



Easily maintained air curtain



Comfort air curtains
Model DoorFlow

Comfort air curtains

Comfortable and inviting



The DoorFlow above the door entrance creates a draught-free inner climate.

Outside doors of shops and public buildings are often left open for commercial reasons. An open door arouses the curiosity and makes the building more accessible to people, which contributes to a customer-friendly approach. When the door is open, incoming colder outside air will disturb the indoor climate. For customers as well as for staff, draught feels very unpleasant. Besides, costly warm indoor air can freely escape to the outside.

The comfort air curtain, model DoorFlow, warms the cold air before entering the building and prevents the escape of warm air from leaving through the open door. Installing model DoorFlow above the open door means increased energy efficiency and the prevention of draught problems. The DoorFlow proves that an open door and a comfortable inner climate can coexist very well.

Easy maintenance

The comfort air curtain, model DoorFlow, is quite easy to maintain. Because the DoorFlow has no filters, cleaning and replacing filters belong to the past.

Benefits model DoorFlow

- *Easy maintenance*
- *Low water temperature coil*
- *Good price-quality ratio*
- *Comfortable inner climate*
- *High efficiency / energy savings*
- *Trendy design*
- *Low noise level*
- *Automatic room temperature control*
- *User-friendly*
- *Fast installation*

Low water temperatures

The DoorFlow can be connected to any CH-installation, because for every situation a suitable coil is available. The low water temperature coil (4-row) is suitable for water ranges between 45/35 °C and 70/50 °C. For water ranges of 80/60 °C and 90/70 °C the common 2-row coil is available.



Trendy design

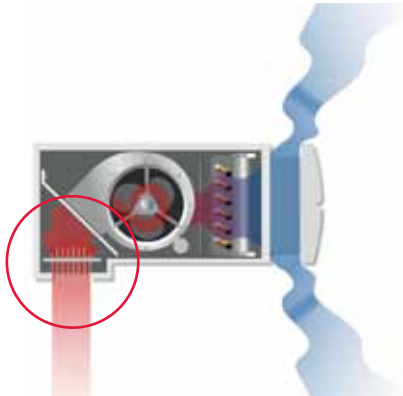
Because of its trendy look the DoorFlow blends with every interior. The recessed and cassette model can be integrated discreetly into the ceiling. The unit is finished in neutral colours. By installing multiple units next to each other in one line, the trendy design is even more emphasized.

High efficiency air curtain

Application

The DoorFlow is highly suitable for use in:

- shops
- supermarkets
- public buildings



Biddle rectifier

With open doors the difference between the indoor and outdoor temperatures leads to an exchange of air, with precious heat being lost to the outside and colder outside air flowing in. Installing a DoorFlow air curtain above the open entrance prevents heat loss to the outside and heats up the cold outdoor air to the desired, comfortable room temperature.

All Biddle air curtains come with the patented rectifier technology. This technology ensures that the turbulent air flow from the fans is converted into a laminar air stream. This makes it possible to reach the floor with much less air whilst the door opening is properly protected. The comfort and efficiency are much higher compared with conventional air curtains.

User-friendly

The DoorFlow air curtain comes as a standard with a user-friendly control panel. The manual setting of the standard controller makes it possible to choose the right fan speed of the air curtain: low - medium - high. If the DoorFlow is extended with a room temperature control, the indoor temperature can be controlled manually as well as automatically by means of the control panel (see page 6).

Fast and easy installation

The DoorFlow air curtain is mounted by means of threaded rods and is as a standard ready to plug in. This makes the unit easy to install. Low voltage cables connect the control panel “plug and play” to the unit. It is also possible to interlink different units in a “plug and play” way.

References

- Burger King
- C&A
- Cecil
- Esprit
- Hema
- Jumbo Supermarket
- Marc O'Polo

In shops, the air curtain provides for a comfortable inner climate, while the door remains open.



Additional applications

Air curtains and revolving doors: the perfect combination



Tourniquet air curtain

A revolving door in the entrance is an architectural step towards creating a comfortable climate in a shop or a public building. But every time a customer goes through a revolving door, cold air comes inside. Customers and staff find the draught very unpleasant. Besides, heating the cold external air costs additional energy.



The tourniquet air curtain prevents draughts, which keeps the interior at a pleasant temperature.

For this reason Biddle has developed a solution specifically for revolving doors, named model tourniquet. The striking feature of this model is that it is supplied with a curved outlet grille, precisely in line with the curve of the revolving door. This protects the entire door opening. The smooth discharge grille fits nicely into the whole and the air curtain is invisibly hidden away in the ceiling or upper part of the revolving door. The result is a perfect, energy-efficient climate separation.

Easy maintenance (no filters)

Air curtains in combination with revolving doors are hard to access, because they are built into the ceiling. Therefore filters are often not replaced or cleaned. The great advantage of the tourniquet DoorFlow air curtain is that it does not contain any filters. This means that maintaining and cleaning filters is a thing of the past.

Custom work

Biddle tourniquet air curtains are suitable for all types of revolving doors. The curve of doors (radius) and type vary per project, so the discharge grille is custom made. For further details please contact the sales department at Biddle.



The discharge grille is precisely in line with the curve of the revolving door.



On hot days, an unheated air curtain can achieve a cool indoor climate.

Climate separation during warm outdoor temperatures

Air curtains are generally used to separate a pleasant warm indoor climate from the cold outdoor climate. An air curtain is also very effective in the reverse situation, where the cool indoor climate has to be separated from the hot outdoor (summer) climate. The ambient model from the DoorFlow range (without heating element) is a suitable solution for this. It is also possible to switch off the heating of an heated air curtain.

Unheated air curtains can also provide the optimum climate separation during hot summer days. The air curtain blows out relatively cool air at low speed as well, which provides an additional cooling effect at the entrance on top of the cooling provided by the air conditioning. Because the air curtain takes in this conditioned air, this considerably improves the air circulation or refreshment rate, keeping the entire space pleasantly cool.

Climate separation in cooled spaces

An air curtain above an open door to a cooled space also offers great advantages. The door can remain open, without the room temperature rising. As well as offering advantages for processing, storage and transportation, this also promotes sales in supermarkets, for example. Customers are more likely to go in and out.

To keep the temperature constant, it is important to keep the cooled space closed to other air inflows and there should preferably not be any other doors.



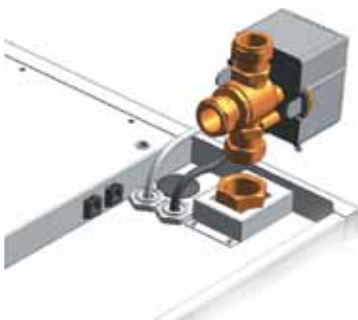
The ambient DoorFlow air curtain provides perfect climate separation in a cooled space.

Thermostatic control

The water heated units of the DoorFlow come as a standard with an air side speed controller and can be extended with a water side room temperature controller. Electrically heated units come as a standard with a room temperature controller.



The control panel can be easily fixed on the wall.



Three-way valve

1. Air side control

The air side control allows the user to regulate the speed of the air curtain using the controller. Three fan speeds are available: low - medium - high.

2. Water side room temperature control

Electrically heated units come standard with room temperature control. With hot water heated units, the air side control can be extended with waterside control (3-way valve). By means of the water control, it is possible to set the room temperature manually or automatically via the control panel.

Manual setting

The heating can be switched manually to 100 or 50% of the capacity. Besides, it is possible to switch off the heating (ambient) to make climate separation possible during warm periods or in cooled spaces (see page 5).

Automatic setting

If the air curtain is controlled automatically, the air curtain itself reads the room temperature and automatically selects the correct heating level to ensure and maintain the preset room temperature level. The desired room temperature can be selected by means of the control panel. The LEDs represent the temperature setting of 18 °C to 25 °C. The heating can be switched off which is shown by the bottom LED. For instance, if 22 °C is set, the air curtain automatically selects the correct capacity to ensure this room temperature is maintained.

Control of more units

Multiple units (max. 8) can be controlled by one control panel.

More control options

Also a timer, door contact switch and BMS can be connected to the electronic control.

To achieve maximum climate separation with minimum energy consumption, Biddle recommends selection of the lowest strength at which no draught occurs.

Many possibilities

Type code

DF S-100-W-F

DF = DoorFlow

Type

S = Small (200 - 250 cm)

M = Medium (250 - 300 cm)

L = Large (300 - 350 cm)

Unit length (cm)

100-150-200-250

Coil type

W2 = Water heating (2-row)

W4 = Water heating (4-row)

E = Electric heating

A = Ambient (no heating)

Model

F = Free-hanging

R = Recessed

C = Cassette

T = Tourniquet

The type coding is put together by selecting 1 of all parts.

The comfort air curtain, model DoorFlow, is available in three types:

1. S (Small): for installation heights of 200 to 250 cm.
2. M (Medium): for installation heights of 250 to 300 cm.
3. L (Large): for installation heights of 300 to 350 cm.

By installing multiple air curtains next to each other, there is a solution for any door width. All types come in four lengths: 100, 150, 200 and 250 cm. Biddle can deliver free-hanging, cassette and recessed models. Besides that, the tourniquet model is perfectly suitable for revolving doors. All of these models feature an electric or hot-water (2- or 4-row) heating coil. An ambient device without heating coil is also a possibility.

Selection

An air curtain is selected properly if it is able to screen off the entire width and height of the door opening. The air curtain must be at least as wide as the doorway, to prevent cold air bypassing the air stream. In addition, the unit must have sufficient capacity to heat the entering cold outside air to a comfortable temperature level. It is also important for the distance between the air curtain and the door to be as short as possible.

Type	Installation-height ¹	Door width ²	Coil type	Models
DF S	200 – 250 cm	100 – 150 – 200 – 250 cm	W (Water)	Free-hanging (F) Recessed (R) Cassette (C) Tourniquet (T)
DF M	250 – 300 cm		E (Electric)	
DF L	300 – 350 cm	A (Ambient)		

¹ Measured from floor to bottom of unit.

² By banking air curtains, also a door opening wider than 250 cm can be covered.

Standard delivery and accessories

Water heated units come as a standard with an air side speed controller. Electrically heated units come as a standard with a room temperature controller. The recessed model (type R) is provided with an outlet duct.

For control and mounting purposes, the following additional accessories are available:

- Controller for one or more units
- Low voltage two plug cables (different lengths)
- Water sided room temperature control (3-way)
- Door contact switch

Colours

The DoorFlow is available in two colours: white (RAL 9016) and aluminium (RAL 9006). Other RAL-colours are available on request against extra charge.



Cassette model

Technical data

DF S

Basic data		DF S-100				DF S-150			
max. door width	cm	100				150			
installation height	cm	200 - 250				200 - 250			
room temperature	°C	20				20			
General selection data		Speed	1	2	3	1	2	3	
air volume	m ³ /h	760	985	1285	1175	1485	1925		
heating capacity	kW	4.4	5.2	6.1	7.4	8.6	10.2		
sound pressure level at 3 m	dB(A)	37	44	50	39	45	52		
Installation data		W2¹	W4¹	E³	A	W2¹	W4¹	E³	A
weight model F	kg	31	33	35	29	46	49	53	45
model R	kg	30	32	34	28	45	48	52	44
model C	kg	34	36	37	31	51	54	56	48
electrical supply	V	230	230	400	230	230	230	400	230
max. heating capacity ²	kW	6.0	6.1	4.7	-	10.0	10.2	9.5	-
max. water volume ²	l/h	261	265	-	-	437	441	-	-
max. water pressure loss ²									
- incl. three-way valve	kPa	0.3	0.4	-	-	0.9	1.3	-	-
- excl. valve	kPa	0.1	0.2	-	-	0.4	0.8	-	-
max. power motors	kW	0.22	0.22	0.22	0.22	0.33	0.33	0.33	0.33
max. current motors (1 phase)	A	0.96	0.96	0.96	0.96	1.44	1.44	1.44	1.44
max. power consumption heating	kW	-	-	5.0	-	-	-	10.0	-
max. current consumption incl. fans (3 phases)	A	-	-	8.20	-	-	-	15.94	-

Basic data		DF S-200				DF S-250			
max. door width	cm	200				250			
installation height	cm	200 - 250				200 - 250			
room temperature	°C	20				20			
General selection data		Speed	1	2	3	1	2	3	
air volume	m ³ /h	1545	1970	2570	1930	2465	3215		
heating capacity	kW	10.2	12.0	14.2	13.0	15.4	18.3		
sound pressure level at 3 m	dB(A)	40	46	53	41	47	54		
Installation data		W2¹	W4¹	E³	A	W2¹	W4¹	E³	A
weight model F	kg	60	64	69	58	76	81	88	73
model R	kg	58	62	67	56	74	79	86	71
model C	kg	66	70	73	62	84	89	93	78
electrical supply	V	230	230	400	230	230	230	400	230
max. heating capacity ²	kW	14.0	14.2	14.3	-	18.0	18.3	14.3	-
max. water volume ²	l/h	614	618	-	-	791	795	-	-
max. water pressure loss ²									
- incl. three-way valve	kPa	2.0	2.9	-	-	3.5	5.3	-	-
- excl. valve	kPa	0.9	1.8	-	-	1.8	3.5	-	-
max. power motors	kW	0.44	0.44	0.44	0.44	0.55	0.55	0.55	0.55
max. current motors (1 phase)	A	1.92	1.92	1.92	1.92	2.4	2.4	2.4	2.4
max. power consumption heating	kW	-	-	15.0	-	-	-	15.0	-
max. current consumption incl. fans (3 phases)	A	-	-	23.66	-	-	-	24.14	-

¹ The 2-row heating coil (W2) is suitable for the water ranges 80/60 °C and 90/70 °C and the 4-row heating coil (W4) for low water temperatures between 45/35 °C and 70/50 °C.

² The W2 is based on a water range of 80/60 °C and the W4 on 60/40 °C (water heating).

³ Electric heating: it is possible to choose 0, 50 or 100% of the heating capacity at every speed.

Technical data

DF M

Basic data		DF M-100				DF M-150			
max. door width	cm	100				150			
installation height	cm	250 - 300				250 - 300			
room temperature	°C	20				20			
General selection data		Speed	1	2	3	1	2	3	
air volume	m ³ /h	1020	1195	1410	1420	1720	2130		
heating capacity	kW	5.3	5.8	6.5	8.4	9.5	10.8		
sound pressure level at 3 m	dB(A)	43	47	51	42	47	53		
Installation data		W2¹	W4¹	E³	A	W2¹	W4¹	E³	A
weight model F	kg	35	37	39	33	51	53	57	49
model R	kg	34	36	38	32	49	52	56	48
model C	kg	38	40	41	35	55	58	60	52
electrical supply	V	230	230	400	230	230	230	400	230
max. heating capacity ²	kW	6.3	6.5	9.5	-	10.6	10.8	14.3	-
max. water volume ²	l/h	275	280	-	-	463	470	-	-
max. water pressure loss ²									
- incl. three-way valve	kPa	0.3	0.5	-	-	1.0	1.5	-	-
- excl. valve	kPa	0.1	0.2	-	-	0.5	0.9	-	-
max. power motors	kW	0.33	0.33	0.33	0.33	0.44	0.44	0.44	0.44
max. current motors (1 phase)	A	1.44	1.44	1.44	1.44	1.92	1.92	1.92	1.92
max. power consumption heating	kW	-	-	10.0	-	-	-	15.0	-
max. current consumption incl. fans (3 phases)	A	-	-	15.94	-	-	-	23.66	-

Basic data		DF M-200				DF M-250			
max. door width	cm	200				250			
installation height	cm	250 - 300				250 - 300			
room temperature	°C	20				20			
General selection data		Speed	1	2	3	1	2	3	
air volume	m ³ /h	2040	2390	2825	2440	2920	3555		
heating capacity	kW	12.2	13.6	15.1	15.3	17.2	19.5		
sound pressure level at 3 m	dB(A)	45	49	54	45	50	55		
Installation data		W2¹	W4¹	E³	A	W2¹	W4¹	E³	A
weight model F	kg	68	72	77	66	84	89	96	81
model R	kg	66	70	75	64	82	87	94	79
model C	kg	74	78	81	70	92	97	101	86
electrical supply	V	230	230	400	230	230	230	400	230
max. heating capacity ²	kW	14.8	15.1	19.0	-	19.1	19.5	23.8	-
max. water volume ²	l/h	648	656	-	-	839	848	-	-
max. water pressure loss ²									
- incl. three-way valve	kPa	2.2	3.3	-	-	4.0	6.0	-	-
- excl. valve	kPa	1.0	2.1	-	-	2.0	4.0	-	-
max. power motors	kW	0.66	0.66	0.66	0.66	0.77	0.77	0.77	0.77
max. current motors (1 phase)	A	2.88	2.88	2.88	2.88	3.36	3.36	3.36	3.36
max. power consumption heating	kW	-	-	20.0	-	-	-	25.0	-
max. current consumption incl. fans (3 phases)	A	-	-	31.86	-	-	-	39.59	-

¹ The 2-row heating coil (W2) is suitable for the water ranges 80/60 °C and 90/70 °C and the 4-row heating coil (W4) for low water temperatures between 45/35 °C and 70/50 °C.

² The W2 is based on a water range of 80/60 °C and the W4 on 60/40 °C (water heating).

³ Electric heating: it is possible to choose 0, 50 or 100% of the heating capacity at every speed.

Technical data

DF L

Basic data		DF L-100				DF L-150			
max. door width	cm	100				150			
installation height	cm	300 - 350				300 - 350			
room temperature	°C	20				20			
General selection data		Speed	1	2	3	1	2	3	
air volume	m ³ /h	1170	1500	1875	1580	2050	2635		
heating capacity	kW	5.8	6.7	7.6	9.0	10.6	12.3		
sound pressure level at 3 m	dB(A)	42	48	54	43	48	54		
Installation data		W2¹	W4¹	E³	A	W2¹	W4¹	E³	A
weight model F	kg	33	35	37	31	47	50	54	46
model R	kg	32	33	36	30	46	49	53	45
model C	kg	36	38	39	33	52	55	57	49
electrical supply	V	230	230	400	230	230	230	400	230
max. heating capacity ²	kW	7.3	7.6	9.5	-	11.9	12.3	14.3	-
max. water volume ²	l/h	321	331	-	-	521	535	-	-
max. water pressure loss ²									
- incl. three-way valve	kPa	0.5	0.6	-	-	1.3	1.9	-	-
- excl. valve	kPa	0.2	0.3	-	-	0.6	1.1	-	-
max. power motors	kW	0.58	0.58	0.58	0.58	0.77	0.77	0.77	0.77
max. current motors (1 phase)	A	2.52	2.52	2.52	2.52	3.36	3.36	3.36	3.36
max. power consumption heating	kW	-	-	10.0	-	-	-	15.0	-
max. current consumption incl. fans (3 phases)	A	-	-	17.02	-	-	-	25.10	-

Basic data		DF L-200				DF L-250			
max. door width	cm	200				250			
installation height	cm	300 - 350				300 - 350			
room temperature	°C	20				20			
General selection data		Speed	1	2	3	1	2	3	
air volume	m ³ /h	2345	2995	3755	2755	3550	4510		
heating capacity	kW	13.4	15.7	18.0	16.6	19.5	22.7		
sound pressure level at 3 m	dB(A)	46	51	56	45	51	56		
Installation data		W2¹	W4¹	E³	A	W2¹	W4¹	E³	A
weight model F	kg	63	67	73	62	79	84	91	76
model R	kg	61	65	71	60	76	81	89	74
model C	kg	69	73	76	65	86	91	95	80
electrical supply	V	230	230	400	230	230	230	400	230
max. heating capacity ²	kW	17.4	18.0	19.0	-	21.9	22.7	23.8	-
max. water volume ²	l/h	762	782	-	-	961	984	-	-
max. water pressure loss ²									
- incl. three-way valve	kPa	3.0	4.5	-	-	5.1	7.9	-	-
- excl. valve	kPa	1.4	2.8	-	-	2.6	5.2	-	-
max. power motors	kW	1.15	1.15	1.15	1.15	1.34	1.34	1.34	1.34
max. current motors (1 phase)	A	5.04	5.04	5.04	5.04	5.88	5.88	5.88	5.88
max. power consumption heating	kW	-	-	20.0	-	-	-	25.0	-
max. current consumption incl. fans (3 phases)	A	-	-	34.02	-	-	-	42.11	-

¹ The 2-row heating coil (W2) is suitable for the water ranges 80/60 °C and 90/70 °C and the 4-row heating coil (W4) for low water temperatures between 45/35 °C and 70/50 °C.

² The W2 is based on a water range of 80/60 °C and the W4 on 60/40 °C (water heating).

³ Electric heating: it is possible to choose 0, 50 or 100% of the heating capacity at every speed.

Explanation of technical data

Coil type	Water range (°C)	Room temperature (°C)			
		+15	+18	+20	+22
W2	90/70	1.35	1.28	1.23	1.19
	80/60	1.12	1.05	1	0.95
W4	70/50	1.58	1.46	1.39	1.31
	60/40	1.20	1.08	1	0.92
	50/40	1.06	0.94	0.87	0.79
	45/35	0.87	0.75	0.68	0.60

m_w = water volume [l/h]

Q = heating capacity [kW]

ρ_w = density of water at 90 °C
(= 0.984) [kg/l]

C_{pw} = specific heat of water
(=4.18) [kJ/kg °C]

ΔT_w = temperature difference water [°C]

Δp_{w_1} = water pressure loss, table values [kPa]

Δp_{w_2} = water pressure loss [kPa]

m_{w_1} = water volume, table values [l/h]

m_{w_2} = water volume calculated using formula above [l/h]

Heating capacity

The maximum heating capacity stated in the tables on page 8, 9 and 10 are based on a water range of 80/60 °C regarding the 2-row heating coil and 60/40 °C regarding the 4-row heating coil. If different water or room temperatures are used, the max. heating capacity may be multiplied by the factors from the table alongside.

Water volume

If different values than the ones stated in the tables on page 8, 9 and 10 are concerned, the water volume may be roughly calculated using the formula below. To do so, the heating capacity must first be calculated (see table above).

$$m_w = \frac{Q}{\rho_w C_{pw} \Delta T_w} \cdot 3600 \text{ [l/h]}$$

Water pressure loss

If different water temperatures are concerned, the water pressure loss may be roughly calculated using the formula below. To do so, the water volume must first be calculated using the formula above.

$$\Delta p_{w_2} = \Delta p_{w_1} \left(\frac{m_{w_2}}{m_{w_1}} \right)^2 \text{ [kPa]}$$

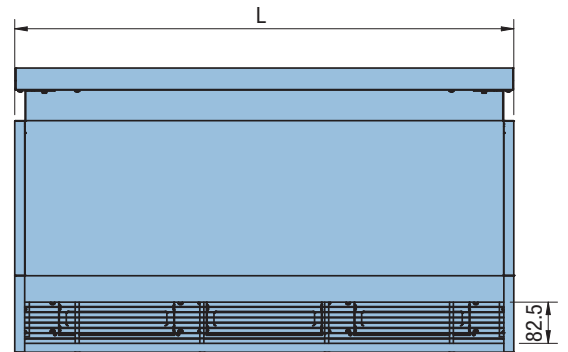
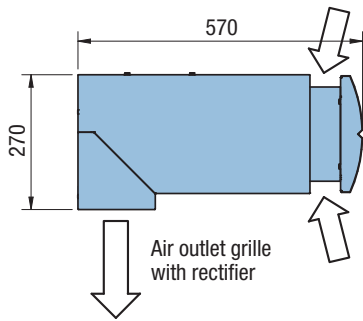
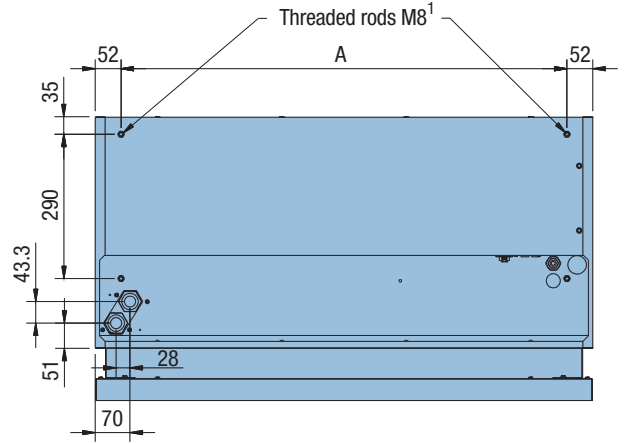
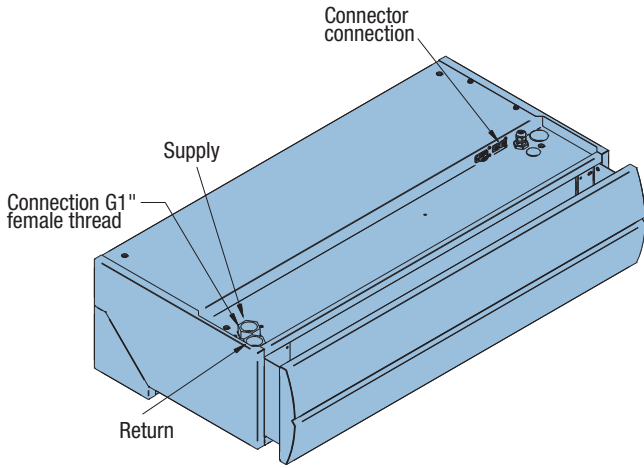
Sound

The sound data stated in the tables on page 8, 9 and 10 are based on the direct field, in situations with open doors and sound-absorbing ceilings. Sound data for other conditions may be determined by adding the following values to the table values below. Closed door: + 1 à 2 dB(A), and acoustical "hard" ceiling: + 2 à 3 dB(A). For other distances, or for multiple units next to each other, the values below should be added to the sound data.

Distance	Total unit width					
	1.0 m	1.5 m	2.0 m	2.5 m	3.0 m	3.5 m
1.0 m	+4.8	+6.2	+7.1	+7.6	+8	+8.3
2.0 m	+1.8	+3.4	+4.5	+5.3	+6	+6.4
3.0 m	0	+1.7	+2.9	+3.8	+4.5	+5
4.0 m	-2.5	-0.8	+0.4	+1.4	+2.1	+2.7
5.0 m	-4.4	-2.7	-1.5	-0.5	+0.2	+0.8

Correction factors in dB(A)

Dimensional sketches free-hanging model (F)



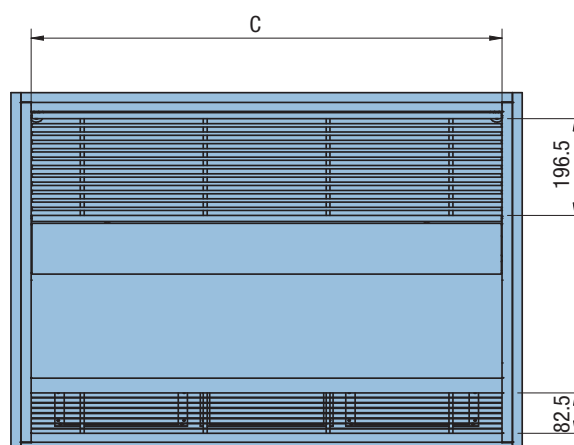
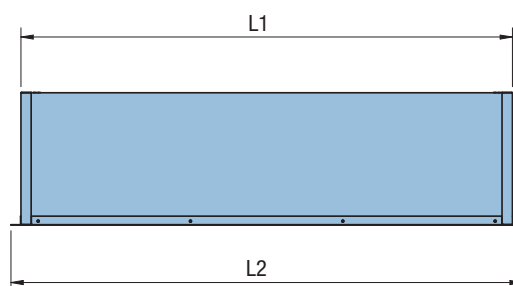
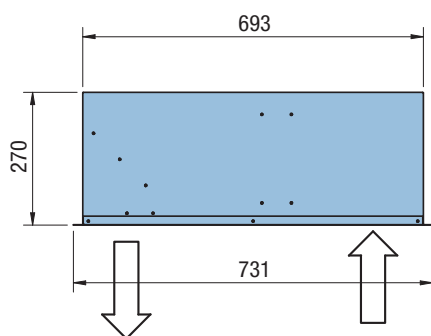
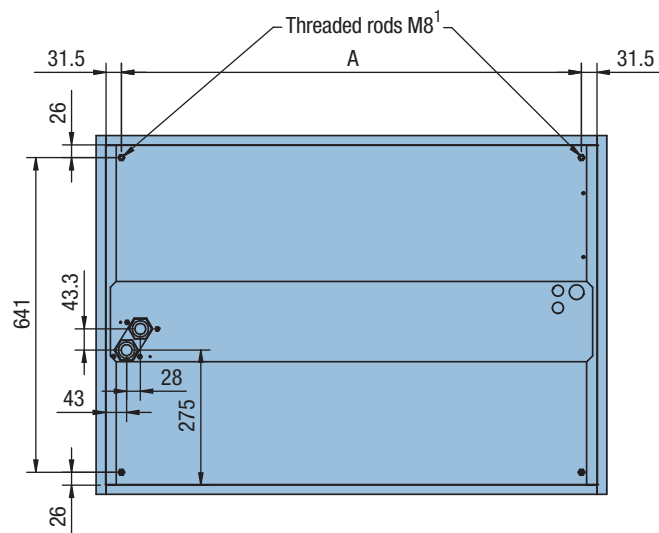
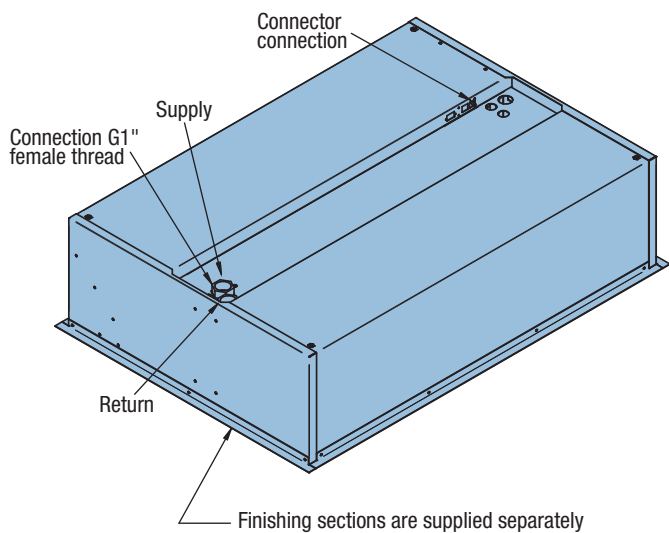
Type	L	A
DF S/M/L	1000	896
	1500	1396
	2000	1896
	2500	2396

Notes:

• All dimensions are in mm.

¹ The 1000, 1500 and 2000 mm versions feature a 4 x M8 internal thread, while the 2500 mm version has a 6 x M8 internal thread.

Dimensional sketches cassette model (C)



Type	L1	L2	A	C
DF S/M/L	1000	1040	937	958
	1500	1540	1437	1458
	2000	2040	1937	1958
	2500	2540	2437	2458

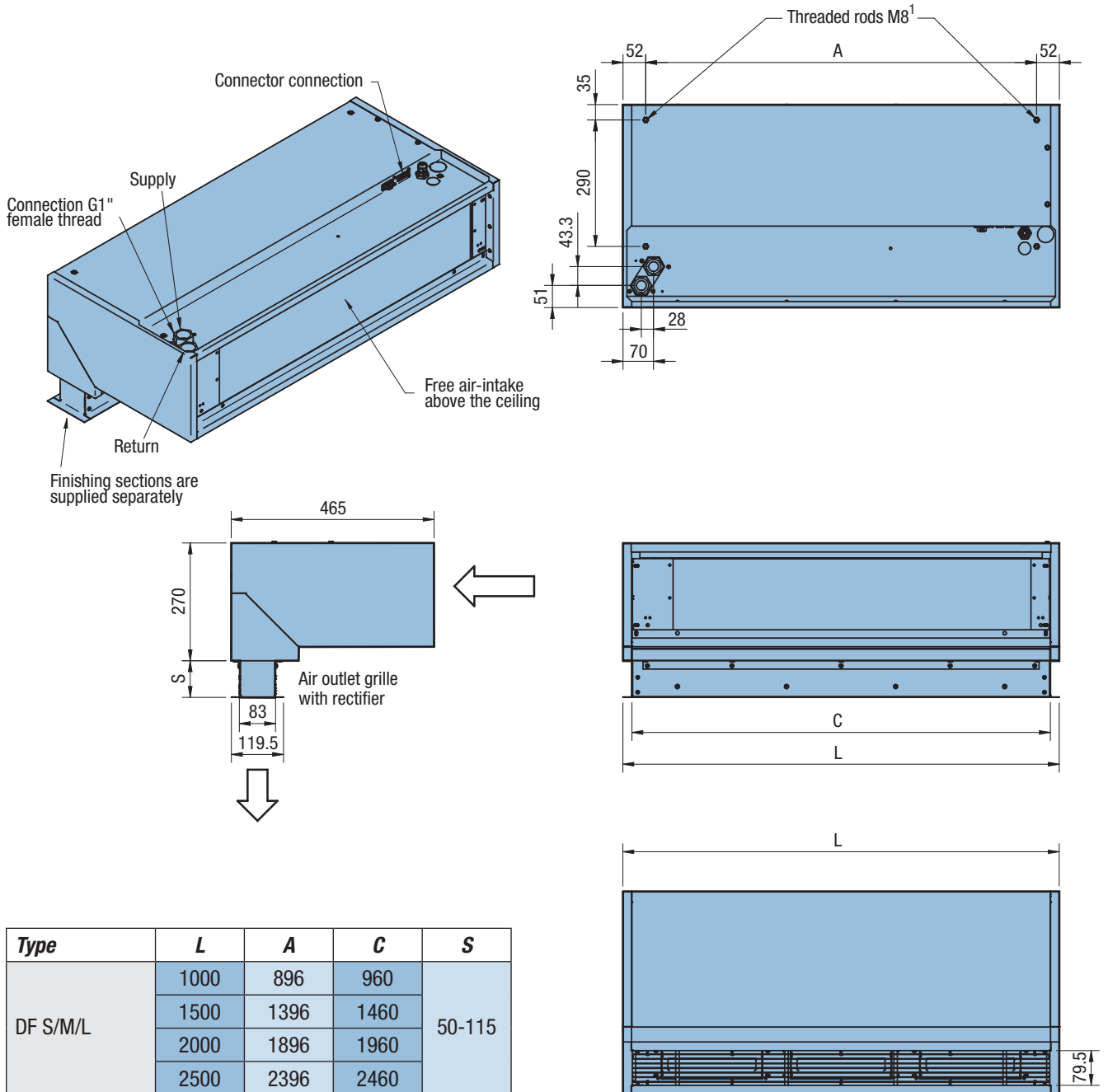
Notes:

• All dimensions are in mm.

• Daylight openings (if cover mouldings are used): -for air discharge (L1 + 8) x 701 mm.

¹ The 1000, 1500 and 2000 mm versions feature a 4 x M8 internal thread, while the 2500 mm version has a 6 x M8 internal thread.

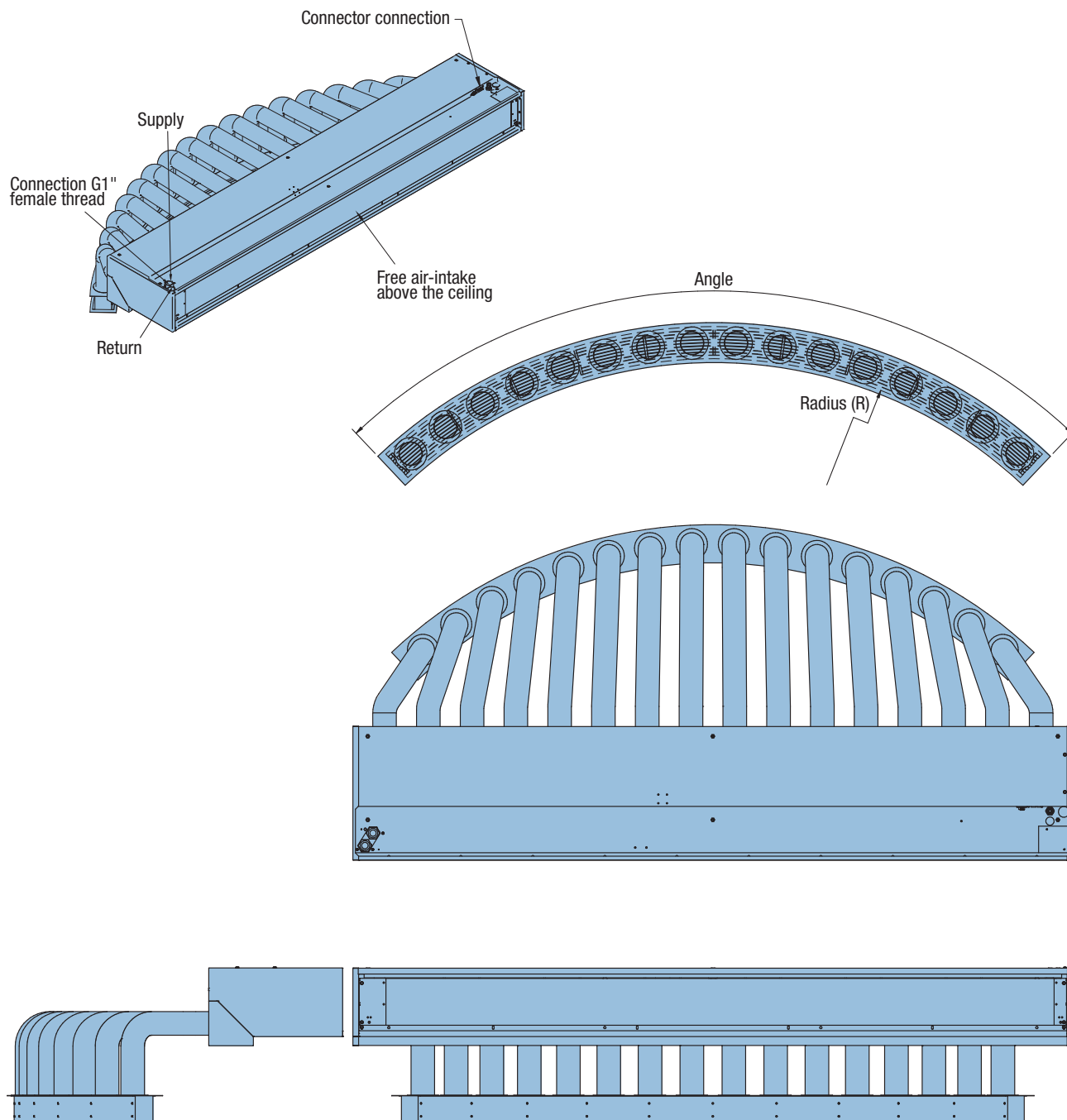
Dimensional sketches recessed model (R)



Notes:

- All dimensions are in mm.
 - Daylight openings (if cover mouldings are used): -for air discharge 92 x (C+8) mm.
 - For safety reasons electrical heated and ambient units come with a guard grille.
- ¹ The 1000, 1500 and 2000 mm versions feature a 4 x M8 internal thread, while the 2500 mm version has a 6 x M8 internal thread.

Dimensional sketches tourniquet model (T)



Notes:

- All dimensions are in mm.
- Two givens are needed for an air curtain to fit around the curve of a revolving door, namely the angle and the radius (R).
- As regards the dimensions of the air curtain, please refer to the dimensioned sketch for the recessed model (R) on page 14.
- The selection of the type depends on the extended length of the revolving door.

Specifications

Casing

The casing is made of zinc-plated sheet steel, extra strengthened to minimize vibration and has an inspection panel in the bottom. The air outlet grille with rectifier is made of anodised aluminium. The unit is as a standard available in the following colours: white (RAL 9016) or in aluminium (RAL 9006). Other RAL colours are available on request.

Motor / fan assembly

The air curtain has two or more (depending on type) dual-inlet vibration-free centrifugal fans. Each fan is driven by a suspended rotor motor on ball bearings. The fan casing (S and M) and the impeller are made of zinc coated plate steel. The fan casing of model L is made of plastic. The motors are, as a standard fitted with thermal contacts. The thermal contacts will break the circuit of the motor when the maximum permissible motor temperature is exceeded.

Heating coil

The LPHW heating coil is made up of $\frac{3}{8}$ " copper pipes and aluminium fins. The distance between the fins is 4.5 mm, which makes the unit easy to maintain. The water supply connections are G1" female thread. The test pressure is 9 bars and the operating pressure is max. 8 bars at 125 °C. The electric heating coil is made up of U-tube-shaped, stainless pipes.



• ISO 9001
• ISO 14001



Subject to change

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