

ENERGY SAVING AIR CURTAINS



www.stavoklima.eu

Contents

Introduction	4	Design Air curtain Arcus	38
Selection software RATUS	6	Design Air curtain Arcus X	42
Comfort Air curtain Li	7	Design Air curtain Tubex	44
Comfort Air curtain Li-EC	10	Design Air curtain Tubex XL	46
Comfort Air curtain Li - recessed	14	Industrial Air curtain AXI	50
Comfort Air curtain Li Dualflow	16	Electrical accessories	54
Comfort Air curtain Li Light	18	Mechanical accessories	56
Basic Air curtain Li Pico	20	Mechanical accessories Econ C	57
Comfort Air curtain Econ C	24	Electrical accessories AXI	58
Basic Air curtain Econ C mini	26	Mechanical accessories AXI	61
Design Air curtain Nucleo 3000	30	Electrothermic and thermostatic valves for air curtains	62
Design Air curtain Magnum	32		
Design Air curtain Compact 400	36		



Dear Customer,

Stavoklima s.r.o. is an innovative, privately owned company. It is an entirely Czech manufacturer of ventilation, air conditioning and acoustic products.

The door and entrance air curtains became the dominant products from the very beginning of the company. The whole of today's portfolio offers products from BASIC units, with easy and simple installation, to our DESIGN range, satisfying even very exacting requirements of modern interior needs.

Our units have always been the epitome of technique and quality. Long-term testing and the right choice of the suppliers/partner companies have resulted in fast improvements and technical solutions, many of which are patented. Every little item is custom developed with innovative technologies used by well-experienced and trained staff and it keeps us ahead of the competition with the ultimate in high-tech designs and standards.

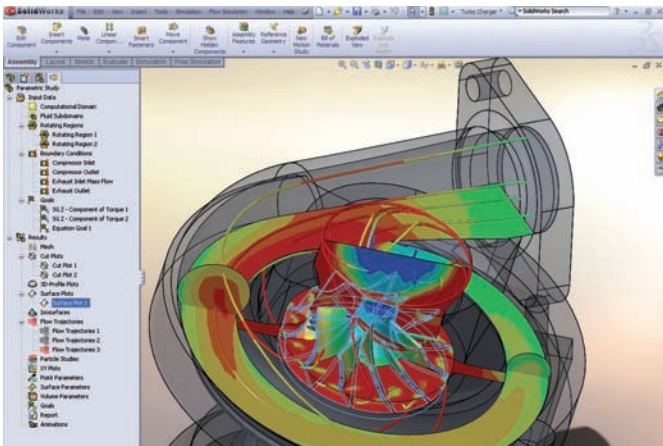
During the ongoing development of control and management functions of our equipment, the electronic controls became an inseparable part of our functionality.

All our appliances are manufactured according to engineering design in CAD/CAM solutions by our new advanced technological machinery.

Manufacture and a complete range of the latest simulation tools allow our state-of-the-art, purpose designed software to ensure 100% compliance with the latest regulations and customer needs, to ensure maximum durability of the equipment and components.

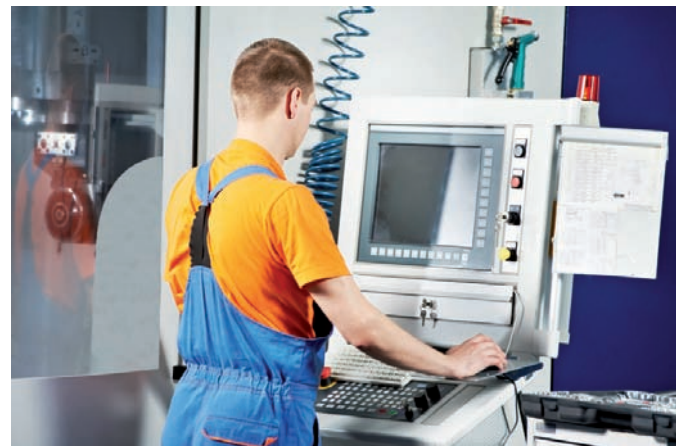
Pavel Simecek, Chief Executive





Development and manufacture

We have developed simulation tools in CAD/CAM software, which aid our engineers in guaranteeing optimum solutions for reliable, quality products.



Production

Manufacturing of components on fully automated CNC machines ensures meeting the highest quality at all times. Good relationships with our suppliers guarantees constant development/growth in the market place.



Logistics

Prompt delivery of components and parts for our products ensures speedy prefabrication; custom manufacturing; and prompt delivery times.



Exhibitions

We regularly present to our trade customers. Our sales representatives will inform you about any participation in trade fairs or the regional work shops.



Training

Regular training of designers, technicians and authorized companies provides constant information updates about new products.



Service

We have high quality service engineers ready to assist as required to ensure maximum customer satisfaction.

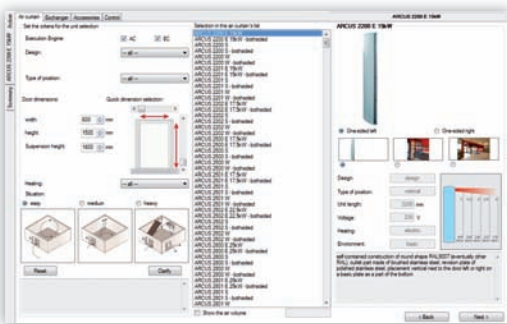


Stavoklima was the first (in 2006) to enter the market with a full selection programme – Ratus – for calculation of air curtain protection requirements with a minimum of input design criteria.

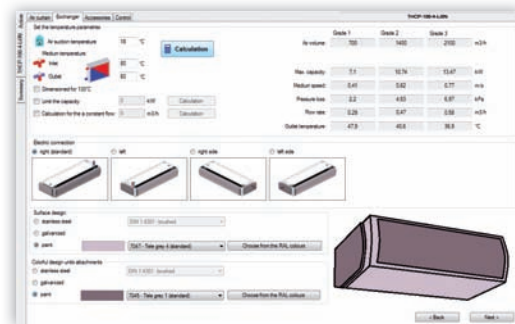
Try to design an air curtain using our company software. Our selection programme – Ratus – is easy to use (see below).

The programme is produced as FIRMWARE for both general and professional use. Choice of the curtain is generated from the basic input data. The programme allows input of hot water criteria and selection of the appropriate and required control equipment. You can also obtain from the programme documentation to create a technical specification.

The resulting proposal can be printed or exported.



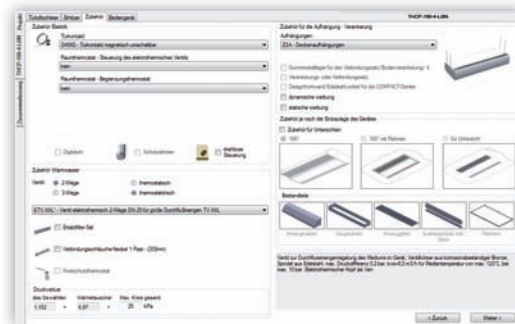
Air curtain selection entering the input parameters



Heating requirements:
Enter base data to obtain accurate calculations for the required heat losses



Control selection:
In accordance with specific requirements or necessary accessories



Accessories selection:
Based upon the type of curtain, its mounting, and other criteria



Summary:
Detail or brief description of selected air curtain with technical data

Li - Light

Comfort Air Curtain Li light



The Comfort Li Light unit has undergone an extensive re-design to offer our clients one of the best looking units using smart manufactured techniques to generate a really great price to suit these difficult financial times. This approach is making the Li Light unit one of our most popular, and can furthermore make any environment look extremely stylish with its smooth lines and low depth.

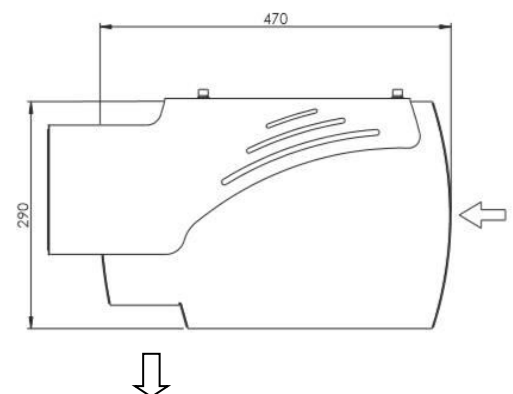
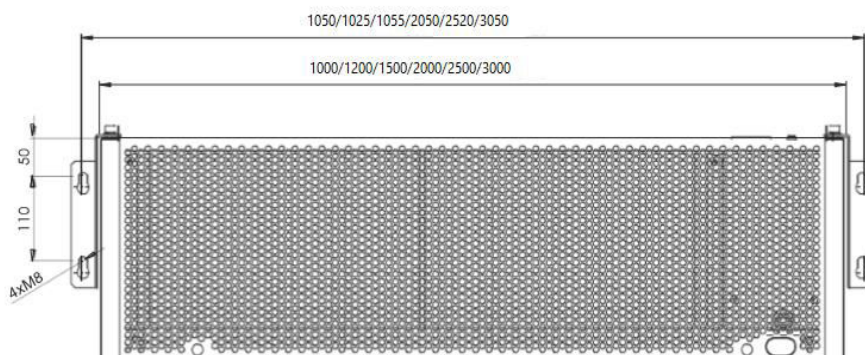
Li Light units are available in various colours with the standard finish being RAL 7047. For other colours please state a RAL number and request costs from our sales office.

The Comfort Li Light unit is very good value for money when connected to our latest control options.

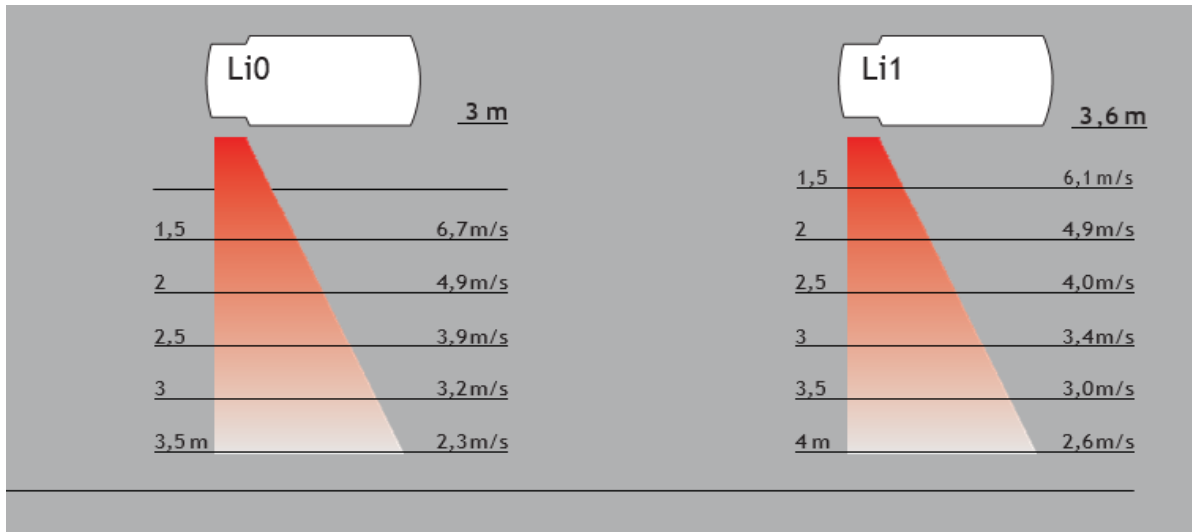
It is a very reliable and versatile unit suitable for most commercial applications and with its very modern design can be used in shops, stores, shopping centres, offices, receptions, municipal buildings and hospitals operating 24/7 if required.

These units are in harmony with both their aesthetically pleasing appearance and performance when needed to fulfil rigorous conditions.

The Li Light units also protect occupants from outside odours, insects and dust, again creating a healthier working environment. The fitting of these units ensures client's needs are fulfilled in all aspects, whilst being energy efficient and providing various comfort conditions.



technical data and recommended mounting height for different types of units.



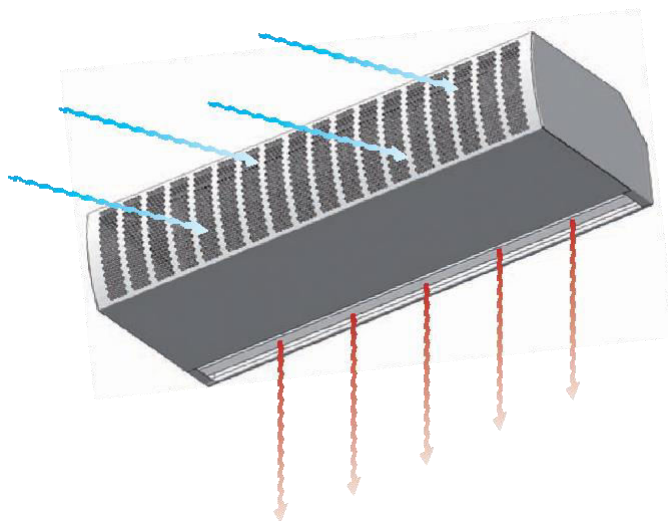
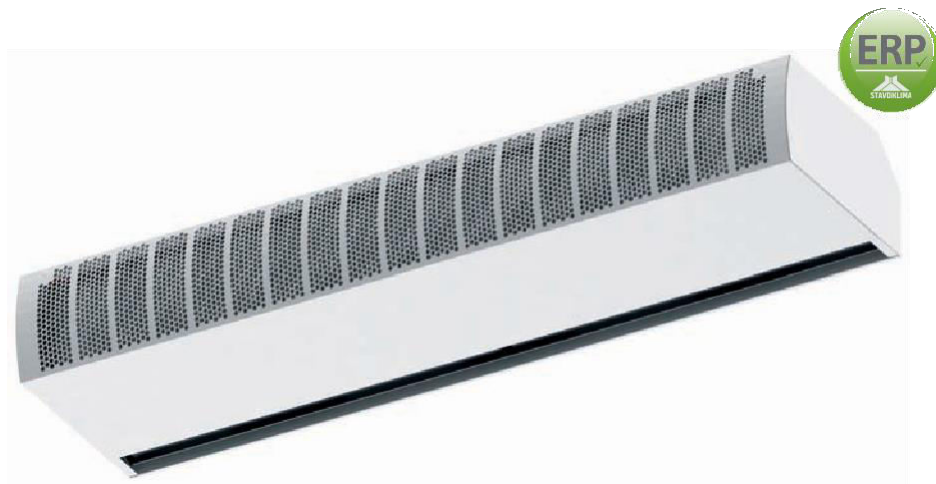
Technical data	SHCP 100-4- Li0 Light	SHCP 120-4- Li0 Light	SHCP 150-4- Li0 Light	SHCP 200-4- Li0 Light	SHCP 250-4- Li0 Light	SHCP 300-4- Li0 Light	SHCP 100-4- Li1 Light	SHCP 120-4- Li1 Light	SHCP 150-4- Li1 Light	SHCP 200-4- Li1 Light	SHCP 250-4- Li1 Light	SHCP 300-4- Li1 Light
Ambient Air volume [m ³ /h]	2000	2200	3075	4300	5250	6000	2600	3100	3650	5250	6380	7250
Fan electrical data for ambient air curtains.												
power [W]	580	700	900	1200	1500	1800	810	940	1080	1350	1620	1980
current [A]	3,0	3,0	4,5	6,0	7,5	8,8	3,6	4,0	4,8	7,0	8,2	9,6
voltage [V]	230	230	230	230	230	230	230	230	230	230	230	230
Control type	Econ, Econ Dual, Ditronic (Plus), Remote Controller											
Protection class	IP22	IP22	IP22	IP22	IP22	IP22	IP22	IP22	IP22	IP22	IP22	IP22
Sound level* dB (A)	60	61	61	62	62	63	58	60	59	61	64	65
Weight [kg]	37	41	49	64	79	90	39	47	53	70	94	117

* Acoustic pressure Lp(A) measurement taken at a distance of 3m from the unit source.

Accessories:	
Electric (see page 54)	mechanical (see page 56)
<input type="checkbox"/> Ditronic Touch	<input type="checkbox"/> DKM - mechanical door contact
<input type="checkbox"/> Econ - controller	<input type="checkbox"/> 2 or 3 way valves - thermostatic or electrothermic valves (see pages 58)
<input type="checkbox"/> Remote Controller IR	<input type="checkbox"/> Suspension - under ceiling and wall mounted
<input type="checkbox"/> DKMG - magnetic door contact	<input type="checkbox"/> Flexible Connection hoses
<input type="checkbox"/> TP - room thermostat	<input type="checkbox"/> Spare filters - EU2

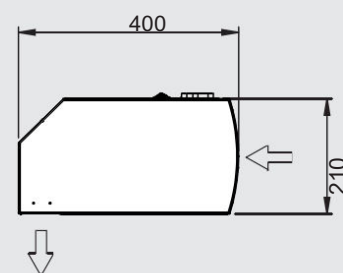
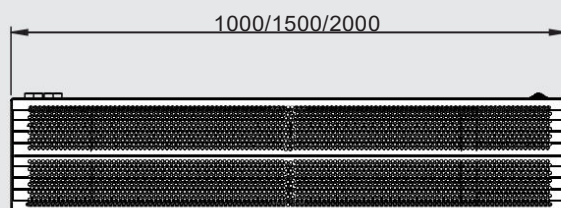
Li mini

Design Air Curtain

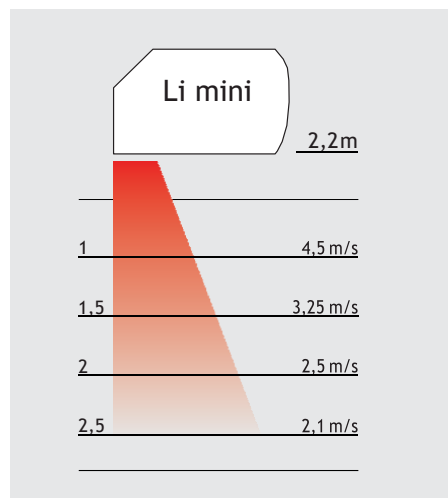


Li mini air curtain Standardized dimension range, simple & functional design make Li mini the ideal solution for individual shops in large shopping galleries, boutiques, restaurants, banks and hotels. Li mini air curtain is designed for wall or ceiling mounting. Competitive price, fast & easy installation, silent operation and high build quality including the maintenance-free fans, are its strong points.

Every unit is equipped with directable louvre for optimal setting of air flow vector. Wide range of accessories complements the unit, including thermostatic valves, outlet temperature sensors, electrical heating elements with integrated delay timer and overheating protection. Water heated units, electrical heating units and ambient variants are available. The default paint is RAL 9010.



technical data and recommended mounting height for different types of units.



Technical data		Li mini 100 S	Li mini 150 S	Li mini 200 S	Li mini 100 W	Li mini 150 W	Li mini 200 W	Li mini 100 E7,5	Li mini 100 E9	Li mini 150 E10	Li mini 150 E12,5	Li mini 200 E12,5	Li mini 200 E15
Air curtain length	[mm]	1000	1500	2000	1000	1500	2000	1000	1000	1500	1500	2000	2000
Air volume	m ³ /h	1420	2150	2950	1380	2100	2820	1390	1390	2125	2125	2850	2850
Heating capacity	kW	-	-	-	9,2	14,7	20,5	-	-	-	-	-	-
80/60°C*	kPa	-	-	-	7,8	3,2	4,2	-	-	-	-	-	-
	m ³ /h	-	-	-	360	612	864	-	-	-	-	-	-
	T _{out} °C	-	-	-	37,6	38,6	39,4	-	-	-	-	-	-
Heating capacity	kW	-	-	-	5,2	8,2	11,6	-	-	-	-	-	-
60/40°C*	kPa	-	-	-	3	1,2	1,6	-	-	-	-	-	-
	m ³ /h	-	-	-	216	324	468	-	-	-	-	-	-
	T _{out} °C	-	-	-	29	29,5	28,4	-	-	-	-	-	-
Heating capacity	kW	-	-	-	-	-	-	7,5	9	10	12,5	12,5	15
Heating levels		-	-	-	-	-	-	2	2	2	2	2	2
Voltage	V	230V	230V	230V	230V	230V	230V	400V	400V	400V	400V	400V	400V
Power input	W	340	510	680	340	510	680	340	340	510	510	680	680
Current	A	1,5	2,25	3	1,5	2,25	3	1,5	1,5	2,25	2,25	3	3
Protection class	IP	20	20	20	20	20	20	20	20	20	20	20	20
Controller type		Econ	Econ	Econ	Econ	Econ	Econ	Econ	Econ	Econ	Econ	Econ	Econ
Weight	kg	25	35	45	35	45	55	30	28	40	42	50	55

Accessories:	
Electric (see page 54)	mechanical (see page 56)
<input type="checkbox"/> Ditronic Touch	<input type="checkbox"/> DKM - mechanical door contact
<input type="checkbox"/> Econ - controller	<input type="checkbox"/> 2 or 3 way valves - thermostatic or electrothermic valves (see pages 58)
<input type="checkbox"/> DKMG - magnetic door contact	<input type="checkbox"/> Suspension - under ceiling and wall mounted
<input type="checkbox"/> Remote Controller IR	<input type="checkbox"/> Flexible Connection hoses
<input type="checkbox"/> TP - room thermostat	<input type="checkbox"/> Spare filters - EU2

Li - Light

References



Eye expert
Li0-Light



Avenue
Li0-Light



Jolt cafe
Li0-Light

Control Accessories

Electrical Accessories for Air Curtain Controllers



RJ 45



Ditronic Touch controller

Control specification:

Ditronic controller is fitted with an intelligent processor regulator, designed specifically for Comfort and Design air curtains that are fitted with AC or EC fans. Due to the unit's sleek design and readable blue colour screen, it is suitable for most kinds of interior design applications (from a basic type to the more expensive stylish type). The controller offers local control, control from superior system (BMS) or Modbus compatibility. Ditronic is suitable for connection using a UTP cable with a RJ45 connector.

Dimensions (mm):

DITRONIC - 125 long x 90 high x 32 deep

ECoN (Dual)



Econ controller

Control specification:

The Econ controller can only operate one air curtain fitted with AC fan units. It is not possible to link more than one air curtain for simultaneous operation. However, you can connect external items such as door contacts and room or discharge air outlet thermostats. This controller indicates on/off and will give 3 speed settings and 2 heat settings.

Econ Dual controller

Control specification:

The Econ Dual controller is intended to operate two air curtains fitted with AC fan units. It is not possible to link more than two air curtains for simultaneous operation. However, you can connect external items such as door contacts and room or discharge air outlet thermostats. This controller indicates on/off and will give 3 speed settings and 2 heat settings.

Dimensions (mm):

Econ - 71 long x 71 high x 25 deep

Econ Dual - 71 long x 71 high x 25 deep

Note

These Econ controllers are intended for wall mounting only and have protection to IP20.

Remote Controller IR



Remote Controller IR

Control specification:

The air curtain is controlled using a remote IR (infra-red) controller that comes with the unit. For reliable control, visual contact between the unit and the remote controller is required. The controller is universal and can be used to control any Stavoklima air curtain equipped with IR receiver.

Dimensions: 100 long x 40 high x 15 deep Note

Electrical Accessories for Air Curtain Controllers

tP2



tP1

IP 30 Room Thermostat (230v/3A/AC15)- range 5-35 °C

tP3



tP2

IP 30 Room Thermostat with on/off (230v/3A/AC15)- range 5-35 °C

tP3

IP 30 Digital Room Thermostat with on/off (230v/3A/AC15)

DkmG



tP4

room thermostat for industrial application - IP54 protection

Dkm






DkmG

magnetic door contact, changeover contact, 24/50Hz/1A/AC15

Dkm

mechanical door contact, changeover contact, 24/50Hz/1A/AC15

STANDARD FUNCTIONS OF DITRONIC, DITRONIC PLUS (incl EC versions) CONTROLLERS FOR BOTH WATER AND ELECTRICALLY HEATED AIR CURTAINS

- 
Time Clock: this allows the unit to operate on a weekly regime, either with day's 1-7 or 1-5 with 6-7 separate.
- 
Frost protection: For each water heated unit there is an inbuilt 2 grades anti-frost protection as standard. in case of freezing danger it will open the valve and switch on visual signallization.
- 
Indication of the room and outlet temperature: the regulator shows the room, outlet and also required temperature as standard.
- 
Unit temperature control: the Ditronic controller allows control of the air curtain temperature according to the room or discharge air temperature. to ensure comfort there is an inbuilt function to restrict the minimum / discharge temperature simultaneously.
- 
Intelligent System - BMS (3-levels): the air Curtains can be controlled by an intelligent controller with 3 levels of inbuilt control of the coil and fans. the BmS (Building management system) can operate via volt free contacts (0-10v) or linked to a bus system.
- 
ON ALARM **Unit monitoring and Fault signals:** the controller operates volt free contacts for failure and operation of the air Curtain. an alarm will sound on failure and a fault log can be accessed.
- 
Exterior Thermostat control: Using an exterior thermostat (mostly placed outside) it is possible to switch off the air curtain or just the heating, according to your required level of control and pre-set temperature settings.
- 
Master/Slave operation: it is possible to connect units in a master /slave mode of operation. For this a room sensor will only be connected to the master unit.
- AUTO** **Automatic operation of the Air Curtain:** the air curtain can operate in automatic running mode via door contact. When the door is closed the unit can be made to run in the relevant levels of heating and fan (according to the difference between actual and requested temperature).
- 
Controller security: to ensure maximum security of the controller it is fitted with a keyboard lock facility.

* other Ditronic functions can be found in our air Curtain catalogues or the user manual.



Official distributor:

STAVOKLIMA s.r.o.

BUDĚJOVICKÁ 450 • 370 01 HOMOLE

tel.: +420 387 001 931 | e-mail: info@stavoklima.cz

www.stavoklima.eu