

AIR CURTAINS

ELiS^T

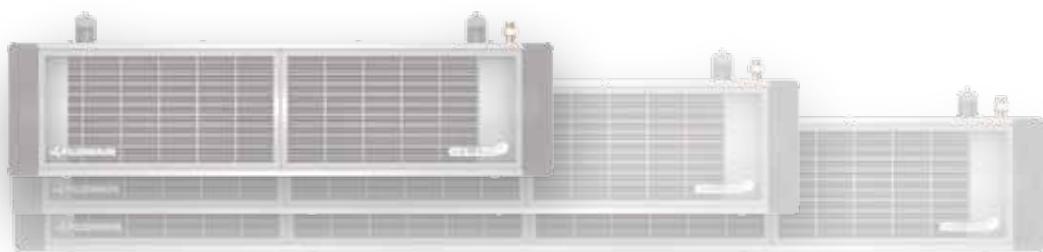
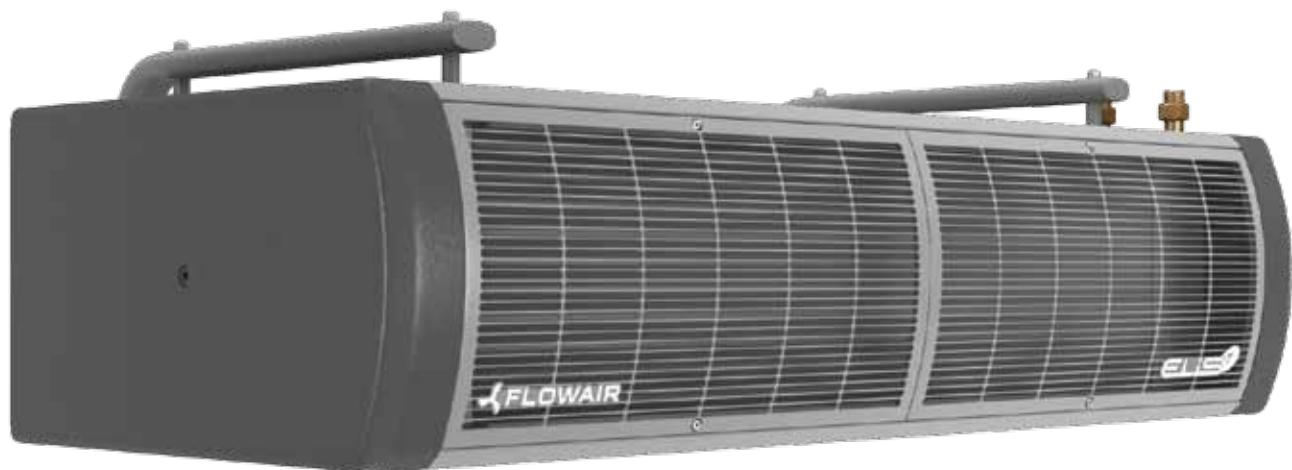
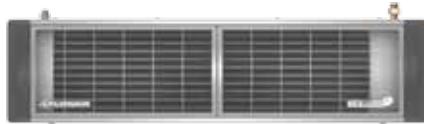




TABLE OF CONTENTS

• General characteristic	3
• Construction	4
• Dimensions	5
• Technical data	5
• Velocity of the air flow	6
• Installation	7
• Control systems	8
• Connection diagrams	12
• Heating capacity tables	
- ELiS T2-W-100	20
- ELiS T2-W-150	20
- ELiS T2-W-200	21
- ELiS T2-E-100/150/200	21

GENERAL CHARACTERISTIC



Max. range* (m)	3,5
Heating capacity** (kW)	9,1 – 23,3
Air flow (m³/h)	1020 – 3500
Weight (kg)	20,5 - 49,4
Colour***	silver - grey; white
Construction	sheet steel + plastic

* Vertical range of isothermal stream (at velocity boundary equal to 2 m/s).

** At inlet/outlet water temperature 90/70°C, inlet air temperature 10°C.

*** On customer's demand, unit is available in other colours.

ELiST air curtains create air barrier on entire door opening plane. It prevents the inflow of cold air during the winter and the inflow of warm air into the air-conditioned rooms during the summer.

ELiST air curtains are:

- available in 3 lengths: 1 m, 1,5 m or 2 m
- available in 3 versions:
 - with water heat exchanger (W),
 - with electric heaters (E),
 - without any heating elements - ambient curtain (N)
- designed to install horizontally or vertically
- available with two types of control systems:
 - L - basic control system
 - AF - advanced control system

T2-W/N/E-100

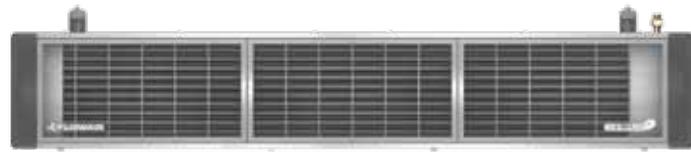


W - air curtain with water heat exchanger

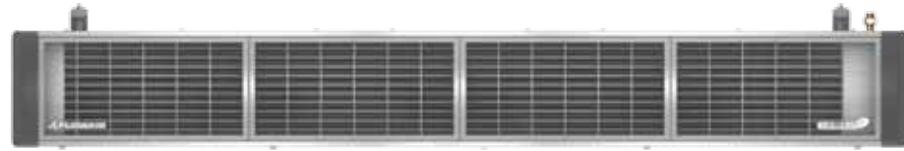
E - air curtain with electric heaters

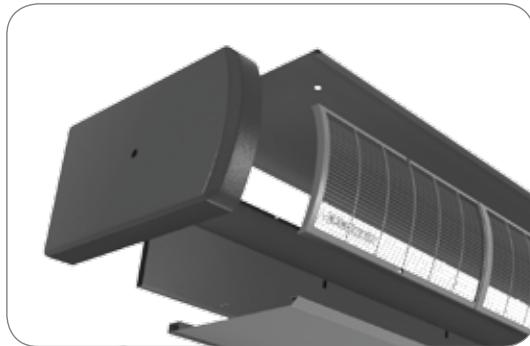
N - air curtain without heat exchanger ("ambient")

T2-W/N/E-150



T2-W/N/E-200





SIMPLE CONSTRUCTION

Simple and light construction made of metal and plastic elements.



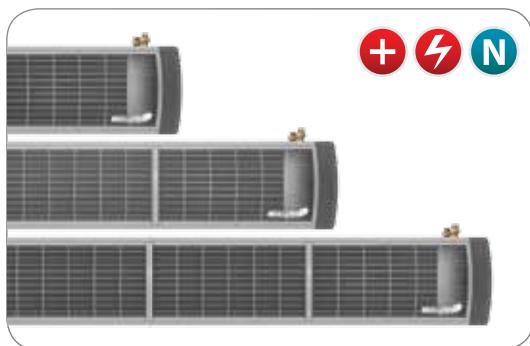
BMS CONTROL SYSTEM

Unit's AF control system can be connected to the intelligent building management system (BMS).



LOW WEIGHT FANS

Casing and fan rotor are made of plastic. They have very low current consumption in proportion to their efficiency. Additionally they are very quiet during operation.



WIDE RANGE OF TYPES

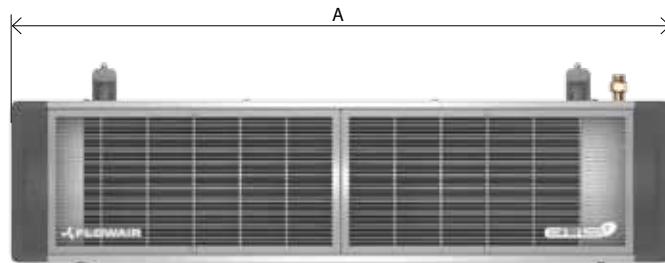
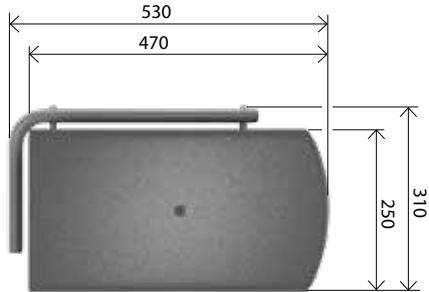
Air curtains with water heat exchanger, with electric heaters and without heating components (ambient) are available in 3 lengths - 1 m, 1,5 m and 2 m. There is possibility to install them horizontally and vertically.



HEATING COMPONENTS

Air curtains with electric heaters are equipped with PTC heating boards.
Air curtains with water heat exchanger are equipped with copper heat exchanger with aluminium lamellas.

DIMENSIONS



[mm]	T2-W/N/E-100	T2-W/N/E-150	T2-W/N/E-200
A	1030	1530	2030

TECHNICAL DATA

	T2-W-100	T2-N-100	T2-E-100	T2-W-150	T2-N-150	T2-E-150	T2-W-200	T2-N-200	T2-E-200
Fan	2 x centrifugal fan, double air inlet, single phase AC		3 x centrifugal fan, double air inlet, single phase AC		4 x centrifugal fan, double air inlet, single phase AC				
Air flow [m³/h]	1770		2500		3500				
Power supply [V/Hz]	230 / 50		230 / 50		230 / 50				
Max. current consumption [A]	0,72		1,1		1,45				
Max. power consumption [kW]	0,17		0,25		0,34				
IP / Insulation class	21		21		21				
Acoustic pressure level* [dB(A)]	53		56		58				
Max. air stream range** [m]			3,5						
	T2-W/N/E-100			T2-W/N/E-150			T2-W/N/E-200		
Fan step	1st step	2nd step	3rd step	1st step	2nd step	3rd step	1st step	2nd step	3rd step
RPM [1/min]	850	1020	1350	850	1020	1350	850	1020	1350
Air flow [m³/h]	1020	1340	1770	1650	2100	2500	2400	2900	3500
Current consumption [A]	0,54	0,7	0,72	0,81	1,05	1,08	1,29	1,34	1,45
Power consumption [W]	124	160	168	186	240	248	297	308	335
Acoustic pressure level* [dB(A)]	42	46	53	45	49	56	47	51	58
	T2-W-100			T2-W-150			T2-W-200		
Heat exchanger	Cu – Al, one row								
Air curtain heating capacity*** [kW]	1st step	2nd step	3rd step	1st step	2nd step	3rd step	1st step	2nd step	3rd step
	9,1	10,7	12,6	13,9	15,9	17,6	18,8	21,0	23,3
Air temperature rise (ΔT)*** [°C]	26	24	21	25	22	21	23	21	20
Max. water pressure [MPa]						1,6			
Max. water temperature [°C]						95			
Connection ["]						1/2"			
	T2-E-100			T2-E-150			T2-E-200		
Heating element	2 x PTC heating board			3 x PTC heating board			4 x PTC heating board		
Power supply [V/Hz]	3x400 / 50								
Rated current [A]	10,0			15,5			21,5		
Heating capacity of electric heaters [kW]	7,0			10,7			15,0		
Air temperature rise (ΔT) [°C]	25			21			18		
	T2-W-100	T2-N-100	T2-E-100	T2-W-150	T2-N-150	T2-E-150	T2-W-200	T2-N-200	T2-E-200
Unit weight [kg]	24	20,5	24,8	34,3	29,9	38	46,8	42,1	49,4
Weight of unit filled with water [kg]	25,2	-	-	35,9	-	-	48,2	-	-

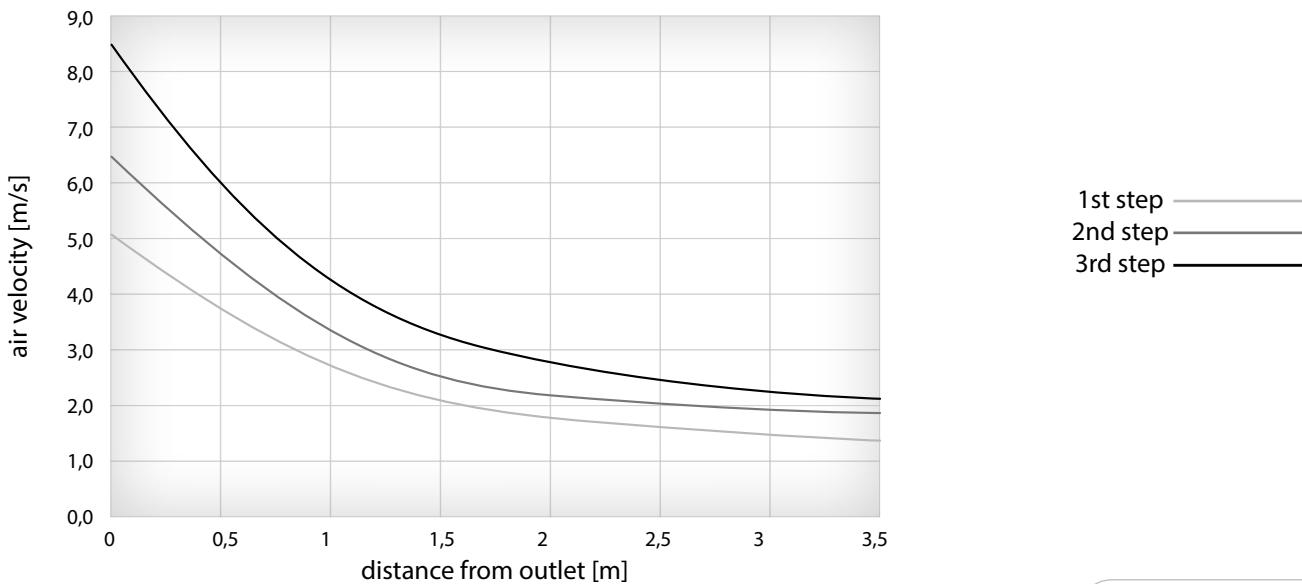
* Acoustic pressure level measured in the room of average sound absorption, capacity 500m³, at distance of 2m from the unit.

** Vertical range of isothermal stream (at velocity boundary equal to 2 m/s).

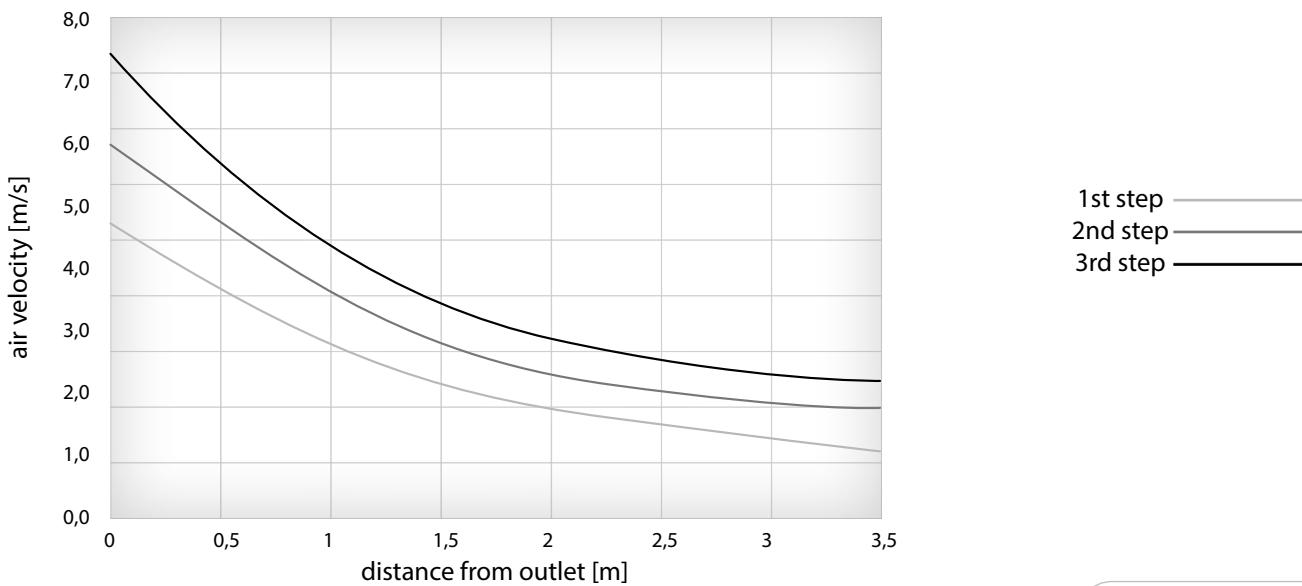
*** At max. air flow stream, inlet/outlet water temperature 90/70°C, inlet air temperature 10°C.

VELOCITY OF THE AIR FLOW

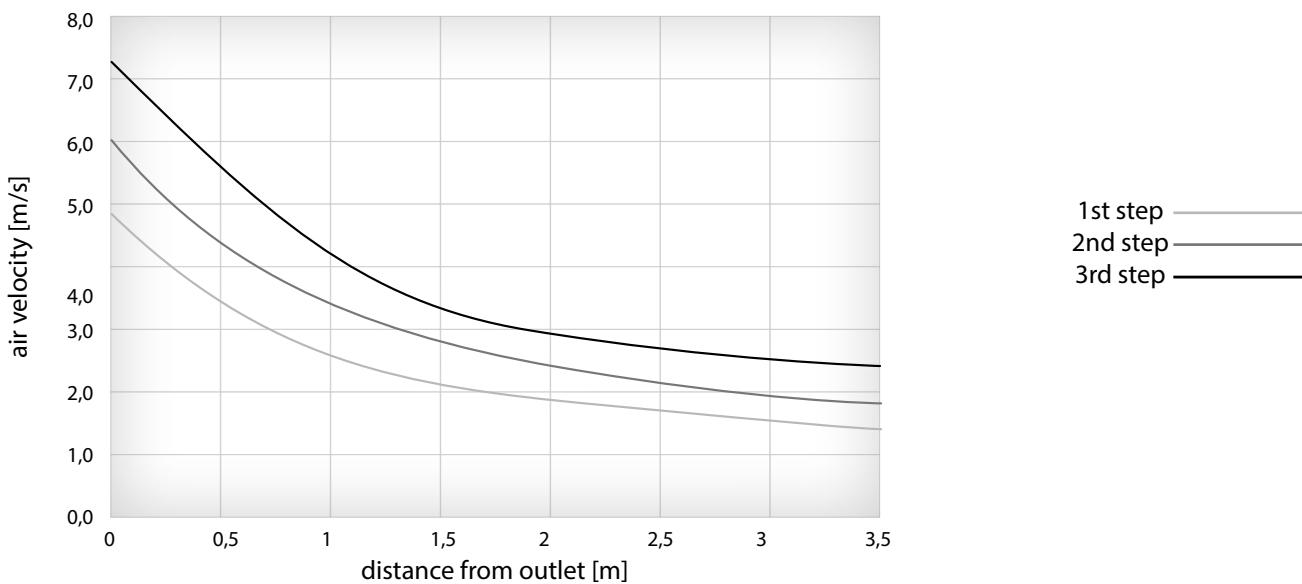
T2-100



T2-150



T2-200



INSTALLATION

INSTALLATION OPTIONS



ELiS T air curtains can be installed vertically using brackets.



ELiS air curtains have a pin handles as a standard equipment.



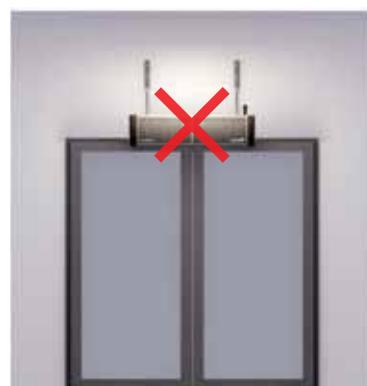
Optional installation console ensures two ways of unit's installation. Both are easy and quick.

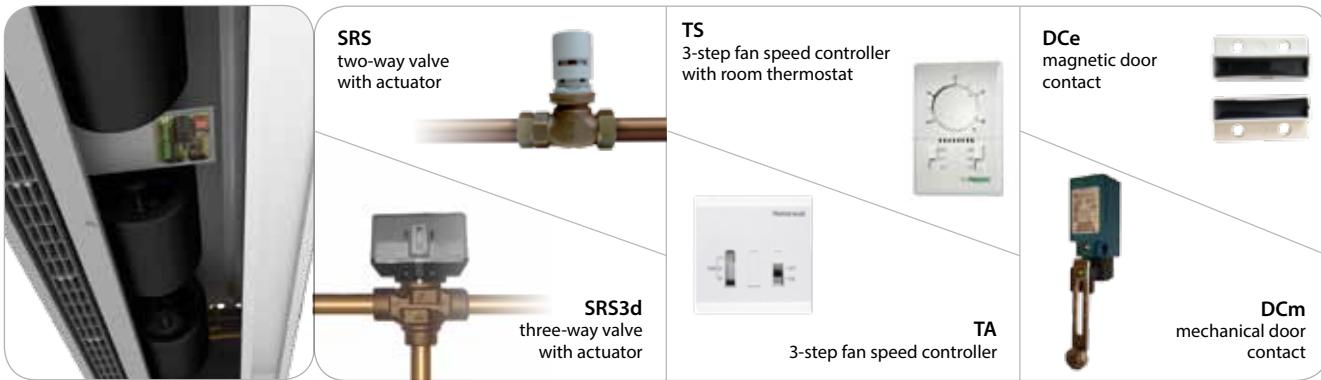


* to order air curtain for vertical installation please contact Sales Office.

PROPER INSTALLATION

The key to the correct operation of the unit is to ensure air barrier on entire door opening plane. ELiS T are adapted to chaining, so covering wider door openings doesn't make any problem. Incorrect installation may result in heat loss during the winter and chill loss in the air-conditioned rooms during the summer.





Control systems of the ELiT air curtains are designed to give the user full control over the air barrier stream. There are two versions of control system available:

- L - basic operation of the air curtain,
- AF - advanced operation of the air curtain.

L SYSTEM

Ensures basic operation of the ELiT air curtains. Air stream can be controlled by fan speed controller and door contact. In case of curtains with water heat exchanger, control system controls also two- or three-way valve. There is possibility to chain up to 5 units and control them by one controller.

The L control system enables two configurations of controlling the unit:

- Mode 1 - operation of the curtain with TA fan speed controller and valve operation by dipswitch configuration.
- Mode 2 - operation of the curtain with thermostat and TS fan speed controller.

In both configurations main signal comes from the door contact.

CHAINING OF THE AIR CURTAINS

In the case of curtains chaining, signals are transferred from MASTER unit to SLAVE units by the wire with RJ plugs.

AF SYSTEM

Beside basic functions of L system, air curtains have other functions, which improve the air barrier efficiency - AF system. This system enables to control air stream, which is specially matched to the conditions of the building. It is possible to set the idle speed of fans and set the delay time of switching the unit from normal operation to idle speed mode. The AF control system can be connected to the intelligent building management system BMS.

There are two configurations of AF system available:

- Mode 1 - operation of the curtain with door contact and TA fan speed controller.
- Mode 2 - operation of the curtain with door contact, thermostat and TS fan speed controller. In this configuration main signal comes from the door contact.

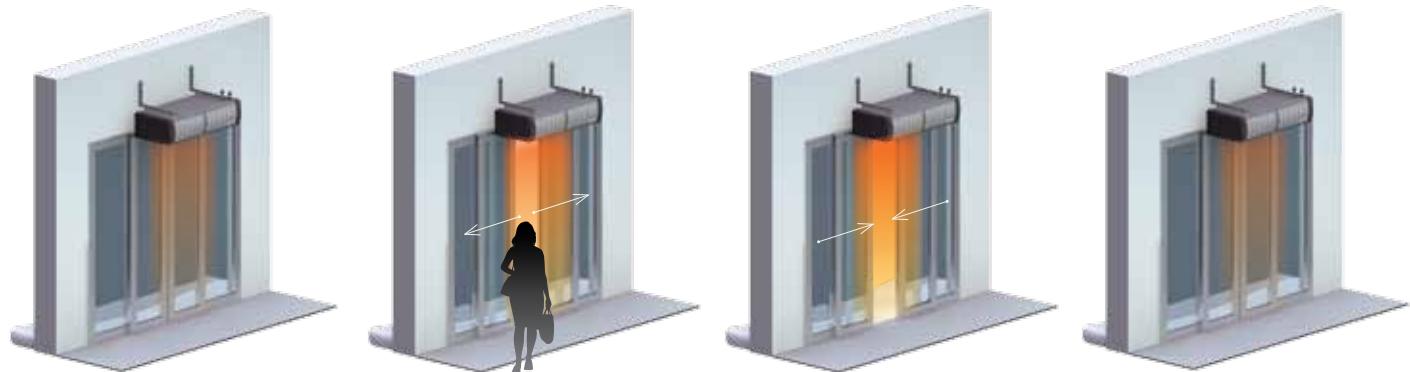
BMS

AF control system can be connected to the intelligent building management system BMS. This solution enables saving and loading parameters of curtain's operation (e.g. fan speed).

FEATURES:

Reduction of the noise by fan speed regulation.
Possibility of connection to BMS system.
Possibility of control several units by one controller due to units chaining via wire with RJ plugs.
Multiple configurations of curtains operation.

When the doors are closed, curtain's fans are operating with lower (chosen) speed. This solution eliminates delay in the air barrier arise, which is caused by the time needed to switch on the fans.



A) Doors are closed - standby mode.

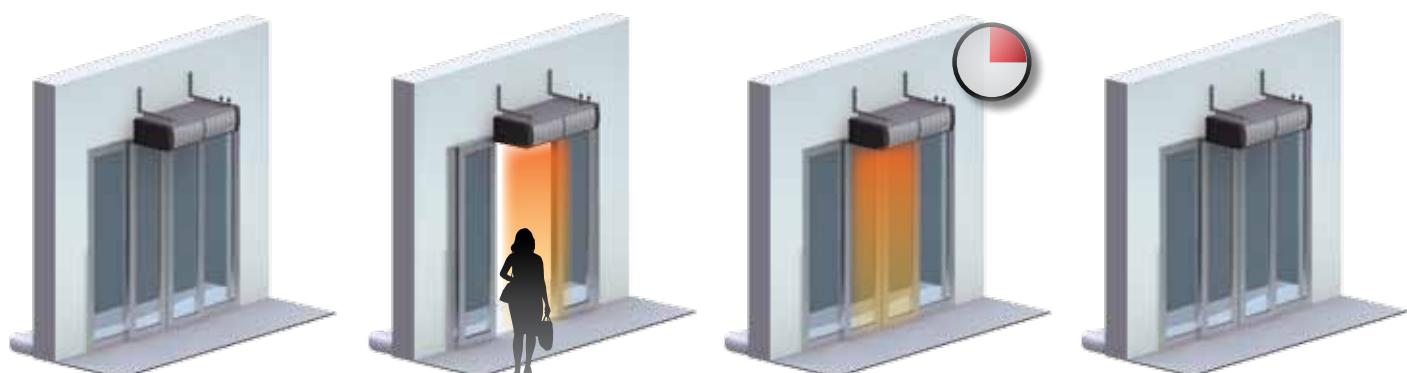
B) Doors are opening - rapid start and speed of fans is rising.

C) Doors are closing - speed of fans is still higher.

D) Doors are closed - back to standby mode.

AIR CURTAIN'S SWITCH OFF DELAY TIME

In the case when doors in the building keep opening and closing constantly, AF system make possible to set time delay of the switching off the curtain or returning it into the idle speed mode. When the doors are closed, curtain is still operating for the set time. If the doors will open in a minute, there is no need to switch on the curtain again. This solution increases reliability of the components and improves the air barrier efficiency.



A) Doors are closed - fans are stopped.

B) Doors are open - fans are operating with speed set on the controller.

C) Doors are closed - fans are operating for a delay time set by the user. After that time, curtain may switch off or return to idle speed mode.

D) Doors are closed - fans will switch off after the delay time.

BMS PROGRAMMING

AF control system is equipped with MODBUS communication protocol (ASCII), which enables connection of the unit to the BMS system. By BMS is possible to save and load main parameters of curtain operation.

Addresses record list:

CATEGORY	DESCRIPTION	ADDRESS
Setpoints (Read and Write)	setpoint (R1)	65216
	curtain's step	65217
	curtain's thermostat	65219
	door contact	65221
	idle speed mode	65222
Digital inputs (Read only) Read: 0 - input inactive 1 - input active 0x8000 - no input	curtain's thermostat	64448
	curtain's 1st step	64449
	curtain's 2nd step	64450
	curtain's 3rd step	64451
	door contact	64452
Digital input bit-packed (Read and Write)	B0 - curtain's thermostat	64384
	B1 - curtain's 1st step	
	B2 - curtain's 2nd step	
	B3 - curtain's 3rd step	
	B4 - door contact	
Digital outputs (Read only) Read: 0 - output switch off 1 - output switch on 0x8000 - no output	curtain's 1st step	64320
	curtain's 2nd step	64321
	curtain's 3rd step	64322
	valve - opening	64326
	valve - closing	64327
Digital output bit-packed (Read only)	B0 - curtain's 1st step	64256
	B1 - curtain's 2nd step	
	B2 - curtain's 3rd step	
	B6 - valve - opening	
	B7 - valve - closing	

In the case of use address whose extend 9999 (not all visualization programs allow read and write above 9999 addresses), it is needed to obtain record's second address by subtracting 55536 figure from the values in the table above.

R1 record description:

Bit number	Alarm
0	curtain's thermostat
1-3	curtain's step
4	door contact
9-15	-



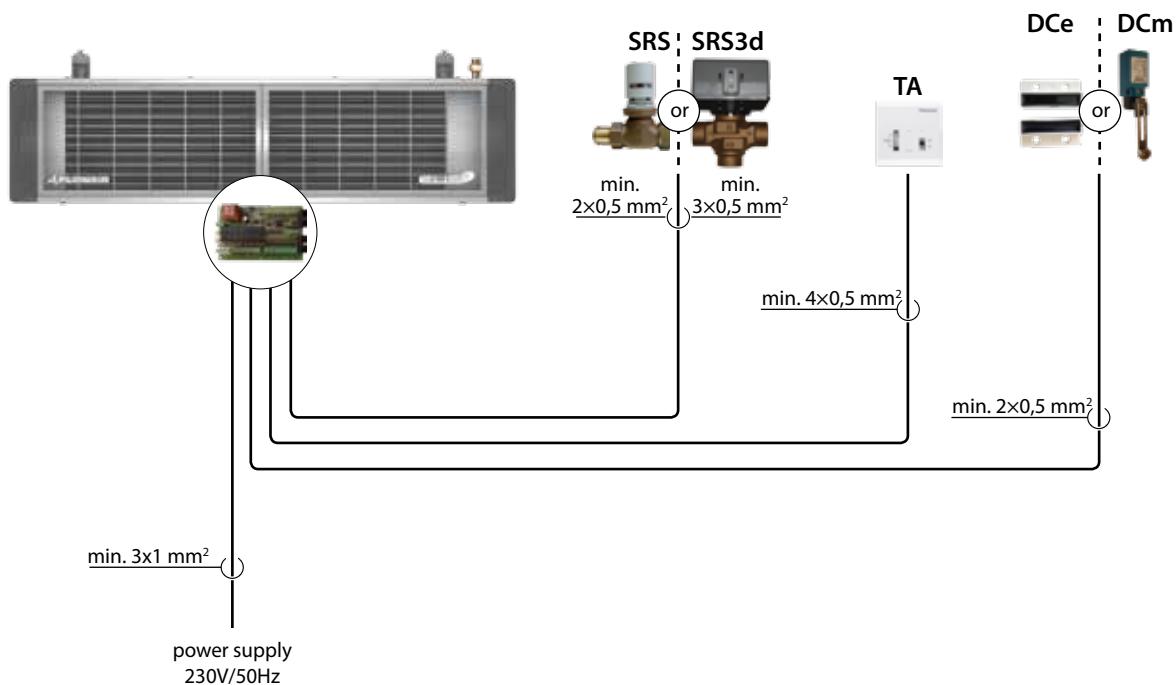
CONTROL SYSTEM COMPONENTS

Category	Symbol	Picture	Technical data
valves with actuator	SRS two-way 1/2" valve with actuator		Protection degree: IP44 Power supply: 200-240V 50/60Hz Max. water temperature: +130°C Max. operating pressure: 1,6 MPa Kvs: 3,5 Opening time: 2,5 min.
	SRS3d three-way 1/2" valve with actuator		Protection degree: IP40 Power supply: 200-240V 50/60Hz Max. water temperature: +95°C Max. operating pressure: 2 MPa Kvs: 3,4 Installation: on water inlet pipe Running time: 7 s
controllers	TA 3-step fan speed controller		Operating temperature range: 0 ... +40°C Protection degree: IP30 Contacts load: inductive 4A, resistance 6A
	TS 3-step fan speed controller with room thermostat		Temperature adjustment range: +10 ... +30°C Operating temperature range: 0 ... +40°C Protection degree: IP30 Contacts load: inductive 2A, resistance 4A Power supply: 230V / 50 Hz
door contacts	DCe magnetic door contact		Operating temperature range: -5 ... +60°C Protection degree: IP64 Casing: plastic Connection wire length: 2 m Type: NC Resistance contacts load: 0,5 A Max. distance between contacts: 8 mm
	DCm mechanical door contact		Operating temperature range: -10 ... +80°C Protection degree: IP64 Casing: plastic Connection wire length: none Type: 1xNC and 1xNO Resistance contacts load: 10 A
wires	CW wire for curtains chaining (master - slave)		Length: 3,7 m Plugs: RJ11

CONNECTION DIAGRAMS

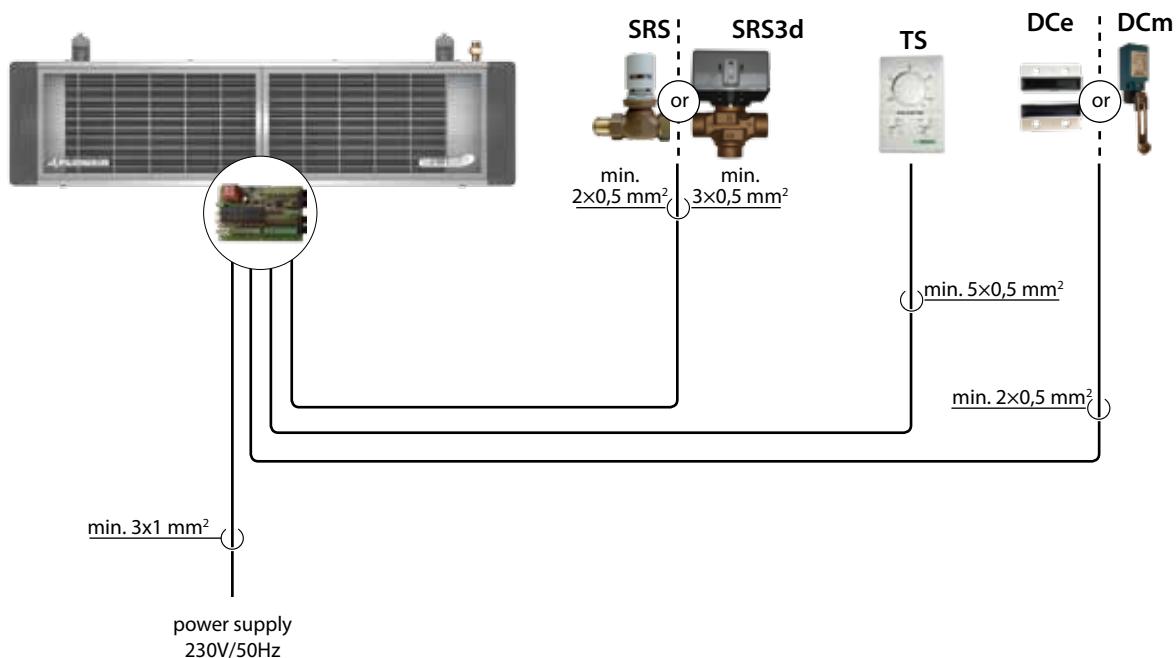
ELIS T WITH WATER HEAT EXCHANGER

AF SYSTEM - K1 MODE enables:
 - controlling air curtain by door contact DCe or DCm and TA fan speed controller.



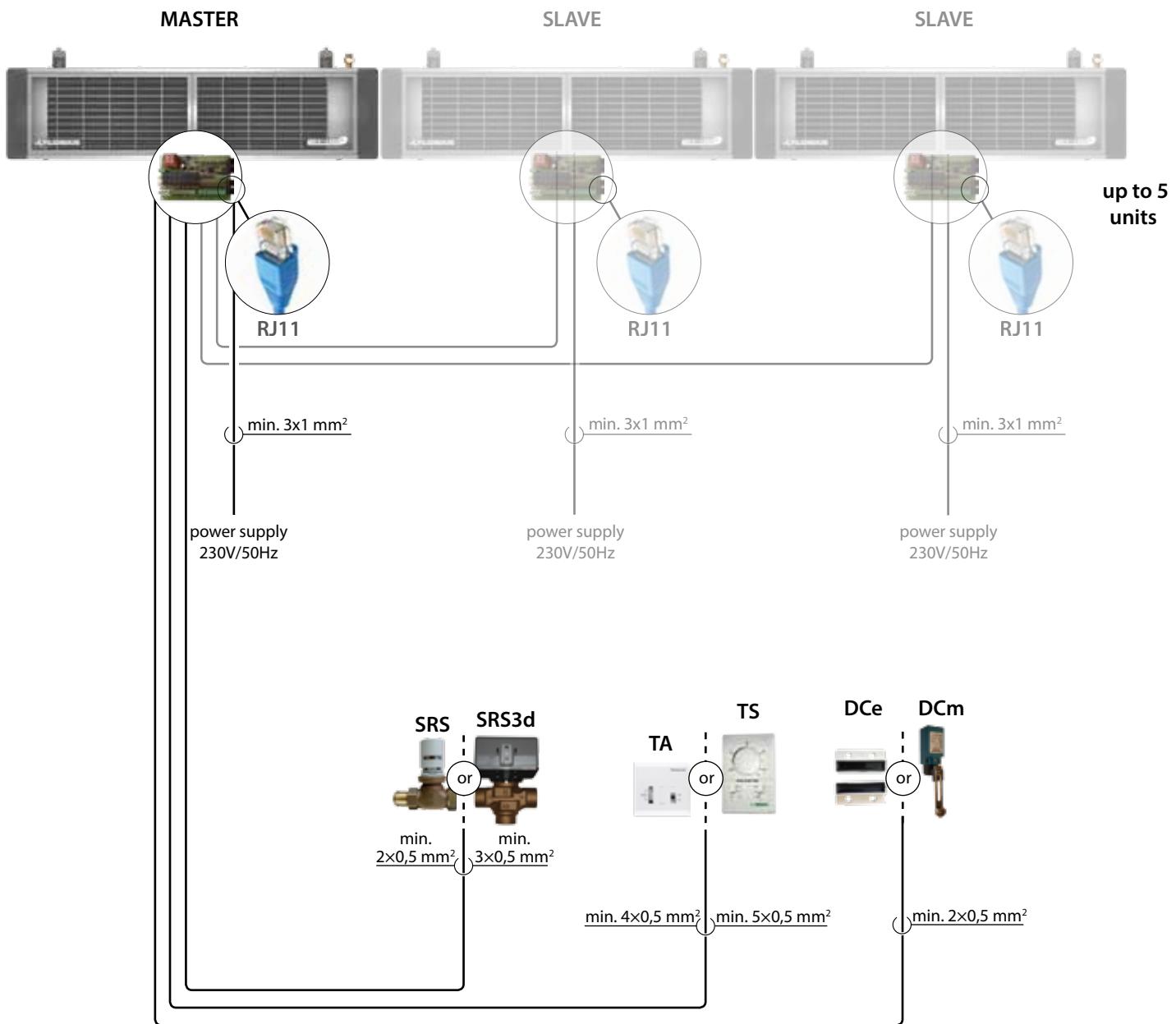
ELIS T WITH WATER HEAT EXCHANGER

AF SYSTEM - K2 MODE enables:
 - controlling air curtain by door contact DCe or DCm and TS fan speed controller with room thermostat.



AF SYSTEM - UNITS CHAINING

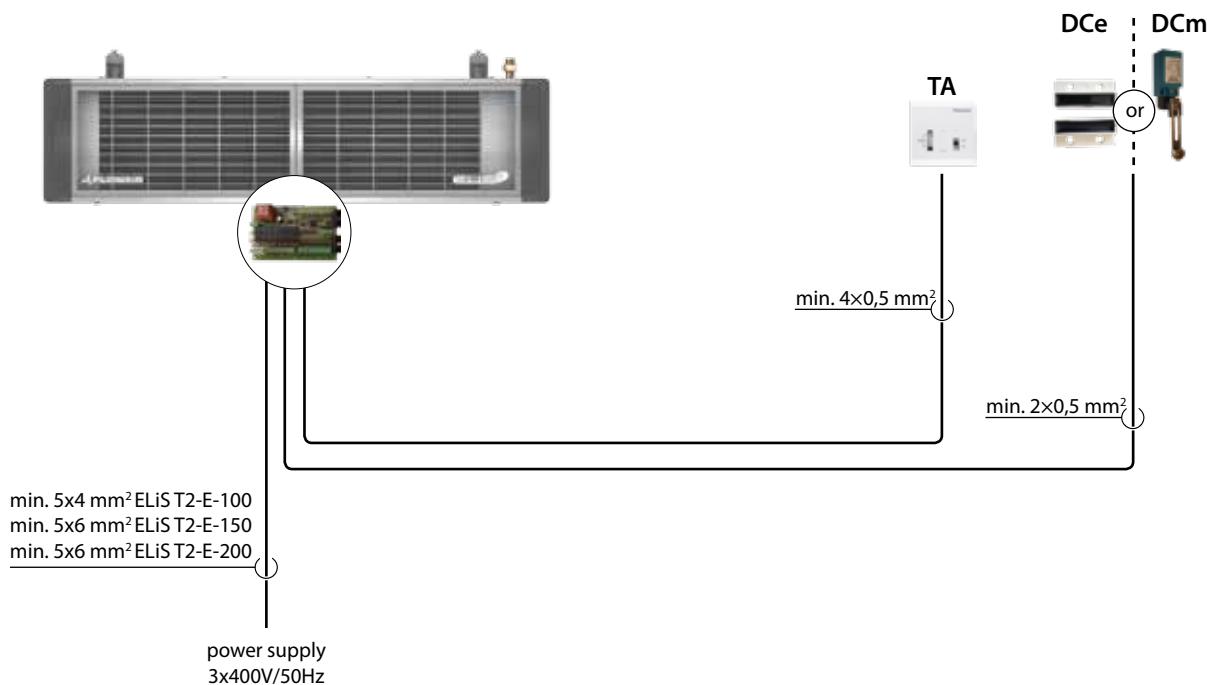
It is possible to chain ELIS T air curtains among themselves. All of the control system components must be connected to the first unit (MASTER). Control signals are transmitting to the other units (SLAVE) by CW wire (with RJ11 plugs) - it is possible to connect up to 5 units in this way.



CONNECTION DIAGRAMS

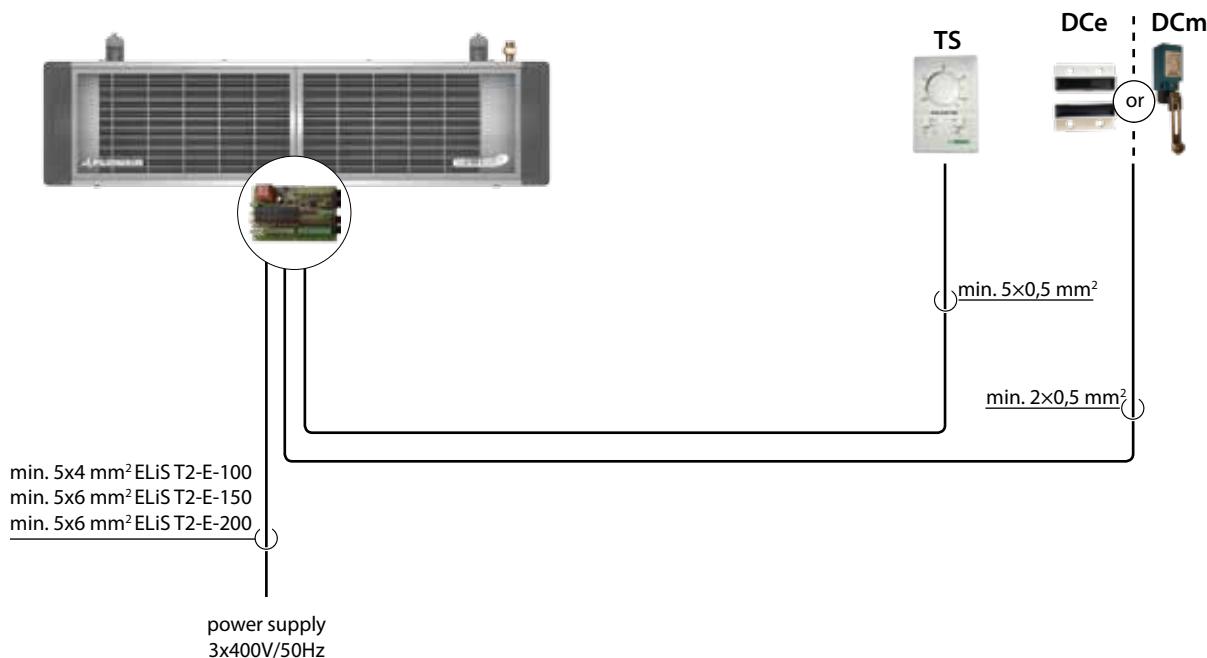
ELiS T WITH ELECTRIC HEAT EXCHANGER

AF SYSTEM - K1 MODE enables:
 - controlling air curtain by door contact DCe or DCm and TA fan speed controller.



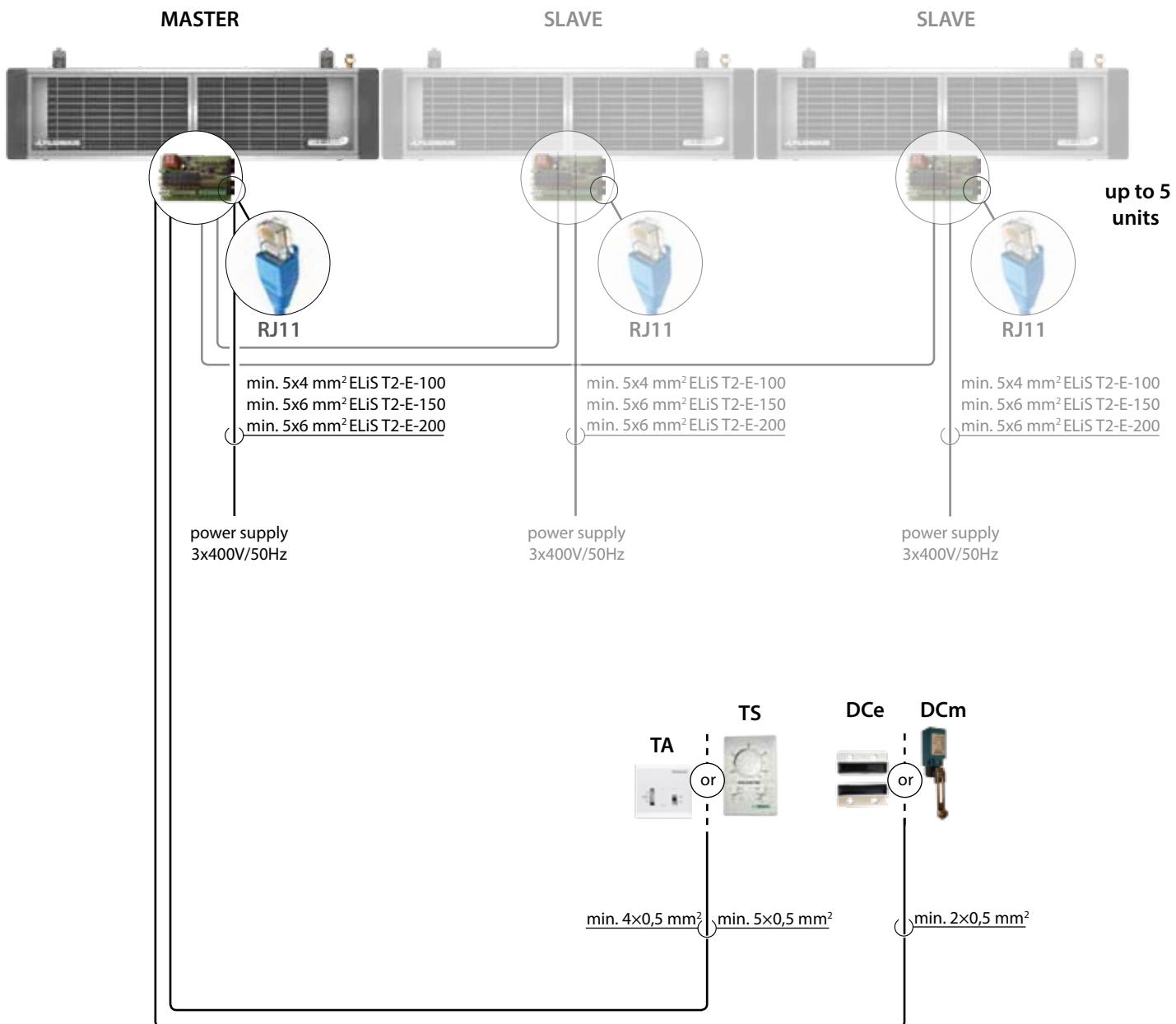
ELiS T WITH ELECTRIC HEAT EXCHANGER

AF SYSTEM - K2 MODE enables:
 - controlling air curtain by door contact DCe or DCm and TS fan speed controller with room thermostat.



AF SYSTEM - UNITS CHAINING

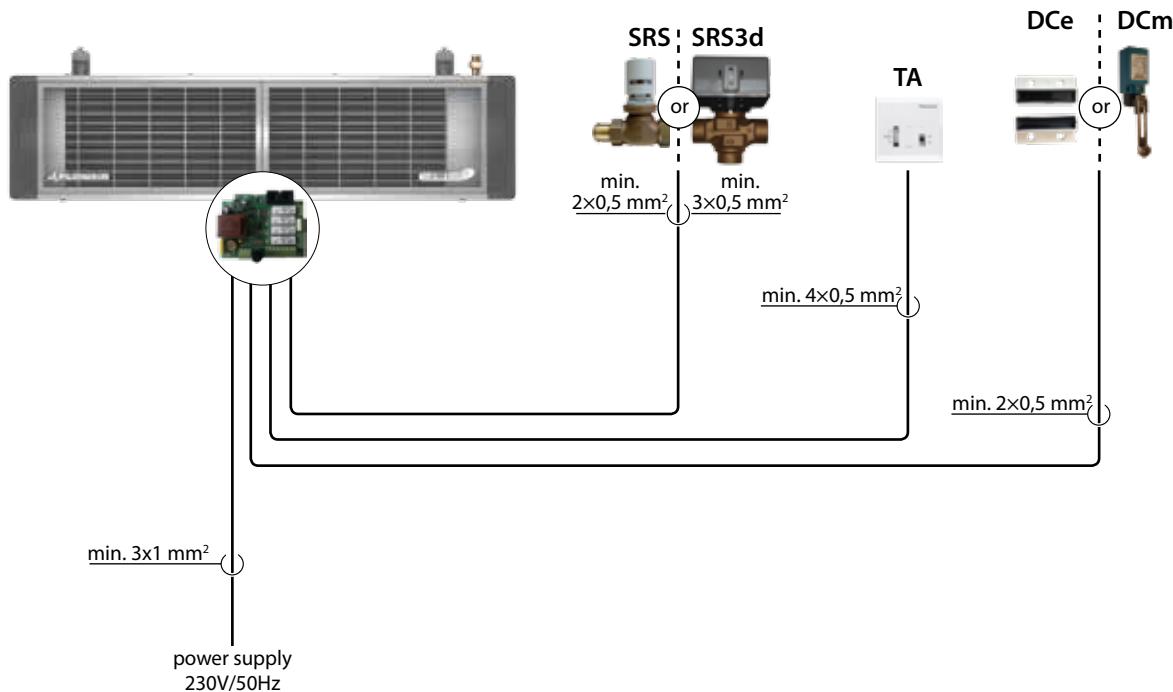
It is possible to chain ELiS T air curtains among themselves. All of the control system components must be connected to the first unit (MASTER). Control signals are transmitting to the other units (SLAVE) by CW wire (with RJ11 plugs) - it is possible to connect up to 5 units in this way.



CONNECTION DIAGRAMS

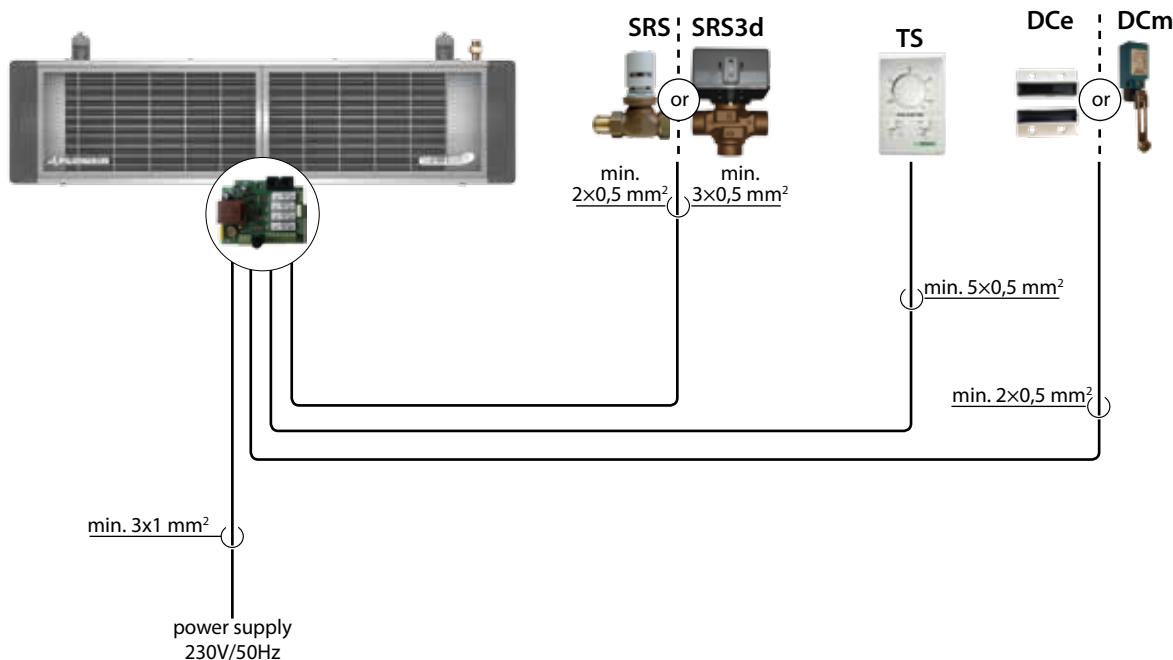
ELIS T WITH WATER HEAT EXCHANGER

L SYSTEM - K1 MODE enables:
 - controlling air curtain by door contact DCe or DCm and TA fan speed controller.



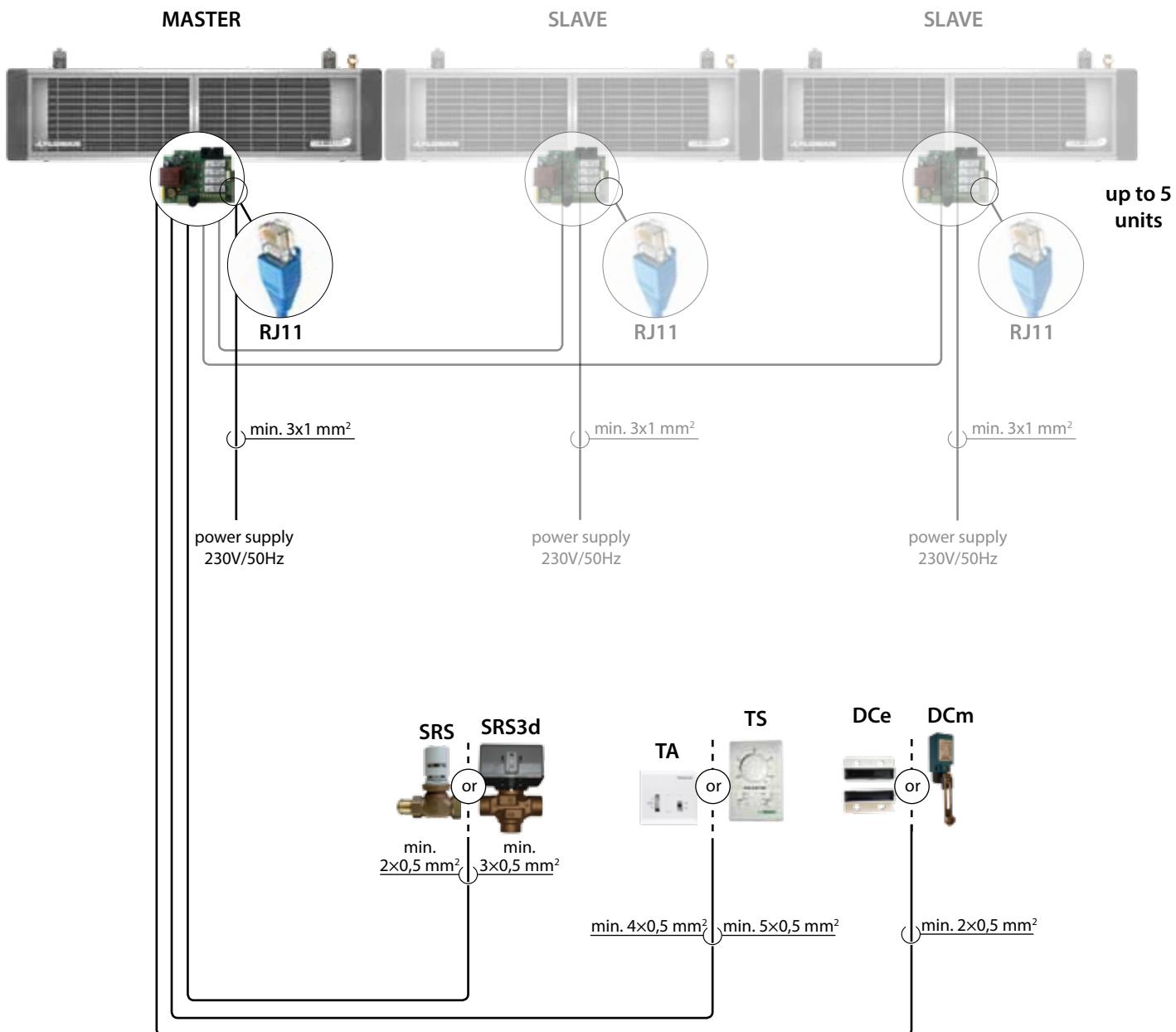
ELIS T WITH WATER HEAT EXCHANGER

L SYSTEM - K2 MODE enables:
 - controlling air curtain by door contact DCe or DCm and TS fan speed controller with room thermostat.



L SYSTEM - UNITS CHAINING

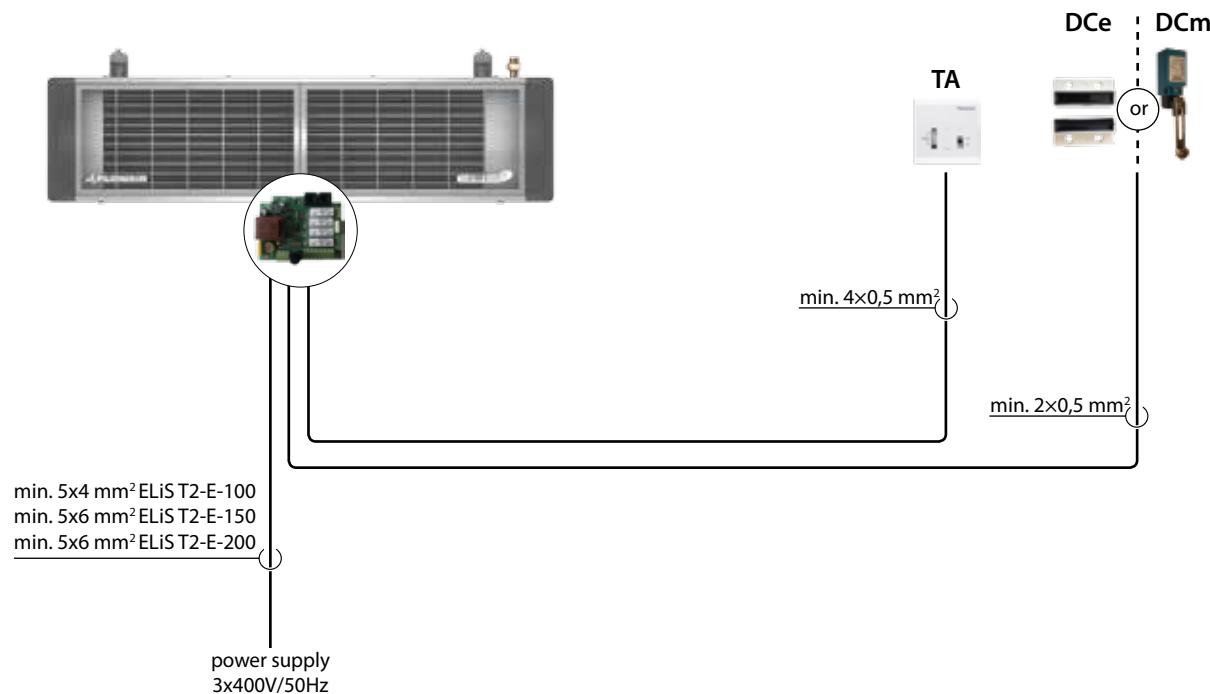
It is possible to chain ELiS T units. All of the control system components must be connected to the first unit (MASTER). Control signals are transmitting to the other units (SLAVE) by CW wire (with RJ11 plugs) or pair wire - it is possible to connect up to 5 units in this way.



CONNECTION DIAGRAMS

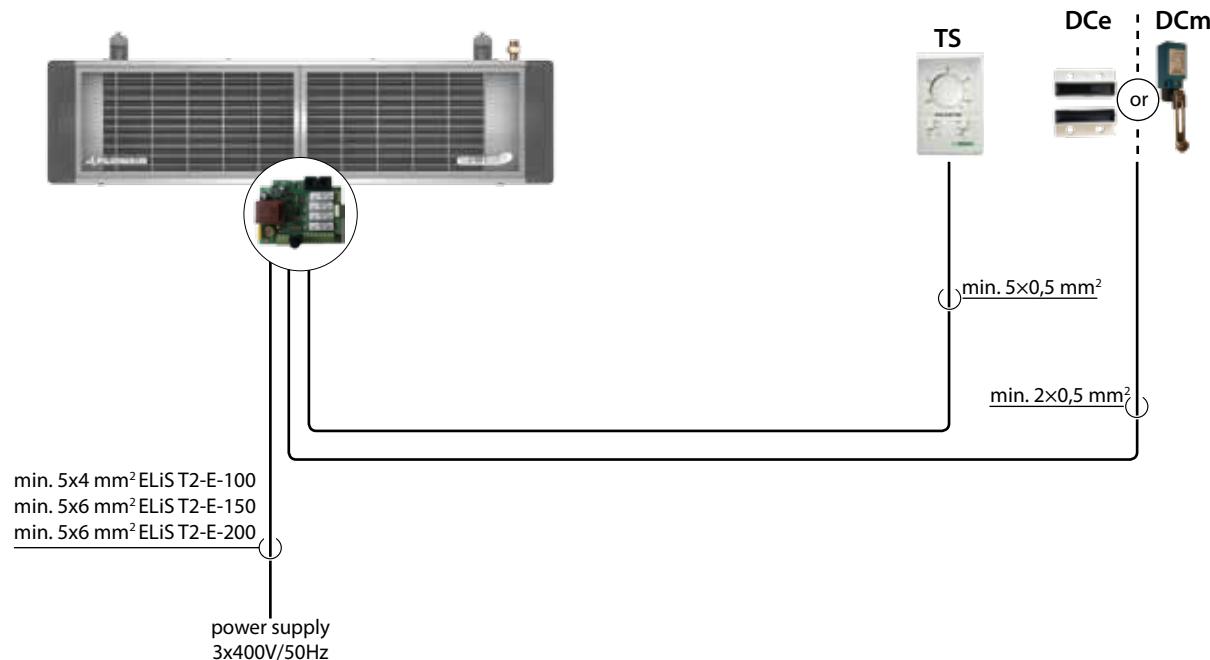
ELIS T WITH ELECTRIC HEAT EXCHANGER

L SYSTEM - MODE 1 enables:
 - controlling air curtain by door contact DCe or DCm and TA fan speed controller.



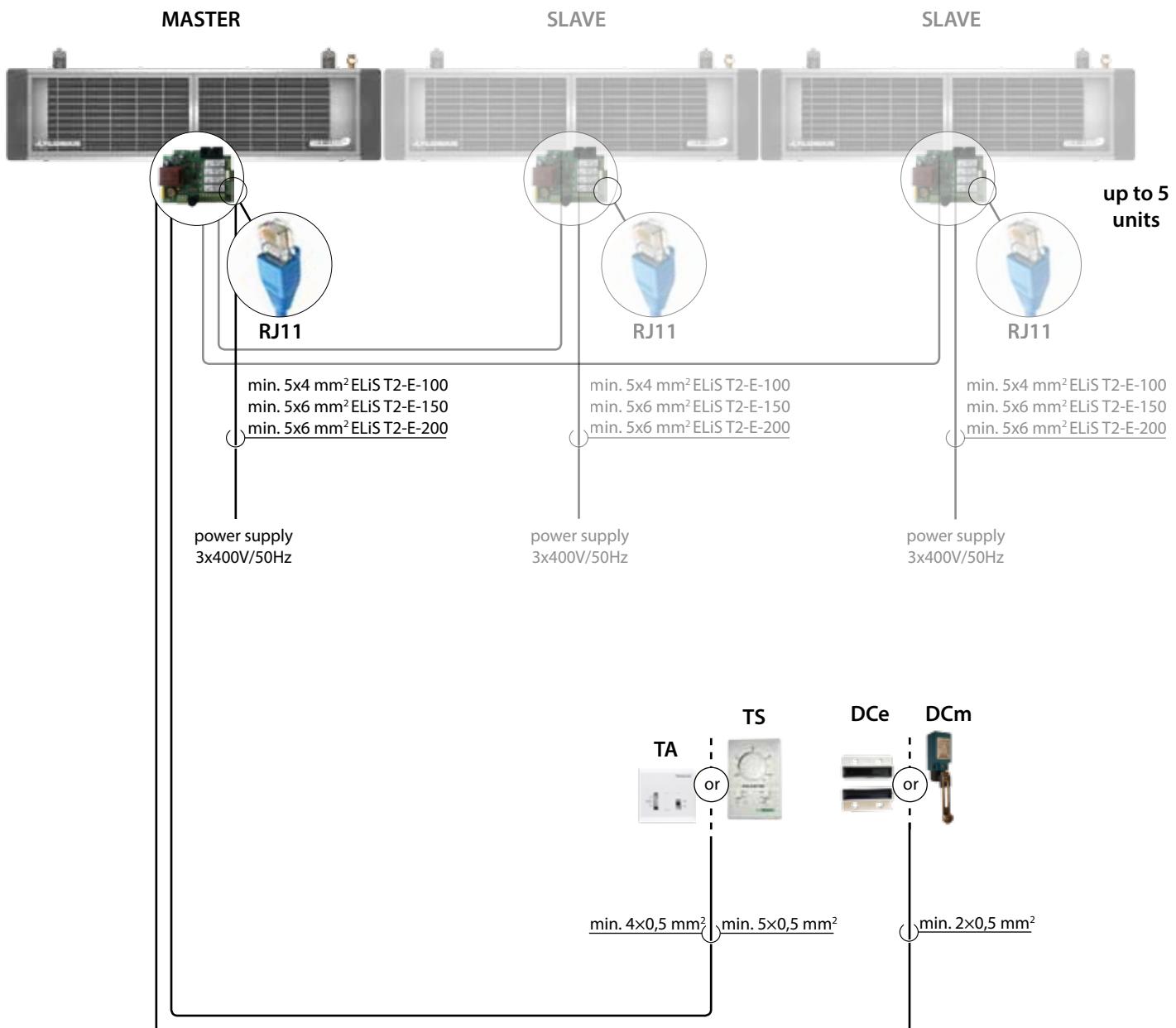
ELIS T WITH ELECTRIC HEAT EXCHANGER

L SYSTEM - MODE 2 enables:
 - controlling air curtain by door contact DCe or DCm and TS fan speed controller with room thermostat.



L SYSTEM - UNITS CHAINING

It is possible to chain ELiS T units. All of the control system components must be connected to the first unit (MASTER). Control signals are transmitting to the other units (SLAVE) by CW wire (with RJ11 plugs) or pair wire - it is possible to connect up to 5 units in this way.



ELiS T2-W-100											
Tp1	V	PT	Qw	Δpw	Tp2	Tp1	V	PT	Qw	Δpw	Tp2
°C	m³/h	kW	l/h	kPa	°C	°C	m³/h	kW	l/h	kPa	°C
Tw1/Tw2=90/70°C						Tw1/Tw2=80/60°C					
0	1020/1340/1770	10,5/12,4/14,5	468/540/648	2,7/3,6/4,8	31/27/24	0	1020/1340/1770	8,9/10,5/12,3	396/468/540	2,0/2,7/3,6	26/23/21
5		9,8/11,5/13,5	432/504/612	2,4/3,2/4,3	33/30/28	5		8,2/9,7/11,3	360/432/504	1,7/2,3/3,1	29/26/24
10		9,1/10,7/12,6	396/468/540	2,1/2,8/3,7	36/34/31	10		7,5/8,8/10,3	324/396/468	1,5/2,0/2,6	32/29/27
15		8,4/9,9/11,6	360/432/504	1,8/2,4/3,2	39/37/34	15		6,8/8,0/9,4	288/360/396	1,2/1,7/2,2	35/32/30
20		7,7/9,1/10,6	324/396/468	1,5/2,0/2,7	42/40/37	20		6,1/7,1/8,4	252/324/360	1,0/1,4/1,8	37/36/34
Tw1/Tw2=70/50°C						Tw1/Tw2=70/40°C					
0	1020/1340/1770	7,3/8,6/10,1	324/360/432	1,4/1,9/2,6	21/19/17	0	1020/1340/1770	5,5/6,5/7,6	144/180/216	0,4/0,6/0,8	16/14/13
5		6,6/7,7/9,1	288/324/396	1,2/1,6/2,1	24/22/20	5		4,7/5,6/6,6	144/162/180	0,3/0,4/0,6	18/17/16
10		5,9/6,9/8,1	252/288/360	1,0/1,3/1,7	27/25/23	10		3,7/4,6/5,5	108/126/144	0,2/0,3/0,4	21/20/19
15		5,1/6,0/7,1	216/252/324	0,8/1,0/1,4	30/28/27	15		2,1/2,3/4,2	72/90/108	0,1/0,1/0,3	22/21/20
20		4,4/5,2/6,1	180/216/252	0,6/0,8/1,0	33/31/30	20		1,8/1,9/2,0	36/54/72	0,1/0,1/0,1	25/24/23
Tw1/Tw2=60/40°C						Tw1/Tw2=50/40°C					
0	1020/1340/1770	5,6/6,6/7,8	252/288/324	0,9/1,2/1,7	16/15/13	0	1020/1340/1770	5,7/6,8/7,9	504/576/684	3,4/4,6/6,2	17/15/13
5		4,9/5,8/6,8	216/252/288	0,7/1,0/1,3	19/18/16	5		5,0/5,9/6,9	432/504/612	2,7/3,6/4,8	20/18/17
10		4,1/4,9/5,7	180/216/252	0,5/0,7/1,0	22/21/20	10		4,3/5,1/5,9	360/432/504	2,0/2,7/3,6	22/21/20
15		3,3/3,9/4,7	144/180/216	0,4/0,5/0,7	24/23/22	15		3,6/4,2/4,9	324/360/432	1,5/1,9/2,6	25/24/23
20		1,7/2,9/3,5	72/108/144	0,1/0,3/0,4	27/26/25	20		2,8/3,3/3,9	252/288/324	1,0/1,3/1,7	28/27/26

ELiS T2-W-150											
Tp1	V	PT	Qw	Δpw	Tp2	Tp1	V	PT	Qw	Δpw	Tp2
°C	m³/h	kW	l/h	kPa	°C	°C	m³/h	kW	l/h	kPa	°C
Tw1/Tw2=90/70°C						Tw1/Tw2=80/60°C					
0	1650/2100/2500	15,9/18,3/20,2	684/792/900	4,1/5,3/6,4	29/26/24	0	1650/2100/2500	13,6/15,6/17,2	612/684/756	3,1/4,1/4,9	24/22/20
5		14,9/17,1/18,9	648/756/828	3,6/4,7/5,7	32/29/27	5		12,5/14,4/15,9	540/648/684	2,7/3,5/4,2	27/25/24
10		13,9/15,9/17,6	612/720/792	3,2/4,1/5,0	35/32/31	10		11,5/13,2/14,6	504/576/648	2,3/3,0/3,6	30/29/27
15		12,8/14,7/16,3	576/648/720	2,8/3,6/4,3	38/36/34	15		10,4/12,0/13,2	468/540/576	1,9/2,5/3,0	34/32/31
20		11,8/13,5/14,9	504/612/648	2,4/3,1/3,7	41/39/37	20		9,4/10,8/11,9	396/468/540	1,6/2,1/2,5	37/35/34
Tw1/Tw2=70/50°C						Tw1/Tw2=70/40°C					
0	1650/2100/2500	11,2/12,9/14,2	504/576/612	2,3/2,9/3,5	20/18/17	0	1650/2100/2500	8,8/10,2/11,2	252/288/324	0,7/0,9/1,1	16/14/13
5		10,1/11,7/12,9	432/504/576	1,9/2,4/2,9	23/21/20	5		7,7/8,9/9,8	216/252/288	0,6/0,7/0,9	19/17/16
10		9,1/10,4/11,5	396/468/504	1,5/2,0/2,4	26/25/24	10		6,5/7,6/8,4	180/216/252	0,4/0,5/0,7	22/21/20
15		8,0/9,2/10,2	360/396/432	1,2/1,6/1,9	29/28/27	15		5,1/6,1/6,8	144/180/216	0,3/0,4/0,5	24/23/22
20		6,9/8,0/8,8	288/360/396	0,9/1,2/1,5	32/31/30	20		2,6/2,8/5,0	72/108/144	0,1/0,1/0,3	25/24/23
Tw1/Tw2=60/40°C						Tw1/Tw2=50/40°C					
0	1650/2100/2500	8,8/10,1/11,2	396/432/468	1,5/1,9/2,3	16/14/13	0	1650/2100/2500	8,7/10,1/11,1	756/864/972	5,3/6,9/8,2	16/14/13
5		7,7/8,9/9,8	324/396/432	1,2/1,5/1,8	19/17/16	5		7,7/8,9/9,8	684/756/864	4,2/5,4/6,5	19/17/16
10		6,6/7,6/8,4	288/324/360	0,9/1,2/1,4	22/21/20	10		6,6/7,6/8,4	576/648/720	3,2/4,1/4,9	22/21/20
15		5,4/6,3/7,0	252/270/288	0,6/0,8/1,0	25/24/23	15		5,5/6,4/7,0	468/540/612	2,3/3,0/3,6	25/24/23
20		4,2/4,9/5,5	180/216/252	0,4/0,5/0,6	27/26/25	20		4,4/5,1/5,6	396/432/504	1,5/2,0/2,4	28/27/26

For operating parameters concerning other water temperatures, please contact Sales Office.

V – air flow

PT – heating capacity

Tp1 – inlet air temperature

Tp2 – outlet air temperature

Tw1 – inlet water temperature

Tw2 – outlet water temperature

Qw – water flow rate in heat exchanger

Δpw – water pressure drop in heat exchanger

ELiS T WITH WATER HEAT EXCHANGER

ELiS T2-W-200											
Tp1	V	PT	Qw	Δpw	Tp2	Tp1	V	PT	Qw	Δpw	Tp2
°C	m³/h	kW	l/h	kPa	°C	°C	m³/h	kW	l/h	kPa	°C
Tw1/Tw2=90/70°C						Tw1/Tw2=80/60°C					
0	2400/2900/3500	21,5/24,0/26,7	936/1044/1188	8,3/10,2/12,4	27/25/23	0	2400/2900/3500	18,4/20,6/22,9	828/900/1008	6,4/7,8/9,5	23/21/19
5		20,1/22,5/25,0	900/1008/1116	7,4/9,0/11,0	30/28/26	5		17,1/19,1/21,2	756/828/936	5,6/6,8/8,3	26/24/23
10		18,8/21,0/23,3	936/936/1044	6,5/8,0/9,7	33/31/30	10		15,7/17,5/19,5	684/756/864	4,8/5,8/7,1	29/28/26
15		17,4/19,4/21,6	756/864/936	5,7/6,9/8,4	36/35/33	15		14,3/16,0/17,8	612/720/792	4,0/4,9/6,0	32/31/30
20		16,1/17,9/19,9	720/792/864	4,9/6,0/7,2	39/38/37	20		12,9/14,4/16,0	576/648/720	3,4/4,1/5,0	36/34/33
Tw1/Tw2=70/50°C						Tw1/Tw2=70/40°C					
0	2400/2900/3500	15,4/17,2/19,1	684/756/828	4,7/5,7/7,0	19/18/16	0	2400/2900/3500	12,7/14,1/15,7	360/396/468	1,6/2,0/2,4	16/14/13
5		14,0/15,6/17,4	612/684/756	4,0/4,8/5,9	22/21/20	5		11,2/12,6/14,0	324/360/396	1,3/1,6/1,9	19/18/17
10		12,6/14,1/15,6	540/612/684	3,3/4,0/4,8	25/24/23	10		9,8/10,9/12,2	288/324/360	1,0/1,2/1,5	22/21/20
15		11,2/12,5/13,9	504/540/612	2,7/3,2/3,9	29/28/27	15		8,3/9,3/10,3	252/270/306	0,8/0,9/1,1	25/24/23
20		9,8/10,9/12,1	432/468/540	2,1/2,5/3,1	32/31/30	20		6,7/7,5/8,4	180/216/252	0,5/0,6/0,8	28/27/26
Tw1/Tw2=60/40°C						Tw1/Tw2=50/40°C					
0	2400/2900/3500	12,3/13,7/15,2	540/612/648	3,2/3,9/4,7	15/14/13	0	2400/2900/3500	11,9/13,3/14,8	1044/1152/1296	10,8/13,2/16,1	15/14/12
5		10,9/12,1/13,5	468/540/576	2,6/3,1/3,8	18/17/16	5		10,5/11,7/13,0	900/1008/1116	8,6/10,5/12,8	18/17/16
10		9,4/10,5/11,7	396/468/504	2,0/2,4/3,0	22/21/19	10		9,1/10,1/11,3	792/864/972	6,6/8,1/9,8	21/20/19
15		8,0/8,9/9,9	360/396/432	1,5/1,8/2,2	25/24/23	15		7,7/8,6/9,5	684/756/828	4,9/6,0/7,2	24/23/22
20		6,5/7,3/8,1	288/324/360	1,0/1,3/1,5	28/27/26	20		6,2/7,0/7,7	540/612/684	3,4/4,1/5,0	28/27/26

ELiS T WITH ELECTRIC HEATERS

	T2-E-100	T2-E-150	T2-E-200
Power supply [V/Hz]		3 x 400 / 50	
Rated current [A]	10,0	15,5	21,5
Heating capacity of electric heaters [kW]	7,0	10,7	15,0
Air temperature rise (ΔT) [°C]	25	21	18

NOTES

NOTES

