



Air curtain with floor outlet for large industrial doorways

UF600 creates a very effective air barrier when air at high speed is pushed out through a narrow channel situated in the floor inside the door opening. An air barrier directed upwards from the floor gives the best possible protection against cold air flowing into the premises.

For doors in industrial environments

UF600 consists of a pillar with inlet hood, silencers and fans, as well as a floor channel with its slot at floor level. The pillar is placed outside (or inside) the door on either side of the opening. The floor channel is cast in floor. Its width is adapted to the specific door.



Great energy savings

In many premises doors remain open for a significant part of the day, this results in huge losses of expensively heated or cooled air, especially when the temperature difference between outdoor and indoor air is great. With correctly installed air curtains great energy savings can be obtained.

Installation alternatives

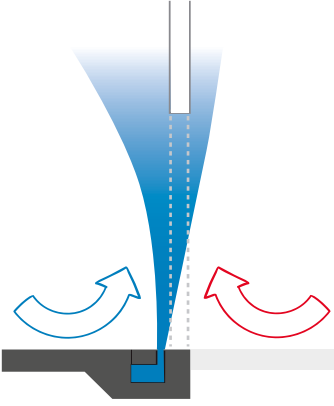
Very large doors require several pillars and separated floor channels. The pillars can be positioned on each or the same side of the opening. Model for doors with rail traffic is available for special order.

UF600

 Ambient (without heat)

Principle



Voltage motor: 400V3~

Ambient, no heat - UF600 - Indoor installation (IP54)

Item number	Type	Output [kW]	Air velocity* [m/s]	Dimensions floor channel [mm]	Diameter fans [mm]
79840	UF601 Indoor	2x4	30	600x600	500
79841	UF602 Indoor	2x7,5	35	750x750	630
79842	UF603 Indoor	2x11	38	750x750	630
79843	UF604 Indoor	2x15	38	750x750	630
79844	UF605 Indoor	2x18,5	40	750x750	630

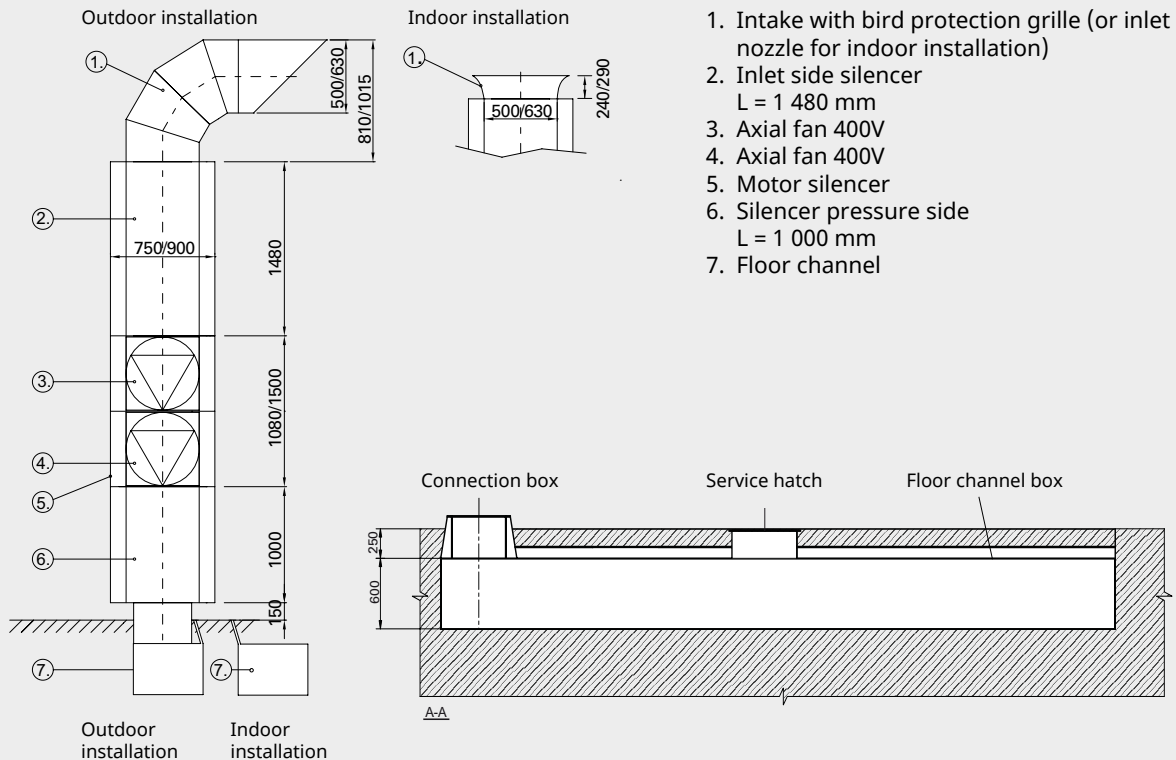
Ambient, no heat - UF600 - Outdoor installation (IP54)

Item number	Type	Output [kW]	Air velocity* [m/s]	Dimensions floor channel [mm]	Diameter fans [mm]
79845	UF601 Outdoor	2x4	30	600x600	500
79846	UF602 Outdoor	2x7,5	35	750x750	630
79847	UF603 Outdoor	2x11	38	750x750	630
79848	UF604 Outdoor	2x15	38	750x750	630
79849	UF605 Outdoor	2x18,5	40	750x750	630

*) Depends on the design of the floor channel.

Approved for 380V/3ph/60Hz. Product performance for 380V/3ph/60Hz will differ from stated data.

Made of galvanised, hot zinc-plated steel.



1. Intake with bird protection grille (or inlet nozzle for indoor installation)
2. Inlet side silencer
L = 1 480 mm
3. Axial fan 400V
4. Axial fan 400V
5. Motor silencer
6. Silencer pressure side
L = 1 000 mm
7. Floor channel

Door height [m]	Door width [m]						
	3 m	4 m	5 m	6 m	7 m	8 m	10 m
3 m	UF601	UF601	UF601	UF601			
4 m		UF602	UF602	UF602			
5 m			UF603	UF603	UF604	UF605	
6 m				UF604		UF605	UF605

Other door sizes on request. For larger openings, two pillars are required. Please contact Frico.



The fan pillar

The fan pillar can be positioned on either side of the door. For large doors, two fan pillars are often required. They should be positioned one on each side. When two units are placed on each side of the doorway, the floor channel has to be divided by a steel wall in the middle to prevent the fans from working against each other.

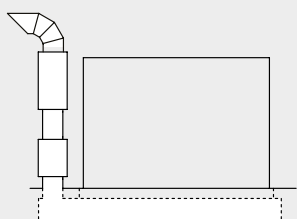
Floor channel

The floor channel box is a steel construction that is cast into the concrete floor. The outlet opening is at floor level, as close to the floor opening as possible. The length of the box and the angle and column width is determined at the project planning stage. There is not normally a need for drainage. If there is a risk of large amounts of water running into the floor channel, a drainage pipe should be connected to the existing 1" connection (internal thread).

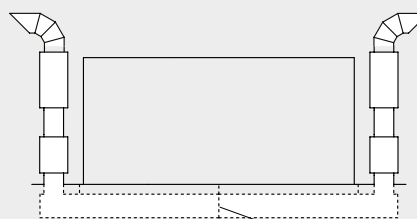
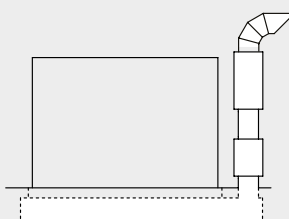
Air curtain slot

To compensate for the inward-directed pressure force, the air curtain slot is directed at an outward angle of about 15°. The air curtain slot should be at least 200 mm wider than the door opening. Internal door protectors should be mounted next to the door if the distance between the air curtain slot and the door is greater than 150 mm, see fig.

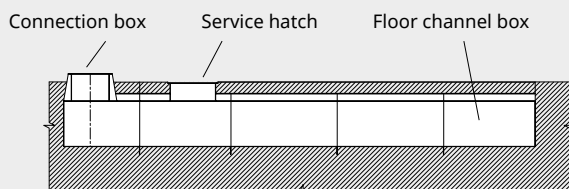
Always contact Frico for projections and dimensioning!



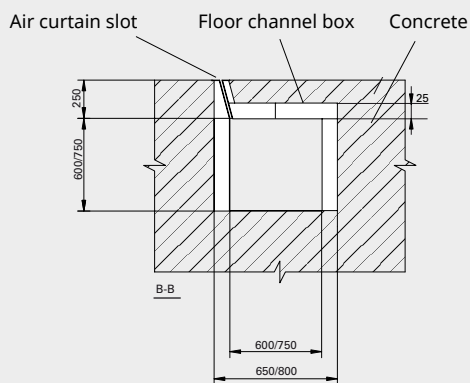
The positioning of the columns.



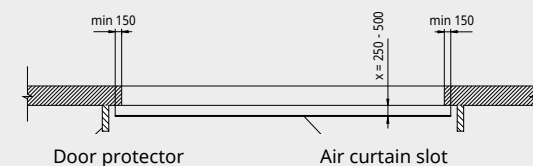
Steel wall



Floor channel



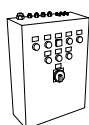
Cross section through floor channel for UF601-602.



Door protector

Air curtain slot

For wiring diagrams and other technical information, please see the manual and www.frico.net.



UFC, control box

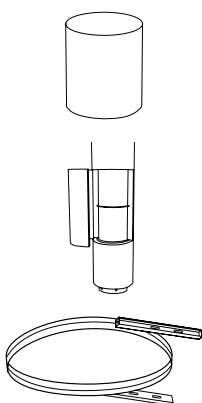
Y/D-start with time delay between the motors. Possibility to use with door switch or position limit switch or external on/off. Integrated motor protection for each fan. Alarm and running indication.

AGB304, position limit switch

Starts the air curtain when the door is opened and stops it when the door is closed. Alternating contact 4 A, 230 V~. IP67.

Item number	Type	Used for	Consists of
935221	UFC601	UF601	1
930934	UFC602	UF602	1
935222	UFC603	UF603	1
930961	UFC604	UF604	1
935213	UFC605	UF605	1
10016	AGB304	UF601-605	1

Accessories - mounting



UFEH, pillar extension

For indoor mounting the air intake should be above the door opening, therefore an extension of the pillar is sometimes necessary. This is placed between the inlet hood and the upper silencer.

UFMS, motor silencer

Additional motor silencer which gives a lower sound level and a uniform tower.

UFS, securing strip

The securing strip is mounted round the upper silencer and fixed to the outside wall to avoid the risk of tipping.

Item number	Type	Description	Used for
95241	UFEH05	Ø500 mm / L: 500 mm	UF601
95242	UFEH10	Ø500 mm / L: 1000 mm	UF601
95243	UFEH15	Ø500 mm / L: 1500 mm	UF601
95244	UFEH20	Ø500 mm / L: 2000 mm	UF601
95245	UFEH605	Ø630 mm / L: 500 mm	UF602-605
95246	UFEH610	Ø630 mm / L: 1000 mm	UF602-605
95247	UFEH615	Ø630 mm / L: 1500 mm	UF602-605
95248	UFEH620	Ø630 mm / L: 2000 mm	UF602-605
84765	UFMS750	Ø750 mm	UF601
84766	UFMS900	Ø900 mm	UF602-605
84763	UFS750	Ø750 mm	UF601
84764	UFS900	Ø900 mm	UF602-605