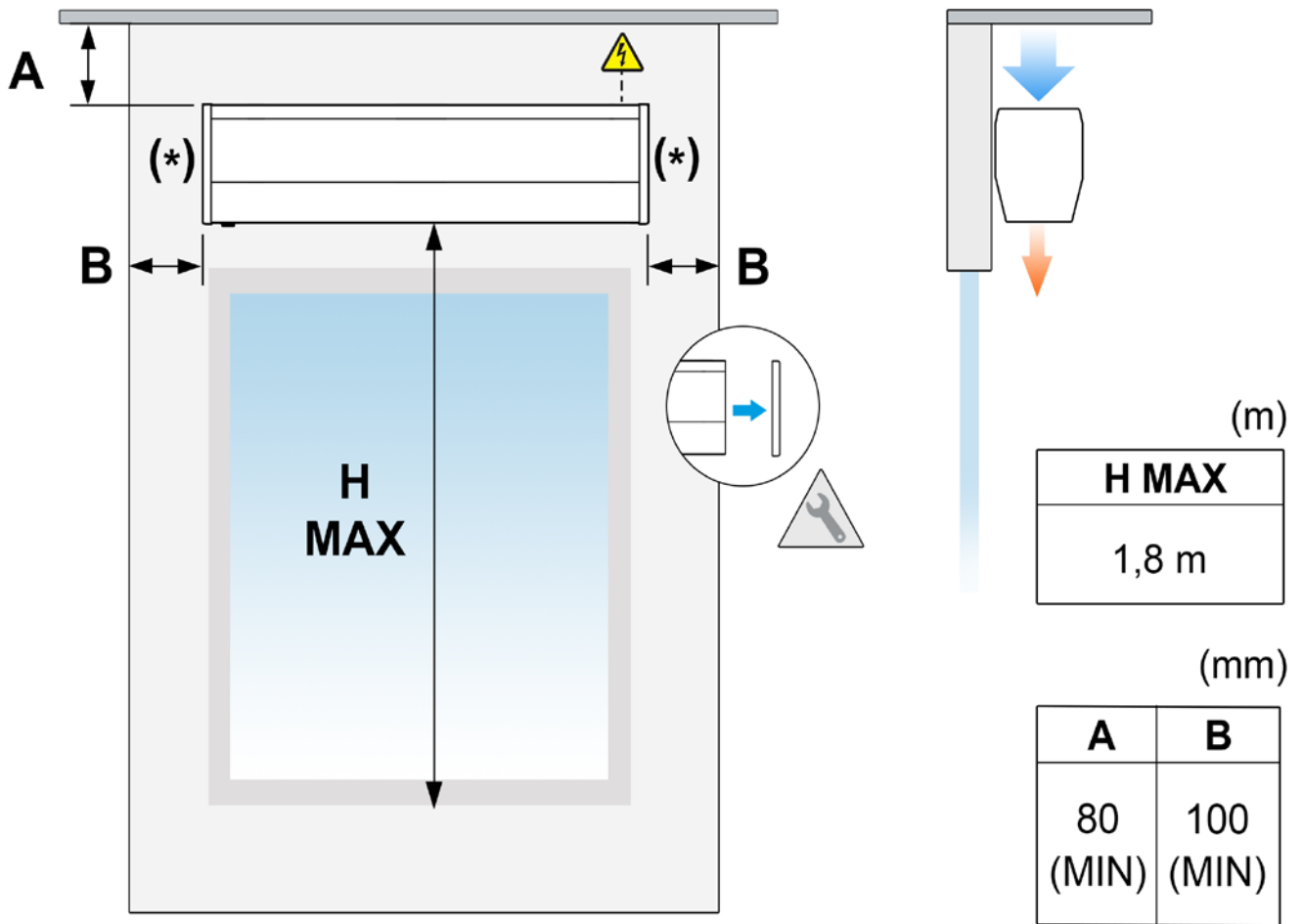


*Important information.*

## INDEX

GENERAL .....	3
RECOMMENDED INSTALLATION CRITERIA.....	4
STORAGE AND TRANSPORT.....	5
Power supply.....	5
Mounting .....	5
Electrical heating.....	5
DATASHEET.....	6
WIRING DIAGRAM .....	7
WORKING INSTRUCTIONS.....	8
MAINTENANCE INSTRUCTIONS .....	8
REPAIRS AND REPLACEMENTS .....	8
Opening the lateral covers .....	9
Fans replacement .....	9
Electrical heater replacement.....	9
DECLARATION OF CONFORMITY.....	10
GUARANTEE .....	11
Air curtain identification .....	11

## GENERAL



(\*) Removable covers.

### **A:**

To make possible the correct air inlet of the air curtain, the minimum recommended distance between the inlet grille and any other object must be at least 80 mm.

### **B:**

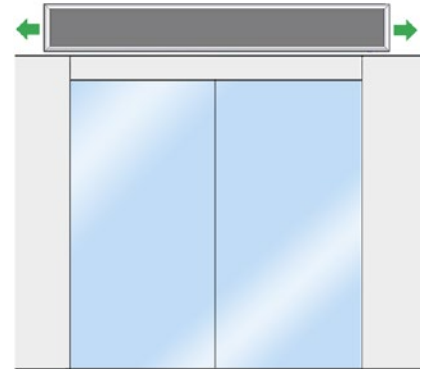
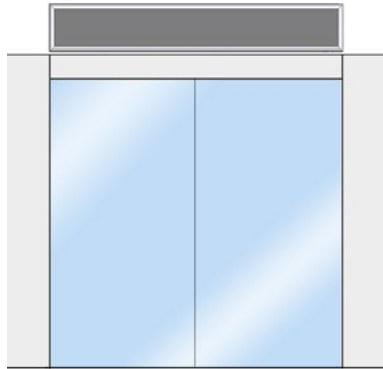
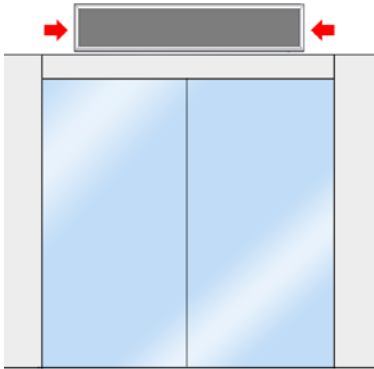
In order to make repairs and take the covers out, the minimum recommended distance between the lateral covers and any other object must be of 100 mm.

### **H MAX:**

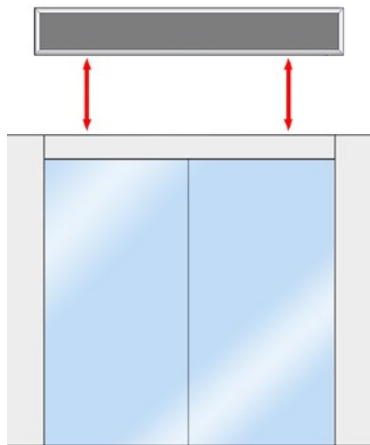
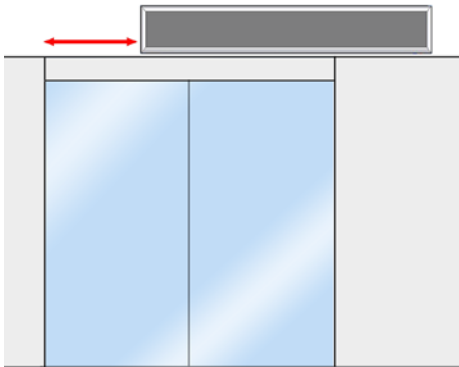
Minibel Air Curtain must be installed to a maximum recommended height of 1,8 m.

## RECOMMENDED INSTALLATION CRITERIA

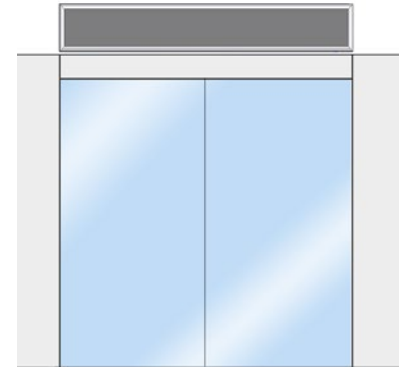
### LENGTH



### CENTERING / HEIGHT

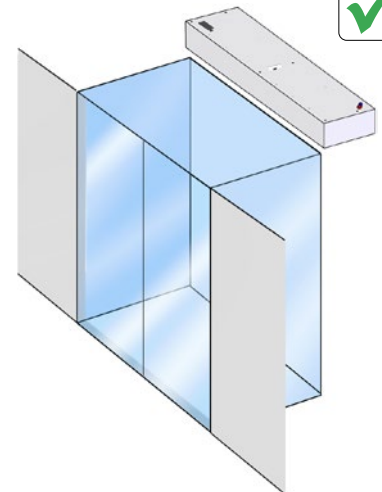
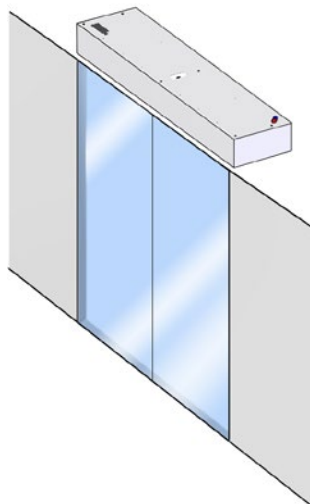
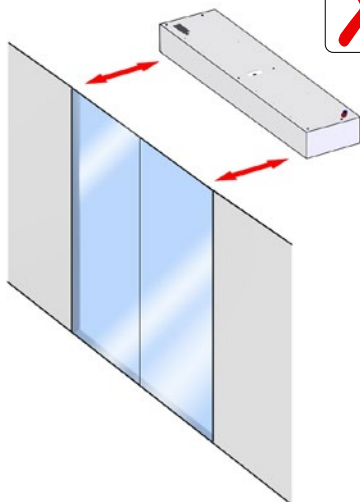


\*



(\* ) Except if designed to be installed at this height

### DISTANCE FROM DOOR





### **Power supply**

Minibel air curtains are supplied with a hose-cable of 1,5m length (without plug), ready to be connected to a connections box. It can be connected to a socket.

### **Mounting**


The air curtain is provided with 8 suspension points: 4 located at the back to be fixed to the wall and 4 on the top to be fixed to the ceiling (see exact situation in the air curtains characteristics page).  
The anchor should be managed according to each unit weight shown on the technical data page.

	<b><i>Installation work, electrical wiring and mechanical maintenance must be done by qualified persons observing these instructions. Each unit should be able to be disconnected according to the applied norms.</i></b>
	<b><i>To connect the air curtain there is no need to open the service door. The power supply connector and all necessary fixations are external.</i></b>

### **Electrical heating**

Air curtains with electrical heating are protected against overheating. If the internal temperature is over 100°C, the heating stops.

## **STORAGE AND TRANSPORT**

	<b><i>Attention! Heavy load. Do not step under hanging load during the transport or assembly.</i></b>
---	---

Store in dry place and protected against the open air in its original packaging. In case the box is open, cover it against dust. Do not put heavy loads or step on over the packed unit and avoid distortion of casing or other damages.

Storage temperatures are between -20°C and +40°C.

When carrying material, make sure it is not damaged by the forklift (fork penetration in the packaging).



## Technical Features



RAL 9016  
standard



Other colors  
on request



Maximum range  
**AC : 1,8 m**  
**EC : 2 m**



Airflow / Length  
**420 - 900 m³/h**  
**0,6 m to 0,9 m**



Fan  
**Compact axial fans**



Heating type  
**E : electrical 1 stage**  
**A : unheated**



Heating capacity  
**E : 2,5 - 3,2 kW**



Control  
**Inbuilt switch for ventilation  
and heating control**



Casing  
**Galvanised steel**



Inlet grille  
**Circular with  
finger guard**



Outlet lamellas  
**Aluminium, airfoil type**

Power supply cable integrated (1,5m length)

MINIBEL air curtain is suitable for installations where the opening of a small door or window is required while maintaining the air conditioning inside. Thus, it is the ideal complement to maintain the temperature in establishments such as kiosks, service windows such as toll booths or fast food, and small sized shops entrances. In addition, you can select the "E" model, which includes heating.

EC models assembled with negligible consumption efficiency fans.

All MINIBEL air curtains are supplied with wall supports.

### ❄ UNHEATED

Model	Airflow m³/h	Ventilation power 230V~50Hz W	Ventilation current 230V~50Hz A	Noise level (5 m) dB(A)	Weight kg
MIN 600 A	420	60	0,52	46	9
MIN 900 A	630	90	0,78	49	12,5
MIN EC 600 A	600	26	0,24	54	9
MIN EC 900 A	900	39	0,36	55	12,5

### ⚡ ELECTRIC HEATED

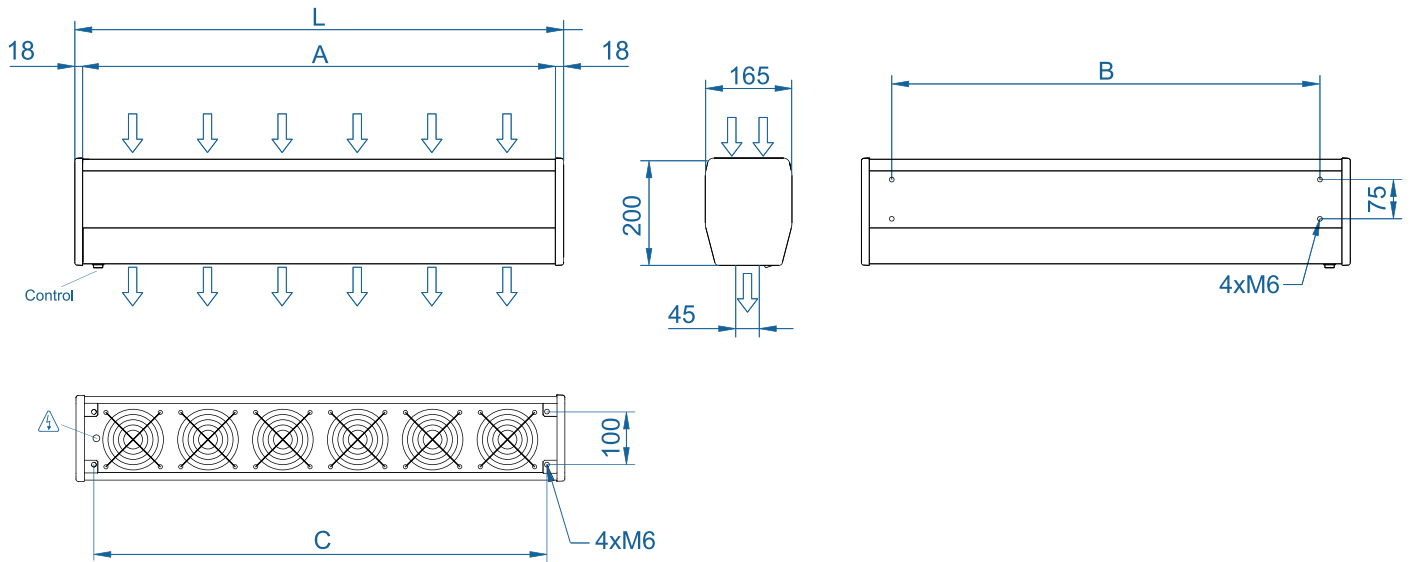
Model	Airflow m³/h	Ventilation power 230V~50Hz W	Ventilation current 230V~50Hz A	Electrical heating capacity 230V~50Hz kW	Noise level (5 m) dB(A)	Weight kg
MIN 600 E230	420	60	0,52	2,5	46	10
MIN 900 E230	630	90	0,78	3,2	48	13,5
MIN EC 600 E230	600	26	0,24	2,5	54	10
MIN EC 900 E230	900	39	0,36	3,2	56	13,5



Selection program



## Dimensions



	L	A	B	C
MIN 600	636	600	520	566
MIN 900	936	900	820	866
MIN EC 600	636	600	520	566
MIN EC 900	936	900	820	866

## Optional Accessories

### Supports and installation



Omega wall support  
SPT1

✓ Included



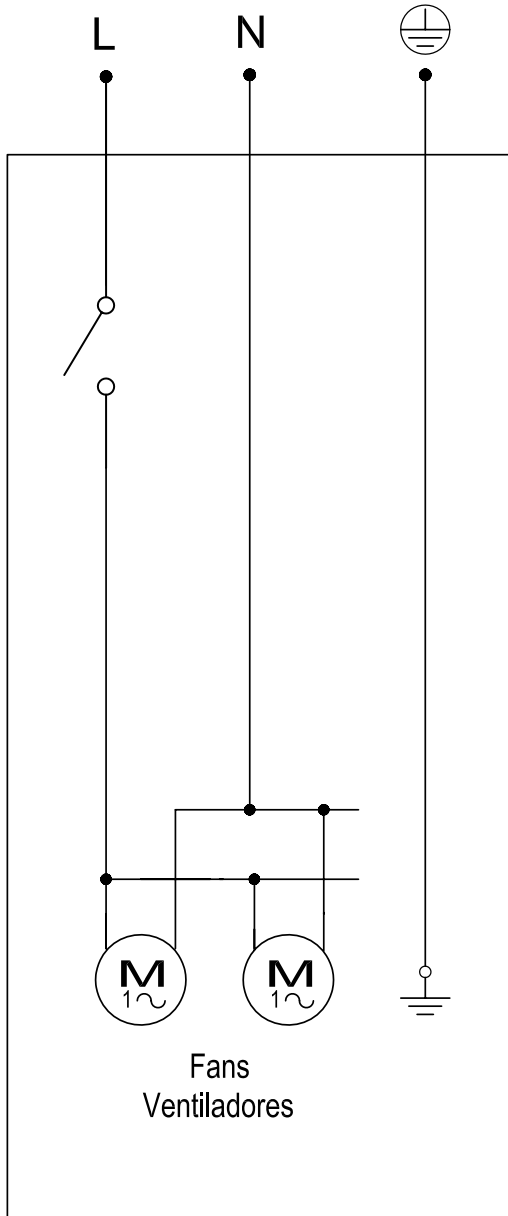
Silentblock support  
SPANG SLB

CAD drawings, BIM files, installation  
manuals and other documentation



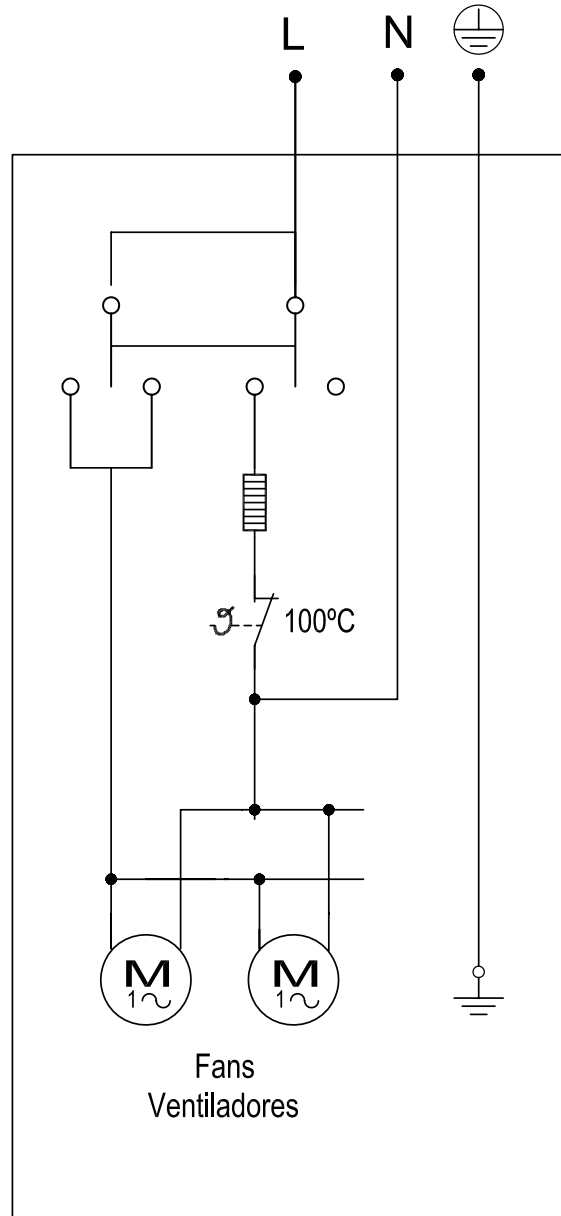
# WIRING DIAGRAM

## MINIBEL A



### Air Curtain Cortina de aire

## MINIBEL E



### Air Curtain Cortina de aire

Minibel Aire / Elèctrica 230V x 1 - Anglès / Castellà



#### MINIBEL AIR CURTAIN WIRING DIAGRAM ESQUEMA ELÉCTRICO CORTINA DE AIRE MINIBEL

1 ventilation speed, only air or heating 230V~1  
1 velocidad ventilación, sólo aire o batería eléctrica 230V~1

Pág./Page 1 de/of 1  
Doc. AIRDOE03050  
R0 - 15/03/10

## WORKING INSTRUCTIONS

Minibel air curtains have one ventilation speed, and the ones with heating have also one heating stage. They have a switch to control the ventilation and heating functions.



### MINIBEL E

1 switch with three positions:

- OFF
- Ventilation
- Ventilation + Heating



### MINIBEL A

1 switch with two positions:

- ON/OFF
- Ventilation

## MAINTENANCE INSTRUCTIONS

Minibel air curtains don't need any kind of maintenance except from the cleaning of the casing and the inlet grille. The inlet grille prevents the entrance of strange objects in the internal parts.

The casing of the air curtain can be cleaned with a wet cloth and non-aggressive detergent. Do not use caustic soap, dissolvent or acids.



***Do not use water or steam for cleaning the internal parts and components of the air curtain.***



***It is forbidden to open the service door in operation (risk of electrical discharge and being trapped in fans). Service and maintenance should be done only by skilled and introduced workers.***

## REPAIRS AND REPLACEMENTS



***Installation and electrical connections must be done by qualified workers and following these instructions.***

***Before any repairs are undertaken, please:***

- ***Inform people that there is work in progress.***
- ***Disconnect the power supply and protect the thermal magnet (so nobody can restart it accidentally).***
- ***Make sure there is no tension in the air curtain.***
- ***Make sure the fans are stationary.***

***Use only original spare parts.***

## **Opening the lateral covers**



1. To open the air curtain, remove the screws that fasten the plastic lateral covers.

2. Remove the lateral covers carefully, the lower part is united through some clips by pressure.

## **Fans replacement**

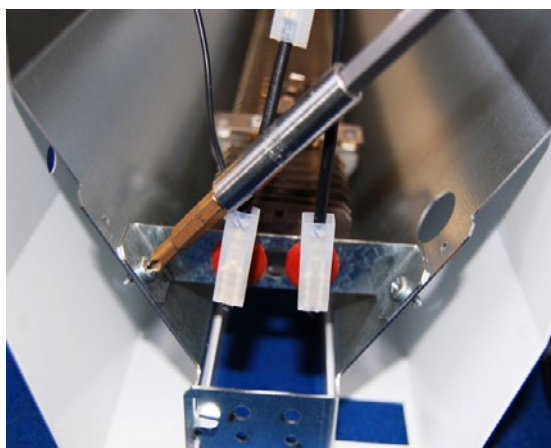


1. Remove the screws that fix the ventilation train and take it out carefully.

2. Disconnect the faston terminals.

3. Replace the broken fan.

## **Electrical heater replacement**



To replace the electrical heater, firstly disconnect the cables and unscrew the supports from both sides.



## DECLARATION OF CONFORMITY



Declaration  of conformity / Declaración  de conformidad

Manufacturer **Motors i Ventiladors S.L. (AIRTÈCNICS)**  
Fabricante **Conca de Barberà 6, Pol. Ind. Pla de la Bruguera  
08211 Castellar del Vallès (Barcelona) Spain**

We declare, under our sole responsibility, that the product  
*Declaramos, bajo nuestra única responsabilidad, que el producto*

**Air Curtains**  
**Cortinas de aire**

with models / *con los modelos*

**Minibel, Optima, Recessed Optima, Optima Wireless, Recessed Optima Wireless, Optima K, Optima Switch, Recessed Optima Switch, School Plus Optima, Top, Recessed Compact, Aris, Recessed Aris, Windbox, Recessed Windbox, Smart, Dam, Recessed Dam, Deco, Kool, Rund, Invisair, Rotowind, Variwind, Zen, Max, Maxwell, Compact Fly, Fly K, Fly KL-KXL, Fly KBB, Windbox SB-BB, Recessed Windbox SB-BB, Zen SB-BB, Invisair SB-BB, Kool SB-BB, Rotowind SB-BB, Zen L-XL, Windbox L-XL, Duojet, Triojet System**

is/are developed, designed and manufactured in accordance with the following directive(s)  
*ha(n) sido desarrollado(s), diseñado(s) y fabricado(s) de acuerdo con la(s) siguiente(s) directiva(s)*

**Low Voltage Directive 2014/35/EU**  
**Directiva Baja Tensión 2014/35/UE**

**Electromagnetic Compatibility Directive 2014/30/EU**  
**Directiva Compatibilidad Electromagnética 2014/30/UE**

**Restriction Certain Hazardous Substances Directive 2011/65/EU (RoHS)**  
**Directiva Restricción Substancias Peligrosas 2011/65/UE**

**Eco-design Energy-related Products Directive 2009/125/EC**  
**Directiva Diseño Ecológico Productos Con Energía 2009/125/CE**

applying the following harmonized standards in particular  
*aplicando las siguientes normas armonizadas en particular*

**LVD:** EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019 + A15:2021 + A16:2023  
EN 60335-2-30:2009 + A11:2012 + A1:2020 + A12:2020 + A2:2022 + A13:2022





**EMC:** EN IEC 61000-3-11:2019  
EN 61000-3-12:2011 + A1:2024  
EN IEC 55014-1:2021  
EN IEC 55014-2:2021  
EN 62233:2008 + AC:2008

**RoHS:** EN IEC 63000:2018

Date / Fecha  
Name / Nombre  
Position / Cargo

21/11/2025  
Jordi Hierro  
Technical Manager / Director Técnico

**MOTORS I VENTILADORS, S.L.**  
ESB58967183 - C/ Conca de Barberà, 6  
08211 Castellar del Vallès  
Tel. 937159988 - Fax 937159989

	<b>airtècnics</b>		
FACTORS VENTILADORS S.L.			
Model	MINIBEL MIN 600 A		
Airflow	420	m3/h	
Caudal			
Blowers	0,52 A	0,06 kW	230 V/50Hz
Ventiladores			
Electric Heater	Heating capacity	Calefacción	
Bateria Eléctrica	kW		
Serial Number	2018 09 04 / 84.891		
Número de Serie			
			
AIRCOR06005 084891			
MINIBEL MIN 600 A		www.airtecnics.com	

### Air curtain identification

Each air curtain is identified by a unique serial number printed in a label located inside the door service or in the top of the casing. There is also indicated the model and their technical characteristics (flow, fans technical characteristics and power heating).

It is indispensable to have this number to facilitate possible replacements or technical information of the air curtain in question.

## GUARANTEE

Your air curtain is guaranteed for a period of one year from the date of purchase. We will adjust, repair or replace at our discretion from our warehouse any defect, system failure or part found to be defective. The assembly cost out of our warehouse is at buyer expense. The products that, in our eyes, have been inadequately used, incorrectly manipulated, improperly installed, connected to different nominal tensions, modified, repaired by non-authorized workers or that have suffered damages during transport are totally excluded from the guarantee.

*To validate the guarantee it should be correctly filled and enclosed with the invoice that vouches for the buying date. If it is manipulated, it will lose all validity.*

*It is the buyer's responsibility to take the necessary safety measures because in case of a failure or mistake in one of our products, no damages to third parties, sets or installations will occur.*



### Guarantee Sheet

**Air curtain data:**

Model: ..... Series number: .....

Invoice date: ..... Invoice number: .....

**Buyer data:**

Name: .....

Address: .....

Country: ..... Phone: ..... Fax: .....

**Seller data:**

Name: .....

Address: .....

Country: ..... Phone: ..... Fax: .....

**Buyer signature and stamp**

**Seller signature and stamp**



*If you detect some error in this manual, we'll be pleased to receive your feedback, it helps us to improve even more. Airtècnics reserves the right to modify some of the specifications in this manual.*



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

**[www.airtecnicos.com](http://www.airtecnicos.com)**