BENEFITS OF AIR CURTAINS

The operation of an air curtain is based on separating two areas using a high-velocity air jet that spans the entire entrance or doorway. This barrier significantly reduces heating and cooling costs—by up to 80%—while maintaining the indoor climate and ensuring optimal comfort for staff, costumers and visitors.





APPLICATIONS



Cold storage

Air curtains for cold storage significantly reduce economic losses and provide effective protection for goods against major temperature fluctuations. Additionally, they enhance safety by preventing slippery floors, ice accumulation, and reduced visibility.



Climate separation

Air curtains are designed to protect climate controlled areas—whether heated or cooled—from the influx of outside air through open doorways. By keeping conditioned air inside the building, they significantly reduce energy costs and contribute to maintain a comfortable environment.



Flying insect prevention

Pest control is crucial in the food industry, whether in manufacturing facilities, warehouses, or retail establishments selling packaged or ready-to-eat food products. Insect control air curtains are used when necessary to prevent flying insects from entering these buildings.





AIR CURTAINS SELECTION

Airtècnics air curtains ensure an efficient climate separation in all commercial and industrial entrances. Our high quality, energy saving air curtains perfectly combine advanced technology with exclusive beauty, and a high level of customization.



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Airtècnics air curtains in cold storage rooms and industrial freezers are a highly effective solution to prevent cold air loss, ice formation, and condensation when doors are opened. They complement high-speed roll-up doors by improving accessibility, enhancing safety, and delivering up to 80% energy savings, while maintaining optimal storage conditions.

Twin Kool



Airtrack

Kool / Kool IP55



Kool SB-BB





Twin KPL



Triojet System / Triojet System **Double Heating**

AIR CURTAIN Recommended Airflow Speed =								COLD STOR	E		
				TEMPERATURE			AIR CURTAIN FUNCTIONS				
1,5 m/s (max)			Refrigeration Freezing								
Model	Configuration			Air jet	> 0 °C	0 °C -25 °C	-25°C	Climatic	Ice reduction (door and	Ice and fog removal +	CONSIDERATIONS
	Fans	Н	I	range		-25 °C	-40°C	separation	entrance floor)	humidity reduction	
AIRTRACK	-	A	HO	2,7 m	~	~	-	~	-	-	Basic protection (1 air jet). For refrigerated vehicles.
OPTIMA K	-	Α	НО	3 m							Basic protection (1 air jet).
	М			3,5 m	-						
	ECM		НО	3,8 m							At >0°C for any chamber siz and door opening time.
KOOL	G	Α	VE	4,5 m							[∗] At <0°C only in certain
	ECG			,0 m	-	~	_			_	conditions, for small and
	ECG				•			•		_	medium-sized chambers an short or medium door openi
KOOL	М	A	HO	3,5 m		[*]			[*]		time.
IP55 KOOL SB KOOL BB	G		VE	4,5 m							Pre-chamber without
	SB	A	НО	5 m	_						control (temperature and
	BB	A	VE	7 m							humidity).
TWIN KOOL											Double protection (2 air jets
	G		VE	4,5 m							For any chamber size.
		A			~	~	-	~	~	-	Short or medium door openi time.
twin Kpl	ECG			5 m							Pre-chamber without contro (temperature and humidity).
TRIOJET SYSTEM	-	E	HO VE	5 m	_	~	-	~	~	~ [**]	Triple protection (3 air jets).
											For any chamber size.
TRIOJET SYSTEM											For any door opening time.
DOUBLE HEATING	-	E	HO VE	5 m	-	-	~	~	~	[**]	[**] Only with pre-chamber with temperature and humic control.

CLIMATE SEPARATION

Airtècnics air curtains for climate separation are designed to maintain stable indoor temperatures and reduce energy use by creating an invisible barrier between indoor and outdoor environments. Available in various sizes, power levels, and installation types, they adapt to all kinds of entrances-from office doors to large industrial openings.



HEATING (H): Air-only (A); Electrical (E); Water (P); Heat Pump (DX). INSTALLATION (1): Horitzontal (HO); Vertical (VE).

HEATING (H): Air-only (A); Electrical (E). INSTALLATION (1): Horitzontal (HO); Vertical (VE).

	Between	2 to 4	m/s	CONSIDERATIONS			
•	nfiguratio	n	Air jet				
	H I		range				
	A, E	НО	1,8 m	Kiosks, windows, booths and small sized places with low pedestrian flow.			
A, E, P		HO	2,2 - 2,8 m	Designed for effective climate separation in small and medium sized commercial doors with a medium pedestrian flow.			
	A, E, P	НО	2,5 - 3,5 m	Integration with BMS and advanced control options available for optimized performance and energy efficiency.			
	A, E, P		2,5 - 3,5 m	Suitable for medium-sized commercial doors with high pedestrian flow. Designed for effective climate separation			
	A, E, P, DX	НО	2,5 - 3,8 m	and protection against external agents. Offer multiple installation options, including exposed and surface mounting as well as recessed and concealed			
	A, E, P	VE	3 - 4 m	configurations. Compatible with false ceilings, bulkheads, and customized architectural integrations.			
	A, E, P, DX		3 - 4,2 m	Integration with BMS and advanced control options available for optimized performance and energy efficiency.			
	A, E, P, DX	HO VE	3,5 - 5 m	Suitable for medium and large-sized commercial and industrial doors with high pedestrian flow. Designed for effective climate separation and protection against external agents.			
	A, E, P, DX	HO VE	5 - 7 m	Offer multiple installation options, including exposed and surface mounting, as well as recessed and concealed configurations. Compatible with false ceilings, bulkheads, and customized			
	A, E, P, DX	HO VE	4 - 5 m 4 - 6 m 5 - 7 m 5 - 8 m	architectural integrations. Integration with BMS and advanced control options available for optimized performance and energy efficiency.			
	A, E, P	HO VE	4 - 6 m	Large industrial doors (warehouses, hangars, factories, logistic centres or			
	A, E, P	HO VE	5 - 8 m	loading bays). Advanced control options available.			
			[1]				



Airtècnics air curtains for insect prevention are engineered to create a powerful, uniform air barrier at entrances, effectively blocking flying insects to ensure hygiene and safety. Compliant with NSF/ANSI 37 standards, they are available in various sizes and airflow configurations, making them ideal for food establishments and industrial applications.

acasacasa								
Comp	act Fly		Fly K		Fly KS	В-КВВ	Fly KL / KXL	
Fly KSB-KE						Duo System	Fly KLXL Duo System	
Without Plenum With Plenum Without Plenum							Without Plenum	
AIR CU	AIR CURTAIN NSF/ANSI 37 STANDARDS							
	Configuration		SERVICE WINDOWS				CONSIDERATIONS	
Model			Recommended Airflow Speed =	Recommended Airflow Speed =	Recommended Airflow Speed = Air jet		CONSIDERATIONS	
	Н	I	3,05 m/s 1/3 above base	8,1 m/s 0,91 m above floor	range	Airflow Speed 3,05 m/s 0,91 m above floor		
COMPACT FLY	A	HO VE	~	-	-	-	Designed to prevent flying insects from entering drive-thru windows, toll booths or kiosks.	
FLY K	A	HO VE	-	~	2 m	✓ [*]	Compatible with commercial entrances and small to medium industrial service	
FLY KSB FLY DUO KSB	A	HO VE		~	2,3 m	✓ [★]	doors, such as supermarkets, shops, restaurants and food establishments.	
FLY KL FLY DUO KL	A	HO VE	-	~	3 m	-	Optimized to minimize insect intrusion in medium to large industrial service doors, including industrial, pharmaceutical, and farming	
FLY KBB FLY DUO KBB	A	HO VE	-	~	3,5 m	-	environments such as food processing plants, logistics centers, warehouses, and livestock facilities.	
					<u> </u>			

~

4 m

[1] Horizontal installation only. [2] Air-only operation. [3] LT and XLT configurations only for Windbox.

HEATING (H): Air-only (A)

FLY KXL

FLY DUO KXL

INSTALLATION (I): Horitzontal (HO); Vertical (VE).

HO

VE

[*] For additional insect control air curtain solutions and applications within the commercial range, please consult other available models.

The optional DUO System features a dual air barrier

for enhanced insect control

in the most demanding

applications.