slim

Slim
air curtain

Your discreete
business partner

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FLOWAIR
# - Air curtain
specialists

FLOWAIR is innovation, functionality, ergonomics, but above all, openness to new concepts. We are inspired by new technologies, improvements in terms of control, materials used and of course Flowair world class industrial design. We really listen to users' opinions. We combine the knowledge of customers, employees, suppliers, designers and experts in many fields. We test our devices in an accredited, independent laboratories.

The FLOWAIR offer includes a wide range of air curtains, which are dedicated to specific types of facilities and various sizes of door openings. They differ in dimensions, range, heating elements and also in design.
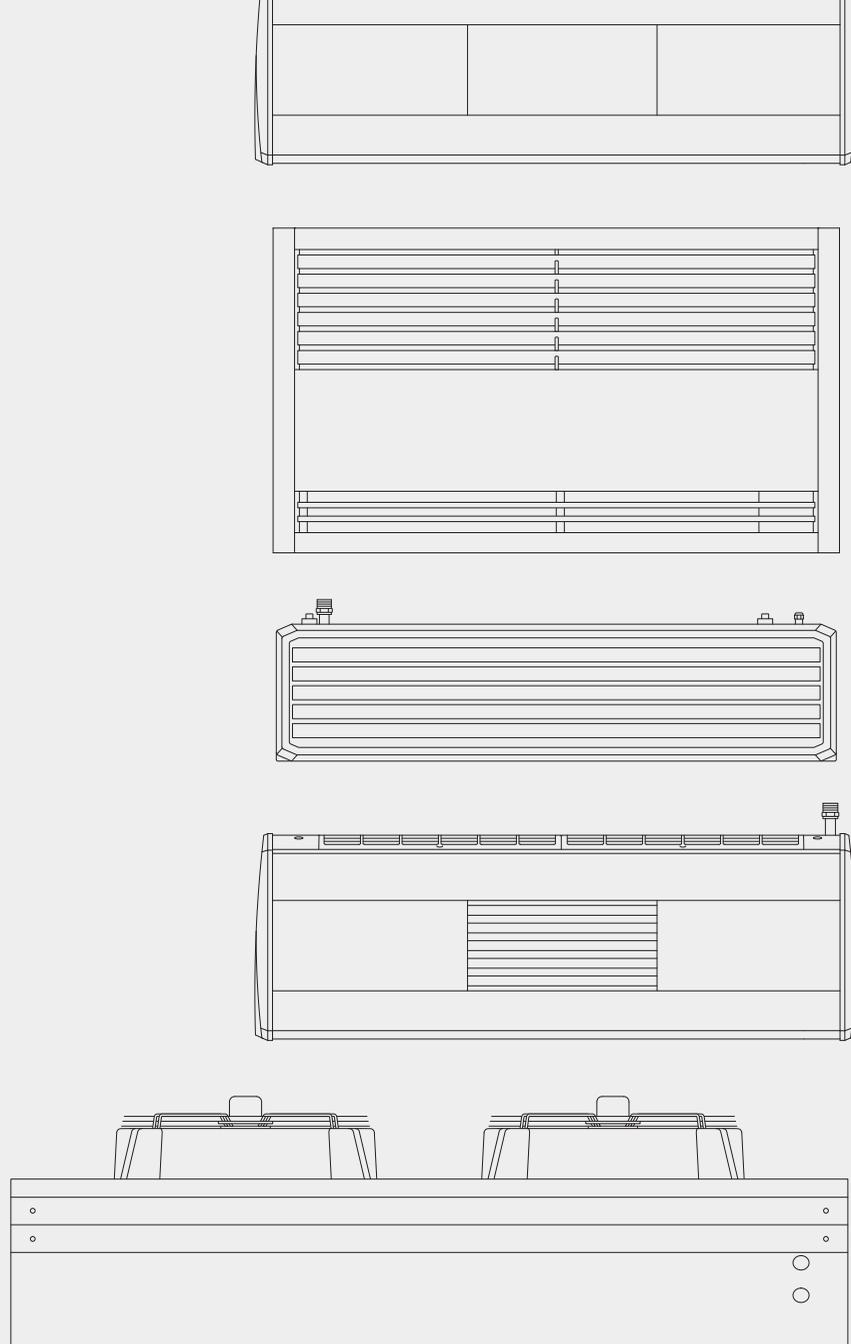
What are
air curtains
for?

A properly selected air curtain saves up to 80% of energy losses

The main task of an air curtain installed above the door is to isolate the room from the influence of external factors. Selection of the appropriate curtain, especially in service and public facilities, where the door is constantly open, allows you to maintain an appropriate energy balance.

4i solution

When creating the new Slim air curtain, we asked our clients what the curtain should be like to fit most doors. We included the answer in the 4i solution, which gave the final character to our device. Thanks to the work of a team of engineers designers of industrial forms and ventilation experts, the thinnest air curtain on the market was created. It's design, color scheme, range and size fits 99% of doors.

Discover the unique 4i advantages of Slim air curtains.

IDEAL · INTELLIGENT · INVISIBLE · IMPROVING ·
4i

1 Intelligent

It's intelligent and economical. It only turns ON when necessary and does not consume electricity unnecessarily.

2 Invisible

It is thin and discreet. Economical in form, perfectly designed not to be conspicuous. It works quietly even at top speed.

3 Improving air

It improves air quality. Possibility of mounting a filter, which blocks pollution from the outside and filters the air inside the buildings.

4 Ideal

It fits your business. Tailiored to the needs of 99% of facillities. Meets all technical requirements.

Intelligent savings

Motion sensor

The built-in motion sensor activates the curtain when motion is detected in the vicinity of the device. No additional door sensor or other automation elements are needed. Additionally, you can limit or extend the sensor's area of operation yourself.

Motion sensor with adjustable angle and sensitivity

Plug & Play

The Slim curtain has a built-in control for automatic operation in relation to the signal from the motion sensor. Thanks to this sensor, the device knows when to activate. Built-in switches on the side of the air curtain are for adjustment of the air barrier to specific needs.

Plug & Play

Savings in heating cost

Tailored to your needs

Switch for activating the heating function or to open the valve
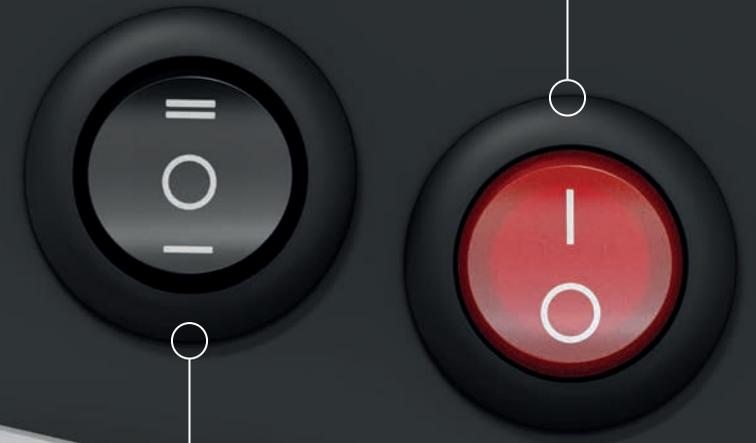
Fan speed switch
The silent mode is useful when you need an effective air barrier and discreet operation of the curtain. Even if the door remains open all the time and the curtain works at its highest fan speed - Slim still lowers your bills and maintains thermal comfort inside.

Discreetness
in action

Minimalist design and color variants

In accordance with the principle of minimalist design, we rejected everything unnecessary. We had moderation economy of form, attention to detail and simplicity in mind. The Slim curtain does not disturb the character of the interior and fits perfectly into the door opening.

Thanks to the two standard colors - deep black and white with black accents - Slim will complement the interior architecture, while guaranteeing maximum space savings. On special request, we also make it possible to order any color from the RAL palette.
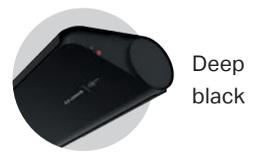
Deep black

White with black accents

The thinnest air curtain on the market – 189 mm

Possibility of painting in any RAL color
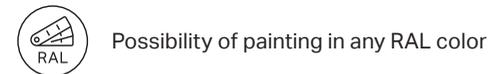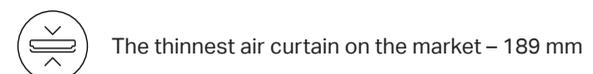
Whisper to me
- low noise

Each device generates minimal operating noise. The air curtains in this case are no exception. Reduction of air curtain's noise level was very important assumption when we designed the Slim air curtain. In silent mode, it works quieter than the conversations around it. It is almost silent, causing no discomfort to people in its vicinity. This is due to the unique design and components used. The generated noise level does not exceed the conversation sound level.

Quiet operation - from 33,5 dB(A)

65

45

35 33,5

20

Noise level – dB(A)

hair dryer

conversation

quiet music

Slim air curtain

Whisper
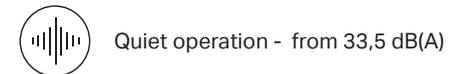
Air quality improvement

Effective barrier with low energy consumption

The task of air curtains is to prevent uncontrolled leakage of warm or cool air from the rooms. The design of the Slim air curtain allows for full protection against unwanted air inflow across the entire width of the door opening.

High-quality drive

Thanks to the highly efficient drive unit and the use of rotors of a renowned German brand, the device is ready to operate with an external filter module.

Savings when heating

It blocks and filters dirty air

The Slim air curtain can be fitted with an easily replaceable external filter module. The filter improves the air quality and what's more the building and the device itself is protected against the ingress of dirt, dust and other pollutants. The filter is easily mounted on the upper surface of the device by means of integrated fasteners.

Filter type: Coarse 30%
Thickness: 4 mm

Recommended for the air curtain version without a water supplied heat exchanger (so-called ambient) and for the curtains with a water supplied heat exchanger.

Simple, intuitive, filter replacement

Reduces dustiness and protects the curtain against dirt

Perfect fit
for your business

Slim is a perfect fit for 99% of door openings

The Slim curtain will work everywhere, where doors are often opened, i.e. in shops, restaurants, commercial buildings. Slim discreetly ensures a comfortable, draft-free interior climate.

Meets all technical standards:

· Perfectly suited to the width of the door.
  Possibility of joining/connecting air curtains with each other
· 3 lengths available: 1m, 1.5m, 2m
· Range 3.2 m
· Light structure - from 14.7 kg
· 2 colors as standard: white, black
· Parameters in accordance with ISO 27327-1 and 2

Service and office facilities

Restaurants and hotels

Optimum range of air stream

Gas stations and car dealerships

Public utility facilities

The thinnest air curtain on the market

Keeping a curtain in proper working condition has never been easier

The optimized shape of the device together with the easy accessible service hatch allows for easy access to the automation. Now, connecting to the electrical system or adjusting sensor parameters becomes even more convenient.

It will work perfectly in a cozy cafe

Contemporary cafes are places that encourage people to come in and stay there for a longer time. The interiors are often dominated by wood and green plants. Natural light, romantic music and thermal comfort is maintained by the Slim air curtain which discreetly fits the character of the interior.

It is perfect for a minimalist interior

Modern offices are often decorated in a simple, raw, economical and functional way. White walls and light furniture do not disturb the interior design. Just like the Slim air curtain, which thanks to its small size becomes an almost invisible element of the interior. The minimalist form of the curtain manifests itself also in its slim shape, and the side elements emphasize the attention to detail.

Slim series

Main technical parameters

Range [(1)]
3,2 m

Heating capacity [(2)]
1,2-29,3

Weight
14,7-26,9

Airflow
750-3000 m³/h

Casing
Steel

2 colors as standard [(3)]
White with black elements and deep black

(1) According to ISO 27327-1
(2) SLIM W power and temperature range specified for the parameters: fan speed III, heating medium temperature 40/30 ° C device inlet temperature 20 ° C - fan speed III, heating medium temperature 110/90 ° C inlet temperature to the device 0 ° C; SLIM E power range for operation at 1N 230/50 to operation at 3N 400/50
(3) RAL 9003 and 9005. Any RAL color on request.

Devices available

3 versions:

W — with water supplied heat exchanger

N — without heat exchanger (ambient)

E — with electric heaters

3 length:

> 100 < 1 m

> 150 < 1,5 m

> 200 < 2 m

1 m — 189 mm

1,5 m — 189 mm

2 m — 189 mm
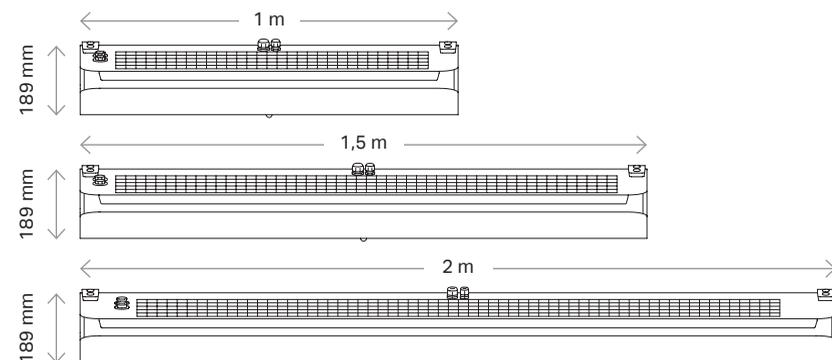
Technical data

Slim air curtain	E-100	W-100	N-100	E-150	W-150	N-150	E-200	W-200	N-200
Power [V/Hz]	230 / 50 or 3x400 / 50	230 / 50	230 / 50	230 / 50 or 3x400 / 50	230 / 50	230 / 50	230 / 50 or 3x400 / 50	230 / 50	230 / 50
Max power consumption [kW]	5,0	0,12	0,14	9,0	0,17	0,2	12,0	0,22	0,23
Max current consumption [A]	8,5	0,5	0,6	13,0	0,7	0,8	17,3	0,9	1
IP	20	20	20	20	20	20	20	20	20
Connection ["]	–	1/2	–	–	1/2	–	–	1/2	–
Capacity [m³/h] [(1)]	800-1300	750-1100	800-1400	1250-2200	1200-1950	1300-2300	1400-3000	1400-2850	1300-3000
Sound pressure level [dB(A)] – 5 m [(2)]	43-55,5	45-54,5	42,5-57	40-54	44-56	41-56	33,5-57	37-58	33,5-56
Sound pressure level [dB(A)] – 3 m [(2)]	44-56,5	46-55,5	43,5-58	41-55	45-57	42-57	34,5-58	38-59	34,5-57
Sound power level [dB(A)] [(3)]	59-71,5	61-70,5	58,5-73	56-70	59-72	56-72	49,5-73	53-74	49,5-72
Heating power [kW] [(4)]	2-5	1,2-12,1	–	3-9	2,6-21,0	–	4-12	3,7-29,3	–
Max. Heating water temperature [°C]	–	110	–	–	110	–	–	110	–
Max. Operating pressure [MPa]	–	1,6	–	–	1,6	–	–	1,6	–
Temperature increase (ΔT) [°C] [(4)]	4,0-24,0	3,0-32,5	–	6,0-32,0	4,0-32,0	–	6,0-36,0	4,0-30,5	–
Weight of the device [kg]	15,1	16,2	14,7	19,6	21,5	19	24,6	26,9	23,8
Range [m] [(1)]	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2

(1) According to ISO 27327-1;
(2) The sound pressure level in a room with an average sound absorption 1500 m³; direction coefficient Q=2;
(3) Sound power level according to ISO 27327-2;
(4) SLIM W, power and temperature range specified for the parameters: fan speed III, heating medium temperature 40/30 ° C temperature at the inlet to the device 20 ° C - fan speed III, heating medium temperature 110/90 ° C temperature at the inlet to the device 0 ° C; SLIM E power range for operation at 1N 230/50 to operation at 3N 400/50;

Horizontal and vertical mounting

✓ Tailored to your needs

🔧 Only one set of brackets for both horizontal and vertical mounting.

Horizontal mounting

Slim air curtains are suited for horizontal installation above the door opening, without limiting the space inside the room. The curtain can be installed with mounting brackets (directly to concrete partitions) or on threaded rods next to the glass door, creating an almost invisible line with the door leaf.

Vertical mounting

The Slim curtain can work vertically if the space above the door is less than 25 cm.

1 set of brackets.
3 mounting posibillities
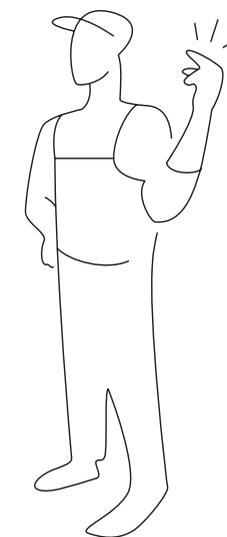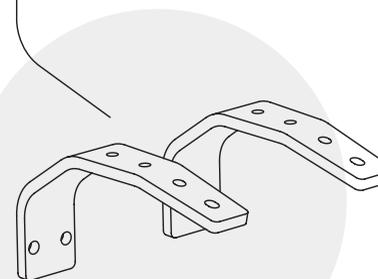
SLIM W-100

Tp1	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2
[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]
	Tw1 / Tw2 = 90/70°C				Tw1 / Tw2 = 80/60°C				Tw1 / Tw2 = 70/50°C				Tw1 / Tw2 = 60/40°C			
	III : V = 1100 [m³/h]															
0,0	9.4	414	5.2	25.5	8.1	354	4.0	22.0	6.7	293	3.0	18.0	5.3	231	2.0	14.5
10,0	8.2	362	4.1	32.0	6.8	301	3.0	28.5	5.5	239	2.1	24.5	4.1	177	1.3	21.0
20,0	7.0	309	3.1	38.5	5.6	247	2.1	35.0	4.2	185	1.3	31.5	2.8	120	0.6	27.5

SLIM W-150

Tp1	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2
[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]
	Tw1 / Tw2 = 90/70°C				Tw1 / Tw2 = 80/60°C				Tw1 / Tw2 = 70/50°C				Tw1 / Tw2 = 60/40°C			
	III : V = 1950 [m³/h]															
0,0	16.5	726	19.2	25.0	14.2	624	15.0	21.5	11.9	522	11.3	18.0	9.6	420	7.9	15.0
10,0	14.4	637	15.2	32.0	12.2	534	11.4	28.5	9.9	431	8.0	25.0	7.5	328	5.1	21.5
20,0	12.4	547	11.5	38.5	10.1	443	8.1	35.0	7.7	339	5.2	31.5	5.4	234	2.8	28.0

SLIM W-200

Tp1	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2
[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]	[kW]	[l/h]	[kPa]	[°C]
	Tw1 / Tw2 = 90/70°C				Tw1 / Tw2 = 80/60°C				Tw1 / Tw2 = 70/50°C				Tw1 / Tw2 = 60/40°C			
	III : V = 2850 [m³/h]															
0,0	23.0	1016	42.2	24.0	19.9	874	33.1	21.0	16.8	734	24.9	17.5	13.6	594	17.6	14.5
10,0	20.2	892	33.3	31.0	17.1	750	25.0	27.5	13.9	608	17.7	24.5	10.7	467	11.5	21.0
20,0	17.4	768	25.3	38.0	14.2	624	17.9	34.5	11.0	480	11.6	31.5	7.7	336	6.4	28.0

V - air flow
PT - heating power
Tp1 - air temperature at the inlet to the device
Tp2 - air temperature at the outlet from the device
Tw1 - temperature of the medium on the supply of the exchanger
Tw2 - temperature of the medium on the return from the exchanger
Qw - flow of the medium in the exchanger
Δpw - pressure drop of the medium in the exchanger

Heating power calculator

Select the device for other parameters using our calculator, scan the QR code.

Control

Plug & Play

A turnkey solution that works right out of the box. Intuitive switches enable comfortable and easy control of the air curtain.
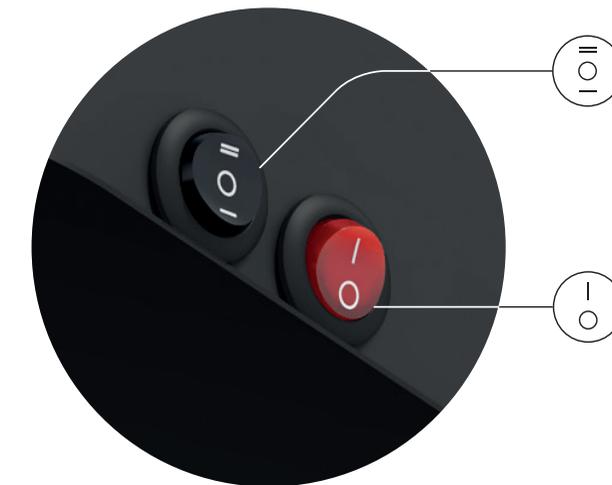
Turn on / off air barrier
minimum or maximum speed depending on the required degree of protection. Appropriate setting of the curtain operating mode will provide you with thermal comfort and allow you to reduce your bills.

Turn on / off the heating function
for even more effective protection of the interior climate and to ensure a thermal comfort in adverse weather conditions (available in the SLIM E, SLIM W versions)

Other available options upon request

When you need traditional regulation

The solution will prove useful if you frequently change the curtain's settings and want to have the controller at your fingertips. Select the TS controller, which acts as a thermostat and switches on the heating elements.

When the motion sensor operation is obstructed

This solution will prove useful when the motion sensor cannot operate freely due to some obstacles (eg a suspended element close to the air curtain). In this case the devices reacts to the signal from the door sensor.

When you need more advanced control option

This solution will work when you want to connect the curtain to an BMS- intelligent building management system,if you need a weekly programmer or remote supervision over the operation of devices.

Other curtains in FLOWAIR's offer

The FLOWAIR offer includes a wide range of ELiS air curtains, which are dedicated to specific types of facilities and specific sizes of door openings. They differ not only in dimensions, but also in range, heating elements and design.

Comparison of air stream range

* air speed at the outlet
** boundary air barrier velocity at the floor

ELiS G
8 m
12,5 m/s*
7 m
6 m
5 m

ELiS B
11 m/s*

ELiS T
4 m
10 m/s*   up to 7,5 m
3 m

ELiS A
8 m/s*   up to 5 m

Slim
2 m
8 m/s*   up to 4 m

ELiS DUO
7 m/s*   up to 8 m
1 m
up to 3 m
up to 3,2 m
up to 2,5 m
2,1 m/s**   2,1 m/s**   2,3 m/s**   2,3 m/s**   2,1 m/s**   3,5 m/s**
0 m

Need of heating   Increased aesthetics   Universal solutions   Industrial premises
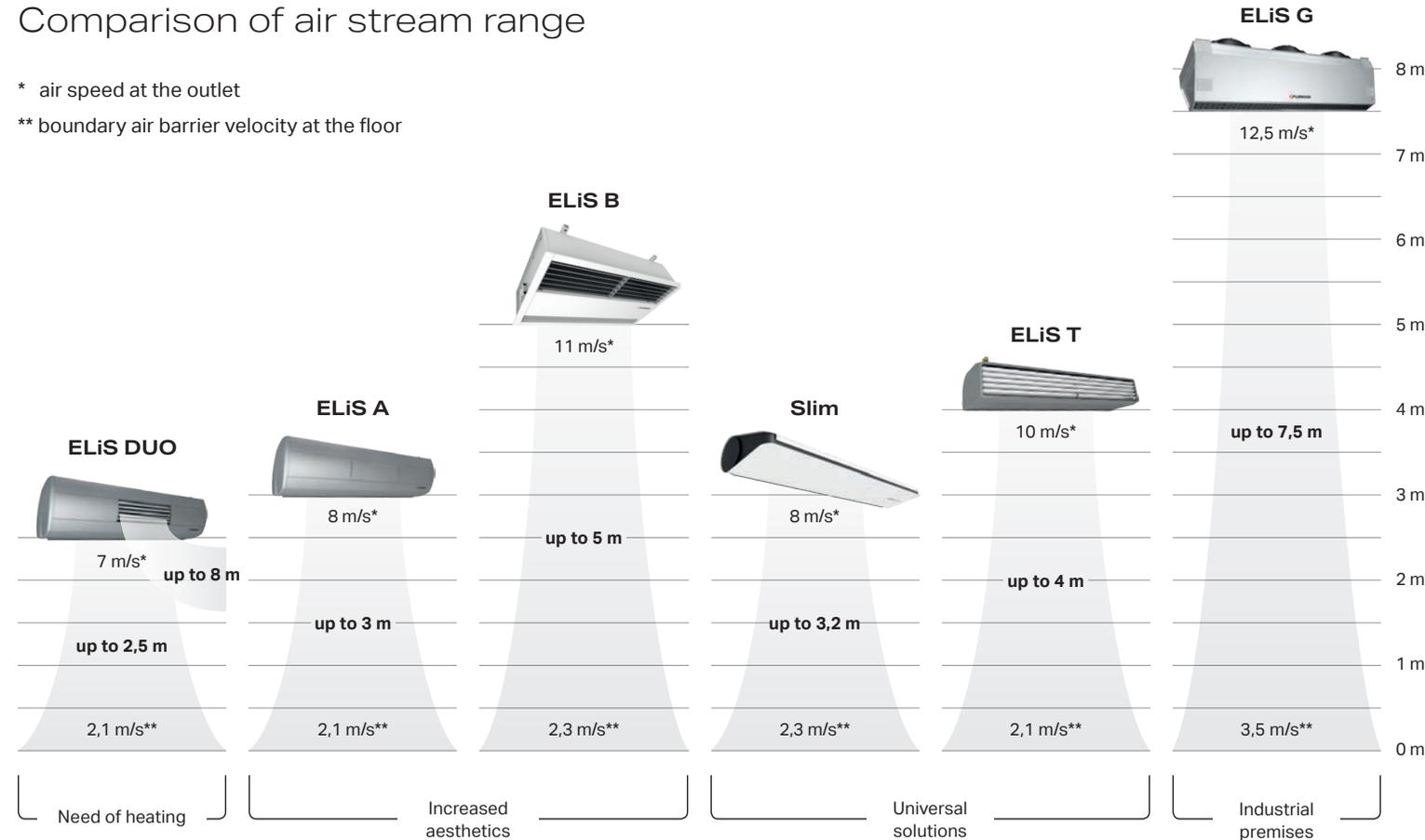
Technical parameters

|	ELiS DUO	ELiS A	ELiS B	Slim	ELiS T	ELiS G
Version	W/E	W/E/N	W/E/N	W/E/N	W/E/N	W/E/N
Installation height	do 2,5 m	do 3 m	do 5 m	do 3,2 m	do 4 m	do 7,5 m
Efficiency	1200–3700 m³/h	850–3500 m³/h	2000–6600 m³/h	750–3000 m³/h	1700–5300 m³/h	1100–8600 m³/h
DB levels	45–60 dB(A)	44–59 dB(A)	55–66 dB(A)	33,5–58 dB(A)	55–65 dB(A)	44–68 dB(A)
BMS	in standard	in standard	in standard	via DRV Slim - external module	via DRV ELIS - external module	via DRV ELIS - external module

N - without heat exchanger   W - with water heat exchanger   E - with electric heaters

The sound pressure level measured in a room with an average sound absorption capacity, 1500 m³; directivity factor Q = 2

Application

ELiS DUO
reception desks, shops, banquet halls

ELiS B
hotels, offices, shopping centers

ELiS T
shopping centers, restaurants, train or buss stations

ELiS A
exhibition centers, banks, airports

Slim
commercial facilities, restaurants, gas stations

ELiS G
industrial halls, logistic centers, warehouses

The essence of FLOWAIR quality

Member of EUROVENT

The essence of FLOWAIR Quality

FLOWAIR as an expert and manufacturer of HVAC devices is a proud member of the EUROVENT association. The organization brings together the renowned companies in our industry. Together we create new recommendations that are finally presented to the European Commission. The association is looking for energy saving solutions in the buildings. One of the solutions recommended is the use of air curtains.

A special EUROVENT project group is currently developing a methodology for testing these devices to measure the effectiveness of air curtains and come up with a reliable comparison of their parameters. FLOWAIR- the only Polish manufacturer participating in the project group, created a test stand to measure the effectiveness of air curtains.

CORRESPONDING **MEMBER**
EUROVENT
EUROPEAN INDUSTRY ASSOCIATION

FLOWAIR
intelligent air flow