

Air curtains ELiS A











Air curtains ELiS A

Max. range[1] [m]	3
Heating capacity[2] [kW]	12,3–28,0
Air flow [m³/h]	850–3500
Weight [kg]	18,4–39,0
Colour	grey/white [3]
Casing	steel, plastic

[1] Range of vertical isothermal air stream, at velocity limit above 2 m/s
[2] For A-W at inlet/outlet water temperature 90/70°C, inlet air temperature 10°C
[3] RAL 9006 / RAL 9010

Application:

Representative rooms like stores, restaurants, showrooms etc. ELiS A units are designed for horizontal installation directly above door openings. They form an air stream, which reduces losses associated with air exchange between the building and its surroundings.

Available types of units:

Available in 3 lengths: 1 m, 1,5 m or 2 m.
Available in 3 versions:

- N – curtain without heat exchanger (ambient)
- W – curtain with water heat exchanger
- E – curtain with electric heaters

Technical data

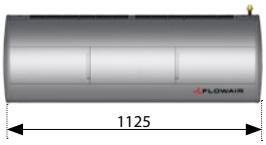
	ELiS A-W-100	ELiS A-N-100	ELiS A-E-100	ELiS A-W-150	ELiS A-N-150	ELiS A-E-150	ELiS A-W-200	ELiS A-N-200	ELiS A-E-200
Power supply [V/Hz]	230/50	230/50	3x400/50	230/50	230/50	3x400/50	230/50	230/50	3x400/50
Power consumption [kW]	0,17	0,17	7	0,25	0,25	10,7	0,34	0,34	15
Current consumption [A]	0,72	0,72	10	1,1	1,1	15,5	1,45	1,45	21,5
IP	21	21	21	21	21	21	21	21	21
Connection ["]	½"	–	–	½"	–	–	½"	–	–
Air flow [m³/h]	1500	1500	1500	2500	2500	2500	3500	3500	3500
Acoustic pressure level [dB(A)][1]	43	43	43	46	46	46	48	48	48
Max. heating water temperature [°C]	95	–	–	95	–	–	95	–	–
Max. operating pressure [MPa]	1,6	–	–	1,6	–	–	1,6	–	–
Air temperature rise (ΔT) [°C][2]	34	–	25	24	–	21	24	–	18
Weight of unit [kg]	20,9	18,4	21,4	28,3	25,3	28,5	37,1	33,6	39
Weight of unit filled with water [kg]	22,3	–	–	29,6	–	–	38,8	–	–
Range [m][3]	3								

[1] Acoustic pressure level measured for optimum installation height, on second step of efficiency, in the room with medium capability of sound absorption, capacity 500 m³, at distance of 3 m from the unit
[2] For A-W at inlet/outlet water temperature 90/70°C and inlet air temperautre 10°C / for A-E at inlet air temperature 10°C
[3] Range of vertical isothermal air stream, at velocity limit above 2 m/s

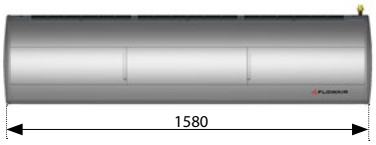


Dimensions

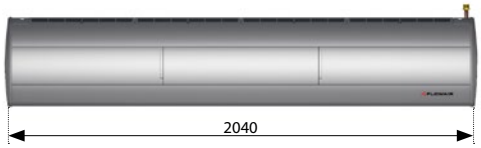
A-N/W/E-100

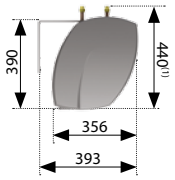


A-N/W/E-150



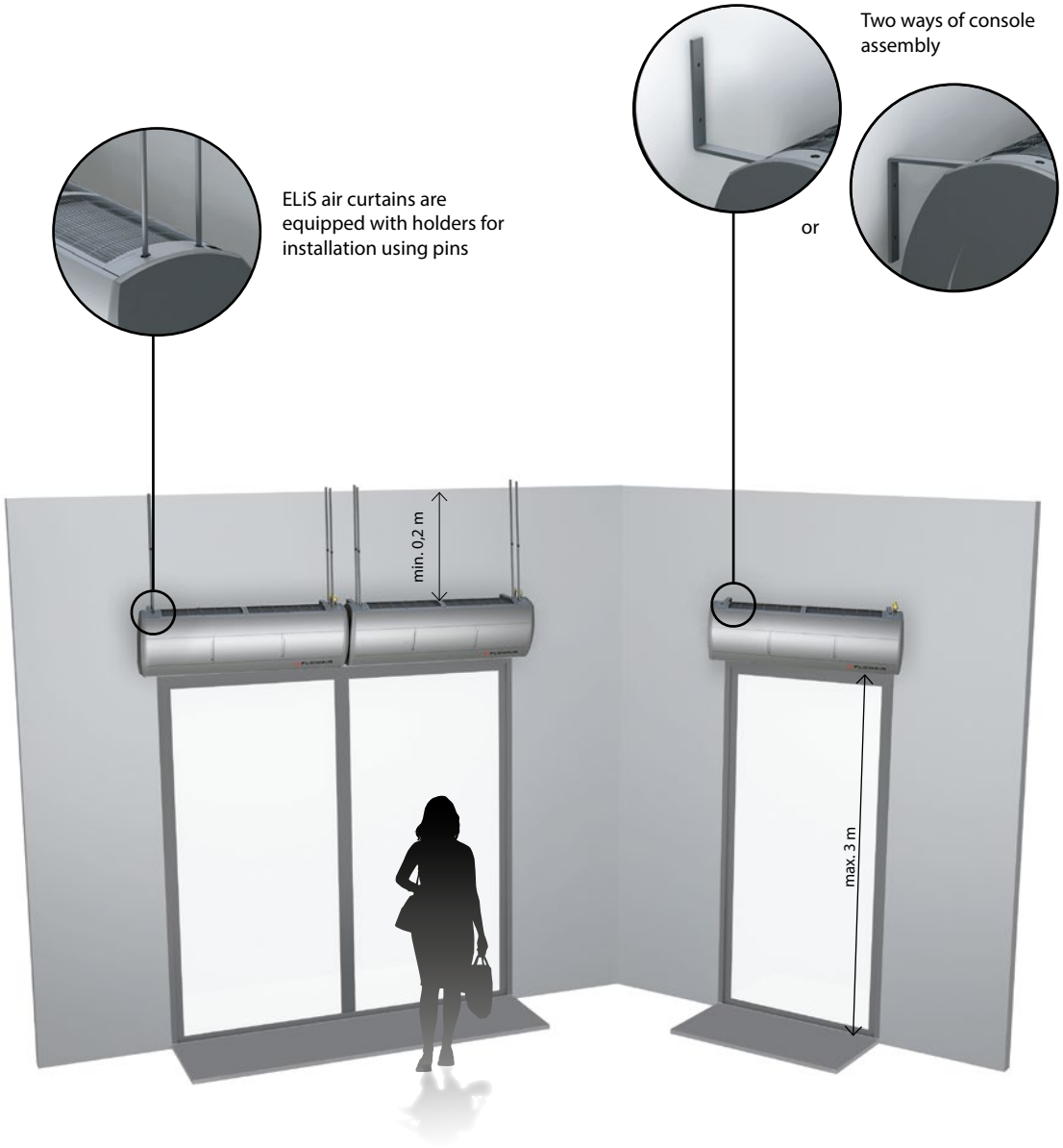
A-N/W/E-200





(1) Concerns ELiS A-W

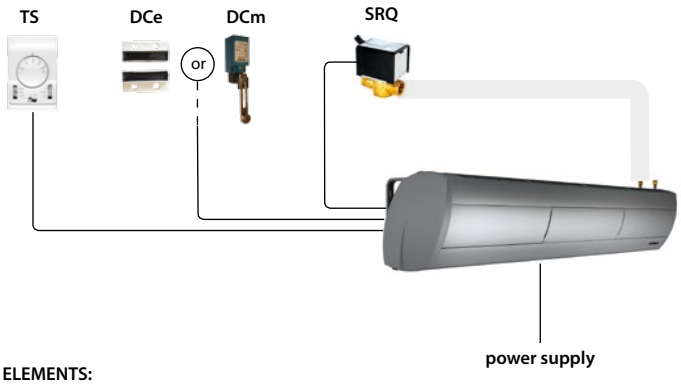
Installation





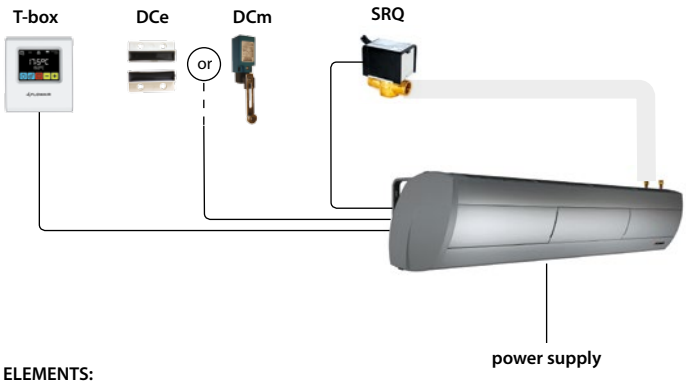
Connection diagrams

Air curtains ELiS A
TS REGULATION



ELEMENTS:
- TS – 3-step fan speed controller with thermostat
- DCe – magnetic door sensor
- DCm – mechanical door sensor
- SRQ – valve with actuator

Air curtains ELiS A
T-box REGULATION



ELEMENTS:
- T-box – intelligent controller with touch screenm
- DCe – magnetic door sensor
- DCm – mechanical door sensor
- SRQ – valve with actuator

Examples of installation

Representative rooms like stores, restaurants, exhibition halls, etc.



ELiS A – light casing | three lengths



Heating capacities

ELiS A
WITH WATER HEAT EXCHANGER

ELiS A-W-100

Tp1	V	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2
°C	m³/h	kW	l/h	kPa	°C	kW	l/h	kPa	°C
		Tw1/Tw2 = 90/70°C				**Tw1/Tw2 = 80/60°C**			
0	850/1150/1500	14,4/17,7/21,0	637/781/927	4,4/6,4/8,8	47/43/39	12,4/15,2/18,0	545/668/793	3,4/5,0/6,8	40/37/33
5		13,3/16,4/19,4	588/721/857	3,8/5,5/7,6	49/45/41	11,3/13,9/16,5	497/610/724	2,9/4,2/5,7	43/39/36
10		12,3/15,0/17,9	541/663/788	3,3/4,8/6,5	51/47/44	10,3/12,6/15,0	451/553/657	2,4/3,5/4,8	45/41/39
15		11,2/13,7/16,3	494/606/721	2,8/4,0/5,5	53/50/47	9,2/11,3/13,5	405/497/591	2,0/2,9/4,0	47/44/41
20		10,2/12,5/14,8	448/550/654	2,3/3,4/4,6	55/52/49	8,2/10,1/12,0	360/442/526	1,6/2,4/3,2	49/46/44
		Tw1/Tw2 = 70/50°C				**Tw1/Tw2 = 60/40°C**			
0	850/1150/1500	10,4/12,7/15,1	453/555/659	2,5/3,7/5,0	34/31/28	8,3/10,1/12,0	360/442/525	1,8/2,5/3,4	27/24/22
5		9,3/11,4/13,5	407/498/592	2,1/3,0/4,1	36/33/30	7,2/8,9/10,5	315/386/459	1,4/2,0/2,7	29/27/25
10		8,3/10,1/12,0	361/443/526	1,7/2,4/3,3	38/35/33	6,2/7,6/9,0	269/331/394	1,0/1,5/2,0	31/29/27
15		7,2/8,9/10,5	316/388/461	1,3/1,9/2,6	40/37/35	5,1/6,3/7,5	224/276/329	0,8/1,1/1,5	33/31/30
20		6,2/7,6/9,1	271/334/397	1,0/1,5/2,0	42/40/38	4,1/5,1/6,1	177/220/264	0,5/0,7/1,0	34/33/32

ELiS A-W-150

Tp1	V	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2
°C	m³/h	kW	l/h	kPa	°C	kW	l/h	kPa	°C
		Tw1/Tw2 = 90/70°C				**Tw1/Tw2 = 80/60°C**			
0	1650/2100/2500	17,9/20,7/22,9	791/914/1011	5,3/6,9/8,3	32/29/27	15,3/17,7/19,6	672/777/861	4/5,6/6,3	27/25/23
5		16,8/19,4/21,4	740/855/946	4,7/6,1/7,4	35/32/30	14,1/16,3/18,1	621/718/795	3,5/4,5/5,5	30/28/26
10		15,6/18/20	688/795/881	4,1/5,3/6,5	38/35/34	13/15/16,6	569/658/728	3/3,9/4,7	33/31/30
15		14,4/16,7/18,5	636/735/814	3,5/4,6/5,6	41/38/37	11,8/13,6/15	517/597/661	2,5/3,2/3,9	36/34/33
20		13,2/15,3/17	584/674/748	3/3,9/4,8	43/41/40	10,6/12,2/13,5	464/532/593	2/2,7/3,2	39/37/36
		Tw1/Tw2 = 70/50°C				**Tw1/Tw2 = 60/40°C**			
0	1650/2100/2500	12,7/14,6/16,2	554/640/709	2,9/3,8/4,6	23/21/19	10/11,5/12,8	434/502/556	1,9/2,5/3	18/16/15
5		11,5/13,3/14,7	502/580/643	2,4/3,2/3,8	26/24/22	9/10,1/11,2	381/441/489	1,5/2/2,4	21/19/18
10		10,3/11,9/13,2	450/520/576	2/2,6/3,1	28/27/26	7,5/8,7/9,7	328/380/421	1,2/1,5/1,8	23/22/21
15		9,1/10,5/11,6	397/459/508	1,6/2,1/2,5	31/30/29	6,3/7,3/8	273/316/351	0,8/1,1/1,3	26/25/24
20		7,84/9,1/10	343/397/439	1,2/1,6/1,9	34/33/32	4,9/5,7/6,4	214/250/279	0,6/0,7/0,9	29/28/27

ELiS A-W-200

Tp1	V	PT	Qw	Δpw	Tp2	PT	Qw	Δpw	Tp2
°C	m³/h	kW	l/h	kPa	°C	kW	l/h	kPa	°C
		Tw1/Tw2 = 90/70°C				**Tw1/Tw2 = 80/60°C**			
0	2400/2900/3500	25,7/29/32,2	1135/1271/1419	12/14,5/18	32/29/27	22/24,7/27,6	970/1086/1212	9/11,1/13,6	27/25/23
5		24/27/30	1063/1191/1329	10,4/13/16	35/32/30	20,4/22,9/25,5	898/1006/1122	7,8/9,7/11,8	30/28/27
10		22,5/25,1/28	992/1110/1240	9,2/11,3/14	38/36/34	18,8/21/23,5	825/924/1031	6,7/8,3/10,1	33/31/30
15		20,8/23,3/26	918/1027/1147	7,9/9,8/12	40/38/37	17,1/19,1/21,4	751/841/939	5,7/7/8,5	36/34/33
20		19/21,4/24	844/945/1054	6,8/8,4/10,3	43/42/40	15,4/17,3/19,2	677/758/845	4,7/5,8/7	39/37/36
		Tw1/Tw2 = 70/50°C				**Tw1/Tw2 = 60/40°C**			
0	2400/2900/3500	18,4/20,6/23	805/902/1007	6,6/8,1/10	23/21/20	14,7/16,5/18,4	641/717/801	4,5/5,5/6,7	18/17/16
5		16,8/18,8/21	733/821/916	5,6/6,9/8,4	26/24/23	13/14,6/16,3	568/636/709	3,6/4,5/5,4	21/20/19
10		15,1/16,9/18,9	660/739/824	4,6/5,7/6,9	29/27/26	11,3/12,7/14,1	493/552/616	2,8/3,5/4,2	24/23/22
15		13,4/15/16,7	586/655/731	3,7/4,6/5,6	31/30/29	9,6/11/12	418/468/522	2/2,6/3,1	27/26/25
20		11,7/13/14,6	510/571/637	2,9/3,5/4,3	34/33/32	7,8/8,7/9,8	340/381/425	1,4/1,8/2,2	30/29/28

V – air flow
PT – air flow
Tp1 – inlet air temperature
Tp2 – outlet air temperature
Tw1 – inlet water temperature
Tw2 – outlet water temperature
Qw – water stream flow in the heat exchanger
Δpw – water pressure drop in the heat exchanger