

Winterwarm Air Curtains

Winterwarm presents the ACM: a modular concept which provides an invisible barrier between inside and outside.





Characteristics Winterwarm ACM

- Creates a comfortable environment inside
- High air volume
- Optional: EC-fan
- Energy-saving
- Easy to install
- Simple and easy maintenance

The entrance of a building gives one the first impression of a company. Everybody entering the building wants to feel welcome, regardless wether it is a hotel, hospital or commercial building. An air curtain above the entrance can help achieve this.

Comfortable

With an air curtain the door can stay open because it creates an invisible barrier between inside and outside. The ambient temperature in wintertime in the building remains constant as any draughts or wind from outside are prevented. In addition, exhaust gases and other odours from outside, stay outside. Also, in summer the air curtain is very useful as it works in opposite direction!

ACM

The ACM is an air curtain concept comprising modules of 50 cm. Almost every door size (width) can be covered. The ACM provides a barrier to the outside air. The warm air from the ceiling is drawn into the ACM and drives it in a comfortable way to ground level. People inside feel comfortable and feel no draught or wind. The ACM can also be uses to separate cold and warm spaces in the building. The ACM reduces heat losses to outside!

Energy efficient

Independent research has proven that energy losses of open doors can be reduced by 60- to 80% when an air curtain is installed. The ACM has a so-called Gurney Flap which makes the efficiency even better. The Gurney Flap guides the warm air flow at floor level to the inside. Additionally, the ACM has a very powerful fan (AC or EC). Both specifications (Gurney Flap and Fan) ensure a good separation of inside and outside air.



Applications Air Curtains:

Side view air flow

The air curtain keeps the cold air outside and helps achieve the desired room temperature as the relative warm air from above will be distributed to ground level.



ACM with EC-Fan



The electrical consumption of an ACM-EC is approx. 25% lower in comparison with the standard ACM. Additionally, the powerful EC fan has 20% extra air volume which increases the application to a door height of 5.5 meters, whereas the standard ACM is suitable for up to 4.5 meters.

Suspension

The ACM can be installed horizontally on mounting consoles. When there is a roller-shutter door or overhead door, the ACM can be installed before or behind the rolling door.



The standard suspension can be used to a door width of 5 meters (10 modules). If the door is wider, extra support is needed. Each curtain requires an assembly set consisting of 2 end plates and an electrical plug.

Control

We recommend using a door contact relay to switch on or off. The standard ACM can be controlled by a 5-step controller. The ACM with EC fan technology can be controlled by a stepless 0-10 Volt controller.



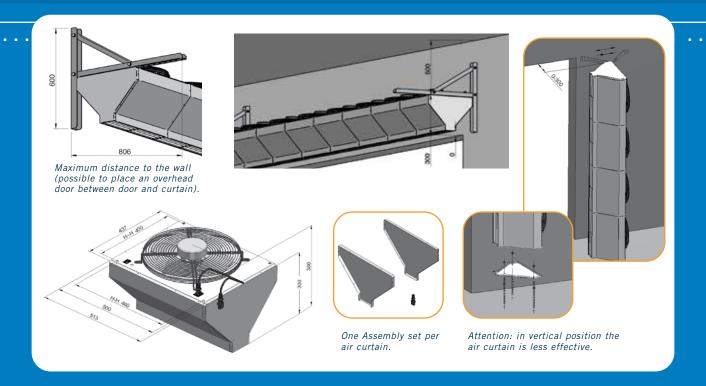
5-Step Controller (art.no. IA8543, IA8544, IA8515, IA8516)



Stepless 0-10 Volt controller for ACM-EC (art.no. GA3955)



Door contact relay (art.no.GA4100 + GA4101 for ACM-EC)



Technical specifications ACM-series

Number of modules	Unit	1	4	5	6	7	8	9	10
Length* (incl. endplates)	mm	520	2020	2520	3020	3520	4020	4520	5020
Maximum suspension height	m	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5
Air volume (15°C)	m ³ /h	1.900	7.600	9.500	11.400	13.300	15.200	17.100	19.000
Voltage (50 Hz)	V	230	230	230	230	230	230	230	230
Total electrical consumption**	А	1,0	4,0	5,0	6,0	7,0	8,0	9,0	10,0
Sound level (5m.)	dB(A)	64	70	71	72	73	73	73	74
Weight	kg	12	48	60	72	84	96	108	120



Technical specifications ACM EC-series

Number of modules	Unit	1	4	5	6	7	8	9	10
Length* (incl. endplates)	mm	520	2020	2520	3020	3520	4020	4520	5020
Maximum suspension height	m	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5
Air volume (15°C)	m³/h	2.250	9.000	11.250	13.500	15.750	18.000	20.250	22.500
Total electrical consumption**	Α	0,9	3,8	4,7	5,6	6,6	7,6	8,5	9,4
Sound level (5m.)	dB(A)	34-53	37-57	37-58	38-58	38-59	39-59	39-60	39-60
Weight	kg	10	40	50	60	70	80	90	100

^{*)} To ensure the best functional result, the air curtain should be just wider than the door opening.

Winterwarm: leading

Winterwarm has been engaged in the development, production and sales of industrial heating in Europe since 1936.

The company not only specialises in indirect fired unit air heaters, but also sells water heaters, electric heaters, destratification fans, air curtains and gas and oil-fired heaters for the agricultural and horticultural industry.



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Renowned Winterwarm-Quality

- More then 85-year experience
- ISO 9001-2015 certified
- Reliable and quick delivery
- Consulting by experienced account managers

^{**)} The electrical supply is maximum 10A, in the event of a wider air curtain (over 10 sections) extra electrical supply/connection is needed.