

## INSTRUCTION MANUAL



### MINIBEL air curtains

*Please, read these instructions carefully before attempting installation*

#### SECURITY ADVICE SYMBOLS



*¡Attention, Danger, Safety Advice!*



*¡Danger from electric current or high voltage!*



*¡Injuries risk!*



*¡Danger! Do not step under hanging load.*

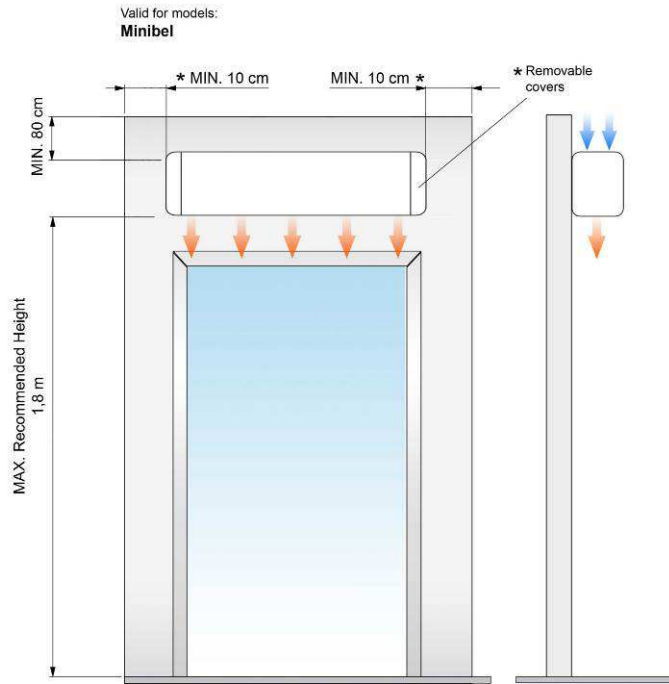


*Important information*

## INDEX

INSTALLATION .....	3
Power Supply .....	3
Mounting .....	3
Electrical heating .....	3
STORAGE AND TRANSPORT .....	3
CHARACTERISTICS .....	4
SPECIFICATIONS .....	4
DIMENSIONS .....	4
WIRING DIAGRAM .....	5
WORKING INSTRUCTIONS .....	6
MAINTENANCE INSTRUCTIONS .....	6
REPAIRS AND REPLACEMENTS .....	7
Fans replacement .....	8
Battery replacement .....	8
GUARANTEE .....	10

## INSTALLATION



### Power Supply

The Minibel air curtains are supplied with a hose-cable of 1,5 m 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. See available supports on accessories page).

The minimum recommended distance between the inlet grille and any other object is of 80 mm. see the minimum distances according to the diagram above.

	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.
	To connect the air curtain there is no need to open the service door. The power supply connector and all necessary fixations are external.

### Electrical heating

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

## STORAGE AND TRANSPORT



**¡Attention! Heavy load.**  
**Do not step under hanging load during the transport or assembly.**

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). Please observe the packaging instructions.

## CHARACTERISTICS

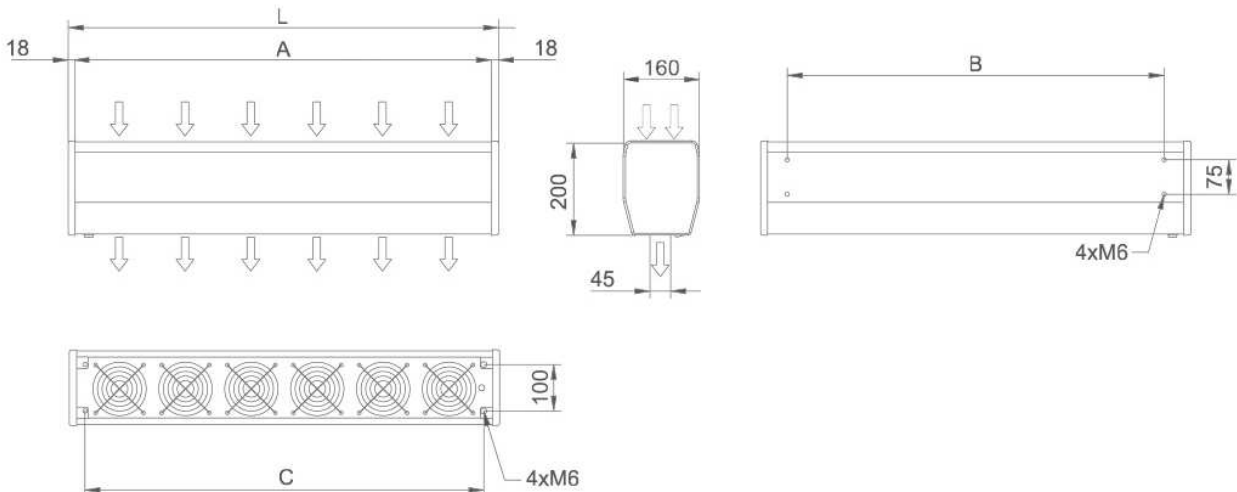


- Self-supporting case construction made of galvanized steel, painted epoxy-polyester structural grey colour RAL 7047.
- Axial fans of compact construction and flat profile.
- “A” type is without heating, only air. “E” types with heating, include electrical shielded batteries.
- Lineal blow-out jets with anodized aluminium lamellas, airfoil type.
- Integrated switches for ventilation and heating control.
- Connection cable of 1,5m length included.

## SPECIFICATIONS

		MIN 600 A	MIN 600 E230	MIN 900 A	MIN 900 E230
Power (fans)	W	60	60	90	90
Voltage (fans)	V	230~1	230~1	230~1	230~1
Current	A	0,52	0,52	0,78	0,78
Airflow volumen	m <sup>3</sup> /h	420	420	630	630
Heating power	kW	-	2,5	-	3,2
Voltage (heating)	V	-	230~1	-	230~1
Strength (heating)	A	-	10,8	-	13,9
Temperature rise	°C	-	18	-	15
Weight	Kg	9	10	12,5	13,5
Noise level	dB(A)	46	46	47	47

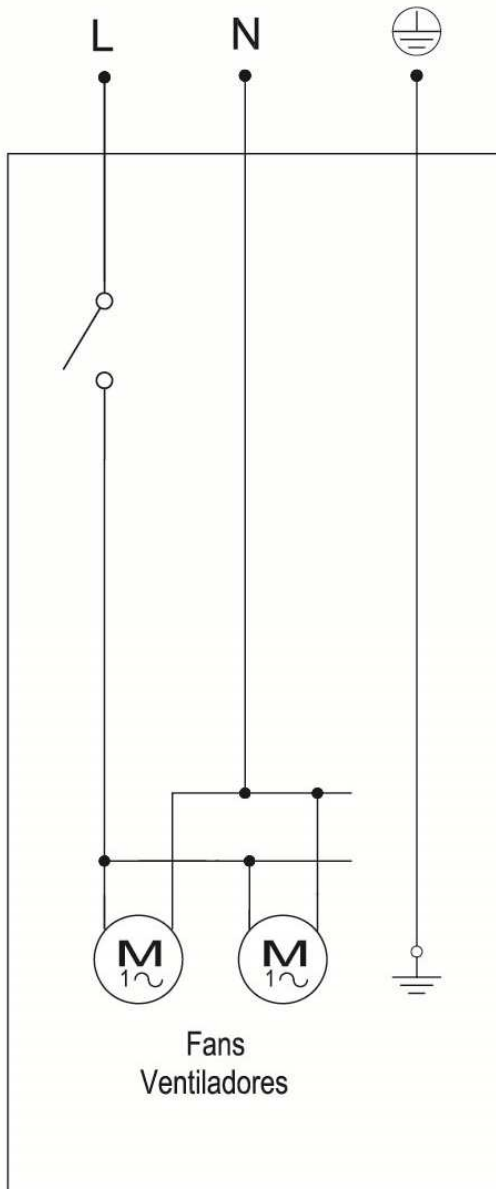
## DIMENSIONS



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

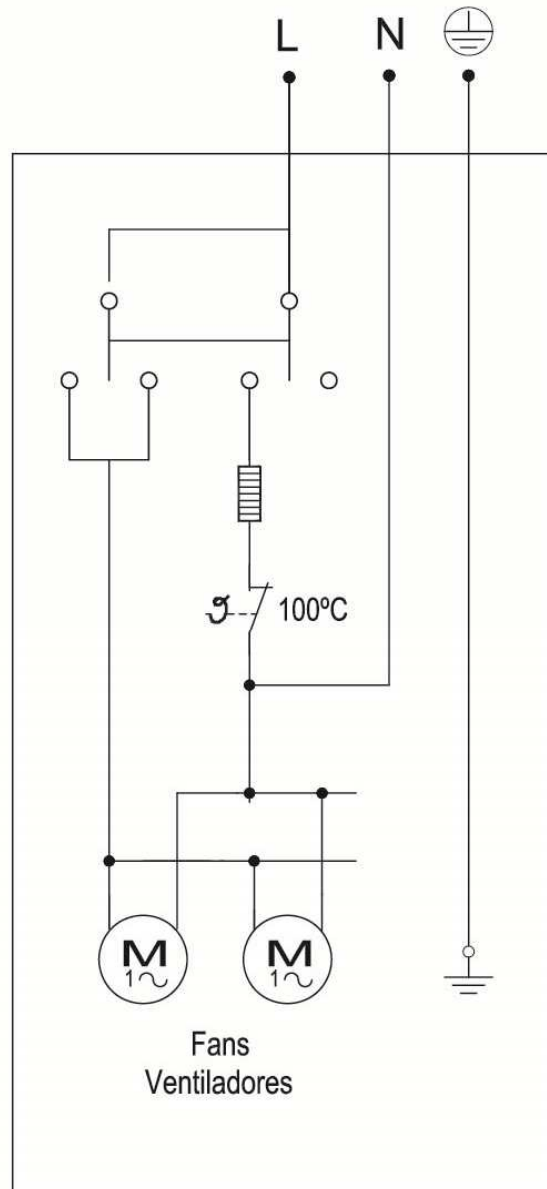
WIRING DIAGRAM

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

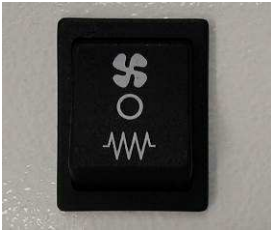
1 ventilation speed, only air or heating 230V~1  
1 velocidad ventilación, sólo aire o batería eléctrica 230V~1

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.

The air curtains 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

Air curtains don't need any kind of maintenance except 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.**



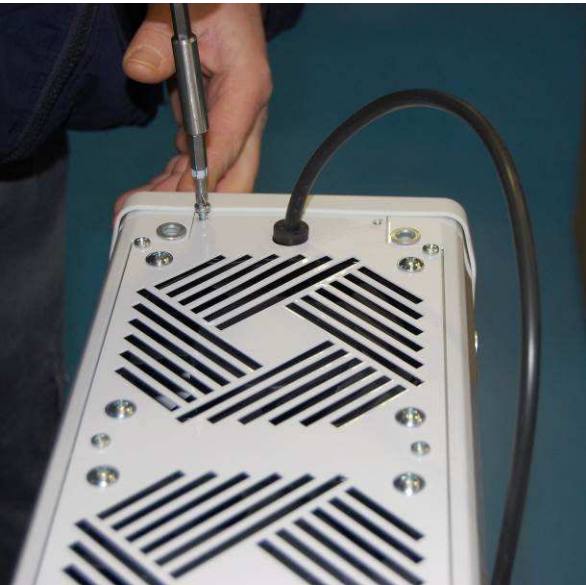
**Before any repairs are undertaken, please :**

- **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 laterals



To open the air curtain unscrew the screws that fix the laterals.



Remove the laterals carefully, the lower part is united through some clips by pressure.

## Fans replacement

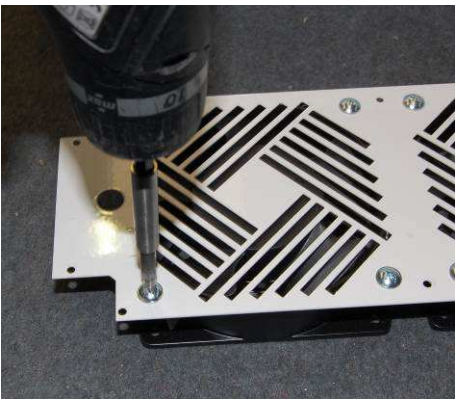
---



Remove the screws that fix the ventilation train and remove it carefully.



Disconnect the terminal fastons.



Replace the broken fan.


## Battery replacement

---



To replace the battery, disconnect the connection cables and remove the supports.



**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(s)  
*Declaramos, bajo nuestra única responsabilidad, que el/los producto(s)*

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

with models  
*con los modelos*

**Minibel, Optima, Recessed Optima, Windbox, Recessed Windbox, Smart, Dam, Deco, Kool, Variwind, Rotowind, Invisair, Rund, Zen, Duojet, Triojet, Max, Recessed Dam, Recessed Compact, Maxwell**

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 2006/95/EEC**  
***Directiva Baja Tensión 2006/95/CEE***

**Electromagnetic Compatibility Directive 2004/108/EEC**  
***Directiva Compatibilidad Electromagnética 2004/108/CEE***

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

**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**  
**EN 60335-2-30:2009+A11 :2012**

**EMC:** **EN 61000-6-2:2005**  
**EN 61000-6-3:2007+A1:2011**  
**EN 55014 -1:2006+A1:2009+ A2:2011**  
**EN 55014 - 2:1997+A1:2001+A2:2008**

**RoHS:** **EN 50581:2012**

Date / Fecha  
Name / Nombre  
Position / Cargo

**10/09/2015**  
**Jordi Oltra Orta**  
**General Manager / Director General**

**AIRTÈCNICS**  
**MOTORS I VENTILADORS, S.L.**  
B58967183 - C/ Conca de Barberà, 6  
08211 Castellar del Vallès  
Tel. 937159988 - Fax 937159989



**Air curtain identification:**

Each air curtain is identified by a unique serial number printed in a label located inside the door service.

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

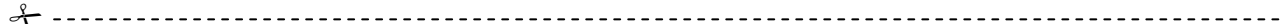
<b>Model</b> Modelo	WINDBOX M 2000 E				
<b>Airflow</b> Caudal	3600	m3/h			
<b>Blowers</b> Ventiladores	1,88	A	0,424	kW	230 V/50Hz
<b>Heating capacity</b> Calefacción	80/60 °C		60/40 °C		
<b>Water Coil</b> Agua		kW			
<b>Electric Coil</b> Batería Eléctrica	6/12/18		kW 400V~3 50Hz		
<b>Serial Number</b> Número de Serie	2015-07-06 / 61.990				

**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 draft**

**Air curtains 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**