

**Ducts and accessories for air-distribution systems** 



## www.mat-plasty.com marketing@mateiciuc.cz

# Project design and execution of construction work including HRV





Opava - Vávrovice





Opava - Jaktař





Opava - Vávrovice

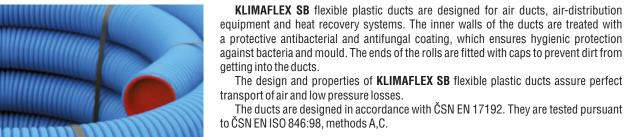




Opava - Stěbořice



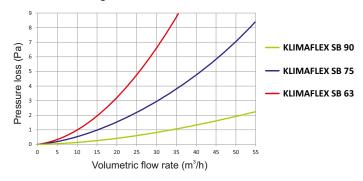




outer diameter	inner diameter	bend radius	roll length
mm	mm	m	m
63	51	0,26	50
75	62	0,29	50
90	75	0,33	50
160*	136	0,43	25
200*	171	0,50	25

<sup>\*</sup> Production on order (delivery time and quantity to be agreed)

#### Pressure loss diagram / 1m



#### **Material**

- · Outer wall made from PE.
- Inner wall made from PE + antibacterial and antifungal additive.

#### **Ducts colours**

- Outer wall blue, green or white.
- Inner wall white.

#### **Temperature resistance**

- Installation temperature: of -5 °C to +50 °C.
- Operation temperature: of -20 °C to +50 °C.
- Storage temperature: of -40 °C to +60 °C.

#### Handling

- The low weight of KLIMAFLEX SB flexible plastic ducts makes them easy to transport and simple to install.
- Protect the ends of pipes against dust and dirt by fitting end caps after installation and before starting operation.

#### Transport

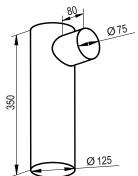
• When loading and unloading the pipes it is essential to prevent any mechanical damage or distortion of the plastic ducts.

#### Storage

- Rolls must be stored in a horizontal position and only for the shortest time necessary. maximum 3 months.
- The ducts must be kept out of direct sunlight.



## **KLOZ-1x75/125-OC** Pass-through ceiling / Wall box for DN 125 air valve



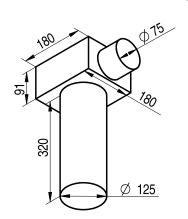
Material: galvanised steel Supplied components:

- DN 125 plug
- · safeguards against movement of the flexible piping
- 1 DN 75 sealing ring

Airflow speed m/s	2	2,5	3
Volume m³/h (1x75)	21	26	32

## KLO-1x75/125-OC Pass-through ceiling / Wall box for DN 125 air valve





Material: galvanised steel Supplied components:

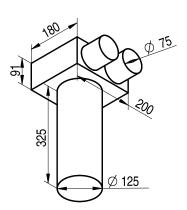
• DN 125 plug

- installation fixtures
- · safeguards against movement of the flexible piping
- 1 DN 75 sealing ring

Airflow speed m/s	2	2,5	3
Objem m³/h (1x75)	21	26	32

## KLO-2x75/125-OC Pass-through ceiling / Wall box for DN 125 air valve





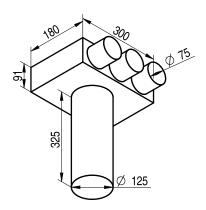
Material: galvanised steel Supplied components:

- DN 125 plug
- installation fixtures
- · safeguards against movement of the flexible piping
- 2 DN 75 sealing rings

Airflow speed m/s	2	2,5	3
Volume m³/h (1x75)	21	26	32
Volume m³/h (2x75)	42	52	64

## KLO-3x75/125-OC Pass-through ceiling / Wall box for DN 125 air valve





Material: galvanised steel Supplied components:

- DN 125 plug
- installation fixtures
- · safeguards against movement of the flexible piping
- 3 DN 75 sealing rings

Airflow speed m/s	2	2,5	3
Volume m³/h (1x75)	21	26	32
Volume m³/h (2x75)	42	52	64
Volume m³/h (3x75)	63	78	96

TM-125 Sealing collar

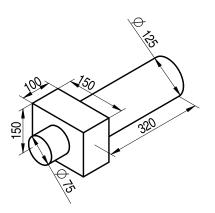


For metal and plastic ∅ 110 - 140 mm outlet vents Weather, UV resistant, ozone Material: EPDM

Material: EPDN Colour: black

## KLO-1x75/P-125-OC Pass-through flat ceiling / Wall box for DN 125 air valve



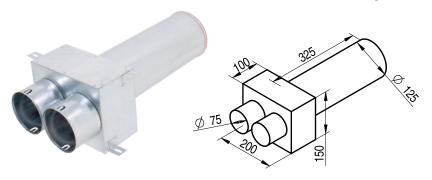


Material: galvanised steel Supplied components:

- DN 125 plug
- · installation fixtures
- safeguards against movement of the flexible piping
- 1 DN 75 sealing ring

Airflow speed m/s	2	2,5	3
Volume m³/h (1x75)	21	26	32

## KLO-2x75/P-125-OC Pass-through flat ceiling / Wall box for DN 125 air valve

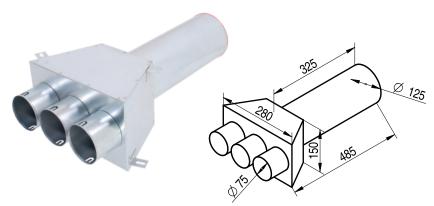


Material: galvanised steel Supplied components:

- DN 125 plug
- installation fixtures
- safeguards against movement of the flexible piping
- 2 DN 75 sealing rings

Airflow speed m/s	2	2,5	3
Volume m³/h (1x75)	21	26	32
Volume m³/h (2x75)	42	52	64

## KLO-3x75/P-125-OC Pass-through flat ceiling / Wall box for DN 125 air valve

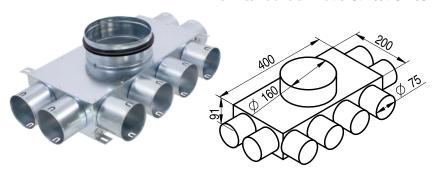


Material: galvanised steel Supplied components:

- DN 125 plug
- installation fixtures
- safeguards against movement of the flexible piping
- 3 DN 75 sealing rings

Airflow speed m/s	2	2,5	3
Volume m³/h (1x75)	21	26	32
Volume m³/h (2x75)	42	52	64
Volume m³/h (3x75)	63	78	96

#### **KL-8x75/160-0C** Flat distribution box

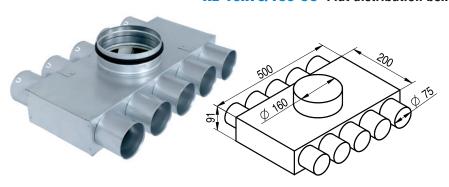


Material: galvanised steel Supplied components:

- DN 160 seal 0 -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 8 DN 75 sealing rings
  interior box insulation\*

Airflow speed m/s	2	2,5	3
Volume m³/h (8x75)	168	208	256

## **KL-10x75/160-0C** Flat distribution box

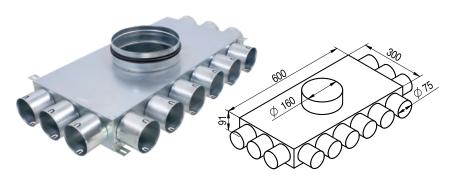


Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixturessafeguards against movement of the flexible piping
- 10 DN 75 sealing rings
- interior box insulation\*

Airflow speed m/s	2	2,5	3
Volume m³/h (10x75)	210	260	320

### **KL-12x75/160-0C** Flat distribution box

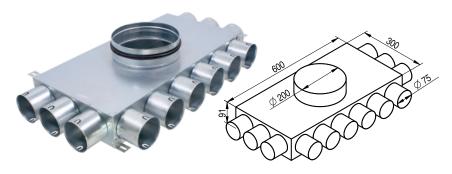


Material: galvanised steel Supplied components: • DN 160 seal O -ring

- installation fixtures
- safeguards against movement of the flexible piping
  • 12 DN 75 sealing rings
- interior box insulation\*

Airflow speed m/s	2	2,5	3
Volume m³/h (12x75)	252	312	384

### KL-12x75/200-OC Flat distribution box



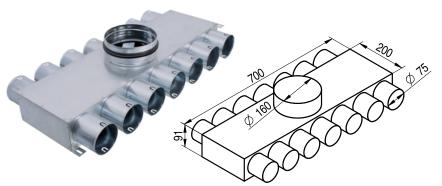
Material: galvanised steel Supplied components:

• DN 200 seal O -ring

- installation fixtures
- safeguards against movement of the flexible piping
- 12 DN 75 sealing rings
- interior box insulation\*

Airflow speed m/s	2	2,5	3
Volume m³/h (12x75)	252	312	384

#### **KL-14x75/160-0C** Flat distribution box



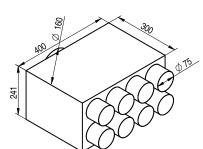
Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- · safeguards against movement of the flexible piping
- 14 DN 75 sealing rings
- interior box insulation\*

Airflow speed m/s	2	2,5	3
Volume m³/h (14x75)	294	364	448

#### RT2R-8x75/160-0C Direct distribution box



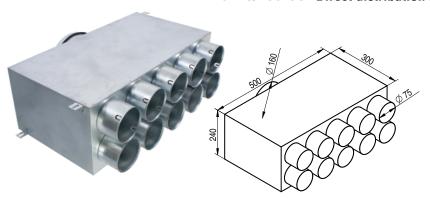


Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
  8 DN 75 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (8x75)	168	208	256

### RT2R-10x75/160-0C Direct distribution box

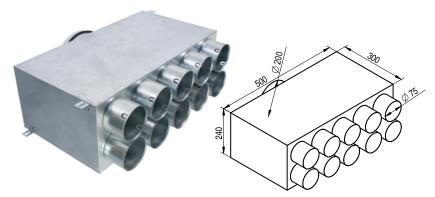


Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 10 DN 75 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (10x75)	210	260	320

## RT2R-10x75/200-0C Direct distribution box

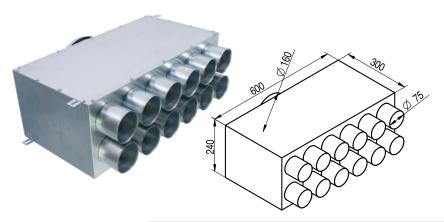


Supplied components:
• DN 200 seal O -ring

- installation fixtures
- safeguards against movement of the flexible piping
  • 10 DN 75 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (10x75)	210	260	320

#### RT2R-12x75/160-0C Direct distribution box

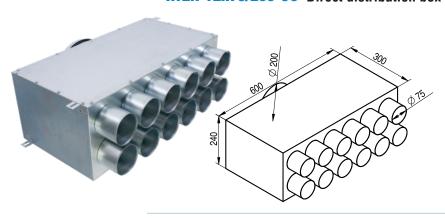


Material: galvanised steel Supplied components:

- DN 160 seal 0 -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 12 DN 75 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (12x75)	252	312	384

### RT2R-12x75/200-0C Direct distribution box

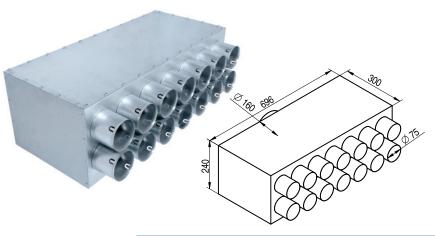


Material: galvanised steel Supplied components:

- DN 200 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 12 DN 75 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (12x75)	252	312	384

#### RT2R-14x75/160-0C Direct distribution box

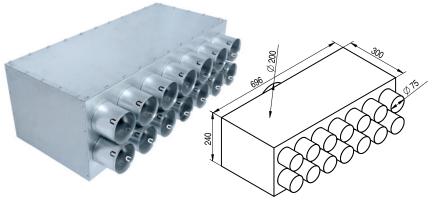


Material: galvanised steel Supplied components:

- DN 160 seal 0 -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 14 DN 75 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (14x75)	294	364	448

### RT2R-14x75/200-0C Direct distribution box



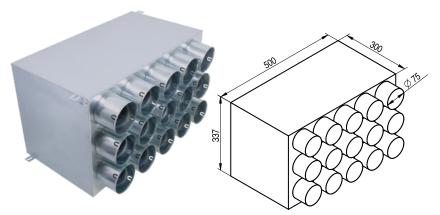
Material: galvanised steel Supplied components:

- DN 200 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 14 DN 75 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (14x75)	294	364	448



## RT3R-15x75/200-0C Direct distribution box

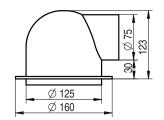


- Material: galvanised steel
  Supplied components:
   DN 200 seal O -ring
   installation fixtures
   safeguards against movement of the flexible piping
   15 DN 75 sealing rings
   interior box insulation\*
   inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (15x75)	312	390	480

## SV-75/125 Plastic ceiling/Wall outlet





For installation on plasterboard with vapour barrier Input for DN 75 flexible piping Output for DN 125 table valve Material: PP Colours may differ Supplied components:
• installation screws
• DN 75 seal 0 -ring

- DN 125 cap
- locking pin

TM-125 Sealing collar



For metal and plastic Ø 110 - 140 mm outlet vents Weather, UV resistant, ozone Material: EPDM

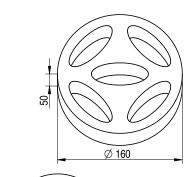
Colour: black

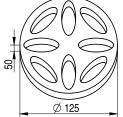


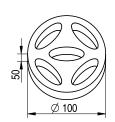


Special damping foam The air flow-through is regulated by means of the number of open apertures



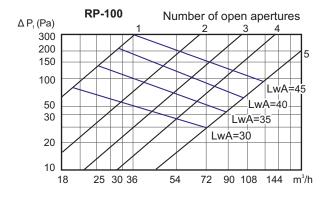


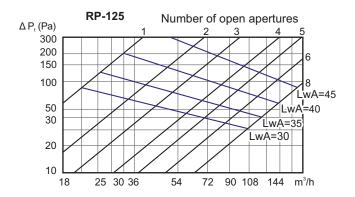


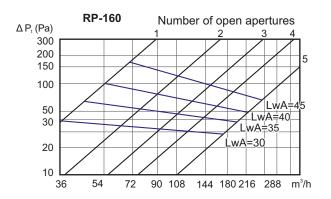


Damping of dB in frequency band (Hz)

Туре	Number of open apertures	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
	1	6,5	7	4	9,5	13	16	18	22
RP-100	3	3	3,5	2,5	5,5	8,5	8,5	15	19
	5	1,5	2,5	1,5	3,5	6	6,5	12	17
	2	5,5	6,5	7	6,5	10	15	19	21
RP-125	5	2	2	2,5	3	8,5	8	14	19
	8	1	1,5	1,5	2,5	6	6	11	18
	1	6,5	7	4	9,5	13	16	18	22
RP-160	3	2,8	3,5	2,5	5,8	8,5	8,7	14,5	19
	5	3	3,5	2,5	5,5	8,5	8,5	15	20

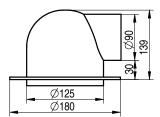








## SV-90/125 Plastic ceiling/Wall outlet

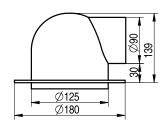


For installation on plasterboard with vapour barrier Input for DN 90 flexible piping Output for DN 125 table valve Material: PP Colours may differ Supplied components:

- installation screws
- DN 90 seal O -ring
- DN 125 cap
- locking pin



## **SVV-90/125** Plastic ceiling / Wall outlet

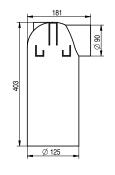


For installation on plasterboard with vapour barrier Input for DN 90 flexible piping Output for DN 125 table valve Material: PP Supplied components:

- installation screws
- DN 90 seal O-ring
- DN 125 cap

# SVD-90/125 Plastic ceiling / Wall outlet long





For installation on plasterboard with vapour barrier Input for DN 90 flexible piping Output for DN 125 table valve Material: PP Supplied components:

- installation screws
- DN 90 seal O -ring
- DN 125 cap
- 2 locking pins

## TM-125 Sealing collar

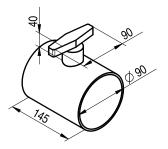


For metal and plastic Ø 110-140 mm outlet vents Weather, UV resistant, ozone Material: EPDM

Colour: black

### **RK-90** Airflow damper DN 90





For manually regulating the volume of air in the air-conditioning route Inlet and outlet intended for KLIMAFLEX SB 90 mm pipes Secure the pipe in the flap using air-tight tape Material: PP

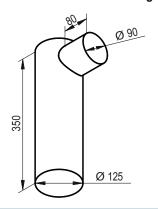
Parts:

• locking nut for securing the position of the reducing valve



## KLOZ-1x90/125-OC Pass-through ceiling / Wall box for DN 125 air valve





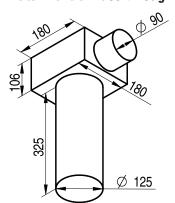
Material: galvanised steel Supplied components:

- DN 125 plug
- safeguards against movement of the flexible piping
- 1 DN 90 sealing ring

Airflow speed m/s	2	2,5	3
Volume m³/h (1x90)	32	40	48

## KLO-1x90/125-OC Pass-through ceiling / Wall box for DN 125 air valve





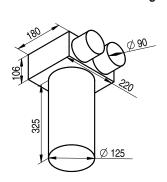
Material: galvanised steel Supplied components:

- DN 125 plug
- safeguards against movement of the flexible piping
- installation fixtures
- 1 DN 90 sealing ring

Airflow speed m/s	2	2,5	3
Volume m³/h (1x90)	32	40	48

## KLO-2x90/125-OC Pass-through ceiling / Wall box for DN 125 air valve





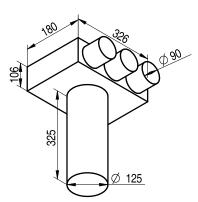
Material: galvanised steel Supplied components:

- DN 125 plug
- safeguards against movement of the flexible piping
- installation fixtures
- 2 DN 90 sealing rings

Airflow speed m/s	2	2,5	3
Volume m³/h (1x90)	32	40	48
Volume m³/h (2x90)	64	80	96

## KLO-3x90/125-OC Pass-through ceiling / Wall box for DN 125 air valve





Material: galvanised steel Supplied components:

- DN 125 plug
- safeguards against movement of the flexible piping
- installation fixtures
- 3 DN 90 sealing rings

Airflow speed m/s	2	2,5	3
Volume m³/h (1x90)	32	40	48
Volume m³/h (2x90)	64	80	96
Volume m³/h (3x90)	96	120	144

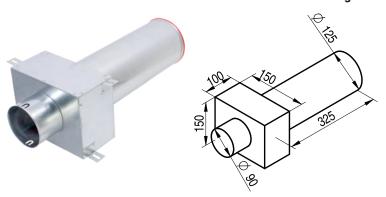
## TM-125 Sealing collar



For metal and plastic Ø 110-140 mm outlet vents Weather, UV resistant, ozone Material: EPDM

Material: EPDM Colour: black

## KLO-1x90/P-125-OC Pass-through flat ceiling / Wall box for DN 125 air valve

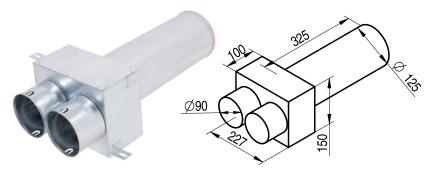


Material: galvanised steel Supplied components:

- DN 125 plug
- safeguards against movement of the flexible piping
- installation fixtures
- 1 DN 90 sealing ring

Airflow speed m/s	2	2,5	3
Volume m³/h (1x90)	32	40	48

# KLO-2x90/P-125-OC Pass-through flat ceiling / Wall box for DN 125 air valve

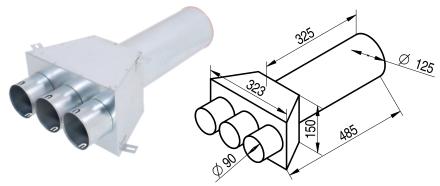


Material: galvanised steel Supplied components:

- DN 125 plug
- safeguards against movement of the flexible piping
- installation fixtures
- 2 DN 90 sealing rings

Airflow speed m/s	2	2,5	3	
Volume m³/h (1x90)	32	40	48	
Volume m³/h (2x90)	64	80	96	

## KLO-3x90/P-125-OC Pass-through flat ceiling / Wall box for DN 125 air valve



Material: galvanised steel Supplied components:

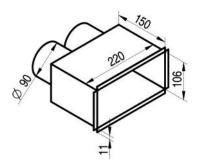
- DN 125 plug
- safeguards against movement of the flexible piping
- installation fixtures
- 3 DN 90 sealing ring

Airflow speed m/s	2	2,5	3	
Volume m³/h (1x90)	32	40	48	
Volume m³/h (2x90)	64	80	96	
Volume m³/h (3x90)	96	120	144	



#### KLOO/KR-2x90-OC Wall box





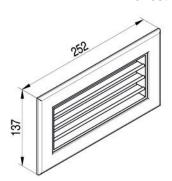
Material: galvanised steel Supplied components:

- safeguards against movement of the flexible piping
- installation fixtures
- 2 DN 90 sealing rings
- the deflection grill is not part of the box, it **MUST** be ordered separately

Airflow speed m/s	2	2,5	3
Volume m³/h (1x90)	32	40	48
Volume m³/h (2x90)	64	80	96

## AD11-220-104-C-03 Deflection grille

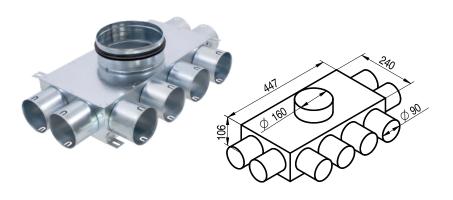




Material: anodized aluminium Colour: white RAL 9003 With adjustable blades, the grille is very useful for air supply and can be adapted to the required throw and air spread pattern Supplied components:

4 adjustable clips

### KL-8x90/160-0C Flat distribution box

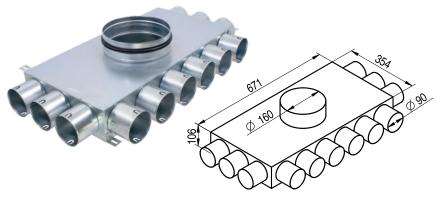


Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 8 DN 90 sealing rings
- interior box insulation\*

Airflow speed m/s	2	2,5	3
Volume m³/h (8x90)	256	320	384

## KL-12x90/160-0C Flat distribution box



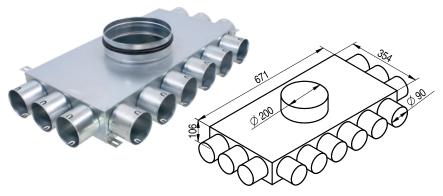
Material: galvanised steel Supplied components:

• DN 160 seal O -ring

- installation fixtures
- safeguards against movement of the flexible piping
  • 12 DN 90 sealing rings
- interior box insulation\*

Airflow speed m/s	2	2,5	3
Volume m³/h (12x90)	384	480	576

#### KL-12x90/200-0C Flat distribution box

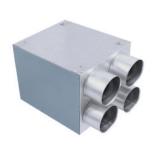


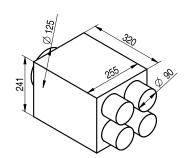
Material: galvanised steel Supplied components:

- DN 200 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 12 DN 90 sealing rings
- interior box insulation\*

Airflow speed m/s	2	2,5	3
Volume m³/h (12x90)	384	480	576

### RT2R-4x90/125-0C Direct distribution box





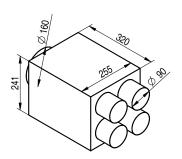
Material: galvanised steel Supplied components:

- DN 125 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 4 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (4x90)	255	320	241

### RT2R-4x90/160-0C Direct distribution box





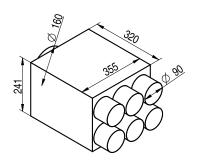
Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 4 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (4x90)	255	320	241

### RT2R-6x90/160-0C Direct distribution box





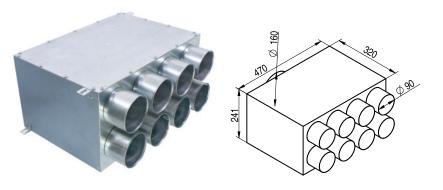
Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 6 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (6x90)	192	240	288



#### RT2R-8x90/160-0C Direct distribution box

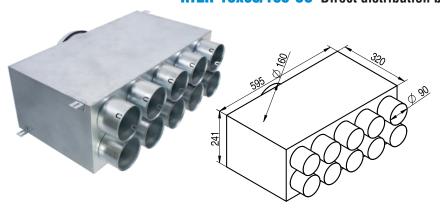


Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 8 DN 90 sealing rings
  interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (8x90)	256	320	384

#### RT2R-10x90/160-0C Direct distribution box



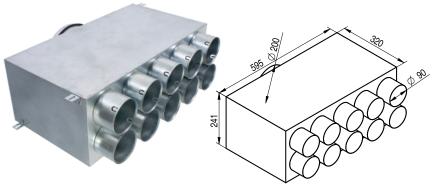
Material: galvanised steel Supplied components:

• DN 160 seal O -ring

- installation fixtures
- safeguards against movement of the flexible piping
- 10 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (10x90)	320	400	480

### RT2R-10x90/200-0C Direct distribution box

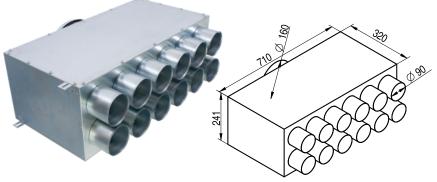


Material: galvanised steel Supplied components:

- DN 200 seal O -ring
- installation fixtures
- · safeguards against movement of the flexible piping
- 10 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (10x90)	320	400	480

### RT2R-12x90/160-0C Direct distribution box

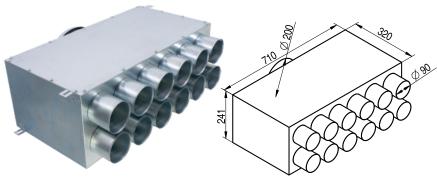


Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- · safeguards against movement of the flexible piping
- 12 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (12x90)	384	480	576

#### RT2R-12x90/200-0C Direct distribution box

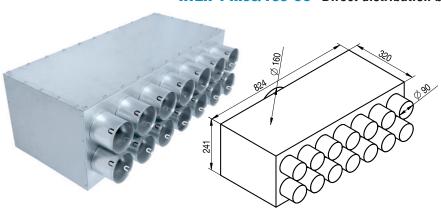


Material: galvanised steel Supplied components:

- DN 200 seal 0 -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 12 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (12x90)	384	480	576

#### RT2R-14x90/160-0C Direct distribution box

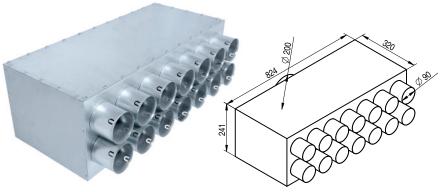


Material: galvanised steel Supplied components:

- DN 160 seal 0 -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 14 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (14x90)	448	560	672

#### RT2R-14x90/200-0C Direct distribution box



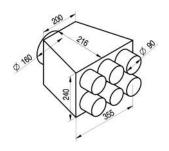
Material: galvanised steel Supplied components:

- DN 200 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 14 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (14x90)	448	560	672

## RT2RQ-6x90/160-0C Direct distribution box





Material: galvanised steel Supplied components:

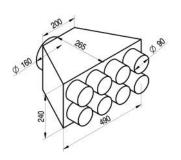
- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 6 DN 90 sealing rings
- interior box insulation\*
- inspection hatch

Rychlost proudění vzduchu m/s	2	2,5	3
Objem m³/h (6x90)	192	240	288



### RT2RQ-8x90/160-0C Direct distribution box





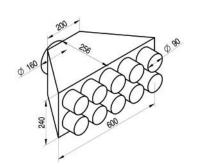
Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 8 DN 90 sealing rings
- interior box insulation\*
- · inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (8x90)	256	320	384

## RT2RQ-10x90/160-0C Direct distribution box





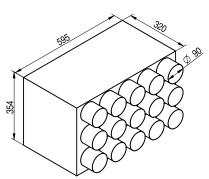
Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 10 DN 90 sealing rings
- interior box insulation\*
- · inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (10x90)	320	400	480

### RT3R-15x90/160-0C Direct distribution box





Material: galvanised steel Supplied components:

- DN 160 seal O -ring
- installation fixtures
- safeguards against movement of the flexible piping
- 15 DN 90 sealing rings
- interior box insulation\*
- · inspection hatch

Airflow speed m/s	2	2,5	3
Volume m³/h (15x90)	480	600	720

### MR-125 Mounting frame with rubber gasket



For easy installation of the SVV-90-125 plastic ceiling/ wall outlet and PLVE-0/125 plastic disc air (exhaust valve), or PLVE-P/125 (supply and exhaust valve). The mounting frame to be attached to a plasterboard structure. There is an attachment fitted with a rubber seal, which assures that the connection is extremely tight, around the perimeter. There are four installation apertures in the collar of the mounting frame.

#### Material:

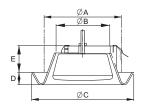
- frame galvanised steel
- seal rubber Diameter: 125 mm



	Order code	Α	В	С	D	Е
	Order code	mm	mm	mm	mm	mm
	PLVE-0/100*	100	70	138	20	45
	PLVE-0/125	125	85	165	20	43
	PLVE-0/150*	150	95	193	21	45
Ī	PLVE-0/160*	160	95	193	21	45
Ī	PLVE-0/200*	200	162	240	18	45

<sup>\*</sup> Made to order

## PLVE-0/125 Plastic disc air exhaust valve



Suitable for the KLO, SV wall or ceiling box Easy regulation of air-flow The aerodynamic design of the valve shape reduces noise made by exhausted air High resistance to temperature, up to 120 °C Low weight Clean using ordinary detergent

#### Material:

- valve polypropylene (PP)
- · sealing ring polyurethane foam
- · central screw, nut, compression spring steel

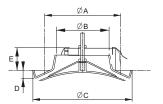
Colour: white RAL 9011 Packaging: in PE bags



Order code	Α	В	С	D	Е
Order code	mm	mm	mm	mm	mm
PLVE-P/100*	100	74	150	17	40
PLVE-P/125	125	93	180	20	40
PLVE-P/150*	150	113	205	23	35
PLVE-P/160*	160	113	205	23	35
PLVE-P/200*	200	165	245	22	45

<sup>\*</sup> Made to order

## PLVE-P/125 Plastic disc air supply and exhaust valve



Suitable for the KLO, SV wall or ceiling box, for installation frame
Easy regulation of air-flow
The aerodynamic design of the valve shape reduces noise made by exhausted air
High resistance to temperature, up to 120 °C
Low weight
Clean using ordinary detergent

#### Material:

- valve polypropylene (PP)
- sealing ring polyurethane foam
- · central screw, nut, compression spring steel

Colour: white RAL 9011 Packaging: in PE bags

## **REVE/125** Disc valve with air-flow regulator





For supply and exhaust ventilation of residential rooms

- Installation into supply or exhaust ducts of a diameter of 125 mm, by insertion – without using pins, screws or other securing elements
- Manual regulation of air-flow using a nineposition sliding regulator, which controls extension of the internal flange

A circular cover in matt white or black



#### Material:

- valve polyethylen (PE)
- cover Ø 23 cm
  - 0,8 mm powder-coated steel
- The set includes seals to ensure that the valve is properly seated in the duct and installation is completely tight







White 2020

Marble Gray Gold 3020

New design

## Concrete







Wood



Marble White 3010



Maple Reddish 5010



Fir 5016 Beech Natural 5017

# **SKVE** Design glass valve

For air intake and outflow with easy and fast airflow control For attachment to a wall or ceiling

The valve consists:

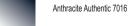
- the body of the valve is fitted within a system of piping by three metal
- the glass front plate is attached to the body of the valve using springs Shape: square (CT) or ring (KR)

Colours: gloss (L), matt (M)

Order code	For pipe dimensions DN	Body diameter mm	Exterior diameter mm	Body depth mm	Diameter of the valve cap mm
SKVE/100/CT or KR/L or M	100	90	137,5	54	200
SKVE/125/CT or KR/L or M	125	114	156	57	200
SKVE/160/CT or KR/L or M	160	149	191	57	230

# **Colours gloss**









Grey Metal 9006

White Pearl 1013

White Pure 9003

White Soft 9010

On request: Blue Shadow 7000, Brown Natural 7013, Red Luminous 1586, Red Terracota 8815

#### Anthracite Authentic 7016M



**Colours** matt











On request:

Silver Bronze 1002M, Brown Natural 7013M, Silver Grey 1001M, Red Terracota 8815M





Avellino Dark 2040



Natural Dark 2050



Marble Gold 3040



Travertin Natural 3050



Travertin 3060





Natural Light 2030

Oak Scandinavian 5018

Acacia 5012



Walnut 5013



Red Apple Tree 5014



Maple Dark 5015



Oak Pearl Gray 5019



Pine 5020



Oak Natural 5021



#### Other accessories

### **End cap**

Material: PE-HD
• for flexible piping

For pipe dimensions DN	75	90
Order code	ZA-75	ZA-90



•	for	hox	Out	lote
•	101	UUX	OIII	IEIS

End cap for box DN	75	90
Order code	ZAB-75	ZAB-90



## Exterior connector for connecting the flexible piping

Material: PP

For pipe dimensions DN	75	90
Order code	ZV-75	ZV-90





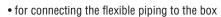
## Sealing ring for connecting the flexible piping

Material: EPDM

• for connecting the flexible piping

For pipe dimensions DN	75	90
Order code	UV-75	UV-90





For pipe dimensions DN	75	90
Order code	UVB-75	UVB-90



• for connecting the flexible piping to the plastic box

For pipe dimensions DN	75	90
Order code	UVB-75-PC	UVB-90-PC





### **PVC** self-adhesive tape

Material: PVC, synthetic rubber based adhesive sheet Colour: grey

• min. application temperature from +10 °C, operating temperature up to +85 °C For joining and sealing metal and plastic piping

For joining and securing foam insulation and polyurethane insulation coated with PVC

Order code	Width	Length	Thickness	Tensile strength	Elongation at break	Adhesion to steel
	mm	m	mm	N/10 mm	%	N/10 mm
PAL-411	50	20	0,13	20	180	2,3







#### **Shrink-seal connectors**

Heat-shrink pipe connector For sealing connections between pipes and boxes Length 1000 mm Application using a hot-air gun Moulds to the pipe surface

For pipe dimensions DN	75	90
Order code	STS01	STS02

## TM-125 Sealing collar

For metal and plastic Ø 110-140 mm outlet vents Weather, UV resistant, ozone Material: EPDM

Colour: black

### Plastic elbow

For  $90^{\circ}$  pipe installation in places where the bend of flexible duct is not sufficient Material: ABS

- Supplied components:
   2 DN 75 or DN 90 seling rings
- 2 locking pins

For pipe dimensions DN	75	90
Order code	KP-75	KP-90



#### Noise damper

Enables achievement of a significant noise damping effect in circular pipes. Material:

- · external casing galvanised metal sheet
- internal casing perforated galvanised metal sheet Damping layer:
- mineral wool with nonwoven textile

Outlet component:

• radial shaft seal

Order code	Internal diameter d1 mm	External diameter D	Length L*
	111111	111111	
TH50* 100/0200/0900/S	100	200	900
TH50* 125/0224/0900/S	125	224	900
TH50* 160/0250/0900/S	160	250	900
TH50* 200/0315/0900/S	200	315	900
TH50* 250/0355/0900/S	250	355	900

<sup>\*</sup>additional dimensions on request

Damping of dB in frequency band (Hz)

f /Hz/	63	125	250	500	1k	2k	4k	8k	Di on LAeq.T
Order code	Di /dB/ acoustic damping effect /dB/ **								
TH50 0100/0200/0900/S	5	17	26	34	30	34	37	25	26,0
TH50 0125/0224/0900/S	3	13	20	32	29	35	31	21	23,0
TH50 0160/0250/0900/S	2	9	13	27	32	39	26	15	20,4
TH50 0200/0315/0900/S	3	6	12	20	24	23	15	12	14,4
TH50 0250/0355/0900/S	5	2	6	11	15	9	7	5	7,5
TH50 0315/0400/0900/S	3	1	5	12	16	14	8	5	8,0
TH50 0400/0500/0900/S	7	1	6	9	10	7	6	5	6,4

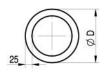
<sup>\*\*</sup>equivalent acoustic pressure level LAeq,T in dB



## THFLEXI noise damper

Substantially reduces noise in the air distribution system Material:

- external laminated aluminium foil cladding
- internal layer made from hydrophobic nonwoven polypropylene fabric reinforced with steel wire
- insulation layer consisting of 25 mm glass fibre



Order code	External diameter D	Insulating layer thickness	Minimum bend radius	Length in box	Box dimensions
	mm	mm	mm	m	mm
THFLEXI 0160/10000	160	25	112	10	230x235x1000
THFLEXI 0200/10000	200	25	133	10	265x265x1000



#### Knife for cutting ventilation pipes

For cutting pipes of an external diameter of 75 mm (code NKF-75) or 90 mm (code NKF-90) in a straight line without leaving burrs Easy replacement of the blade

Spare blades stored in the handle of the knife

For pipe dimensions DN	75	90
Order code	NKF-75	NKF-90



## Installation of KLIMAFLEX SB pipes to KL, KLO, KLOZ and RT boxes



1) Cut the pipe to the required length at the groove in the corrugation.



2) Fit a sealing ring to the 2<sup>nd</sup> or 3<sup>rd</sup> groove.



3) Apply lubricant to the interior surface of the outlet.\*



4) Insert the pipe as far as it will go.



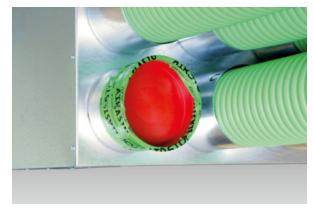
5) Press both locks to prevent the pipe from sliding out.



6) Correct lock position.



7) Secure the connection using air-tight self-adhesive tape.



8) We recommend that the end caps on unused and sealed outlets be secured using air-tight self-adhesive tape.

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## Installation of the plastic disc valve



1) Press the plastic disc valve into the anchored ventilation system outlet.



2) Insert the valve as far as it will go towards the ceiling/wall structure.



3) Regulate the air-flow by rotating the central disc, which modifies the valve opening.



4) After adjusting to the required air-flow rate, disassemble the valve by removing it, and lock the central disc using the securing nut\*.





5) Re-install the valve and check that it is firmly seated in the structure.



## **Maintenance and cleaning of air-conditioning systems**

#### Cleaning distribution boxes

Type RT2R and RT3R direct distribution boxes allow inspection and cleaning after removal of the inspection door, figure 1. Type KL flat distribution boxes allow inspection and cleaning following disassembly from the connected ducting, figure 2. Wipe the interior of the box with a damp cloth or carefully vacuum the interior. Proceed carefully to avoid damaging the surface of the interior insulation.

#### Cleaning KLIMAFLEX SB air-conditioning ducts

The DN 125 cleaning kit is intended for cleaning flexible KLIMAFLEX SB ducting. This kit consists of an attachment, mini-winch (14,5 m) with brush and replacement seals for the mounting frames, figure 7. You must remove all airconditioning elements from the ducting, e.g. flow regulators, before cleaning. Disconnect the heat recovery unit from the power supply. Access is through the ceiling/wall boxes, or from the other end of the route through the distribution boxes, figure 1 and figure 2.

Procedure through the room exhaust vents: screw the brush firmly onto the end of the mini-winch. Fit the mini-winch bowden to the attachment, guide the brush through the box pipe into the duct by hand. Fit the attachment to the mouth of the pipe and finally insert the narrowed end of the vacuum nozzle\*\* into the attachment opening Ø 35 mm, fig. 4 and 5. Clean the ducting by pulling, after switching the vacuum on. If cleaning is performed through the distribution box, fig. 6, the vacuum is simultaneously connected to the box pipe attachment at the other end of the ducting route. If a plastic

room vent end and through the distribution box. We do not recommend use of other types of hard brush (steel, etc.), which could damage the interior surface of the air-conditioning ducting.

elbow is installed in a DN 75 air-conditioning route, you must perform the cleaning procedure from both ends. From the

#### Cleaning the disc valves

Remove the valve from the ceiling/wall structure by pressing at the side and sliding it out of the box pipe, figure 3. Remove any dirt using a soft brush, vacuum or water with standard detergent.

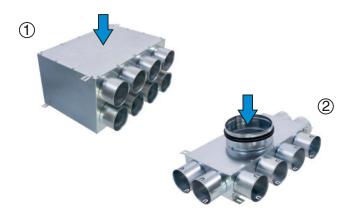
#### Cleaning the interior surface of the ceiling/wall box pipes

After removing the valve, figure 3, you can easily reach into the interior of the box pipe. Clean using a vacuum or a dry cloth.

#### Recommendations

We recommend you contract servicing / maintenance with a qualified professional company during installation of the heat recovery system.

\*\* Tested by vacuum cleaner: power input 1 100 W, maxi - mum suction 270 mbar = 27 kPa.







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# **Project design and execution of construction work including HRV**



















## The advantages of using KLIMAFLEX accessories and pipes

- · speed and simplicity of installation
- · adaptability to the type of installation
- · increased flexibility while retaining mechanical durability
- · low weight
- · easy modification of pipe length
- anti-bacterial and anti-fungal treatment applied to the interior of the pipe
- low acquisition costs compared to other types of distribution system
- · uniform air distribution
- low pressure losses in the pipeline
- sealing rings for connecting the pipes to the boxes are included in the delivery
- no material losses, left-over pipes can be used by inserting a connector

#### **Recommendations:**

- the available pressure must be verified on long routes (over 15 m)
- secure connections between the boxes and the pipes using air-tight tape
- recommended maximum air-flow speed up to 3 m/s
- protect the ends of pipes against dust and dirt by fitting end caps (included in the delivery) after installation and before starting operation
- projects and installation should be realised according to the relevant building regulations and guidelines valid at the site of installation
- the maximum distance between anchoring strips when installing beneath the ceiling is 1,000 mm
- condensate removal must be resolved when distributing moist air
- insulate pipeline (insulation thickness 20 mm):
- a) if the pipeline is used to carry cooled air and leads through a warm room b) if the pipeline leads through a space with a lower temperature than the temperature of the transported air the heat-loss requirements of the relevant standards (the thermal conductivity of the pipe wall is approx. 0.28 0.30 W/mK, thermal resistance is approx. 0.034-0.040 m2 K/W)

#### **Air flow rate**

KLIMAFLEX SB DN 63 (m³/h)				
Number	Air flow speed			
of tubes	2 m/s	2,5 m/s	3 m/s	
0	14,7	18,4	22,1	
00	29,4	36,8	44,2	
000	44,1	55,2	66,3	

KLIMAFLEX SB DN 75 (m³/h)					
Number of tubes	Air flow speed				
	2 m/s	2,5 m/s	3 m/s		
0	21,7	27,2	32,6		
00	43,4	54,4	65,2		
000	65,1	81,6	97,8		

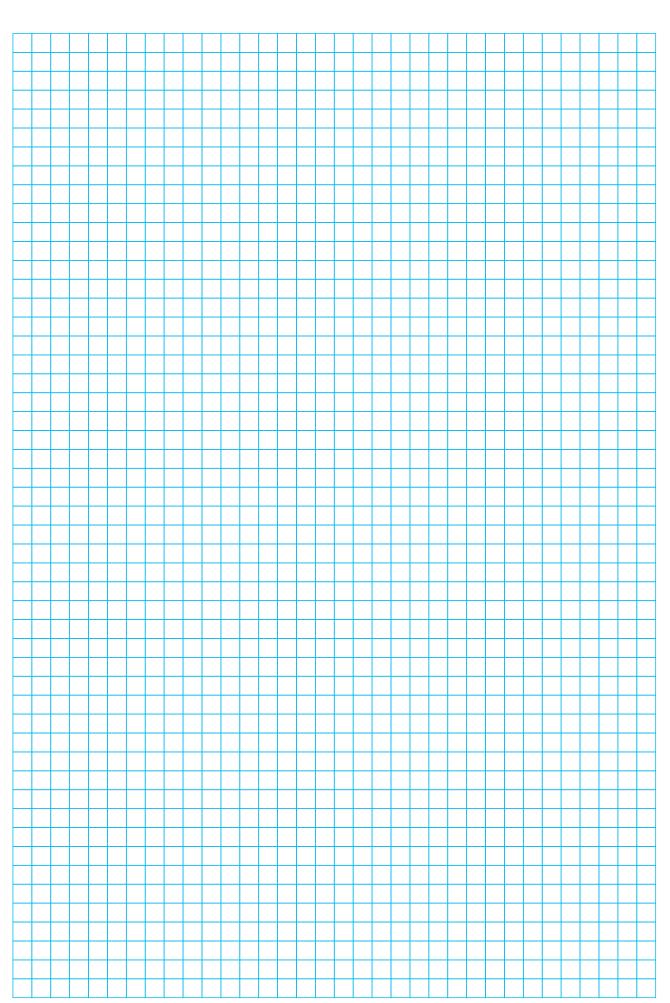
KLIMAFLEX SB DN 90 (m³/h)					
Number of tubes	Air flow speed				
	2 m/s	2,5 m/s	3 m/s		
0	31,8	39,8	47,7		
00	63,6	79,6	95,4		
000	95,4	119,4	143,1		

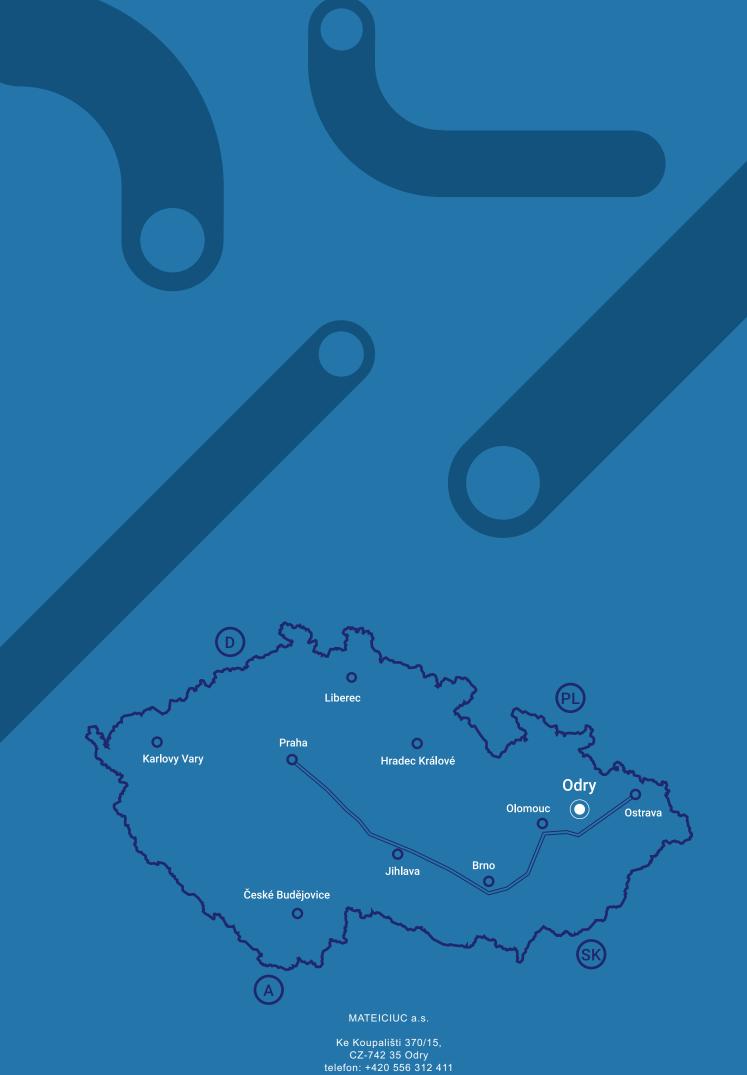
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# **Housing project "SKY Barrandov" in Prague 5**









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