



POWERSTREAM DSB AIRLOCK

Highest efficiency and lowest energy-consumption air curtain for freezer doors.

Maximum efficiency and low energy consumption are the keywords describing the system the best.

Modular and tailormade design

Specially designed for (freezer) logistic environments with changeable components to keep costs to the absolute minimum.

Specially designed for different type of situations and areas with different levels of humidity load.

Also available in stainless steel (hygienic design)

Patented design and high efficient performance of avoiding fog, ice and/or slippery floors in freeze temperature conditions

This unique high-pressure air curtain system was specially developed for use for doors between large freezers in combi with big conditioned front rooms. Here, the function of temperature and humidity separation is split into two individual functions. The temperature separation is ensured with a predefined outblow angle of the separation air jet against the natural flow direction.

Another patented conditioned air jet is applied to the separation air jet and protects the deep-freeze area from penetrating humidity. Since this is done with a high degree of efficiency, we refer to it as an insulation air layer.

The Powerstream[®] system consists of an external fan and two vertical discharge modules.





As standard, this basic system is installed on the freezer side. In opposite to the typical Masterveil approach, the tailormade length is reached by combining standard modules.

The blow-out modules are positioned to the left and right of the door.

Depending on requirements, the insulation air layer is conditioned with an electric heating coil, a glycol coil or an active dehumidifier.

Due to the patented separation of functions into separation and insulating air jet, the energy requirement is reduced to a minimum.

The entire system is controlled via a control cabinet and can be connected directly to the building management system.

The fans are based on EC technology in accordance with the latest ErP regulations.

They have an adjustable operating point, so that a zero point is demonstrated in each case as proof of correct function and screening.

The specially developed nozzles have a very smooth surface to avoid the smallest turbulence in the air jet.

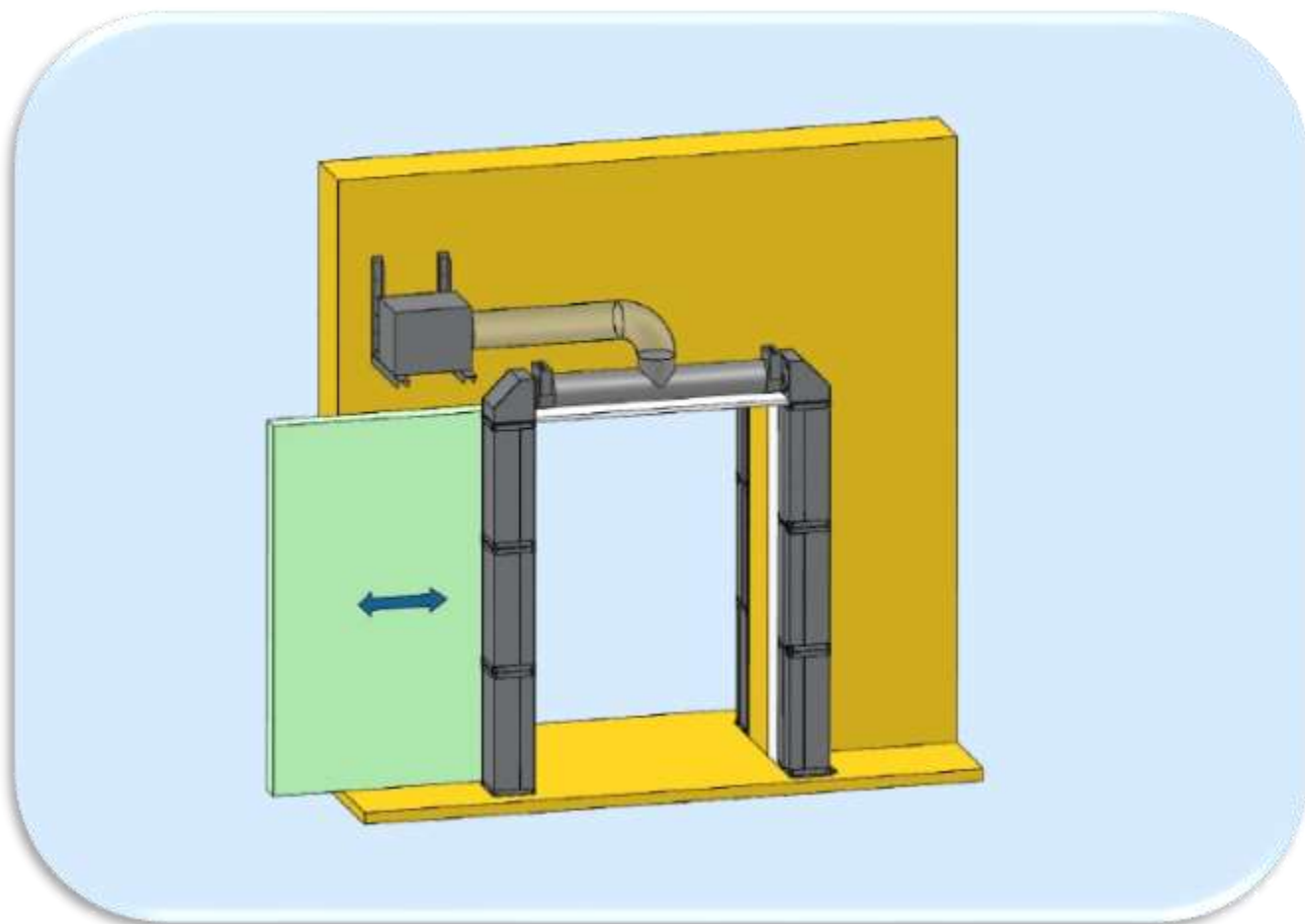
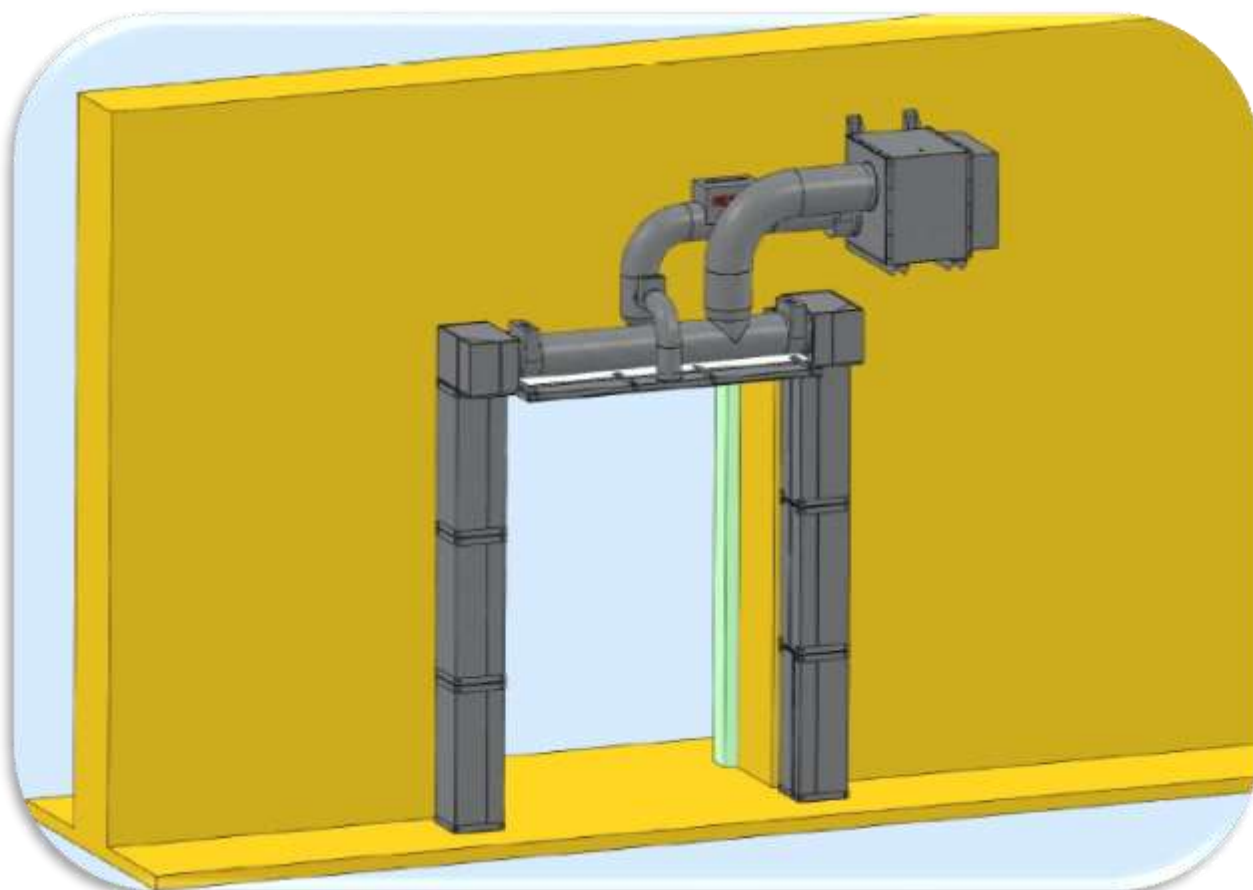
Basic system extended with

Airlock system on the **warm side** for large humidity loads, large temperature differences or to 15 % increase system efficiency.

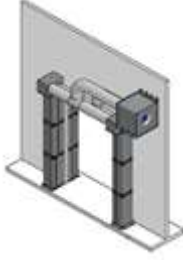
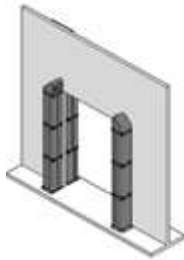
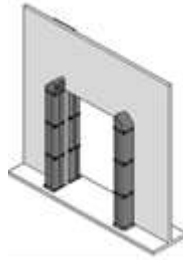
This extension system has the same design, but only one additional separating air jet.







TECHNICAL DATA Powerstream DSBLOCK AIRLOCK

	Cold side (*)	Warm side (*)	Cold/Warm (*)
			
	Ziehl FAN GR40 184245/A01	Ziehl FAN GR40 116173/A01	EBM K3G400 PW03-05
Phase	3	3	3
Voltage V	380V – 480V	380V – 480V	380V – 480V
kW	3.3	3.3	3.4
Ampere	5,40 – 4,20	5,40 – 4,20	5,20
Hz	50/60	50/60	50/60
Volume m³/h	5866	5866	6360
Rotation	2700	2700	2700
Environmenttemp	40°C / -20°C	40°C / -20°C	40°C / -40°C
Motorprotect	Intern	Intern	Intern
IP	55	55	55
Pressure Pa	1279	1279	1279
Weight kg	33	33	24,8

(*) = availability