

Intelligent Solutions for Residential Ventilation

SaveVent Systems
Technical Specifications



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Take a deep breath and enjoy the pure, fresh air of your surroundings. With each breath, you unwind a little bit more and begin to feel fully at ease. You've finally arrived.

Make the dream of modern living a reality for your customers. Transform every home into a day-spa of fresh air. With residential ventilation by Systemair. Intelligent concepts increase living quality, and help save energy too. A refreshing outlook for your customers. And for you.

Quality of life starts with the climate

Residential ventilation by Systemair

Those wishing to build or carry out renovations today are faced with a challenge. The current Building Regulations demands better insulated building envelopes in order to protect our resources and the environment. These prevent natural ventilation through the building's component parts, which means that mould may appear in the interior rooms, which in turn puts the health of its occupants at risk. While regular cross-ventilation can provide some relief, it is rarely convenient and often not realisable at all. On top of that, valuable heating energy is wasted by doing so. And this is a real conflict. So isn't it great that you now have a solution to it at hand? The SaveVent - controlled residential ventilation by Systemair.

Residential ventilation of the highest standard

For over 35 years now, we here at Systemair have been making clean air a reality. Be that in large shopping centres, hospitals or simply in the confines of your customer's homes. With SaveVent we offer you a system which lets your customers enjoy outdoor air around the

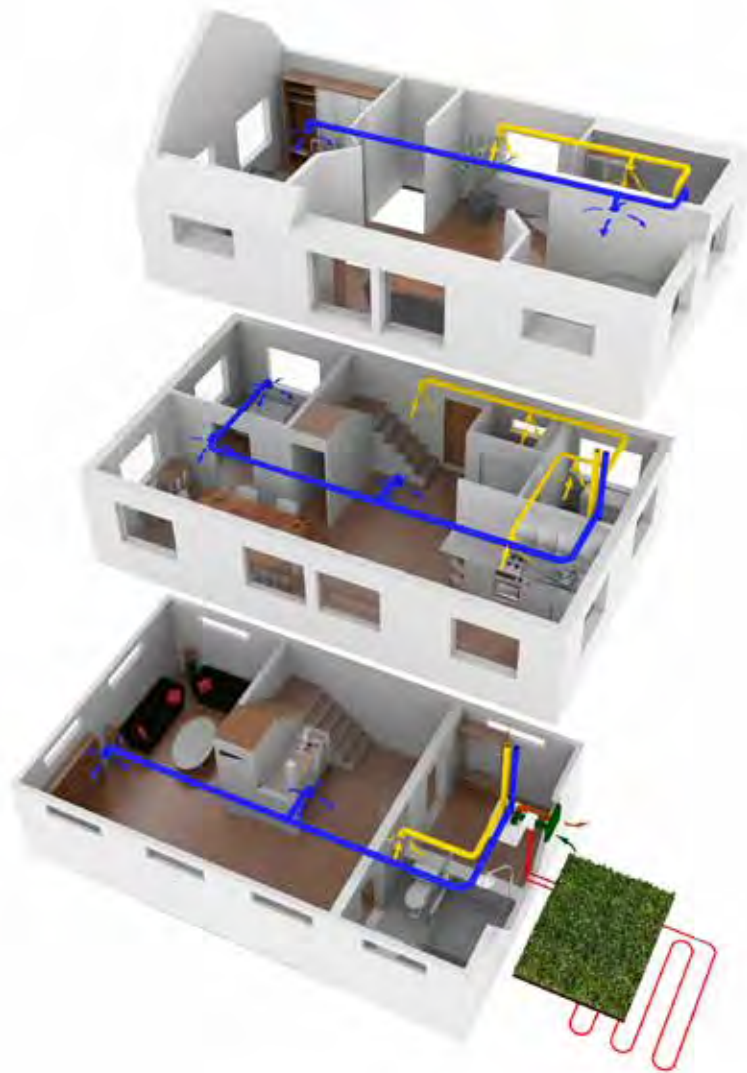
clock, without having to lift a finger. This is because the air exchange occurs automatically and, importantly, is monitored. Opening the windows for a quick airing-out is no longer necessary. Not only is this very convenient, your clients also save both energy and money in the process. Why? Because the heating energy stays where it's supposed to: in the house. This is most applicable when the ventilation system works with heat recovery. In this process, the waste air is extracted and used for tempering the cool outdoor air. Creating a draught becomes a thing of the past.

One of life's luxuries

Along with stale air, SaveVent systems also expels excessive air moisture. This way, your customers can enjoy a pleasant environment and mould doesn't stand a chance. Not only does this protect the basic fabric of the building, it protects the occupants' health as well. Just as beneficial to their well-being are our high-quality pollen and dust filters. Even people with allergies can now breathe a sigh of relief.



Extract air from the bathroom, kitchen and toilet.



This is how your controlled residential ventilation works:

Using the rooms, kitchen, bathroom and toilet, your ventilation system vents waste air outside. Depending on the system, a heat exchanger extracts the heat from waste air first. At the same time, outdoor air from outside is taken in and filtered.

If necessary, the heat exchanger pre-temperes the cool outside air using the waste air. The outdoor air then flows through the vents into the rooms. From there, the supply air flows through openings in the doors (door gap or grille) across the overflow area (corridor and floorboards) into the kitchen, bathroom and toilet. This way, the two different types of air don't mix.

The result: an optimum air ratio and a pleasant room climate.

Creating a good atmosphere is a matter of trust

SaveVent systems

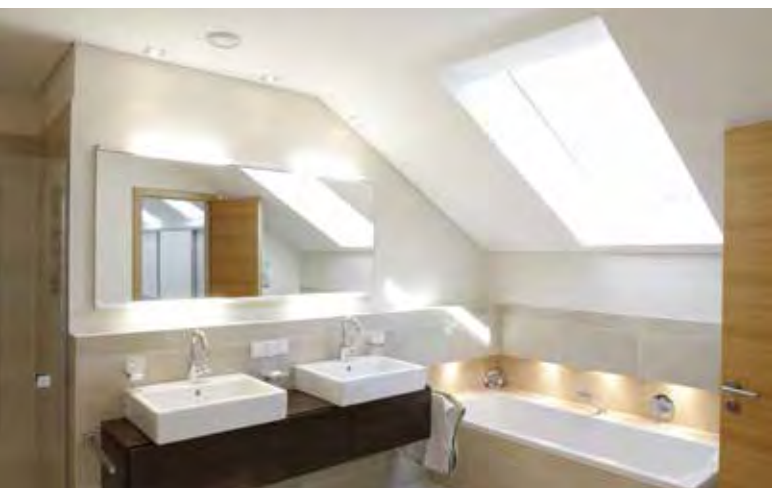
A room's climate is not a constant, instead it depends on a number of factors, for example, room moisture, CO₂ saturation, the size of the room as well as the number of people in the room and how long they stay there. This is why your customers need to rely on a system which takes all these factors into account. A system which is perfectly tailored to your clients' needs and buildings, regardless of whether it's a new build or renovation work. In short: a system like SaveVent Comfort.

Optimum planning

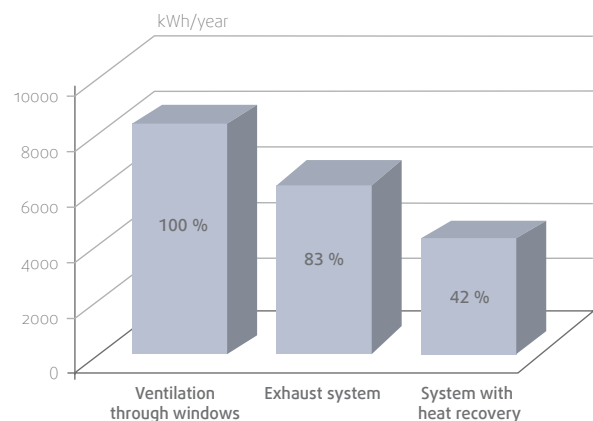
In close collaboration with you, we plan your customers' personal residential ventilation options. Based on our calculations and our decades of experience, we put together the SaveVent Comfort system components for you. Of course, we take into account the specific wishes of your clients when doing so, perhaps they want a ventilation system with geothermal heat-exchanger for example (see p. 16). So what does it all mean? It means you can guarantee your customers' complete satisfaction at all times.

Intelligent residential ventilation

Sensors determine the exact degree of ventilation necessary according to building usage. Subsequently, the level of ventilation is monitored effectively, that is, the fan speed is adjusted to meet the requirements necessary at any specific time. This means that the system isn't always running at full power. Similarly, preheating the outdoor air is only done when needed. This way, your customers' energy costs can be considerably reduced. And since the control mechanism responds without delay, the occupants can enjoy a balanced and relaxing room climate around the clock. Intelligent technology both you and your customers can trust by Systemair.



Modern living needs the proper living space ventilation:
SaveVent Comfort



168 m² living area 10 kWh = 1 litre fuel oil or 1 m³ natural gas
Source: Hessian Ministry of Economics and Transport, Germany

Raising quality of life – Reducing heating costs!

Something you can trust

Your “Carefree package” from Systemair

For whichever configuration level your customers choose, in SaveVent Systems they are getting residential ventilation of the highest caliber. This is because we place the greatest emphasis on quality, functionality, efficiency and energy conservation when developing our products. And since we only want to offer you and your customers the absolute best, we put our innovations through extensive tests and quality controls before they reach you. You can depend on that. Our Research and Development Centre in Sweden is one of Europe’s most state-of-the-art test laboratories for ventilation technology.

Expert advice from the start

It goes without saying that such a high-quality system also comes with high-quality service. As such, we make ourselves available to you with our helpful advice during the planning and tendering process. Using the building plans we determine your customers’ required air quantity. The basis for this are the current provisions of the EnEV as well as the DIN standards. We then plan your entire ventilation system using our experience and the latest CAD programmes. This way, you can be sure that your system and all of its components are optimally coordinated with the building. We also make it easy for you to put together your quotation: Alongside the description of the individual items and detailed material lists, you receive all of the corresponding prices from us too.

You take care of the installation. But we don’t leave you high and dry here either: So that you know all the ins-and-outs as best as possible, we offer comprehensive training courses, provide informative material to help keep you up-to-date with all the latest technological advances and answer all your questions at all times. When it comes to assembling, we provide you with the most precise plans and deliver all of the system components straight to your construction site. Provided the system is constructed according to plan, we will of course offer a warranty for its proper functioning. We also take great care to ensure that our products are delivered quickly and are easy to assemble. This not only simplifies the work for you, it also reduces both the construction time and the costs for your clients, which they will no doubt appreciate.

If necessary, we also help you during the commissioning and adjustment of the system. Even afterwards, we are there for you and your customers. With our filter subscription, for example: Help your customers maintain a healthy room climate and keep energy consumption down. We are happy to automatically deliver new filters for the system on a regular basis. Our all-round worry-free service makes it easy.

If you have any difficulties starting up the system or general questions on residential ventilation, give us a call!

Systemair

Since 1974, Systemair has been making clean air a reality. Today, our company has established itself as one of the global market leaders in the area of ventilation technology. A success story which began in Skinnskatteberg in Sweden and continued rapidly with the invention of the duct fan. Today, we develop ventilation technology which sets new standards. Be it for major projects like shopping centres, tunnels or underground train stations, or for smaller undertakings for residential ventilation in family homes, our experts know what matters.



The EU Ecodesign Directive

Reduce environmental impact with product design

With the „Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products“ – in brief Ecodesign or ErP Directive– the EU sets minimum requirements for the energy efficiency of such products.



The energy label should permit the end user to compare products easily, enabling them to select energy-efficient products. In contrast to other electrical equipment, the energy classes on the labels of residential ventilation equipment are determined by a calculated parameter, the specific energy consumption, or SEC. This value should display the energy-saving potential of the equipment used in kilowatt hours per m² per year.

There are numerous new requirements in the field of ventilation and air conditioning:

Fans EU 327/2011 (B2B, no label)

- Since 2013, minimum requirements apply for fans above 125 Watts regarding energy efficiency
- From January 1, 2015, these requirements have become significantly more stringent

Non-residential ventilation unit

EU 1253/2014 (B2B, no label)

- From January 1, 2016 minimum requirements with regard to
 - Fan energy consumption and
 - Efficiency of the heat recovery

Residential ventilation unit EU 1253/2014 and 1254/2014 (B2C, label)

- Minimum requirements from January 1, 2016: The units must save at least as much primary energy (electricity and heat) as they use (electricity)
- Minimum requirements from January 1, 2018: The units must save significantly more primary energy than they use – the ventilation heat requirement of the residential building will be approximately halved
- Energy efficiency label from A+ to G (see Fig. 1)

Air conditioners EU 206/2012 (B2C, label)

- Since January 1, 2013, units with a cooling performance up to 12 kW are classified in energy efficiency classes from A+++ to D
- Units in cooling mode must fulfil at least the requirements of energy efficiency class A

SEC Class	SEC in kWh/a.m ²
A+ (highest efficiency)	SEC < -42
A	-42 ≤ SEC -34
B	-34 ≤ SEC -26
C	-26 ≤ SEC -23
D	-23 ≤ SEC -20
E	-20 ≤ SEC -10
F	-10 ≤ SEC -0
G (lowest efficiency)	0 ≤ SEC

SEC value and energy class assignment.

Central residential ventilation unit with heat recovery

As shown in Figure 2, this is not only influenced by known parameters such as electrical power consumption or heat recovery, but, to a great degree, by the mode of operation as well.

So a Unit X may well achieve a better energy class when operated according to demand (e.g. moisture and CO2 sensors influence the air quantity), than in a time-controlled or manually-controlled version.

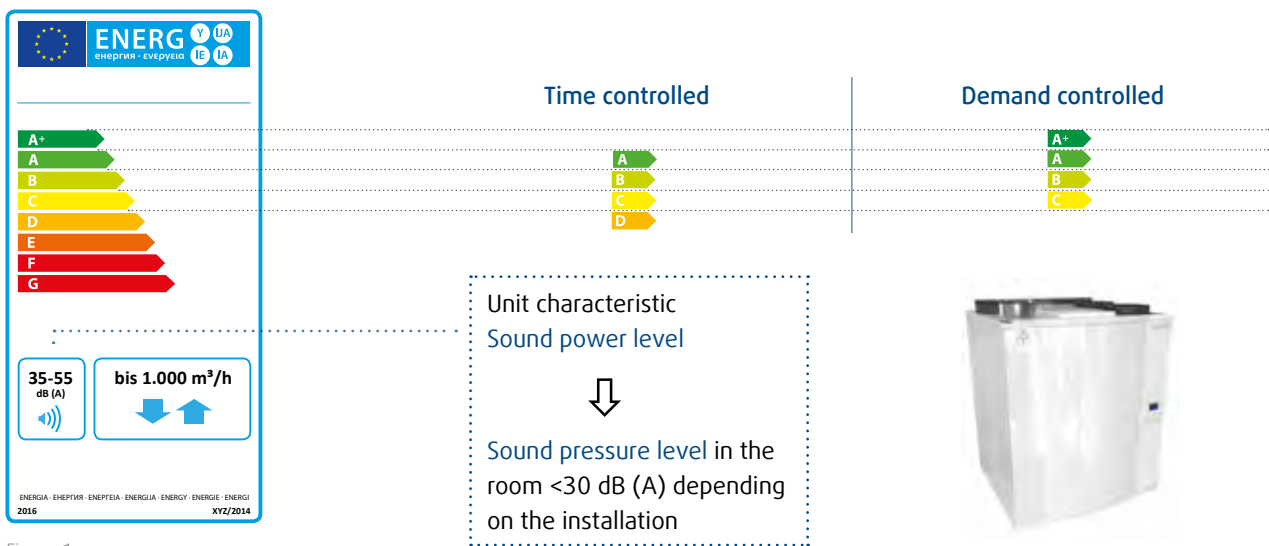
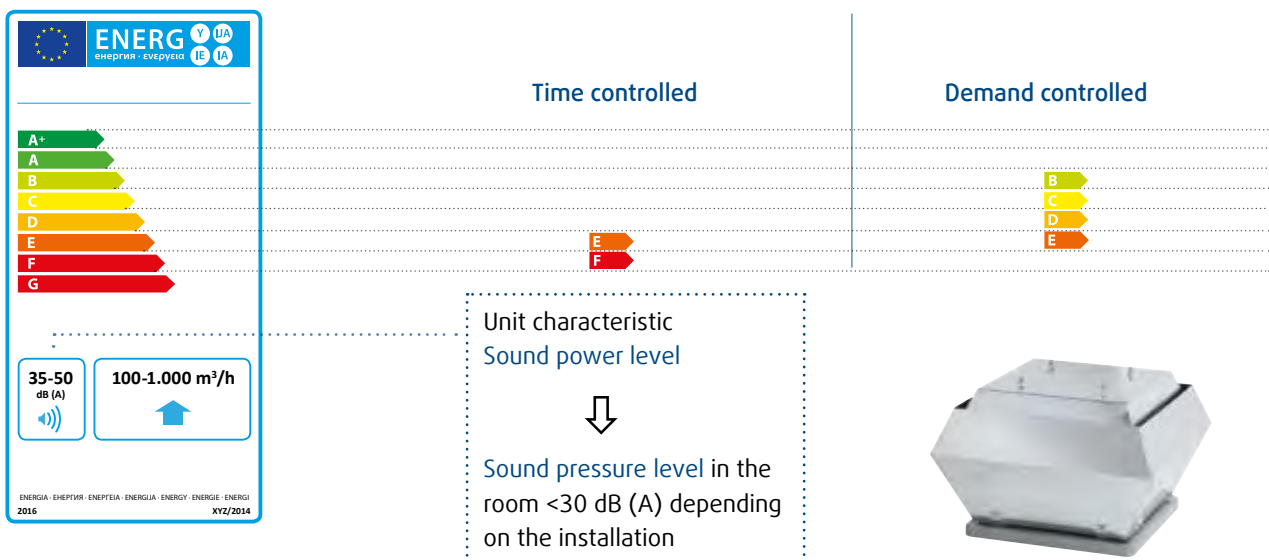


Figure 1

Central extract air fan without heat recovery

Exhaust systems without heat recovery score worse than units with heat recovery, since the exhaust heat is lost. For exhaust systems, the mode of operation also has a large influence on the energy class.



CAD planning for residential ventilation systems

Systemair operates a special design office for residential ventilation systems. Due to their special training particularly for residential ventilation the designers are able to plan and to offer the most suitable ventilation system for you and your customers.

They use the planning software Plancal:

Plancal nova is a stand-alone drawing software for HVAC. It requires no other CAD applications and is widely used in the HVAC sector.

Plancal nova can import and modify drawings from other architecture or drawing software and export them again. Plans can be read and created in 2D as well as in 3D.

Visualisation methods of projects:

2D for ground plans or 3D models with or without building. Unclear details can be displayed as sections or 3D details. 3D models offer different perspective views or allow to take a virtual tour through a building.

Systemair data set

Systemair has created a data set for this software with some specific features:

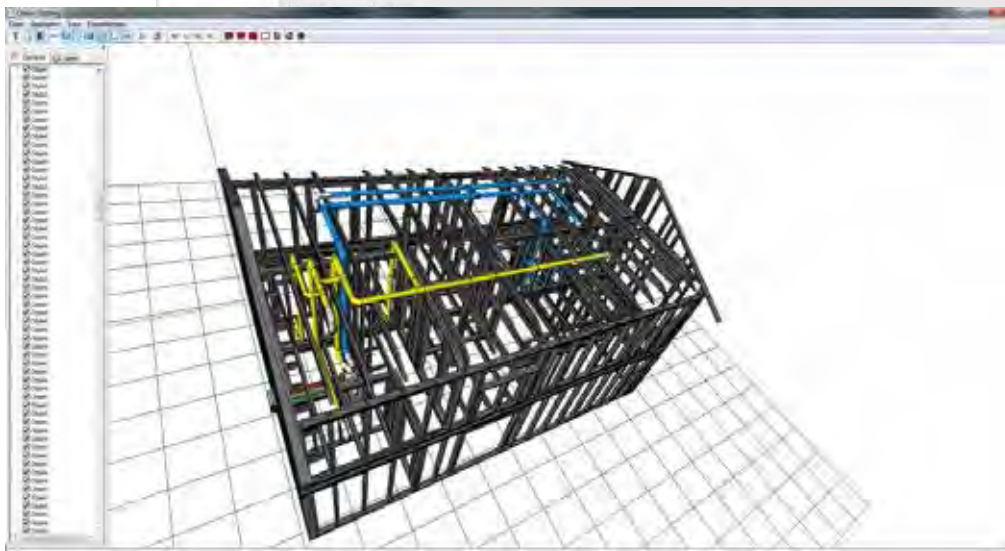
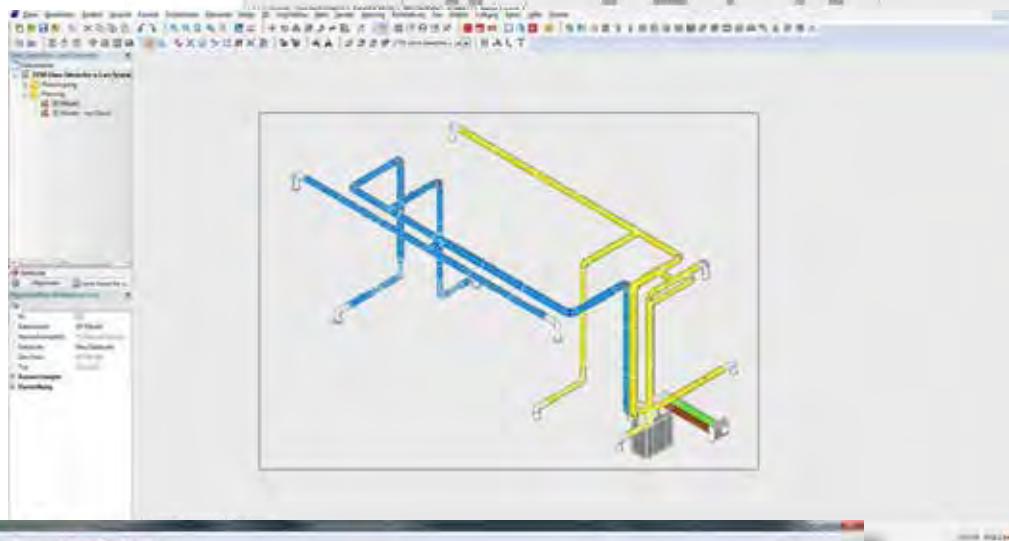
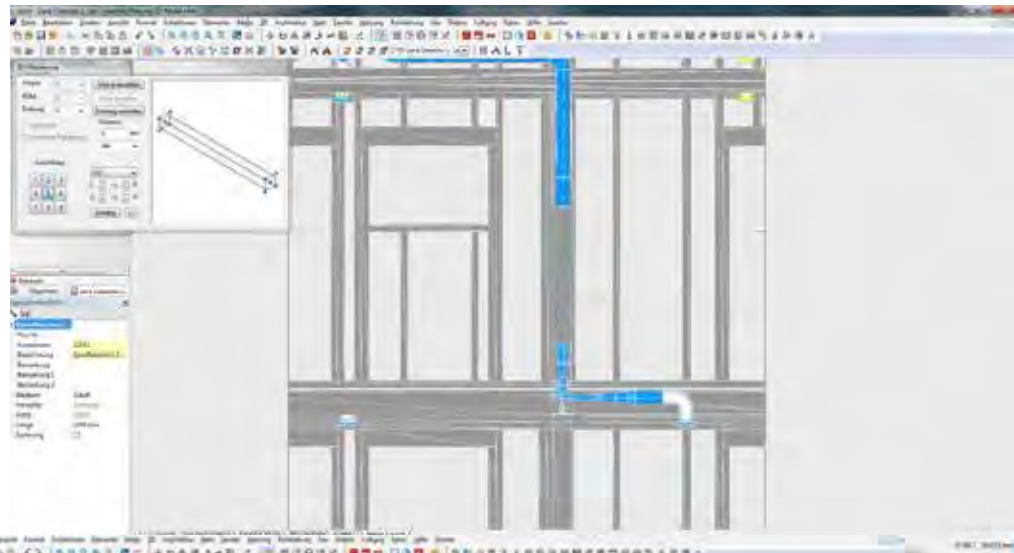
Plancal nova uses components of the Systemair residential ventilation product range and allows calculating the planned system by using the determined air volume with regard to pressure losses of the unit up to the outlets.

The determined operation point helps calculating the data of the unit, such as power consumption and sound emission. Plancal nova can also calculate noise reduction of the duct system from the unit up to the outlets. Therefore, noise problems can be detected early and prevented during the planning phase.

After planning, a suitable bill of materials with Systemair article numbers can be generated to make a detailed quotation. The CAD plans can also be used to release installation plans with specified information concerning duct installation inclusive legends and identification marking in colours. This considerably facilitates the installation. This planning documentation ensures an easy inspection because the duct installation can be quickly reproduced.

This wide planning service is currently unique and guarantees safety from offering phase to commissioning.

This level of planning service is unique, and gives you absolute peace of mind from the time an offer is made all the way through to commissioning.



Perfectly in tune with your customers

The SaveVent systems

Without heat recovery



SaveVent Basic

Efficient exhaust ventilation system with manual air flow control

In the basic model, the stale indoor air is extracted. Outdoor air flows in through the external wall vents. As such, continuous ventilation of the entire home is assured.

SaveVent Basic +

Efficient exhaust ventilation system with intelligent control

Ventilating rooms is even easier with the EC vent. This intelligent control unit can regulate ventilation according to the current CO₂ saturation, room temperature, humidity and the number of people in the room. Using these parameters it determines the requirement for ventilation and regulates the volume of air. All of it is done automatically.

With heat recovery



SaveVent Comfort R

Highly efficient residential ventilation with rotational heat exchanger

Your customers want maximum convenience with minimum heat loss? Then recommend them our rotational heat exchanger system. This extracts the heat from the waste air and pre-tempers the cool outdoor air. Some of the humidity of the air is also recovered and transferred to the supply air. High-quality fine particle filters make sure the air stays pure.

SaveVent Comfort C

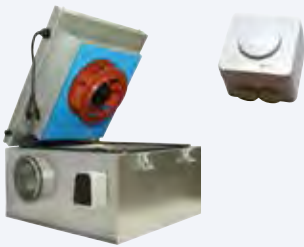
Highly efficient residential ventilation with counterflow heat exchanger

With a reverse flow heat exchanger your customers can achieve the highest degree of heat recovery. The system automatically switches between normal mode with heat recovery and summer mode without it. In Summer a bypass function overrides the heat recovery.

With SaveVent Systems, your customers are constantly breathing outdoor air at home. Even with our basic configuration, they can enjoy the best climate conditions.

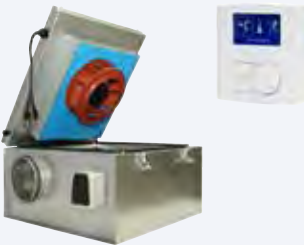
Comfort which can be improved on even further: with components which automatically manage the supply of outdoor air and save on energy too.

Could there be such a thing as too much convenience?



The benefits:

- Tailored outdoor air and ventilation
- Energy-saving
- Low operating costs
- Simple installation
- User-friendly
- Quiet-running
- Long life



The benefits:

- Controlled outdoor air and ventilation as needed
- Intelligent control
- Energy-saving
- Low operating costs
- Easy installation
- Quiet-running
- Long life
- User-friendly menu navigation
- Day/night operation can be set using a timer



The benefits:

- Controlled outdoor air and ventilation
- Heat recovery degree of up to 85%
- Bypass function
- Extreme energy savings
- User-friendly
- Space-saving and quiet-running
- Allergy-friendly
- Humidity recovery, thus consistently pleasant indoor climate
- No condensation, thus connecting to the drains is unnecessary
- Frost protection is unnecessary (to as low as approx. -30°C)



The benefits:

- Controlled outdoor air and ventilation
- Heat recovery degree of up to 90%
- Bypass function
- Automatic de-icing function
- Extreme energy savings
- Quiet-running
- User-friendly
- Optional fine particle filter

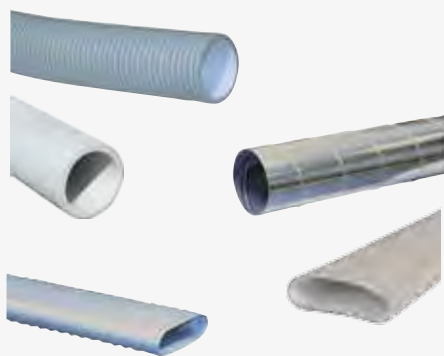
Systemair duct systems

Extremely flexible

For whichever convenient ventilation system your customers chooses and regardless of their structural circumstances, with our ductwork systems you can rise to every challenge.

Whether from galvanised steel sheeting or polymer, whether round or oval, all pipes are extremely robust, resistant to deformation and, if necessary, easy to clean.

Your clients can make the selection and choose the size to meet their individual requirements. This guarantees the safe and economical distribution of air through the building.



Duct systems see page 112.



Systemair air distribution products

Just your style

Do your customers prefer modern living? What about classical, maybe elegant or perhaps they prefer the style of the country house? Regardless of which fittings your clients like, they're bound to find the design they're looking for in our versatile range of high-quality ceiling and wall vents.

Simply show your customers the models in our catalogues or refer them to our website www.systemair.com



Air distribution products see page 144.

SaveVent – a pure pleasure

- Convenient: outdoor air around the clock
- Healthy: optimum climate - without a draught
- Efficient: reduces heating costs
- Value preservation: no mould
- Hygienic: no harmful substances in the air
- Allergy-friendly: thanks to high-quality supply air filters
- Pleasant: fast extraction of unpleasant smells from the kitchen, toilet and all other rooms
- Easy: no window ventilation necessary
- Relaxing: enjoy outdoor air without the noise from the street coming through open windows
- Increase value: with the latest building standards

Supply your customers with energy from the earth

With GEO, our brine geothermal heat exchanger

Your customers want to improve the level of efficiency of their ventilation system? Do they want a pleasant indoor room climate for relaxing on hot summer's days? Then why not simply use geothermal heating? Not only is it available all the time for free, it helps your customers save on their energy costs too.

The temperature in the earth is practically constant throughout the year. As such, it's suitable for preheating the frosty outside air in winter with the help of a heat exchanger. Then in summer, the warm air can be cooled down before it reaches your home's interior. The one condition:

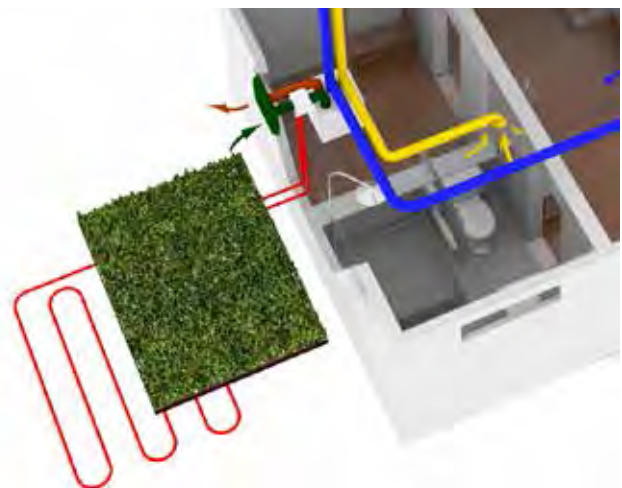
The heat exchanger's piping needs to be buried at a depth of 1.5 to 2 meters. This is the only way to ensure that a large enough temperature gradient is in place. Since we only want to provide your customers with the best in this area too, we have developed "GEO". With this geothermal heat exchanger, the heat or coolness of the earth first passes into the brine (water with antifreeze agent). Only after it has arrived in the basement is it transferred to the supply air using a heat exchanger.

The clear advantage with GEO

Unlike the air duct geothermal heat exchanger, with GEO the air is not drawn in through underground pipes. Not only is this more hygienic, it does away with the otherwise necessary regular cleaning. On top of that, GEO is better value and more robust than the air duct system. This is because the piping can have much smaller dimensions (DN 32 instead of DN 200). This also means that it is easier to install. Furthermore, the brine system is easier to manage. Your customers decide at what outside temperatures GEO should start up. This conserves the supply of geothermal heat and gives you exactly the room climate you want.



The forward-looking way to use energy:
Systemair "GEO"



Make household chores fun again

Villavent® Central vacuum cleaner system

Your customers will no doubt want to keep up with the times when it comes to household chores too and ensure themselves the greatest convenience possible. So why not introduce them to our Villavent® Central Vacuum Cleaner! With this system, all your customers have to do is insert a suction hose into a socket in the wall and they can get started straight away. No more pulling around a clunky machine behind you, which often gets caught on valuable pieces of furniture, leaving behind ugly marks or worse no more need to carry heavy items from floor to floor in order to vacuum clean. Household chores really can be this easy.

Incredibly powerful. Incredibly quiet.

This helps your customers maintain a healthy room climate with clean air. For one, its very strong suction guarantees maximum cleaning of furniture, floor and vacuum cleaner bag of the central device. This can be mounted in a utility room like the basement or garage. This means that the vacuum cleaner is extremely quiet and your customers don't have any annoying background noise in the house's rooms.

Additionally, the central device blows the waste air directly to the outside. This ensures that dust doesn't swirl up in your utility room - meaning that time is saved when cleaning and those with allergies don't have to worry. Equipped with a Hepa filter, the vacuum cleaner is even suited to passive houses whose building envelope cannot be cut through by air discharge openings. The long, flexible suction hose comes equipped with a telescopic pipe and floor nozzle. This means your customers can work in ease and give their backs a break. Maintenance of the central vacuum cleaner is generally limited to regular cleaning of the suction casing and replacing the filter bags. Once or twice a year is enough.

Systemair offers a large range of accessories for Villavent® Central vacuum cleaner system.



Vacuum-cleaning today:
Villavent® Central vacuum cleaner system

SaveVent Basic

Efficient exhaust ventilation systems from Systemair without heat recovery

SaveVent Basic

Efficient exhaust ventilation system with manual air flow control



Systemair duct systems

Extremely flexible



Duct systems see page 112.

SaveVent Basic +

Efficient exhaust ventilation system with intelligent control



Overview SaveVent Basic applications

SaveVent	Basic	Basic	Basic+	Basic+
Application	Single family house	Flat	Single family house	Flat, central unit
System	Residential ventilation without heat recovery	Residential ventilation without heat recovery	Residential ventilation without heat recovery	Residential ventilation without heat recovery
Location	Plant room	Roof	Plant room	Roof
Ventilation unit	Extract fan: KVKE EC, controller MTP	Extract fan: DVC or MUB	Extract fan: KVKE EC, controller MTP	Extract fan: DVC or MUB
Extract valves	In bathroom, toilet and kitchen	In bathroom, toilet and kitchen	In bathroom, toilet and kitchen	In bathroom, toilet and kitchen
Intake valves	windows* and/or FAV	windows* and/or FAV	windows* and/or FAV	windows* and/or FAV

*Windows with integrated supply intake

Systemair air distribution products

Just your style



Air distribution products see page 144



General description

- Exhaust air units are the most cost-efficient method of mechanical ventilation.
- Exhaust air units consume less electrical power because only the fan needs energy.
- However: no heat recovery and no pre-heating of supply air!

Function

The used, humid and polluted room air in extract air rooms such as kitchens, bathrooms and toilet rooms is extracted by a fan through a duct system and led via roof or facade to the outside. Outdoor air enters

living rooms, children's rooms and bedrooms via facade or windows inlets (valves with filter in the facade or window frame with integrated supply intake) and ensures continuous airing of the whole apartment. The controlled room ventilation reduces ventilation heat losses compared to conventional airing by open windows.

Delivery contents

We deliver demand-controlled EC fans as well as complete duct systems including extract air valves, silencers and exhaust air outlets for roofs or facades. Outdoor air inlets in the facade are also available with noise reduction; demand-control of the ventilation unit is available with CO₂ or humidity sensors.



Exhaust air unit in a single-family house

Advantages for a single-family house

- Cost-efficient method
- Smaller duct system

Disadvantages for a single-family house

- No heat recovery
- No pre-heating supply air
- High amount of maintenance (one filter exhaust air and one filter for each outdoor air inlet cone)
- Only basic filtration of the outdoor air possible



Exhaust air unit in an apartment building centrally

Advantages for an apartment buildings

- Low maintenance costs
- Less power consumption - only one fan

Disadvantages for an apartment building

- No heat recovery
- No pre-heating supply air
- Only basic filtration of the outdoor air possible
- Fire safety and noise protection measures have to be respected

Take care, that you plan intake valves in window frame or walls. Self regulating outdoor air valves see page 20.

Exhaust air unit in an apartment building, decentrally

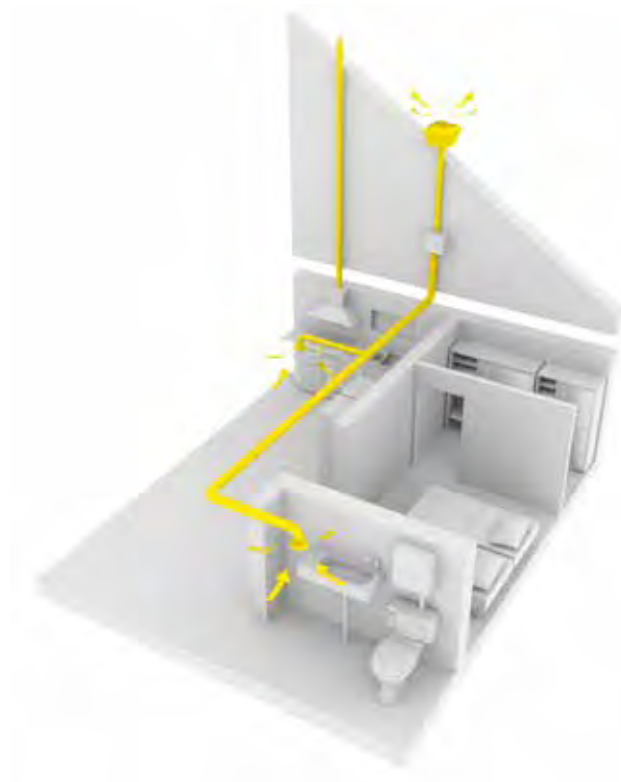
Advantages of exhaust air for each apartment

- Individually controllable
- Clear costs
- Exhaust air via facade: no noise protection and fire safety measures to the neighbour necessary

Disadvantages of exhaust air for each apartment

- Facade breakthrough in each apartment
- No heat recovery
- No pre-heating supply air
- Only basic filtration of the outdoor air possible

Take care, that you plan intake valves in window frame or walls. Self regulating outdoor air valves see page 21.

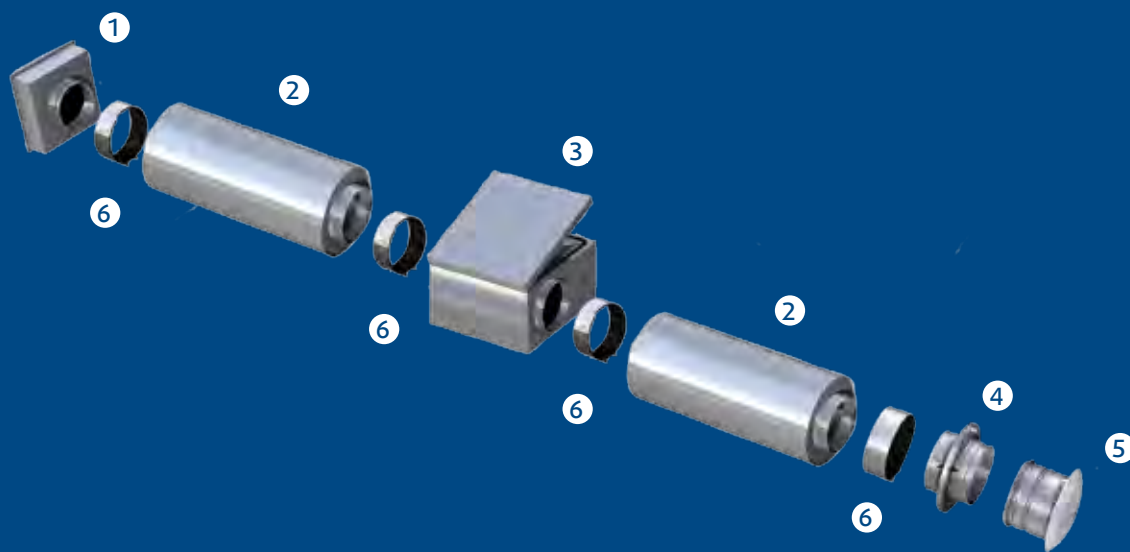


Conclusion:

Exhaust air units meet the requirements of energy saving standards, but cold supply air from the outside offers less comfort. In addition to this, filtering of the supply air is limited. The main advantages are cost-efficient acquisition costs and installation.



Circular duct fans



Quality by tradition

Systemair circular duct fans have been developed for use in compact exhaust and supply air systems. The Systemair circular duct fan was the first in-line duct fan available on the market in this design. The availability of a comprehensive range of accessories, including heating and cooling coils, filters, silencers and more, offers solutions for complete systems for almost all applications. Our experience over the past 35 years and continuous research and development of new products and technologies has resulted in the Systemair circular duct fan system being a market leader. Our motto "the straight way" is revealed in the straight routing of the air in a ducted system.

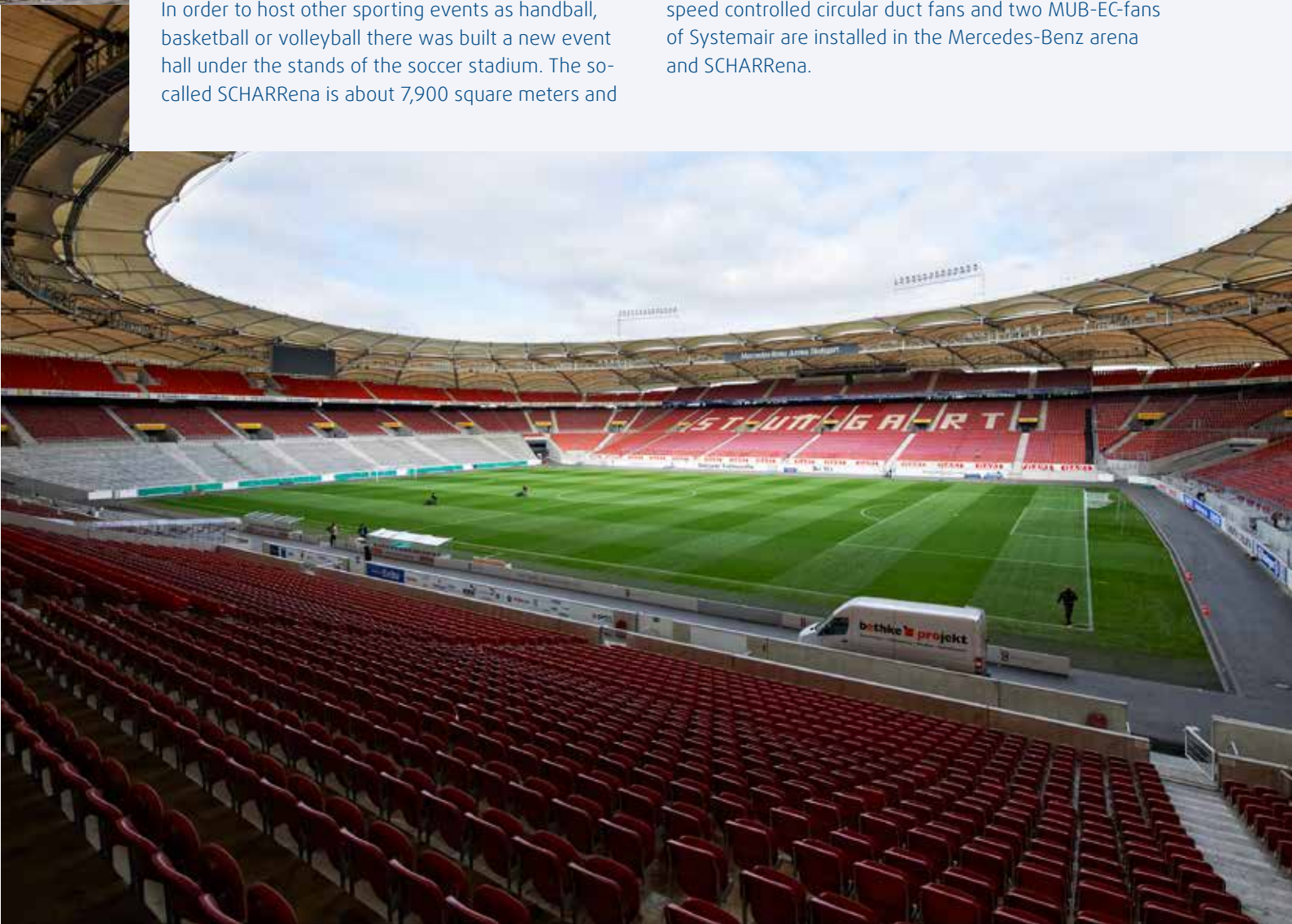
- 1 IGK - Intake grid with wall flange and insect mesh
- 2 LDC - Silencer
- 3 KVKE EC - Circular duct fan
- 4 SPI - Iris damper
- 5 IGC - Intake grid
- 6 FK - Fast clamp



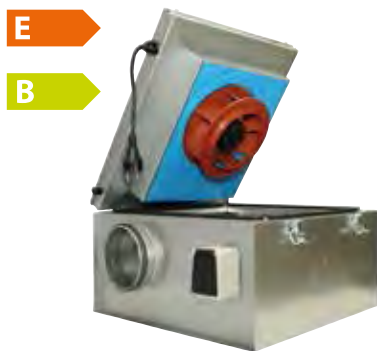
References: Mercedes-Benz Arena in Stuttgart, Germany

Mercedes-Benz Arena with approximately 60,000 seats is used for concerts of different global super stars such as Rolling Stones, Genesis and Jon Bon Jovi. In order to host other sporting events as handball, basketball or volleyball there was built a new event hall under the stands of the soccer stadium. The so-called SCHARrena is about 7,900 square meters and

up to 2,000 spectators are able to follow the different matches. Systemair delivered 17 axial fans for smoke extraction and ventilation in case of fire. Besides 34 speed controlled circular duct fans and two MUB-EC-fans of Systemair are installed in the Mercedes-Benz arena and SCHARrena.



KVKE EC



- EC-motors, high level of efficiency
- Low sound level
- 100% speed controllable
- Integrated motor protection

The KVKE EC models have a single inlet centrifugal fan with backward-curved blades and a maintenance-free external rotor motor (EC). These fans develop relatively high static pressure and have a very high efficiency. The fans are delivered with a pre-wired potentiometer (0-10V) that allows you to easily find the desired working point. The KVKE motor and impeller are mounted on the access cover for ease of maintenance. The service cover can be easily removed by withdrawing the hinge pin. To protect the motor from overheating, the fans have integral thermal contacts with automatic reset. The fans can be installed in any position and are easy to connect to spiral ducts using FK mounting clamps. The KVKE models are manufactured from galvanised sheet steel and are thermally and acoustically insulated with a 50 mm layer of rockwool with a surface liner which prevents the migration of fibres into the airstream.

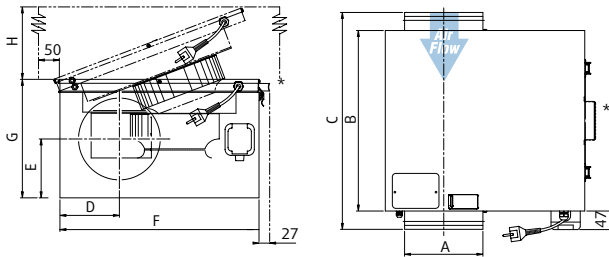
More information in our online-catalogue on www.systemair.com

Technical data	
Art. no.	2570
Voltage	V 230
Frequency	Hz 50/60
Phase	~ 1
Power	W 68,7
Current	A 0,536
Max. airflow	m ³ /h 374
Fan impeller speed	1/min 3339
Sound pressure level at 3 m (20 m ² Sabine)	dB(A) 41,1
Weight	kg 13,7
Insulation class, motor	B
Enclosure class, motor	IP 44
Max. temperature of transported air*	°C 60
*when voltage-controlled	°C 60
Constant pressure, electronic	CXE/AVC
Demand-controlled ventilation, electronic	EC-Vent
Speed control, manual	MTP 10

Accessories		Art. no.
Speed control	MTP 10	32731
Speed control	MTV 1/010	30650
Room unit	EC-Vent RU	3018
Digital regulator	CXE/AV	30674
Fast clamp	FK 125	1608
Back draft clamper	RSK 125	5598
Louvre shutter	VK 12	5638
Filter cassette	FGR 125	1804
Wall grid	IGK 125	1631
Silencer	SCD 125	2556

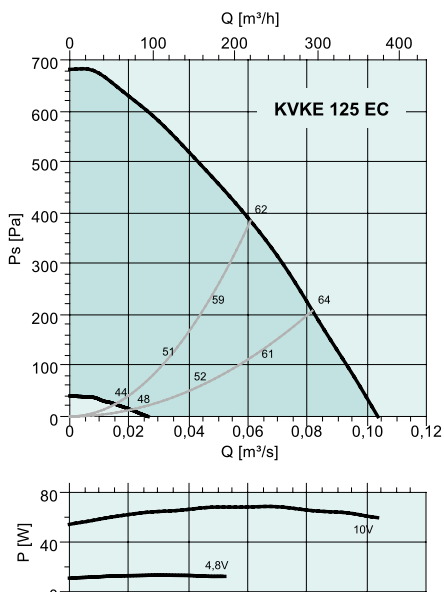
Accessories see page 24.

Dimensions



	A	B	C	D	E	F	G	H
KVKE 125 EC	125	433	479	125	128,5	442	246	470

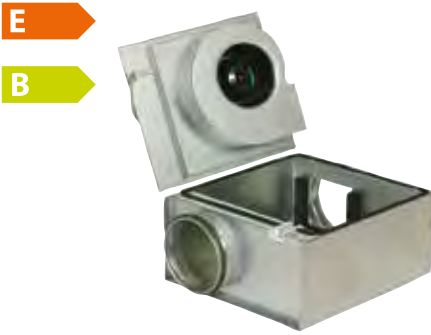
Performance



dB(A)	Tot	Mid-frequency band [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	60	46	57	56	50	45	40	37	35
L _{WA} Outlet	76	54	63	69	71	69	66	60	46
L _{WA} Surrounding	48	18	40	41	43	40	38	35	32
With LDC 125-900									
L _{WA} Inlet	54	42	53	44	17	0	0	7	18
L _{WA} Outlet	61	50	59	57	38	24	16	30	29

Measurement point: 219 m³/h; 384 Pa

KVO EC



- EC-motors, high level of efficiency
- Low sound level
- 100% speed controllable
- Integrated motor protection
- Potentiometer included for ease of commissioning

The KVO EC 100-160 models have a single-inlet centrifugal fan with forward-curved blades and a maintenance-free external rotor motor(EC). KVO EC 200-315 models have a single-inlet centrifugal fan with backward-curved blades and a maintenance-free external rotor motor(EC). These fans develop relatively high static pressure and have a very high efficiency. The fans are delivered with a pre-wired potentiometer (0-10V) that allows you to easily find the desired working point.

The KVO EC motor and impeller are mounted on the access cover for ease of maintenance. The service cover can be easily removed by withdrawing the hinge pin. To protect the motor from overheating, the fans have integral thermal contacts with automatic reset. The fans can be installed in any position and are easy to connect to spiral ducts using FK mounting clamps. The KVO EC models are manufactured from galvanised sheet steel and the lid is insulated with 40mm rockwool.

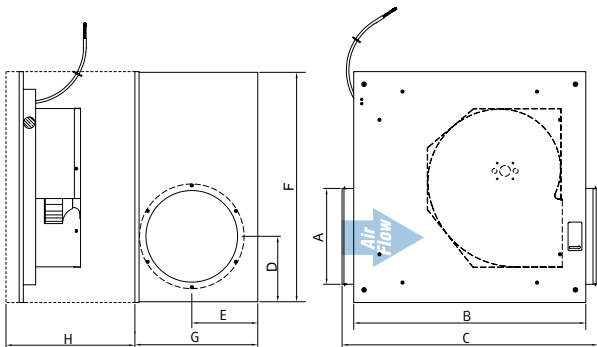
More information in our online-catalogue on www.systemair.de

Technical data

KVO EC		KVO 100 EC	KVO 125 EC	KVO 160 EC
Art. no.		11542	11544	11545
Voltage	V	230	230	230
Frequency	Hz	50	50	50
Phase	~	1	1	1
Power	W	60,4	111	116
Current	A	0,483	0,858	0,897
Max. airflow	m ³ /h	312	472	547
Fan impeller speed	1/min	2499	2724	2411
Sound pressure level at 3 m (20 m ² Sabine)	dB(A)	43,2	47,6	48,4
Weight	kg	5,6	5,6	6
Insulation class, motor		B	B	F
Enclosure class, motor	IP	44	44	44
Max. temperature of transported air*	°C	60	60	60
*when voltage-controlled	°C	60	60	60

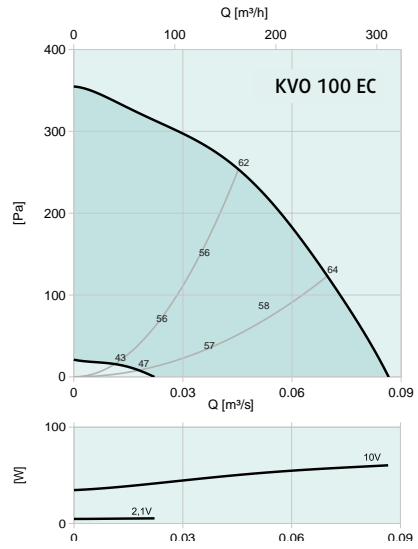
Accessories		Page
Speed control	MTP 10	62
Speed control	MTV 1/010	62
Room unit	EC-Vent RU	58
Fast clamp	FK	42
Back draft damper	RSK	43
Louvre shutter	VK	44
Filter cassette	FGR	48
Wall grid	IGK	43
Silencer	SCD	46
Water heating battery	VBC	55
Duct heater with integral control equipment	CBM	53
Filter cassette	FFR	47
Intake/exhaust louvre	IGC-BR	42
Protection guard	SG	42
Water heating battery	VBF	54
Water cooling battery	CWK	52

Dimensions



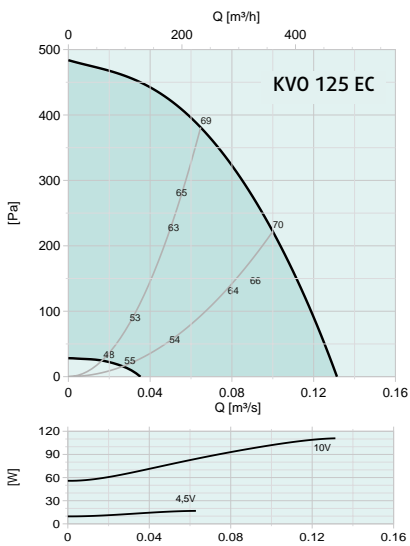
KVO EC	A	B	C	D	E	F	G	H
100	100	329	367	69	76	300	150	150
125	125	329	367	84	72	300	150	150
160	160	329	367	99	90	300	185	185

Performance



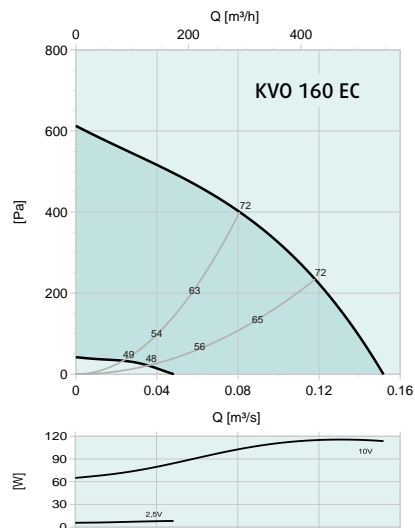
dB(A)	Tot	Mid-frequency band [Hz]							
		63	125	250	500	1k	2k	4k	8k
L_{WA} Inlet	65	51	55	59	58	57	56	52	43
L_{WA} Outlet	70	53	63	61	62	64	63	56	47
L_{WA} Surrounding	50	16	31	40	41	46	46	38	28

Measurement point: 163 m³/h; 254 Pa



dB(A)	Tot	Mid-frequency band [Hz]							
		63	125	250	500	1k	2k	4k	8k
L_{WA} Inlet	70	59	60	65	63	61	59	56	49
L_{WA} Outlet	76	58	69	68	68	70	69	63	57
L_{WA} Surrounding	55	34	35	50	46	49	47	40	31

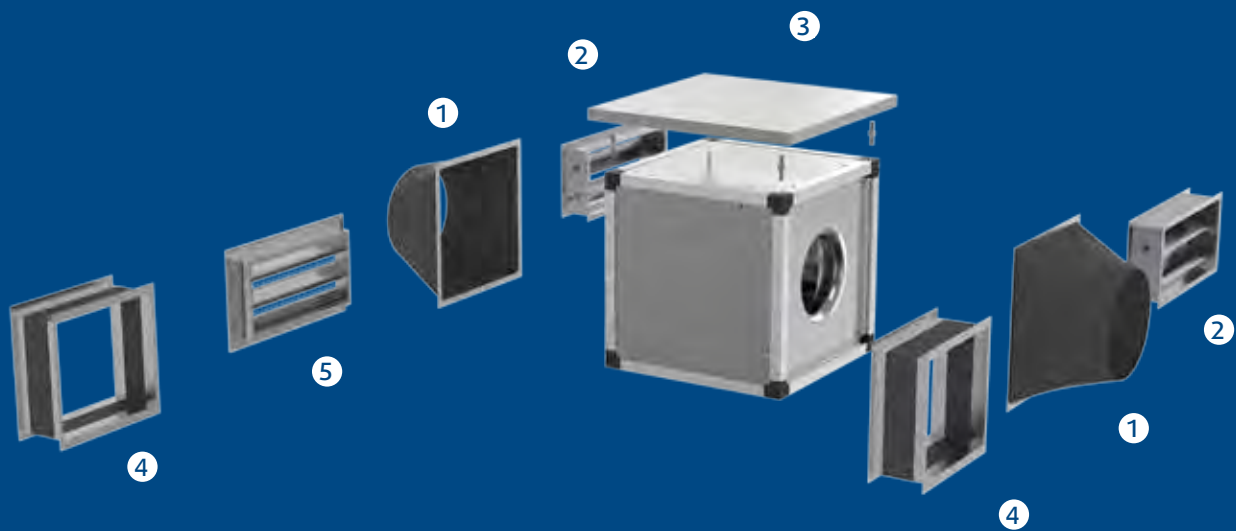
Measurement point: 233 m³/h; 381 Pa



dB(A)	Tot	Mid-frequency band [Hz]							
		63	125	250	500	1k	2k	4k	8k
L_{WA} Inlet	71	49	66	66	63	62	61	59	52
L_{WA} Outlet	74	55	64	68	67	66	68	63	57
L_{WA} Surrounding	55	31	43	51	48	49	47	42	35

Measurement point: 291 m³/h; 400 Pa

Rectangular duct fans



Our original

Systemair rectangular and square duct fans have been developed for use in compact exhaust and supply air systems. Covering a wide performance spectrum and availability of a comprehensive range of accessories, including heating and cooling coils, filters, silencers and more, offers solutions for complete systems for almost all applications. Our experience over the past 35 years and continuous research and development of new products and technology have made the Systemair duct fan a market leader. For instance, the flexibility offered by removable panels allows the MUB range to be adapted to all installation positions and airflow directions, which can still be decided during installation. The MUB range is suited for outdoor applications (complete with Systemair weather protection accessories).

- ① UGS - Flexible connection
- ② SRKG - Damper
- ③ WSD - Weather roof
- ④ FGV - Flexible connection
- ⑤ WSG - Weather protection guard
- ⑥ MUB - Multibox

Installation example for MUB Multibox

The panels are removable, any outlet side can be chosen, allowing flexible ventilation solutions.



MUB EC



MUB EC



Mini MUB



- EC-motors, high level of efficiency
- Flexible airflow direction due to removable panels
- Installation in any mounting position
- Low noise level

The MUB-EC fans are driven by EC-external rotor motors. These are energy saving motors with high efficiency. The power electronics are integrated in the motor housing. All models have one potential-free terminal for error message. All motors are suitable to be used for 50/60Hz. The input voltage for single phase units can vary between 200 and 277V, for three phase units between 380 and 480V. Speed control by a 0-10V signal. From size 450 the motor has an output voltage of 10V and 20V for an external potentiometer. All models are equipped with impellers with backward curved blades, manufactured from aluminium. The casing consists of an aluminium frame with fibreglass reinforced plastic corners of PA6; highly shock-resistant. The double skin panels are manufactured from galvanized steel with 20 mm mineral wool insulation. To avoid condensation the profile is provided with a separate chamber to fix the screws. The panels are removable, any outlet side can be chosen, allowing flexible ventilation solutions.

More information in our online-catalogue on www.systemair.de

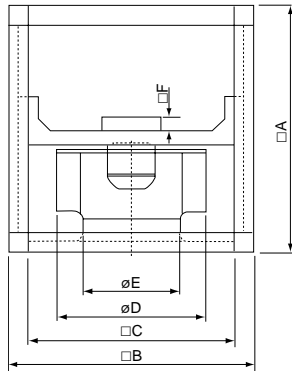
Technical data

MUB EC		Mini MUB	MUB 025 355EC	MUB 042 450EC
Art. no.		33207	30670	30610
Voltage	V	230	230	400
Frequency	Hz	50	50/60	50/60
Phase	~	1	1	3
Power	W	89,1	388	1055
Current	A	0,701	2,37	1,79
Max. airflow	m ³ /h	626	3182	6336
Fan impeller speed	1/min	3965	1639	1562
Max. temperature of transported air*	°C	40	60	60
*when voltage-controlled	°C	40	60	60
Sound pressure level at 3 m (20 m ² Sabine)	dB(A)	47	53	63,1
Weight	kg	8,1	29,5	52,5
Insulation class, motor		B	B	F
Enclosure class, motor	IP	44	44	54
Constant pressure, electronic		CXE/AVC	CXE/AVC	CXE/AVC
Demand-controlled ventilation, electronic		EC-Vent	EC-Vent	EC-Vent
Speed control, manual		MTP 10	MTP 10	MTP 10

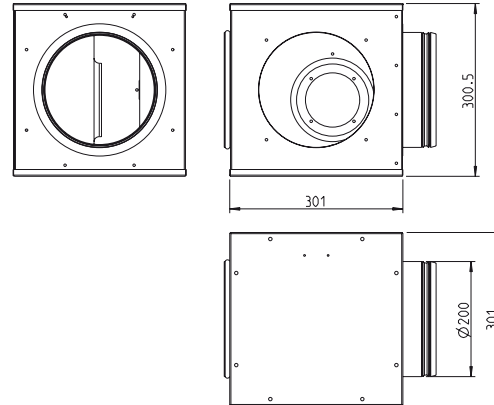
Accessories		Page
Room unit	EC-Vent RU	58
Speed control	CXE/AV	63
Speed control	MTP 10	62
Flexible connection	FGV	48
Shutter valve	SRKG	44
Adapter flexible	UGS	49
Weather protection guard	WSG	43
Weather roof	WSD	50

Dimensions

MUB EC

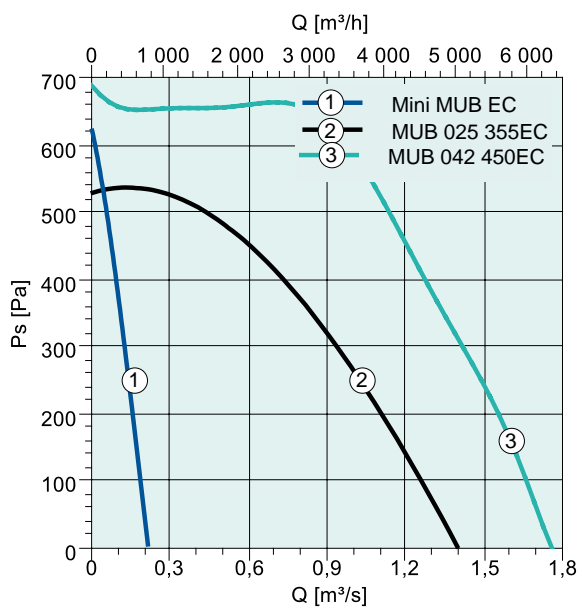


Mini MUB

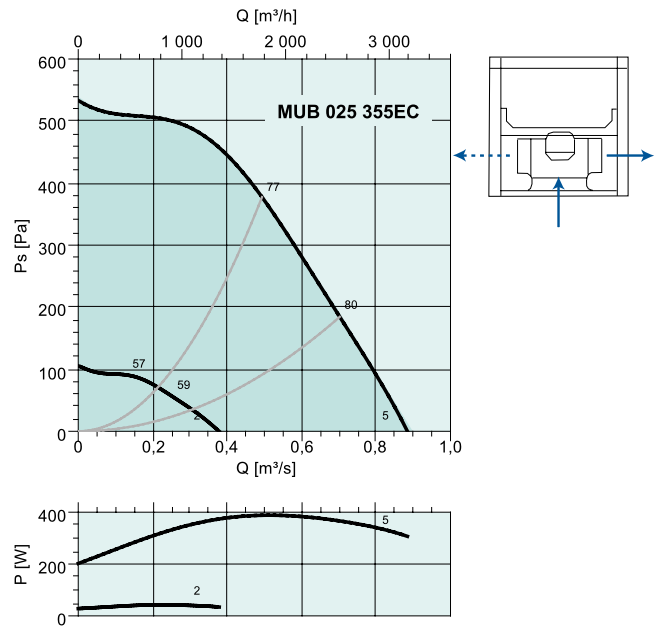
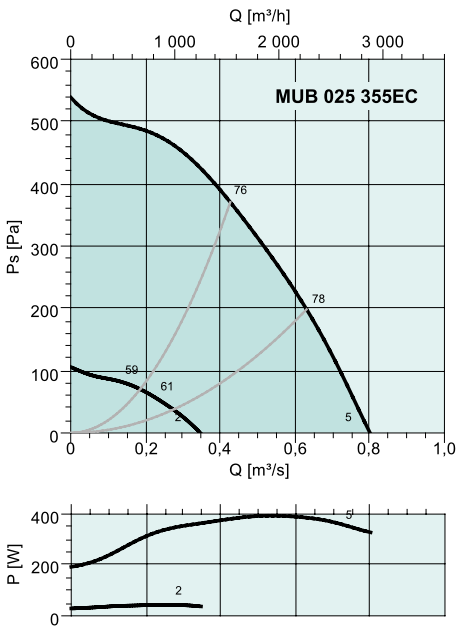


MUB	□A	□B	□C	ØD	ØE	□F
025 355EC	500	500	420	355	224	40
042 450EC	670	670	590	454	286	70

Quick selection

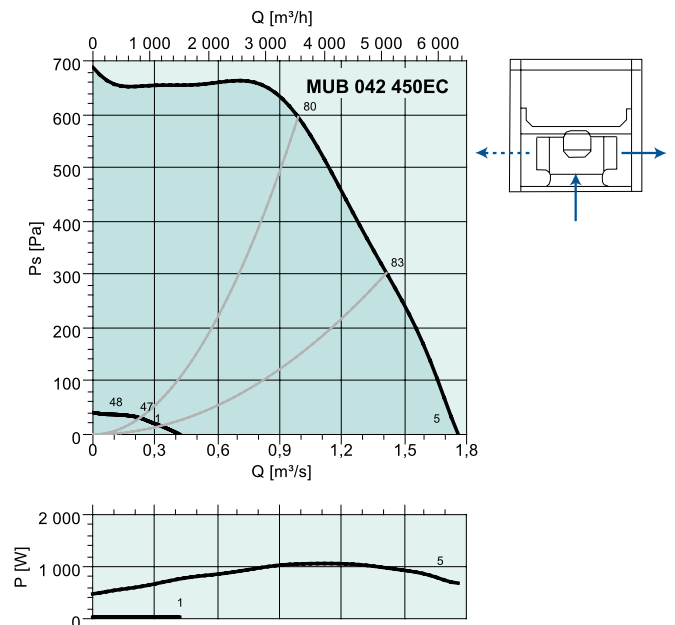
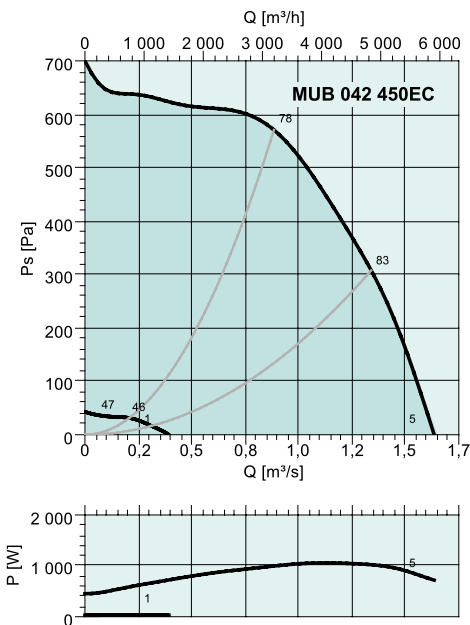


Performance



dB(A)	Tot	Mid-frequency band [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	75	43	64	65	70	66	68	66	57
L _{WA} Outlet	77	43	69	66	70	70	69	66	58
L _{WA} Surrounding	60	35	53	53	54	51	53	50	35

Measurement point: 1778 m³/h; 377 Pa



dB(A)	Tot	Mid-frequency band [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	78	46	68	70	73	71	70	65	61
L _{WA} Outlet	83	68	76	71	76	78	75	68	63
L _{WA} Surrounding	70	29	67	62	61	61	59	52	44

Measurement point: 3558 m³/h; 595 Pa



MUB CAV/VAV



- Equipped with a sensor-control module and complete connection for constant flow
- High efficiency across the entire system characteristic
- Removable panels
- Any outlet side can be chosen
- Low noise level

The MUB CAV/VAV is completely pre-wired for easy operation and installation. Depending on the adjusted operation mode the controller can be used as sensor- or control module. Conversion kit to constant pressure applications is included in the package. All fans are driven by EC-external rotor motors. These are energy saving motors with high efficiency. The power electronics are integrated in the motor housing. All models have one potential-free terminal for error message. Speed control by a 0-10V. All models are equipped with impellers with backward curved blades, manufactured from aluminium. The casing consists of an aluminium frame with fibreglass reinforced plastic corners of PA6; highly shock-resistant. The double skin panels are manufactured from galvanized steel with 20mm mineral wool insulation. To avoid condensation the profile is provided with a separate chamber to fix the screws. The Multibox can also be used as extract- or supply air unit in air handling units. Installation in any mounting position is possible.

More information in our online-catalogue on www.systemair.de

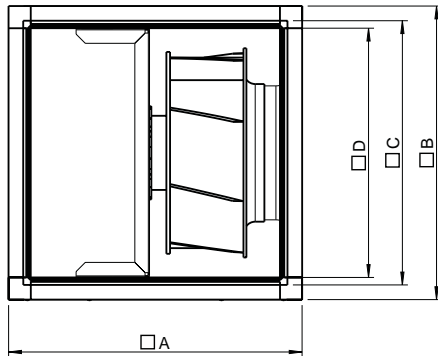
Technical Data

MUB-CAV/VAV	MUB-CAV/VAV 025 355EC	MUB-CAV/VAV 042 450EC
Art. no.	37169	37171
Voltage	V 230	400
Frequency	Hz 50	50/60
Phase	- 1	3
Power	W 389	1061
Current	A 2,37	1,79
Max. airflow	m ³ /h 3182	6336
Fan impeller speed	1/min 1638	1562
Max. temperature of transported air*	°C 60	60
*when voltage-controlled	°C 60	60
Sound pressure level at 3 m (20 m ² Sabine)	dB(A) 53	63
Weight	kg 29,5	56
Insulation class, motor	B	F
Enclosure class, motor	IP 44	54
Demand-controlled ventilation, electronic	EC-Vent	EC-Vent
Drehzahlregelung, manuell	MTP 10	MTP 10

Zubehör		Page
Room unit	RU	60
Speed control	MTP 10	64
Flexible connection	FGV	50
Shutter valve	SRKG	46
Adapter flexible	UGS	51
Weather protection guard	WSG	45
Weather roof	WSD	52

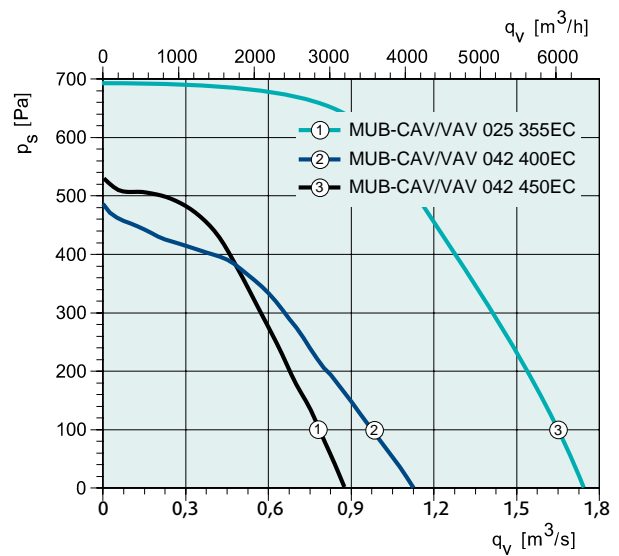
Dimensions

MUB-CAV/VAV

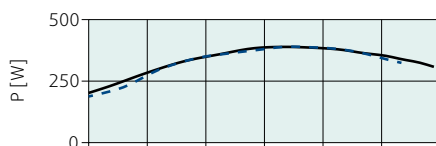
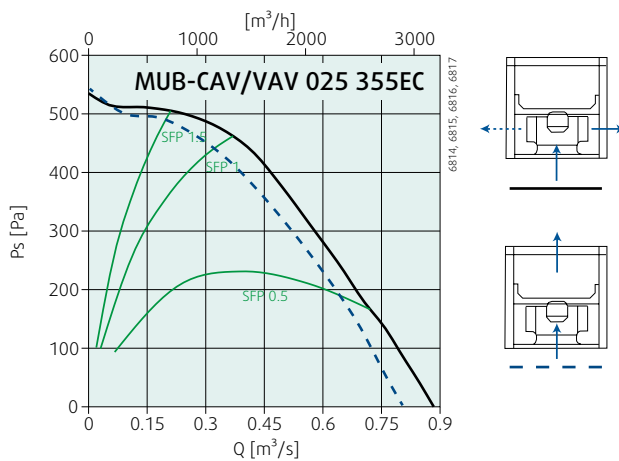


MUB-CAV/VAV	A	B	C	D
025 355	500	500	420	378
042 450	670	670	590	548

Quick selection

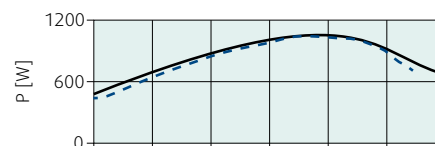
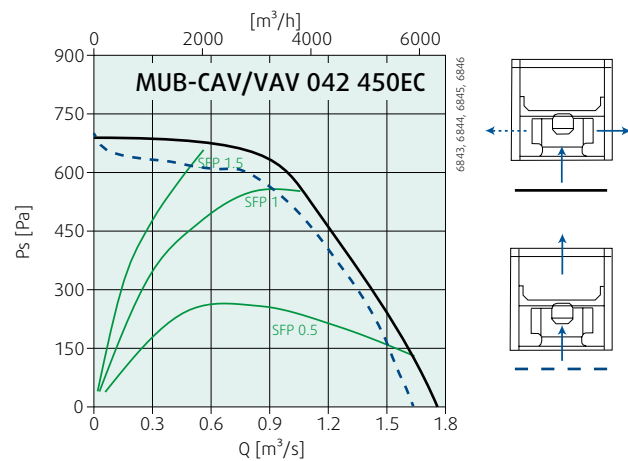


Performance



dB(A)	Tot	Mid-frequency band [Hz]							
		63	125	250	500	1k	2k	4k	8k
L_{WA} Inlet	75	43	64	65	70	66	68	66	57
L_{WA} Outlet	77	43	69	66	70	70	69	66	58
L_{WA} Surrounding	60	35	53	53	54	51	53	50	35

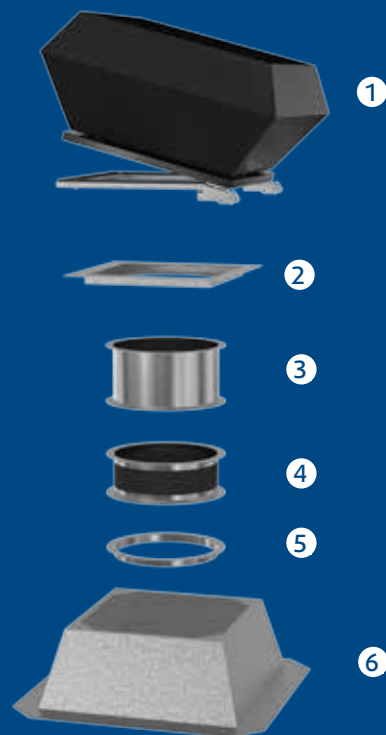
Measurement point: 1777 m³/h; 377 Pa



dB(A)	Tot	Mid-frequency band [Hz]							
		63	125	250	500	1k	2k	4k	8k
L_{WA} Inlet	78	46	68	70	73	71	70	65	61
L_{WA} Outlet	83	68	76	71	76	78	75	68	63
L_{WA} Surrounding	70	29	67	62	61	61	59	52	44

Measurement point: 3558 m³/h; 599 Pa

Roof fan



Our classic

Systemair roof fans have been developed for the use in effective exhaust air systems. Ranges DVS/DVSI/DHS/DVN/DVNI/DVC are equipped with a sea water resistant aluminium casing. The integrated bird screen is manufactured from galvanized and powder coated steel. The impellers are manufactured either from compound material or from aluminium.

- ① DVC - Roof fan
- ② TDA - Adapter frame
- ③ VKS / VKM - Motor driven shutter
- ④ ASS - Flexible connection
- ⑤ ASF - Inlet flange
- ⑥ FDS - Flat roof socket



DVC/DVCI



- 100 % speed controllable
- Integrated motor protection
- Low noise level
- Safe and maintenance free operation
- Energy-saving

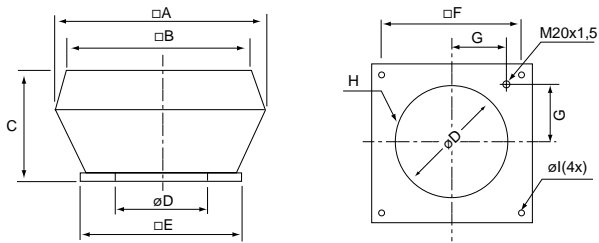
The roof fans are driven by EC- external rotor motors, so called energy saving motors with high efficiency. The input voltage for single phase units can vary between 200 and 277V, for three phase units between 380 and 480V. All motors are suitable for 50Hz and 60Hz and size 355 suspended on effective vibration dampers. Motor protection is integrated in the electronics of the motor, no additional external motor protection device is needed. The DVC-P versions have integrated pressure sensors and the electronics are programmed for a pressure constant operation. Two potentiometers in the electronics allow for 2 set values (day/night), one additional contact for an external setting. Backward curved impellers manufactured from polyamide PA 6 for size 315. Size 355 impellers manufactured from seawater resistant aluminium.

More information in our online-catalogue on www.systemair.com

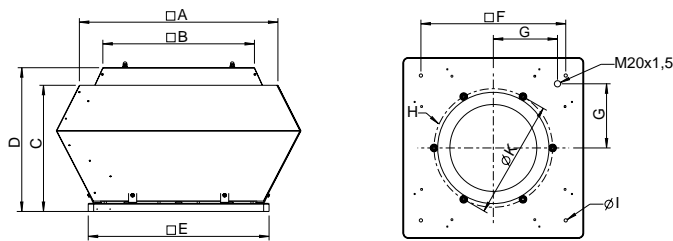
Technical data

DVC/DVCI		DVC 315-P/-S	DVCI 315-P/-S	DVC 355-P/-S	DVCI 355-P/-S
Art. no. DVC/DVCI		30634/30619	30702/30694	30635/37759	30703/38351
Art. no. DVC/DVCI + REV		30684/30585	30718/30710	30692/30621	30719/30711
Voltage	V	230	230	230	230
Frequency	Hz	50/60	50/60	50/60	50/60
Phase	~	1	1	1	1
Power	W	173	169	378	408
Current	A	1,18	1,19	2,31	2,46
Max. airflow	m ³ /h	1966	2048	3305	3431
Fan impeller speed	1/min	1867	1898	1657	1635
Max. Fördermitteltemperatur	°C	60	60	60	60
*bei Drehzahlsteuerung	°C	60	60	60	60
Sound pressure level at 4 m	dB(A)	47	41	50	46
Sound pressure level at 10 m	dB(A)	39,1	33	42,4	38
Weight	kg	13	18	21	31
Insulation class, motor		B	B	B	B
Enclosure class, motor	IP	44	44	44	44
Constant pressure, electronic		CXE/AVC	CXE/AVC	CXE/AVC	CXE/AVC
Demand-controlled ventilation, electronic		EC-Vent	EC-Vent	EC-Vent	EC-Vent
Speed control, manual		MTP 10	MTP 10	MTP 10	MTP 10

Dimensions



	□A	□B	C	ØD	□E	□F	G	H	Øl
DVC/DVCI 315-S	560/690	470	330	285	435	330	146	6xM6	10(4x)
DVC/DVCI 355-S	720/874	618	390/439	438	595	450	200	6xM6	10(4x)

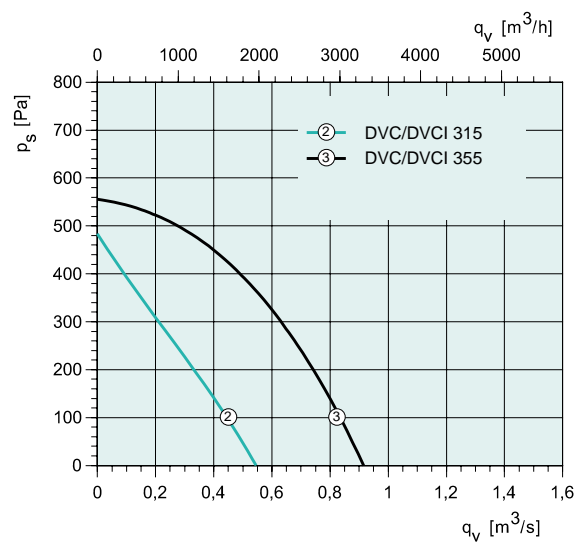


	□A	□B	C	D	□E	□F	G	H	ØK	Øl
DVC/DVCI 315-P	470	340	560/690	378	435	330	146	6xM6	285	10(4x)
DVC/DVCI 355-P	618	420	720/874	439	595	450	200	6xM8	438	12(4x)

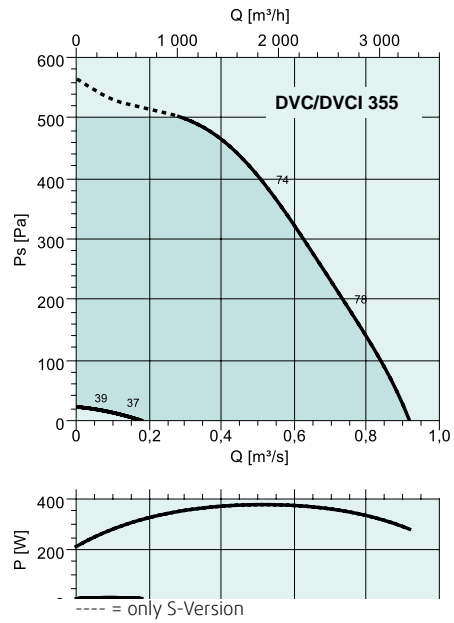
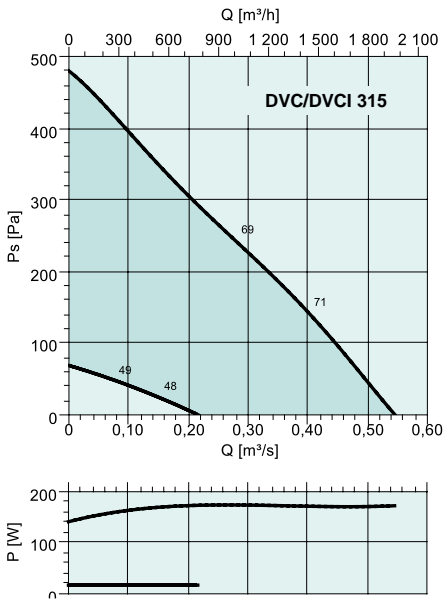
Accessories

Accessories		Page
Isolator	REV	62
Speed control	MTP 10	62
Speed control	MTV 1/010	62
Room unit	EC-Vent RU	58
Speed control	CXE/AVC	63
Silencer	SSD	49
Flat roof socket	FDS	50
Inflow box	ASK	51
Automatic shutter	VKS	45
Motor driven shutter	VKM	45
Flex. inlet connection	ASS	50
Flexible connection	ASF	51

Quick selection



Performance



Typ	Tot	Mid-frequency band [Hz]							
DVC	63	125	250	500	1k	2k	4k	8k	
L _{WA} Inlet dB(A)	67	41	56	59	63	59	55	54	49
L _{WA} Outlet dB(A)	70	42	57	60	67	64	59	56	49
Measurement point: 1004 m ³ /h; 243 Pa									
DVCI									
L _{WA} Inlet dB(A)	67	38	53	59	63	60	55	51	49
L _{WA} Outlet dB(A)	64	37	53	56	60	59	52	43	41
Measurement point: 1145 m ³ /h; 225 Pa									

Typ	Tot	Mid-frequency band [Hz]							
DVC	63	125	250	500	1k	2k	4k	8k	
L _{WA} Inlet dB(A)	71	37	65	62	65	63	62	60	56
L _{WA} Outlet dB(A)	73	38	60	66	68	67	65	62	56
Measurement point: 1926 m ³ /h; 378 Pa									
DVCI									
L _{WA} Inlet dB(A)	72	38	61	64	68	62	64	59	57
L _{WA} Outlet dB(A)	69	40	58	61	66	62	59	53	48
Measurement point: 2016 m ³ /h; 366 Pa									



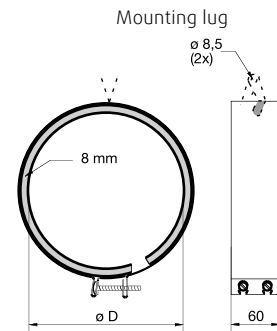
Accessories



FK	Art. no.	øD mm
125	1608	125
160	1610	160
200	1611	200

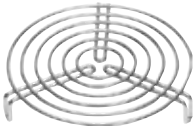
Fast clamps

Mounting clips which facilitate the installation and removal of fans for service and cleaning. Made from galvanised sheet steel and fitted with an 8 mm neoprene lining which suppresses vibrations and ensures a tight fit. The mounting clips are clamped together by two screws which allow for small differences in dimension.

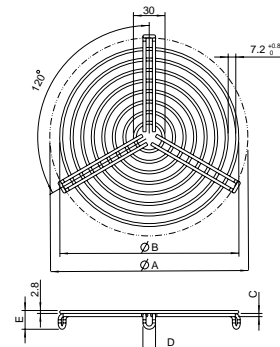


Protection guard

Protection grille for duct fans, mounted with three screws. Ring distances 8 mm.



SG	Art. no.	øA	øB	C	D	E
100	5606	100	90	3,4	11,8	24,3
125	5607	125	110	3,4	11,8	24,3
160	5608	160	150	3,4	11,8	24,3



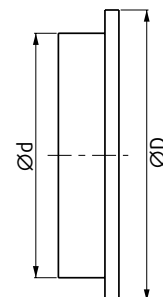
Protection grille

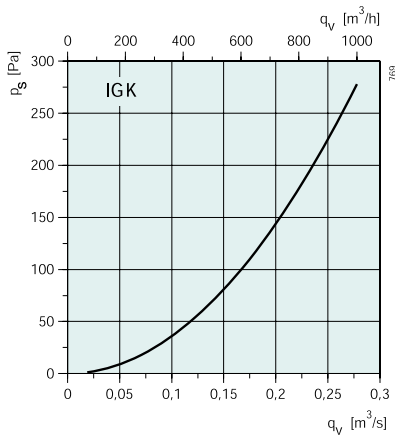
The IGC-LI is a round weather protection grille for installation in exterior walls. The grid is used in ductwork for supply and exhaust air. The grid has a mesh bird screen. The underlying Birds screen made of stainless steel.



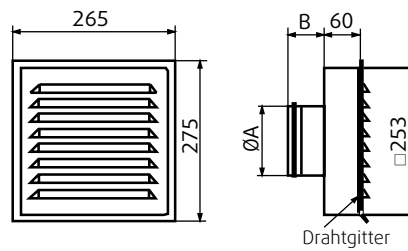
IGC-LI	Art. no.	ød	øD
100	37357	100	131
125	37358	125	151
160	37359	160	188
200	37360	200	230

øD = Outside diameter
ød = Connection diameter



Pressure drop

Intake / outlet grid

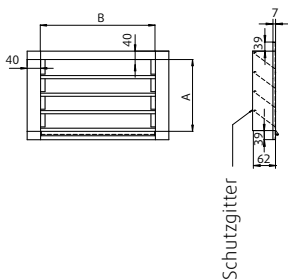
Intake grid manufactured from galvanised sheet steel with wall flange and insect mesh. Connection sleeve with rubber seal.



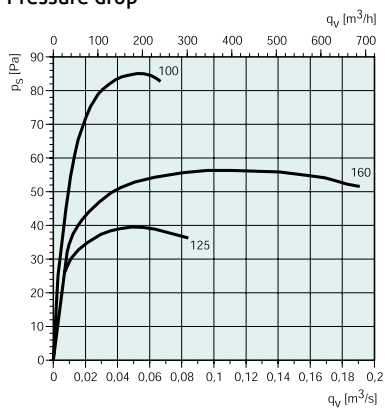
IGK	Art. no.	$\varnothing A$	B
125	1631	125	37

Weather protection guard

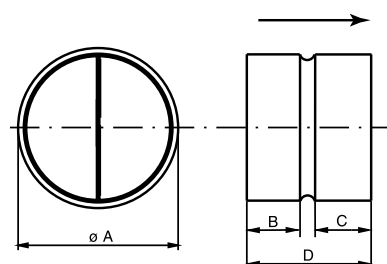
Manufactured from galvanised steel. The protection guard includes a protection grill. Suitable for MUB.



WSG	Art. no.	A	B
025	31484	418	418
042	31485	585	585

Pressure drop

Back draft damper

Back draft damper for circular ducts, manufactured from galvanised sheet steel. The two blades are spring-loaded, which means that the damper can also be mounted vertically.



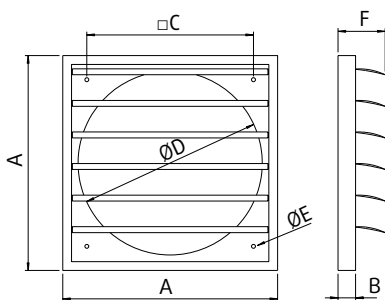
RSK	Art. no.	$\varnothing A$	D	B	C
125	5598	125	100	33	44



VK	Art. no.	A	B	□C	∅D	∅E	F	G**
12*	5638	164	12	115	117	5	38	4

* Colour: White

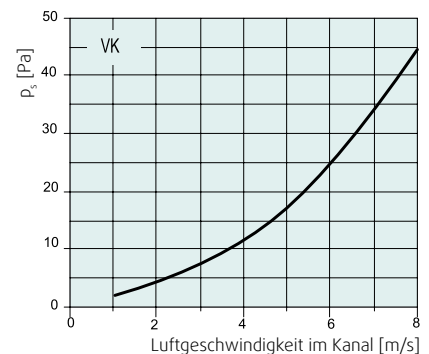
**G: Number of shutters



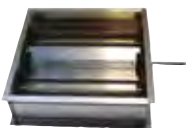
Louvre shutter

Louvre shutters for vertical mounting on a wall. The profiled vanes produce a strong upward force which reduces the air resistance. This means that the vanes opens fully at low air velocities as well. All the parts are manufactured in weather-resistant and shockproof nylon material (PVC containing special synthetic). The robust construction ensures that the vanes will not become deformed or loose. Above size 45, the vanes are fitted with a cast counter-weight. Air velocity should not exceed 12 m/s. The louvre shutters are easy to install.

Pressure drop

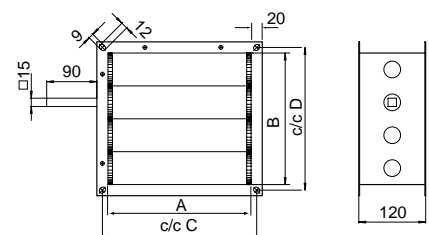


Shutter valve



Shutter valve SRKG is a cut-off valve intended for use in ventilation plants. The valve is designed with a number of blades which close towards each other, mounted in an aluminium frame. The blades are manufactured from aluminium. Suitable for MUB.

SRKG	Art. no.	A	B	c/c C	c/c D
025	4268	378	378	398	398
030	4265	678	236	698	256
042	4868	548	548	568	568



Shutter

VKS

Consists of flanges manufactured from galvanized steel, and of shutter blades manufactured from seawater resistant aluminium. Suitable for: DVS, DHS, DVSI, DVN, TFSK.

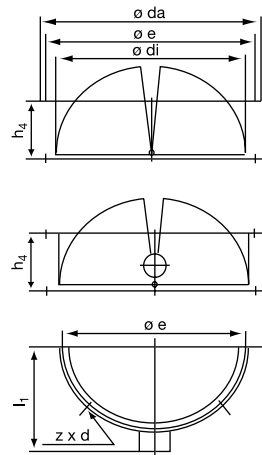


VKM

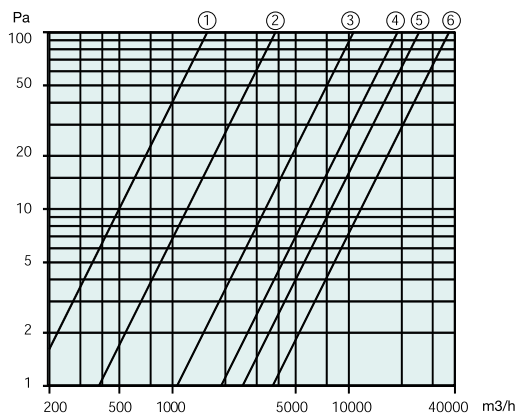
Consists of flanges manufactured from galvanized steel, and of shutter blades manufactured from seawater resistant aluminium. Is equipped with a servo motor (230V/50Hz/25W), which can be operated manually as well as through the automatic controllers of the air conditioning unit. While the motor is energized the shutter stays open. When separated from the supply the shutter will close automatically. Temperature approx 70°C. Suitable for: DVS, DHS, DVSI, DVN, DVNI, DVC, DVCI, TFSK.

VKS	Art. no.	øda	øe	ødi	h4	zxd
310/311	9543	306	286	255	156	6xø10
355-500	9544	464	438	406	220	6xø10

VKM	Art. no.	øda	øe	ødi	h4	l1	zxd
310/311	9555	306	286	255	156	210	6xø10
355-500	9556	464	438	406	220	290	6xø10



Pressure drop VKS/VKM





Technical data	
Material (internal)	non-woven Matte
Insulation	25 mm glass wool
Material (external)	glass-fibre reinforced, tear-resistant aluminium laminate
Connection	one side sleeve, one side nipple
Verbindung	galvanized steel sheet
Fire classification	Bs1 (EN13501-1)
Temperature range	°C -30 bis +140
Working pressure	Pa max. 2000
Air velocity	m/s max. 10
Length	m 1,0 (without sleeve/nipple)

Flexible silencer

The SCD silencer from Systemair is characterized by high flexibility and excellent sound insulation values. The internal duct consists of a closed, non-woven internal hose (washable) and an insulation layer made of glass wool with a thickness of 25 mm and sound reducing and thermal effective properties. The outer casing is made of glass-fibre reinforced, tear-resistant aluminium laminate. The silencer (1 m length) provides duct connections made of galvanized steel sheet on both sides for the connection directly to the duct system. One side is equipped with a connection sleeve and the other side with a connection fitting to guarantee connection flexibility.

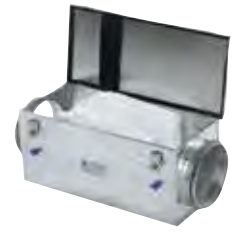
Sound insulation (dB), non-woven isolation 25 mm

SCD	Art. no.	D (mm)	L (m)	Mid-frequency band, Hz								Tot (dB)
				63	125	250	500	1000	2000	4000	8000	
100	2555	100	1,0	15,9	22,9	31,1	38,6	36,4	40,6	50,1	35,9	39
125	2556	125	1,0	11,7	18,9	32,4	29,9	28,8	34,5	40,9	24,5	32
160	2558	160	1,0	19,3	25,4	30,5	27,1	23,8	32,2	27,8	17,3	28
200	2560	200	1,0	10,7	12,1	28,7	22,8	22,8	30,6	19,4	11,9	26
250	2561	250	1,0	12,9	18,7	24,3	19,5	19,9	27,7	12,9	10,2	22

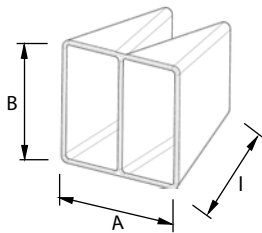
(Test report No. A1672-1, Peutzbv)

Filter cassette

The FFR filter cassette is designed for bag filters of the F3, F5 or F7 standard filter types. The cassette is manufactured from galvanised sheet steel with rubber-sealed circular connections and locks with toggle fasteners. The cassette is fitted with connections for connecting to a pressure sensor. The filters for FFR are BFR bag filters. Available in the F3, F5 or F7 filter classes and are ordered separately and supplied individually. The recommended final pressure drop is 170 Pa for the F3 filter, 200 Pa for the F5 filter and 250 Pa for the F7 filter.

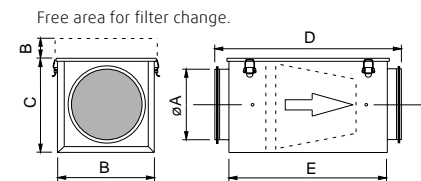


FFR	Art. no.	Filter	Filter class
100	1766	BFR 100-160	G3, F5, F7
125	1768	BFR 100-160	G3, F5, F7
160	1770	BFR 100-160	G3, F5, F7

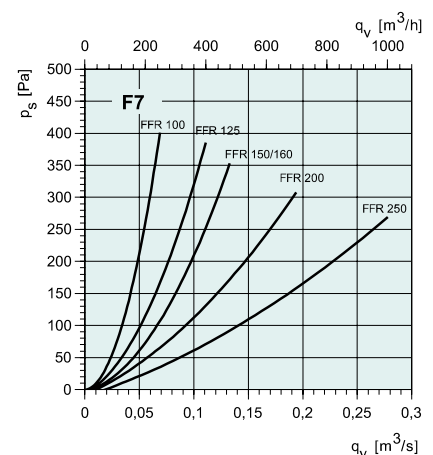
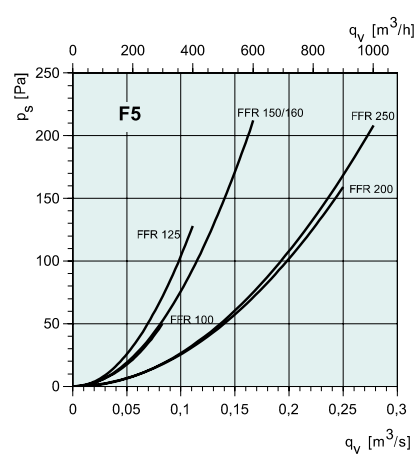
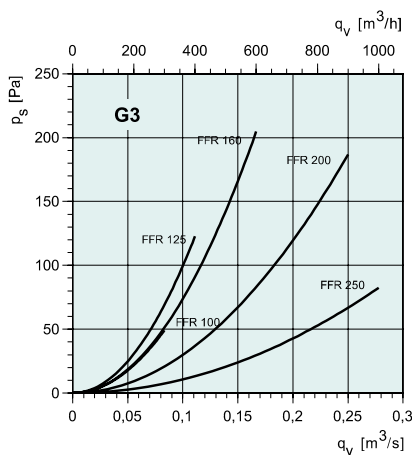


Dimensions for Filter cassette G3/F5/F7 in mm:

BFR	A/B	I	No.
100-160	187/187/188	250/250/235	2/2/3



ϕA	B	C	D	E
100	200	203	522	450
125	200	203	522	450
160	200	203	522	450





FGR	Art. no.	Fleece filter mat (contain)	Filter class
100	1802	PFR 100-160	G3
125	1804	PFR 100-160	G3
160	1809	PFR 100-160	G3
200	1812	PFR 200-250	G3
250	1815	PFR 200-250	G3

FGR-I (insulated)	Art. no.	Fleece filter mat (contain)	Filter class
125	37064	PFR 100-160	G3
160	37065	PFR 100-160	G3
200	37066	PFR 200-250	G3
250	37316	PFR 200-250	G3

Filter cassette

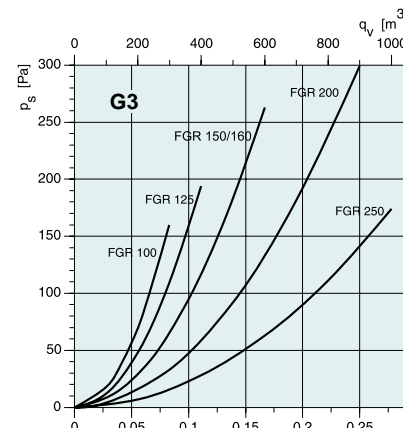
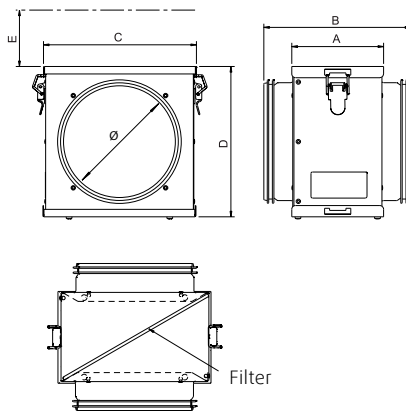
The FGR filter cassette is fitted with a standard type F3 panel filter. The cassette housing is manufactured from galvanised sheet steel with rubber-sealed circular connections, toggle locks and disposable filters. Replacement PFR filters are sold in packs of five. The filter cassette is suitable for use as a supply-air filter in heavy industry and industrial workshops. Nytrek panel filters (available for sizes 100 to 200) are recommended for exhaust air from tumble driers. The recommended final pressure drop is 170 Pa for the F3 filter.

FGR	∅	A	B	C	D	E*
100	100	123	199	205	201	190
125	125	123	199	205	201	190
160	160	123	199	205	201	190
200	200	123	199	302	297	280
250	250	123	239	302	297	280

FGR-I**	∅	A	B	C	D	E*
125	125	156	190	241	213,5	190
160	160	156	190	241	213,5	190
200	200	156	215	320	308,5	280
250	247	156	206	320	305	280

*Space requirement filter change.

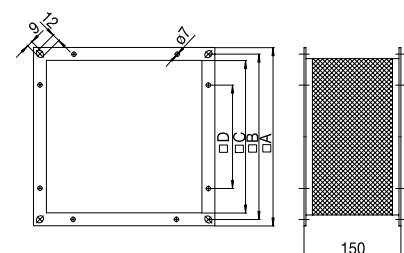
**isolated



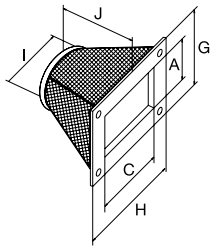
FGV	Art. no.	□A	□B	□C	□D
025	4196	418	398	378	190
042	4605	586	568	548	350

Flexible connection

Manufactured from galvanized steel sheet with neoprene coated fabric. For temperature up to 60°C. On both sides there are holes for mounting to the duct system. Suitable for MUB.



Flexible adapter

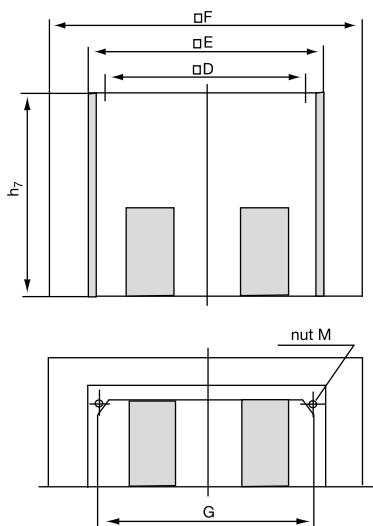


Reduction from square to round.
 The frame is manufactured from aluminium and neoprene coated fabric. For temperature up to 60°C.
 The circular side has a locking ring for easy installation to the duct system.
 Suitable for MUB.

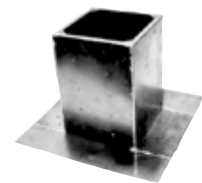


UGS	Art. no.	A/C	G/H	I	J
025/355	4356	378	418	355	210
042/500	4357	548	588	500	210

Socket silencer



Socket silencer for special requirements at the inlet side. The sound absorption at 250 Hz is in average 8 dB. The SSD is manufactured from sea-water resistant aluminium. The sound absorbing material is abrasion resistant up to a velocity of 20 m/s. The crank is extendable for service options.

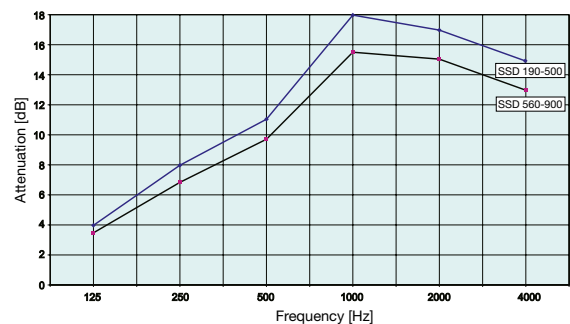
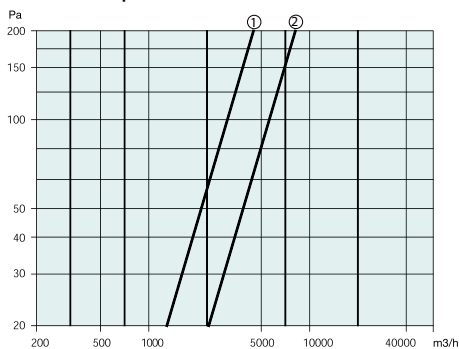


Suitable for:
 DVS, DHS, DVSI, DVN, DVNI, DVC, DVCI,

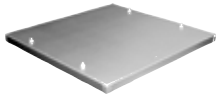
SSD	Art. no.	D	E	F	G
310/311	9561	330	395	710	345
355/400	9562	450	555	874	505

SSD	Art. no.	nut M	h7	Pressure drop no.
310/311	9561	500	330	1
355/400	9562	650	450	2

Pressure drop

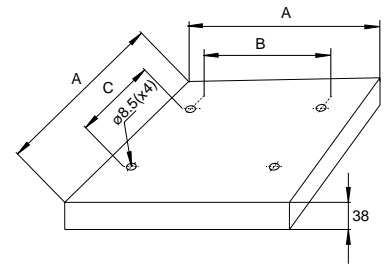


Weather protection



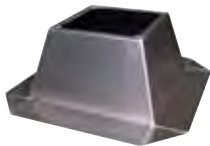
Made of seawater resistant aluminium. Edges are welded. Inclusive mounting accessories!

We recommend to order the WSD factory mounted, because special tools are needed! Suitable for MUB.

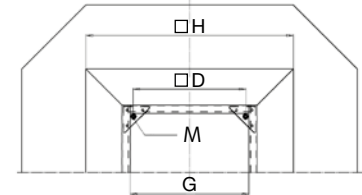
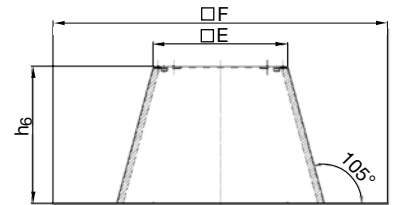


WSD	Art. no.	A	B	C
025	31480	560	480	260
042	31481	730	650	370

Flat roof socket



FDS is manufactured from seawater resistant aluminium and is supplied ready for assembly with insulation up to 100°C.

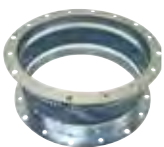


FDS	Art. no.	□D	□E	□F	G
310/311	9549	330	395	817	345
355/400	9550	450	555	977	505

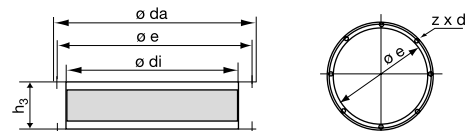
FDS	Art. no.	H	M	h6
310/311	9549	553	M6	300
355/400	9550	713	M10	300

Flexible connection

Manufactured from galvanised sheet steel, with neoprene coated fabric. For temperature up to 70°C.



ASS	Art. no.	øda	øe	ødi	h3	zxd
310/311	9575	306	285	256	155	6xø7
355-500	9576	464	438	402	155	6xø9

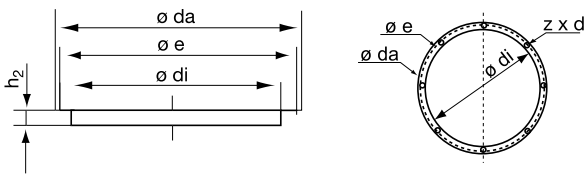


Inlet flange

Counterflange for connection to a duct system. Manufactured from galvanized steel.



ASF	Art. no.	$\varnothing da$	$\varnothing e$	$\varnothing di$	h2	z x d
310/311	9568	306	285	256	25	6 x $\varnothing 10 \times 14$
355/500	9569	464	438	402	30	6 x $\varnothing 10 \times 14$

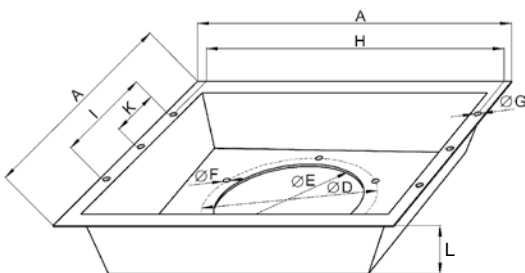


Inflow box

For mounting on SSD socket silencers to fix inlet accessories and duct system. Made of seawater resistant aluminium.



ASK	Art. no.	A	$\varnothing D$	$\varnothing E$	$\varnothing F$	$\varnothing G$	H	I	K	L	kg
310/311	300904	385	285	256	6x $\varnothing 7$	4x $\varnothing 9$	366	152	-	110	1,2
355/400	300905	551	438	402	6x $\varnothing 9$	4x $\varnothing 9$	526	214	-	110	2



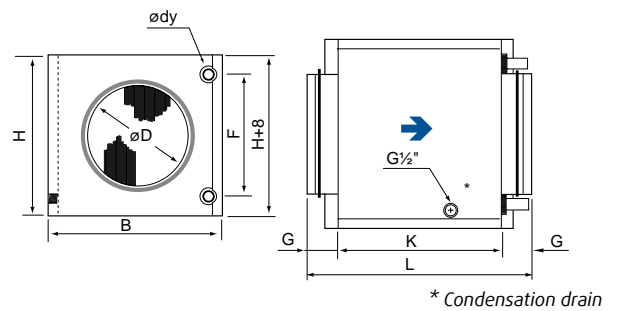
Water cooling battery



Casing of galvanised sheet steel with copper tubes and aluminium fins.
 Inspection covers for easy cleaning and maintenance.

Connection sleeves with rubber seal.
 Max operating temperature: 150 °C
 Max operating pressure: 1,6 MPa (16Bar)

CWK	Art. no.	øD	B	H	ødy	F	G	K	L	kg
100-3-2.5	30019	100	251	180	10	100	40	276	356	4,4
125-3-2.5	30021	125	326	255	10	175	40	276	356	6,5
160-3-2,5	30022	160	326	255	10	175	40	276	356	6,7



Coil calculation

CWK	Flow	Velocity	Pressure drop	Air			Capacity	Water	
				before	before	After		Flow	Pressure drop
	(m³/h)	m/s	(Pa)	(°C)	(% RH)	(°C)	(kW)	(l/s)	(kPa)
100-3-2.5	54	2	7	25	50	14,3	0,2	0,01	< 0,5
	54	2	7	30	45	15,8	0,4	0,01	1
	100	3,5	22	25	50	16,4	0,3	0,01	1
	100	3,5	22	30	45	18,5	0,5	0,02	2
	145	5	58	25	50	17,5	0,4	0,02	1
125-3-2.5	145	5	58	30	45	20,0	0,6	0,02	3
	85	2	3	25	50	12,6	0,5	0,02	3
	85	2	3	30	45	13,5	0,7	0,03	5
	150	3	9	25	50	14,5	0,7	0,03	5
	150	3	9	30	45	15,7	1,1	0,04	10
160-3-2.5	215	4,5	18	25	50	15,6	0,8	0,03	7
	215	4,5	18	30	45	17,0	1,4	0,05	16
	145	2	9	25	50	14,4	0,7	0,03	4
	145	2	9	30	45	15,6	1,0	0,04	10
	250	3,5	24	25	50	16,1	0,9	0,04	8
160-3-2.5	250	3,5	24	30	45	17,4	1,5	0,06	20
	355	5	45	25	50	17,0	1,1	0,04	11
160-3-2.5	355	5	45	30	45	18,4	1,3	0,08	32

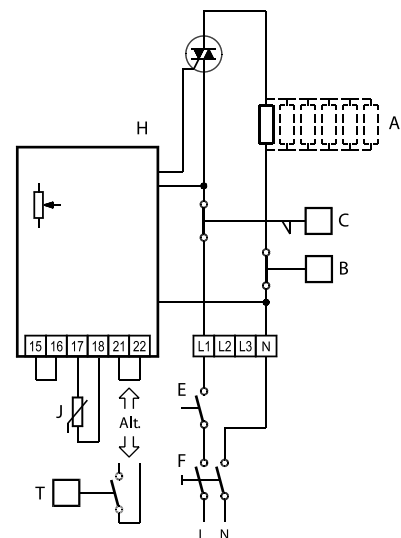
Duct heater with integral control equipment

Duct heater with spigot connection for standard spiral circular ducts. Manufactured from Aluzinc-coated sheet steel with a heating element in stainless steel. The heater has integral overheating protection with a manual reset function. The CBM have rubber seals on the connecting spigots. The temperature is set on the cover of the duct heater. The unit is controlled by an integral electronic temperature regulator, using so-called time-proportional Pulse/Pause technology. This provides extremely precise temperature control. As a thyristor is used for adjusting the temperature, the unit has no moving parts. This means that it is silent and not susceptible to wear and tear. Terminals for interlocking the heater, via a pressure- and airflow guard are available in the terminal box. The minimum air volume is based on a minimum air velocity of 1.5 m/s. These duct heaters are designed for a maximum output air temperature of 50°C. All CBMs are delivered with duct sensor TG-K330 (0-30°C) as standard.

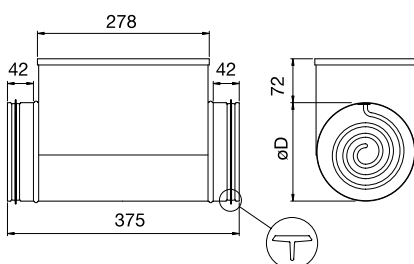


CBM		100-0.6	125-1.2	160-2.1
Art. no.		5479	5480	5482
Connection \varnothing	mm	100	125	160
Power	kW	0.6	1.2	2.1
Voltage	V	230 1~	230 1~	230 1~
Current	A	2.6	5.2	9.1
Min. airflow	m ³ /h	45	70	115
Weight	kg	2.3	3	3.5
Wiring diagram		CBM-1	CBM-1	CBM-1

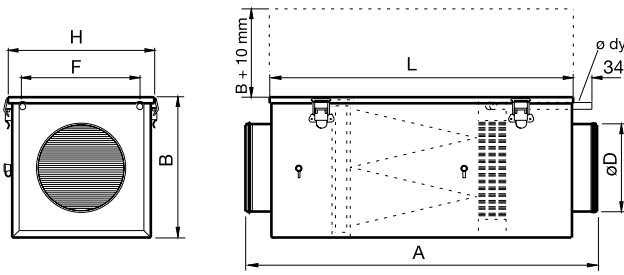
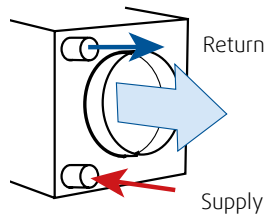
CBM-1 230V~



- A = Heating elements
- B = Over heat protection with automatic reset
- C = Over heat protection with manual reset
- E = Interlocking
- F = All phase breaker
- H = Thyristor type Pulse or TTC
- J = Sensor
- T = Air flow switch/Pressure switch



$\varnothing D$ = Connection diameter



Water heating battery with bag filter

Water-heating battery with integral EU5 bag filter for heating air in ventilation systems with circular ducts. Casing from galvanised sheet steel, with copper tubes and aluminium fins. Inspection cover which facilitates cleaning and replacing the filter. The water-heating battery must be installed in a horizontal duct. The bag filter must always be fitted vertically. The VBF is fitted with connections for connecting to a filter monitor. The Systemair fan selection programme includes a special selection programme for water-heating batteries. The recommended final pressure drop is 200 Pa.

VBF	øD	A	B	H	L	ødy	F	kg
100	100	665	254	266	599	22	213	8
125	125	665	254	266	599	22	213	8
160	160	665	254	266	599	22	213	8
200	200	665	254	266	599	22	213	8
250	250	795	354	366	699	22	313	12
315	315	895	454	466	799	22	413	17
355	355	920	454	466	799	22	413	17
400	400	920	454	466	799	22	413	17

VBF	Bag filter	Filter class
100	BFR 200	G3, F5, F7
125	BFR 200	G3, F5, F7
160	BFR 200	G3, F5, F7
200	BFR 200	G3, F5, F7
250	BFR 315	G3, F5, F7
315	BFR 355	G3, F5, F7
355	BFR 355	G3, F5, F7
400	BFR 355	G3, F5, F7

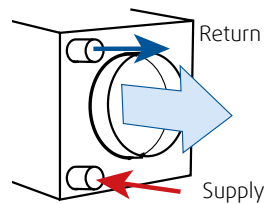
Coil calculation 2-row

VBF		100	125	160	200	250	315	355	400
Art. no.		1724	1730	1731	1732	1733	1734	1735	1736
Air flow	m ³ /h	144	180	432	576	612	1008	1584	1584
Air velocity	m/s	1,2	1,6	3,5	4,6	1,8	1,7	2,7	2,7
ΔT Air at T water 60/40 °C		23,3	20,9	14,3	12,6	25,9	26,2	21,5	21,5
Water flow range	l/s	0,01	0,02	0,03	0,03	0,06	0,11	0,14	0,14
Water speed	m/s	0,1	0,1	0,2	0,2	0,5	0,4	0,5	0,5
Water pressure drop	kPa	0,1	0,2	0,4	0,5	3,5	1,6	2,6	2,6
Power	kW	1,17	1,35	2,1	2,4	5,31	8,82	11,67	11,67
ΔT Air at T water 90/70 °C		44	39,9	28,2	25	44,3	44,9	37,2	37,2
Water flow range	l/s	0,03	0,03	0,03	0,06	0,11	0,18	0,24	0,24
Water speed	m/s	0,2	0,2	0,4	0,4	0,8	0,7	0,9	0,9
Water pressure drop	kPa	0,4	0,5	1,2	1,6	8,1	3,7	6,3	6,3
Power	kW	2,2	2,58	4,13	4,76	8,97	15,11	20,18	20,18
Filter class		F5	F5	F5	F5	F5	F5	F5	F5

Water heating battery

Water-heating battery for heating air in ventilation systems with circular ducts. Aluzinc-coated casing, heat transmission element with copper tubes and aluminium fins. Removable cover for cleaning the unit. The water-heating battery can be installed in a horizontal or a vertical duct with optional direction of airflow.

Max operating temperature: 150 °C
 Max operating pressure: 1,6 MPa (16Bar)
 2-rows battery

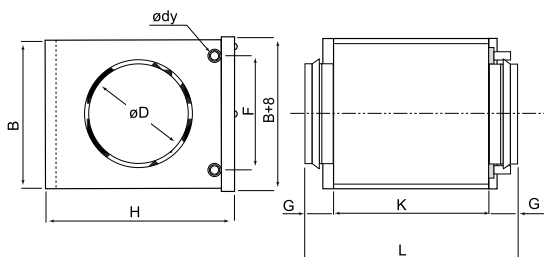


Coil calculation 2-row

VBC		100-2	125-2	160-2
Art. no.		5456	5457	5458
Air flow	m ³ /h	144	216	360
Pressure drop	Pa	35	72	40
ΔT Air at T water 60/40 °C		16	13	19,9
Water flow range	l/s	0,01	0,01	0,03
Water speed	m/s	0,15	0,2	0,4
Water pressure drop	kPa	0,1	0,1	3,0
Power	kW	0,85	1,0	2,6
ΔT Air at T water 90/70 °C		32,5	28,3	35,8
Water flow range	l/s	0,02	0,03	0,06
Water speed	m/s	0,3	0,4	0,8
Water pressure drop	kPa	1	1	8
Power	kW	1,7	2,2	4,6

Coil calculation 3-row

VBC		125-3	160-3
Art. no.		9839	9840
Air flow	m ³ /h	216	360
Pressure drop	Pa	17,2	41
ΔT Air at T water 60/40 °C		33,4	29,3
Water flow range	l/s	0,03	0,05
Water speed	m/s	0,47	0,68
Water pressure drop	kPa	5,33	11
Power	kW	2,6	3,8
ΔT Air at T water 90/70 °C		56,2	49,7
Water flow range	l/s	0,05	0,08
Water speed	m/s	0,8	1,17
Water pressure drop	kPa	14	29,5
Power	kW	4,38	6,46



VBC	øD	B	H	ødy	F	G	K	L	kg
100-2	100	238	180	10	137	40	276	356	3,7
125-2	125	238	180	10	137	40	276	356	3,5
125-3	125	313	255	10	175	40	276	356	5,5
160-2	160	313	255	10	212	40	276	356	5,4
160-3	160	313	255	10	175	40	276	356	5,4



EC-Vent

Take control of your ventilation system



Summer/winter



Time



Temperature



Pressure



Presence



Air quality



Humidity



Manual

EC-Vent

One controller - many possibilities

Our new and intelligent control system, EC-Vent, takes energy efficiency and room comfort to a new level. It makes achieving the right level of ventilation easy. The intelligent control system adjusts the air volume using the signals from various indicators:

- Humidity
- CO₂ content
- Presence sensor
- Pressure
- Temperature
- Time switch



What makes this system special is that it allows you to connect different sensors simultaneously. The highest value determines the air volume. EC-Vent can be installed easily and can help significantly reduce operating costs. It also ensures quiet running and a long service life for the whole ventilation system. EC-Vent consists of a control unit next to the fan, and a remote control system installed in the room itself.

You can find more detailed information on EC-Vent in our online catalogue at www.systemair.com.

	Art. no.	Page
EC-Vent room unit with integrated temperature and humidity sensor	3018	58
EC-Vent control board	3115	58
Room sensor TG-R5/PT1000	5404	59
Outdoor sensor TG-UH/PT1000	35203	59
Duct sensor TG-KH/PT1000	202705	59
Room humidistat / humidity switch HR1	5150	61
Timer	5165	60
Pressure sensor DSG 200	5169	60
Pressure sensor DSG 500	5170	60
Pressure sensor DSG 1000	9466	60
CO ₂ RT-R-D transmitter (digital)	6993	61
CO ₂ sensor CO ₂ RT	14904	61
Presence detector IR24-P	6995	60



- Built-in transformer (230V/24V)
- Can control two fans
- Can control heater/cooler, 0-10V
- 3 inputs, digital / 0-10V / PT1000
- 3 outputs, digital / 0-10V
- 1 output EC-Motor, PWM
- 24V supply to damper and sensors etc

CB	
Art. no.	3115
Voltage	V 230
Phase	~ 1
Frequency	Hz 50/60
Max. current load	A 6
Recommended fuse	A 10
Supply to sensor, 24V DC	mA 150
Permitted range for ambient temperature	°C -20...50
Enclosure class	IP 44
Weight	kg 0.95

Control board

The EC Vent is more than just a control for EC fans. It is a tool that, together with EC fans, simplifies demand-controlled ventilation making it easy to set up and operate. The unique feature of the EC-Vent is that it allows for a number of control options with up to five sensors (analog or digital). A single parameter such as temperature can be controlled at several different locations. Alternatively, various parameters, (CO₂, humidity, temperature, etc.) can be combined to control the fan directly or as a complement to the weekly schedule and/or the manual control to boost the ventilation if needed. It can also be used to control a heater or an extra fan via 0-10 V signal.

The EC-Vent consists of two units, one central unit to be placed near the fan and a single display unit normally sited in a room easily accessible to the user. These units are connected to each other with a low voltage cable. The EC-Vent offers the opportunity to connect up to 5 different sensors that simultaneously detect the actual ventilation requirements and in this way the EC fan will be steplessly controlled to ventilate exactly as much as is needed, no more, no less. The result is a good indoor air quality and the user avoids high electricity bills.

The central unit for the EC-Vent can be operated stand-alone from the room unit.

3018 - EC-Vent Room Unit is needed for configuration !



- Ready for connection to EC-Vent CB
- 2 inputs for CO₂, humidity, temperature, presence, pressure sensors etc.
1 input, digital / 0...10V / PT1000 and
1 input, digital / 0...10V
- Built-in humidity and temperature sensors
- User friendly menu
- Away mode and boost ventilation function
- Inclusive 10 m connection cable

Room unit

The EC Vent is more than just a control for EC fans. It is a tool that, together with EC fans, simplifies demand-controlled ventilation making it easy to set up and operate. The unique feature of the EC-Vent is that it allows for a number of control options with up to five sensors (analog or digital). A single parameter such as temperature can be controlled at several different locations. Alternatively, various parameters, (CO₂, humidity, temperature, etc.) can be combined to control the fan directly or as a complement to the weekly schedule and/or the manual control to boost the ventilation rate if required. It can also be used to control a heater or an extra fan via 0-10 V signal.

RU	
Art. no.	3018
Voltage	V 24
Permitted range for ambient temperature	°C 0...50
Enclosure class	IP 20
Weight	kg 0,2

3115 EC-Vent Control Board is needed!

Room sensor

For measuring room temperature.
Models without setpoint adjustment.



TG-R5/PT1000	
Art. no.	5404
Temperature range	°C 0...50
Control signal	PT1000
Protection class	IP 30
WxHxD	mm 86x86x30

Outdoor sensor

For measuring outdoor temperature.



TG-UH/PT1000	
Art. no.	35203
Temperature range	°C -40...+60
Protection class	IP 65
WxHxD	mm 70x93x46

Duct sensor

Duct sensor for measuring air temperature in ventilation.



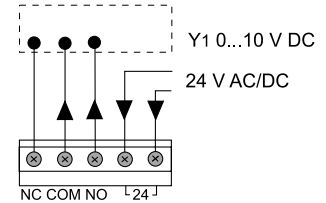
TG-KH/PT1000	
Art. no.	202705
Temperature range	°C -30 - +70°C
Time constant	16 s
Insert length	mm 60...205
Protection class	IP 65



IR24-P	
Art. no.	6995
Voltage supply	V 24 V AC/DC
Permitted range for ambient temperature	°C -20...+50
Permitted max. ambient humidity	%RH 95
Enclosure class	IP 40
Circuit-breaking relay	A NC/NO
Switching capacity	24V DC/0,2A
WxHxD	mm 66x112x45

Presence detector

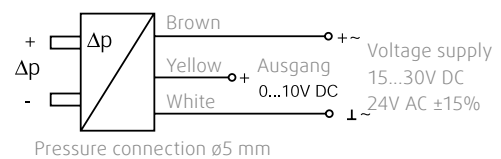
A detector that gives a signal when someone is present in the room under supervision. The detector has a pulse detecting function that minimizes the risk for false alarm. Settable output on/off delay. Intended for wall or ceiling mounting.



DSG		200/500/1000	
Art. no.		5169/5170/9466	
Voltage	V	15V-30V DC/24V~± 15%	
Output 0-10 V, I _{max}	mA	2	
Enclosure class	IP	65	
Current	A	0,012	
Pressure range 200	Pa	0...200	
Pressure range 500	Pa	0...500	
Pressure range 1000	Pa	0...1000	

Pressure sensor

A membrane-type sensor for measuring the differential pressure in non-aggressive gases. The difference in pressure between the sensor's plus (+) and minus (-) connections affects the membrane, which generates a voltage via a differential transformer. This voltage converts into a continuous DC voltage proportional to the membrane's position. Cable length approx. 0.5m.

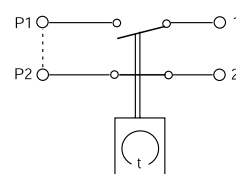


T 120	
Art. no.	5165
Voltage	V 230
Frequency	Hz 50
Max. current load	A 10 (2)
Connection time	min 0-120
WxHxD	mm 80x80x25

Timer

Timer with 120-minute operating time. Supplied with flange for fitting into equipment housing. Casing for surface mounting is available as an extra. A switch for closing and breaking circuits. A link can be used to produce a change-over function. The timer makes a quiet ticking sound when connected.

This timer is suitable for controlling the REU and RTRDU five step transformers.





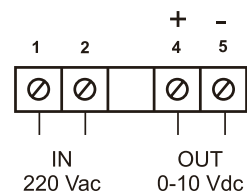
MTV 1/010	
Art. no.	30650
Voltage supply	V 230 V
Output 0-10V I _{max}	mA 8
Enclosure class	IP 44
Weight	kg 0,2
Colour	weiß

Speed controller

Speed controller with 0-10V output

- Combined flush or surface mounting

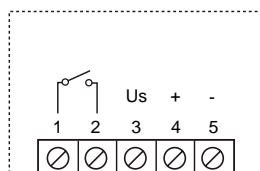
For the manual control of speed and air flow of electrical fans with 0-10V input. The jetproof IP 54 enclosure is achieved with the included surface mounting case. (Flush-mounting without the surface mounting case, gives a splash proof IP 44.)



MTP 10	
Art. no.	32731
Voltage supply	V DC 10
Control signal	kΩ 0...10
Rangeability	V 0...10
Contact	1 NO
Switching capacity	4A/250V
Enclosure class	IP 44
Weight	kg 0,2

Speed controller

For the manual control of speed and air flow of electrical fans with 0-10V output. The jetproof IP 54 enclosure is achieved with the included surface mounting case. (Flush-mounting without the surface mounting case, gives a splash proof IP 44 enclosure also suitable for highly demand environments as bathrooms etc). Potentiometer 10kΩ for speed controlling.



Us = 0-10 V
+ = 10 V Output signal
- = GND



REV 3POL/03 (Art. no.: 33978)

3-pole (closing/auxillary contact 1) lead 3x1,5 mm² for 1 phase motor. TK not lead out.

REV 5POL/05 (Art. no.: 33979),

5-pole (closing/auxillary contact 1) lead 5x1,5 mm² for 1 phase motors TK lead out and 3 Phase motors TK not lead out.

REV-Isolator

REV-Isolator mounted on a bracket, leads connected I max 20 A.

REV 5POL/07 (Art. no.: 33980),

5-pole (closing/auxillary contact 1) lead 7x1,5 mm² for 3 phase motors TK lead out.

REV 9POL/12 (Art. no.: 33981),

9-pole (closing/auxillary contact 1) lead 12x1,5 mm² for 3 phase motors TK lead out and two speed (D/Y).

Control modul

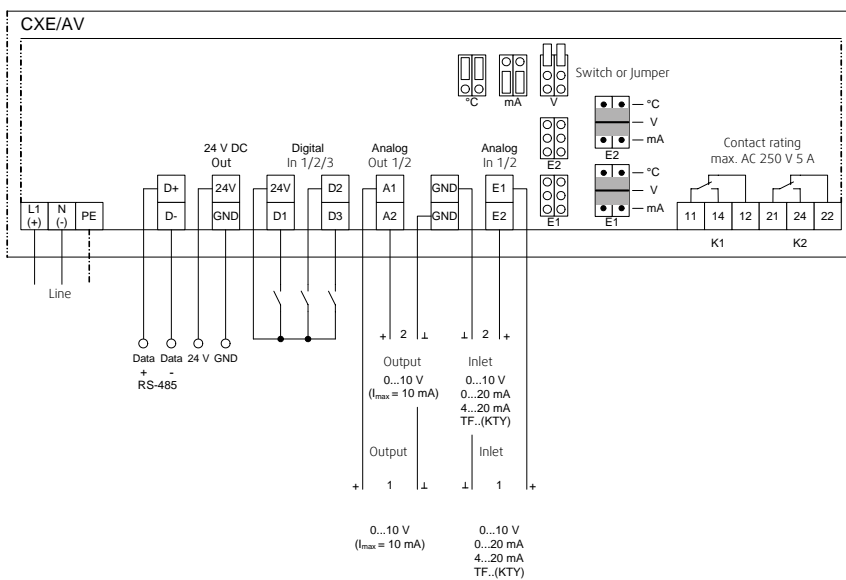
Regulator with multifunction display constant temperature or constant pressure in duct systems with 0...10V output signal to control external devices (power units, frequency inverters, EC-motors etc.). Two setpoints are possible.

3 digital inputs, 2 analogue inputs, 2 analogue outputs 0...10V and 2 relays with change-over contact. All in-/outputs are programmable. With preprogram modes also for outdoor compensation for easy setup. Menu languages are English, German, Swedish,...

24VAC/Imax 70mA power supply for sensors.



CXE/AV	
Art. no.	37256
Voltage	V 230
Frequency	Hz 50/60
Phase	~ 1
Output 0-10V Imax	mA 10
Switching power	5A/250VAC
Permitted range for ambient temperature	°C -20...+55
Enclosure class	IP 54
Weight	kg 0,9
WxHxD	mm 223x200x115



SaveVent Comfort

High efficient heat recovery systems from Systemair

SaveVent Comfort R

Highly efficient living space ventilation with rotational heat exchanger



Systemair duct systems

Extremely flexible



Duct systems see page 62.

SaveVent Comfort C

Highly efficient living space ventilation with reverse flow heat exchanger



Overview SaveVent Comfort applications

SaveVent	Comfort R	Comfort C	Comfort C
Application	Single family house / Single flat	Single family house / Single flat	Central unit, flats
System	Heat Recovery	Heat Recovery	Heat Recovery
Location	Plant room / flat	Plant room / flat	Plant room / roof
Ventilation unit	VR, SAVE VTR, SAVE VSR	SAVE VTC	SAVE VTC
Extract valves	In bathroom, toilet and kitchen	In bathroom, toilet and kitchen	In bathroom, toilet and kitchen
Intake valves	In sleeping room, living room	In sleeping room, living room	In sleeping room, living room

Systemair air distribution products

Just your style



Air distribution products see page 63



General description

- Heat recovery minimizes ventilation heat losses
- The unit is completely self-controlled and is easy to run by the operator
- Heat recovery pre-heats supply air
- Fine filters provide clean and dust-free supply air
- A rotary heat exchanger regains humidity during winter time
- No temperature fluctuations and cold zones in rooms - even at cold outside temperature

Function

Extract air from kitchens and bathrooms is piped via air handling unit to the outside. The unit sucks outdoor air through a second duct system. The heat of the extract air is transferred up to 90% by a heat exchanger to the supply air and returned to living and bedrooms. Inside the unit it is possible to treat the air flows as required, e.g. cleaning, heating or dehumidifying. Supply and extract air pipes are installed inside concrete ceilings according to the requirement as round or oval folded spiral seam pipes or as PVC pipes.

Delivery contents

Besides air handling units, we also deliver duct system packages including valves and silencers, outdoor air inlets and exhaust air outlets for wall or roof. Demand control by EC fans also available with CO₂, presence or humidity control.

Heat exchanger unit in a single-family house



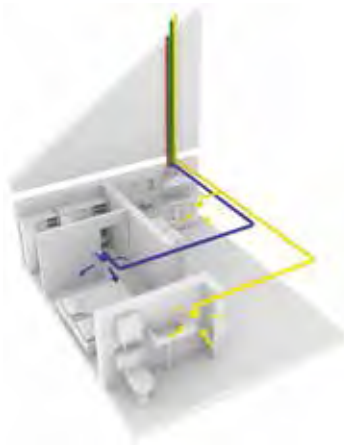
Advantages for a single-family house

- High heat recovery, thermal comfort
- Less ventilation heat losses
- Humidity regain during winter time with one rotor
- Pre-heating supply air possible
- Higher energy saving potential

Disadvantages for a single-family house

- Complex duct system
- Higher investment costs

Heat exchanger unit in an apartment building, decentrally



Apartment building, decentrally, example for an apartment

Advantages for an apartment building

- High energy saving potential and less heating is required
- High heat recovery

Disadvantages for an apartment building

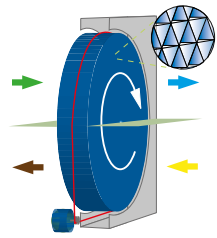
- Complex duct system
- Higher investment costs
- Fire safety and sound protection requirements
- Central units: „Heat theft“

Conclusion

A ventilation unit with heat recovery provides a high living comfort with well heated and clean supply air to the user. Furthermore, the energy saving potential meets the future requirements. The decision for a unit with heat recovery allows combining comfort and energy savings. Counterflow heat exchanger vs. rotary heat exchanger: a rotary heat exchanger is the best choice for single-family houses or single residential units. It is more effective and creates a better indoor climate. However, odours may be transferred in little amounts. To supply more than one residential unit, a counterflow heat exchanger is the right choice. The required energy for frost protection reduces the efficiency of this exchanger.

Comparison rotary heat exchanger and counterflow heat exchanger

Rotary heat exchangers



With rotary heat exchangers, heat as well as humidity can be exchanged. Application for single-family houses or residential units with efficiencies up to 85 %.

Heat exchanging

The blade structure (similar to corrugated board) of the rotor and continuous rotation between hot and cold air flows heats the exhaust air rotor which transfers this heat to the cold supply air in winter time. This effect can be used vice versa in summer time by transferring heat of the outside air to the colder exhaust air. This provides a cooling effect in summer and also leads back the cooling energy of the air conditioning.

Humidity transfer with a condensation rotor

The storage mass consists of pure aluminium which transfers humidity exactly when condensate appears on the exhaust air side and is absorbed by the outside air. High temperature differences can reach humidity return values up to 60 %. With our rotors, humidity is transferred when needed - in winter time. This minimizes dry air.

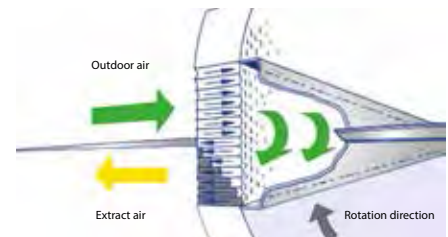
Carryover

A little exhaust percentage can be led to supply air by the rotation of the storage mass. Constructive modifications prevent this for units which are /DE marked (transmission 0.1 %).

Rinse chamber

Some outside air flow is led on the exhaust air side to produce a rinsing effect. This reduces

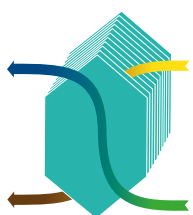
the transmission of exhaust air to a minimum by carry-over. For correct operation of the rinse chamber, a pressure gradient of min. 200 Pa on supply and exhaust air is necessary.



Frost protection

Due to the transmission of humidity, condensate has not to be drained in residential constructions. A connection of ventilation units to a waste water pipe is not necessary. Furthermore, the rotor does not freeze because of the transmission of condensate down to -30 °C by a little exhaust air surplus. A frost protection for heat exchangers is not needed. This shows the whole performance of exchangers at cold outside temperatures.

Counterflow heat exchanger



Counterflow heat exchangers are used to transfer heat and can reach an efficiency of more than 90 %.

Heat exchanging

Counterflow heat exchangers lead air flows through parallel plates arranged in a row. On the opposite side supply and exhaust air alternates. Warm air flow transfers energy via the plate to the cold air flow.

Humidity transfer is not possible

In winter time, condensate has to be drained into a waste water pipe. The siphon has always to be filled with water to avoid air suction from the sewage system.

Leak-proof









Supply and exhaust air are totally separated from each other to keep the supply air clean.

Frost protection

The higher the efficiency of an exchanger, the more condensate drops out at high temperature differences. The efficiency also influences the temperature when frost protection is necessary for the exchanger. This concerns outside temperatures when condensate starts freezing. For high quality counter cross-flow heat exchangers with an efficiency of 90 %, this can already begin at -3 °C. In contrast, simple cross-flow heat exchangers with an efficiency of app. 55 %, this starts not before app. -14 °C. The amount of energy necessary for frost protection is correspondingly different. To ensure frost protection and to avoid pulling out energy from the exchanger, outside air can be pre-heated, the supply air fan can be throttled or the outside air can be bypassed at the exchanger via a bypass flap. The missing heat transfer by throttling of the supply air fan or during bypass of the supply air has then to be replaced by the heating system. Frost protection without additional energy is possible when using a geothermal heat exchanger (GEO).

Overview SaveVent Comfort

Air handling units

Air handling unit	SAVE VTC 200	SAVE VTC 300	SAVE VTC 700	SAVE VSR 150/B	SAVE VTR 150/K
					
					
Energy efficiency class					
Standard unit	A	A	A	A	B
Standard unit with accessories	A+	A	A+	A	A
Technical data					
Design up to living space	m ² 180	300	600	120	100
Max. air volume at 100 Pa	l/s 70	97	230	44	78
Max. air volume at 100 Pa	m ³ /h 250	350	830	160	280
Max. sound level at 1 m dis	dB(A) 46	42	54	49	43
Efficiency heat recovery	% 90	81	86	85	80
Filter, Supply air	- G4/F7 (accessories)	G4/F7 (accessories)	G4/F7 (accessories)	F7	G4/F7 (accessories)
Filter, Extract air	- G4	G4	G4	G3	G3
Duct connections	mm 125	160	250	125	125
Control unit	CD 3 integrated	CD 3 integrated	CD 3 inclusive	CD 3 inclusive	CD 3 inclusive
Voltage/Frequency	V/50Hz 230	230	230	230	230
Max. power, fan(s)	W 68	85	168	37	86
Electr. heater	W -	-	-	500	500 / 1000
Recommended fuse	A 10	10	10	10	10
Enclosure class	IP 24	24	24	24	24
Width	mm 660	762	1170	1108	598
Height	mm 824	857	1214	300	774
Depth	mm 597	616	860	570	470
Weight	kg 42	72	160	47	54
Isolation of casing	mm 30	30	30	30	30
Condensate connection (2x)	1/2"	1/2"	1/2"	no	no
Further information	Page 70	72	74	76	78
Application					
Flats		○		○	○
Single-family house	○	○			○
Appartment building, centrally		○	○		
Light commercial		○	○		

SAVE VTR 200/B	SAVE VSR 300	SAVE VTR 300/B	SAVE VSR 500	SAVE VTR 500	SAVE VSR 300/DE	VR 400 DCV/DE	VR 700 DC/DE	VR 700 DCV/DE
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A	A	A	A	A	A	B	B	B
A	A	A	A	A	A	A	A	A

200	240	280	400	400	180	200	350	350
75	97	102	166	164	67	75	138	152
270	350	370	600	590	240	270	500	550
42	47	43	46	47	45	52	49	50
80	80	80	83	80	85	85	85	85
F7	F7	F7	F7	F7	F7	F7	F7	F7
G3	G3	G3	G3	G3	G3	G3	G3	G3
125	160	160	200	200	160	160	200	200
CD 3 integrated	CD 3 inclusive	CD 3 integrated	CD 3 inclusive	CD 3 integrated	CD 3 inclusive	CD 3 integrated	CD 3 necessary	CD 3 integrated
230	230	239	230	230	230	230	230	230
84	83	88	169	170	83	121	246	230
500 / 1000	1670	1670	1670	1670	1670	1670	1670	1670
10	10	10	13	13	10	10	16	16
24	24	24	24	24	24	24	24	24
799	1120	762	1120	920	1120	796	1149	918
598	602	804	652	853	602	800	576	800
428	505	486	595	582	595	406	545	517
46	61	69	72	81	61	57	72	67
30	30	30	30	30	30	30	30	30
no	no	no	no	no	no	no	no	no
80	82	84	86	88	90	92	94	96

	o						o	
	o	o	o	o	o	o	o	o
		o	o	o	o		o	o

SAVE VTC 200



A+
A



- Up to 90% heat recovery efficiency
- For approx. 180 m² living space
- Automatic change to summer operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, integrated control panel CD 3 with LCD-display
- Modbus communication with RS-485

The casing is built of sheet metal and well insulated against condensation. The inner part of the case is made of expanded polypropylene (EPP) and provides extremely good insulation in terms of noise and heat losses. All components are easily removed for maintenance and service. The unit has built-in functions available for demand control that gives effective and economical operation. For instance, CO₂, presence or humidity sensor. It also has built-in functions for communication with building management systems like Modbus.

Technical data	
Art. no. (R)	24802
Art. no. (L)	24803
Energy efficiency class	
Standard unit	A
Standard unit with accessories*	A+
Voltage/Frequency	V/50 Hz 230
Power rating per fan at the operation point:	W ca. 28 52,77 l/s at 80 Pa
SFP	kW/m ³ /s < 1,0
Fuse	A 10
Heating coil	W -
Filter, supply air	G4 / F7**
Filter, extract air	G4
Weight	kg 52

*Accessories see page 71

**Available as accessories.

SFP = Specific Fan Power (kW/m³/s)

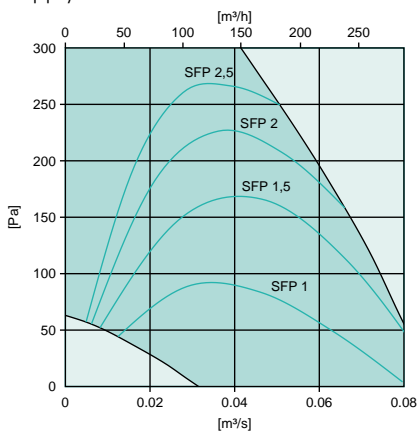
The SFP value stated applies to the complete unit.

LwA dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Extract air	53	41	41	50	47	44	36	25	22
Supply air	56	25	33	41	50	52	51	43	34
Surrounding	46	22	31	34	41	41	38	28	20

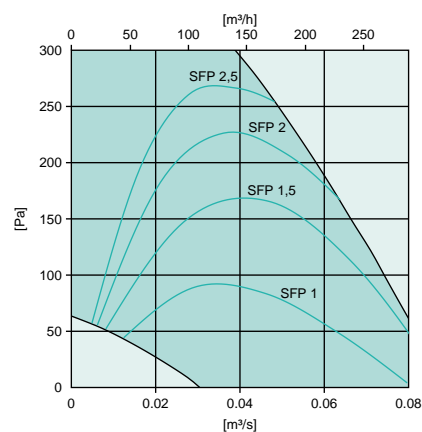
The sound data table indicates the sound power level L_{wA} , which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

Supply air

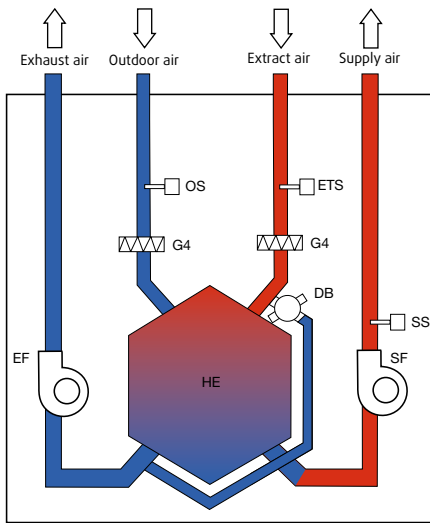


Extract air



Scheme

Right-hand version



- EF Extract fan
- G4 Extract/Supply filter
- ETS Extract air temp. sensor
- SF Supply fan
- SS Supply air temp. sensor
- OS Outdoor air sensor
- DB Bypass damper
- HE Heat exchanger

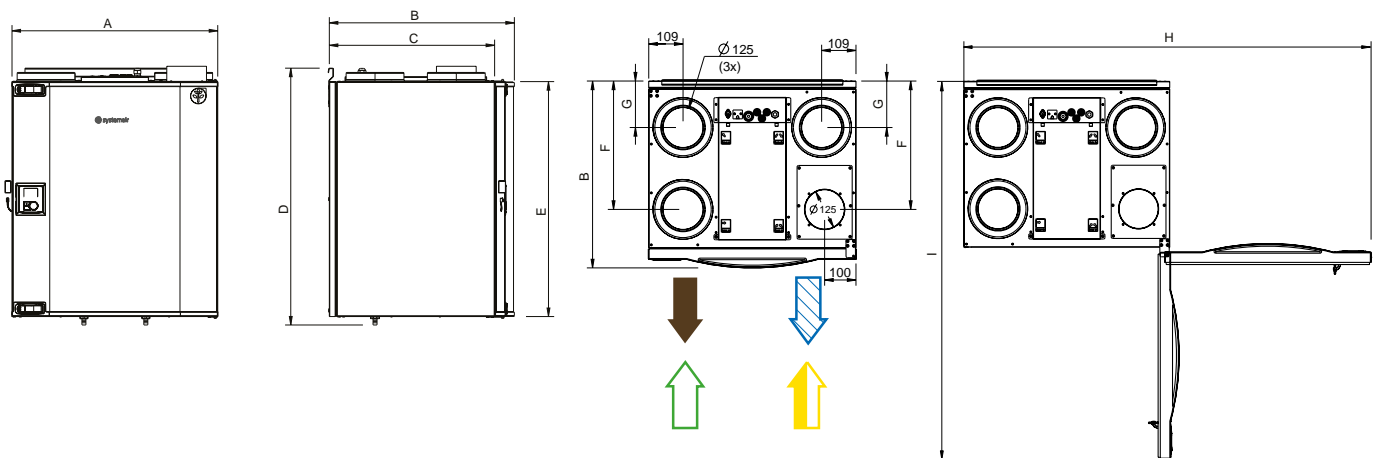
Accessories

		Art. no.
Control panel	CD3	208175
Shutter damper	EFD 125	311321
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 125/1,0	2556
3-way valve	ZTR 15-0,4	9670
Water heating battery	VBC 125	5457
Actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Fast clamp	FK 125	1608
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A+		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions

Right-hand version



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

	A	B	C	D	E	F	G	H	I
SAVE VTC 200	658	593	530	822	752	408	148	1.301	1.207

Dimensions in mm.

SAVE VTC 300



A



- Up to 81% heat recovery efficiency
- For approx. 300 m² living space
- Automatic summer and defrost function with/without preheating
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display integrated
- Modbus communication via RS-485

The unit is double skinned, fully insulated and with complete control functions, high efficiency counterflow heat exchanger and filters. Energy efficient fans with EC motors will reduce energy consumption for transportation of ventilation air by apx. 50 % compared to traditional AC motors. Modern technology gives low SFP factor (Specific Fan Power). The unit will automatically alternate between normal operation with heat recovery and summer operation without heat recovery. This solution will also automatically recover chilled indoor air (from cooling).

Technical data

Art. no. (R)	2480
Art. no. (L)	2481
Energy efficiency class	
Standard unit	A
Standard unit with accessories*	A
Voltage/Frequency	V/50 Hz 230
Power rating per fan at the operation point	W ca. 43 83,33 l/s at 80 Pa
SFP	kW/m ³ /s 1,03
Fuse	A 10
Power rating, fan motor	W 2 x 85
Filter, supply air	G4 / F7**
Filter, extract air	G4
Weight	kg 72

*Accessories see page 73.

**Available as accessories.

SFP = Specific Fan Power (kW/m³/s)

The SFP value stated applies to the complete unit.

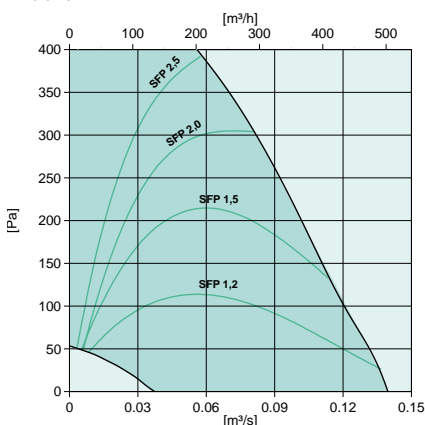
Mid-frequency band, Hz

LwA dB(A)	Tot	63	125	250	500	1k	2k	4k	8k
Extract air	63	46	50	57	56	54	57	49	40
Supply air	52	43	40	50	42	42	40	27	22
Surrounding	43	27	33	39	37	34	32	25	21

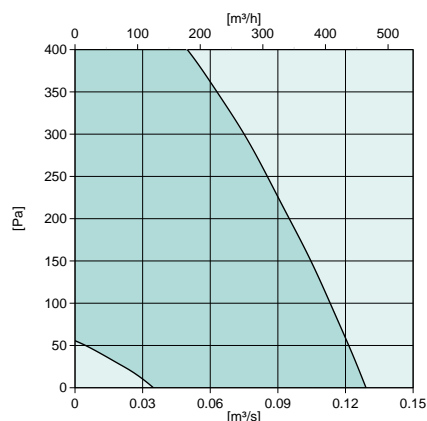
The sound data table indicates the sound power level L_{wAR} , which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

Supply air

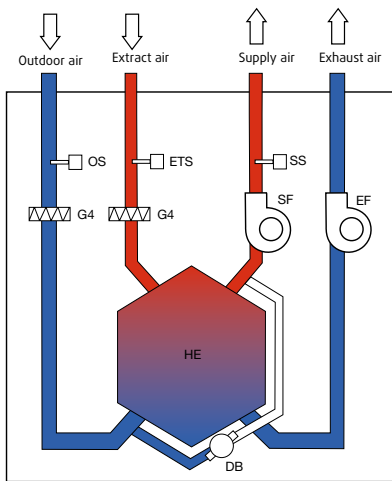


Extract air



Scheme

Right-hand version



- EF Extract fan
- G4 Extract/Supply filter
- ETS Extract air temp. sensor
- SF Supply fan
- SS Supply air temp. sensor
- OS Outdoor air sensor
- DB Bypass damper
- HE Heat exchanger

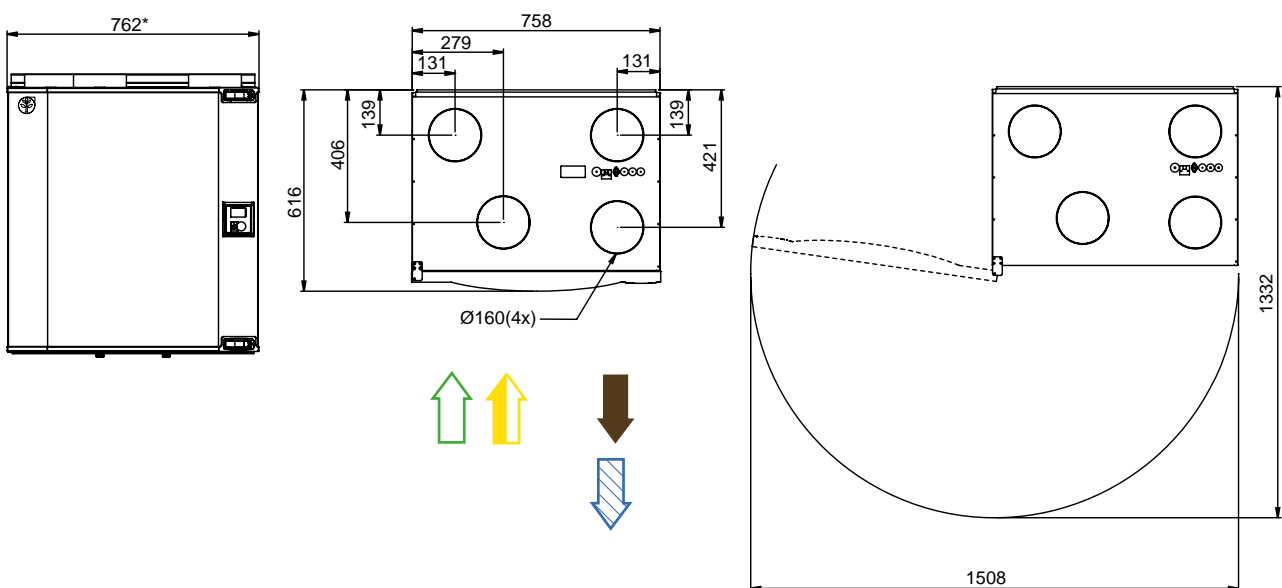
Accessories

		Art. no.
Control panel	CD3	208175
Shutter damper	EFD 160	7122
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 160	2558
3-way valve	ZTR15-0,4	9670
Reheater, electr.	VTC 300 R/L	2488/2489
Water heating battery	VBC 160	5458
Actuator 0-10V	RVAZ4	9862
Transformer, 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverging plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions

Right-hand version



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

SAVE VTC 700



A+
A

The unit is double skinned, fully insulated and with complete control functions, high efficiency counterflow heat exchanger and filters. Energy efficient fans with EC motors will reduce energy consumption for transportation of ventilation air by apx. 50 % compared to traditional AC motors. Modern technology gives low SFP factor (Specific Fan Power). The unit will automatically alternate between normal operation with heat recovery and summer operation without heat recovery. This solution will also automatically recover chilled indoor air (from cooling).



- Up to 86% heat recovery efficiency
- For approx. 600 m² living space
- Automatic summer and defrost function with/without preheating
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display and 6 m connecting cable inclusive (enclosed)
- Modbus communication with RS-485

Technical data	
Art. no. (L)	2174
Art. no. (R)	2173
Energy efficiency class	
Standard unit	A
Standard unit with accessories*	A+
Voltage/Frequency	V/50 Hz 230
Power rating per fan at the operation point	W ca. 95 194,44 l/s at 80 Pa
SFP	kW/m ³ /s 0,97
Fuse	A 10
Input power, fan motor	W 2 x 168
Filter, supply air	G4 / F7**
Filter, extract air	G4
Weight	kg 160
Connection (sleeve)	DN 250

*Accessories see page 75.

**Available as accessories.

SFP = Specific Fan Power (kW/m³/s)

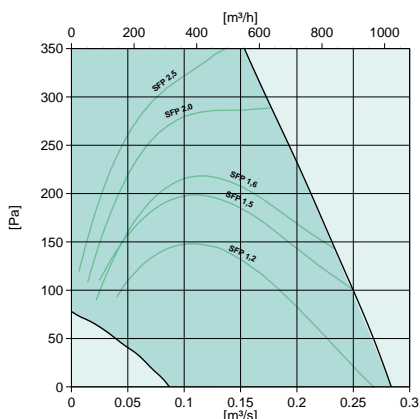
The SFP value stated applies to the complete unit.

LwA dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Extract air	66	47	50	58	65	54	52	44	38
Supply air	78	61	61	64	75	71	71	69	64
Surrounding	54	37	39	43	52	45	44	39	35

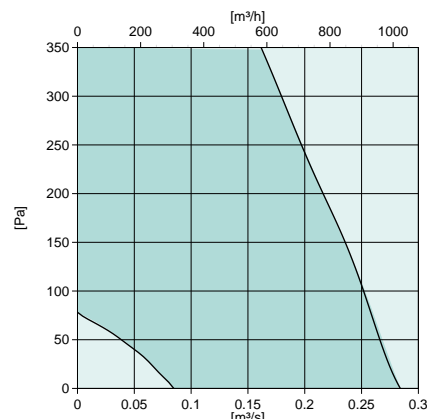
The sound data table indicates the sound power level L_{wA}, which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

Supply air

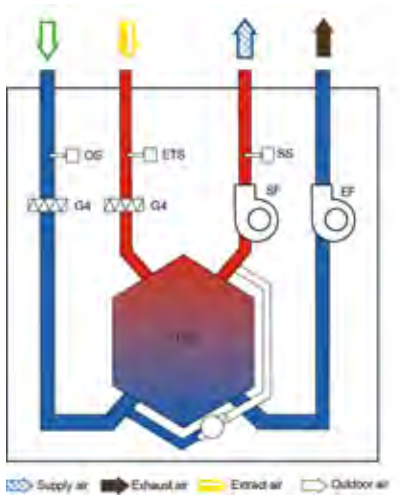


Extract air



Scheme

Right-hand version



- EF Extract fan
- G4 Extract/Supply filter
- ETS Extract air temp. sensor
- SF Supply sensor
- SS Supply air temp. sensor
- OS Outdoor air sensor
- DB Bypass damper
- HE Heat exchanger

Accessories

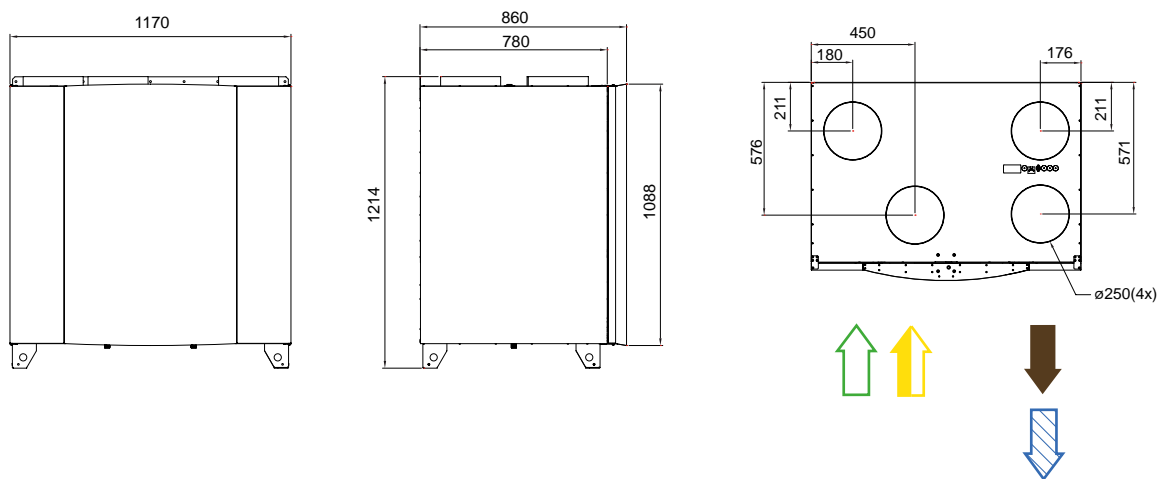
		Art. no.
Control panel	CD 3	208175
Shutter damper	EFD 250	6748
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 250	2561
3-way valve	ZTR15-1,6	9673
Reheater, electr.*	VTC 700 R/L	2738/2739
Water heating battery	VBC 250	5460
Actuator 0-10V	RVAZ4	9862
Transformer, 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
CO2 Transmitter	CO2RT-R-D	6993
Input Modul Wireless	-	25128
SmartDial	-	25129

*400V voltage supply necessary

Accessories Energy efficiency class A+		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions

Right-hand version



- = Supply air
- = Exhaust air
- = Extract air
- = Outdoor air

SAVE VSR 150/B



A →



- Up to 85% heat recovery efficiency
- For approx. 120 m² living space
- Automatic change to supper operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display and 12 m connecting cable inclusive (enclosed)
- Modbus communication with RS-485
- For Wall- and ceiling installation

The unit is white painted and can be mounted on the wall or in the ceiling. The unit is double skinned and is fully insulated. It has complete control functions with a high efficiency rotating heat exchanger, a thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumption for transportation of ventilation air by apx. 50 % compared to traditional AC motors. Modern technology is contributing to a low SFP factor (Specific Fan Power) as well as an efficient design of the unit.

Technical data

Art. no.	19980	
Energy efficiency class		A
Standard unit		A
Standard unit with accessories*		A
Voltage/Frequency	V/50 Hz	230
Power rating per fan at the operation point	W	ca. 20 33,3 l/s at 80 Pa
Fuse	A	10
SFP	kW/m ³ /s	1,12
Electrical heating battery	W	500
Filter, supply air		F7
Filter, extract air		G3
Weight / incl. packaging	kg	47

*Accessories see page 77.

SFP = Specific Fan Power (kW/m³/s)

The SFP value stated applies to the complete unit.

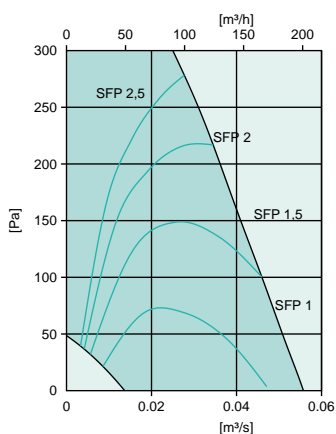
Mid-frequency band, Hz

LwA dB(A)	Tot	63	125	250	500	1k	2k	4k	8k
Extract air	64	51	47	53	61	56	53	53	40
Supply air	52	41	42	47	49	38	31	23	19
Surrounding	49	30	28	39	47	39	38	33	20

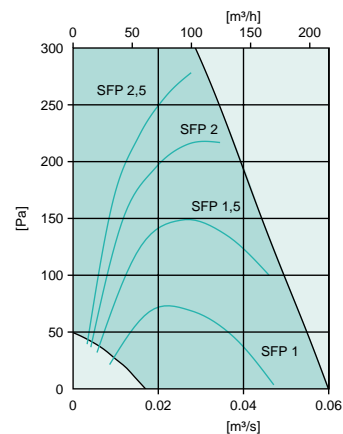
The sound data table indicates the sound power level L_{wA} , which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

Supply air

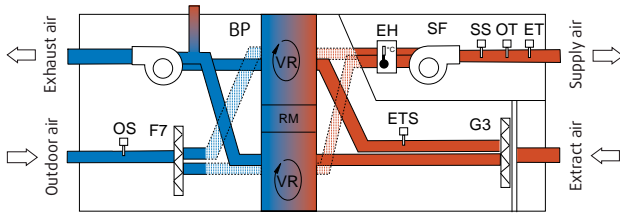


Extract air



Scheme

Right-hand version



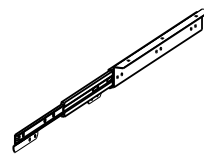
- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- OS Outdoor air temperature sensor
- BP Bypass cooker hood

Accessories

		Art. no.
Control panel	CD 3	208175
Shutter damper	EFD 125	311321
Silencer	SCD 125	2556
3-way valve	ZTR 15-0,4	9670
Water heating battery	VBC 125	5457
Actuator 0-10V	RVAZ4	9862
Surface sensor	TG-A 130	5159
Suct sensor	TG-K 360	4846
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Fast clamp	FK 125	1608
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

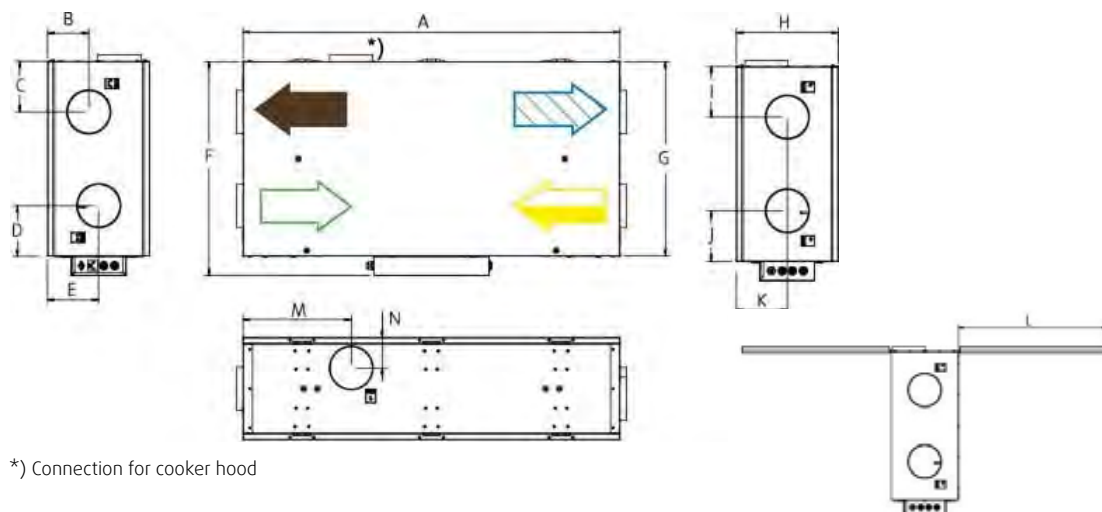
Telescope suspension



Accessories		Art. no.
Telescope suspension (Set = 2 pieces)	-	37251

Dimensions

Right-hand version



*) Connection for cooker hood

➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
SAVE VSR 150/B	1107,6	120,7	148	148	150	628	570	300	148	148	150	575	318	89

Duct connection ø125 mm.
Dimensions in mm.

SAVE VTR 150/K



- Up to 80% heat recovery efficiency
- For approx. 100 m² living space
- Automatic change to summer operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display and 6 m connecting cable inclusive (enclosed)
- Modbus communication with RS-485
- Modern design with integrated cooker hood

SAVE VTR 150/K has an integrated cooker hood and should be placed above the hob. The unit has been adapted to suit different kitchen environments, with a modern design. The unit is double skinned, fully insulated and with complete control functions, high efficiency rotating heat exchanger, thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumptions. With these, up to 50% less energy consumption can be achieved in comparison to AC solutions and with the noise behavior decreased by one-half. Modern technology gives low SFP factor (Specific Fan Power).

Technical data		500W	1000W
Energy efficiency class			
Standard unit		B	B
Standard unit with accessories*		A	A
Voltage/Frequency	V/50 Hz	230	230
Power rating per fan at the operation point	W	21	21
		36,11 l/s at 80 Pa	
SFP	kW/m ³ /s	1,18	1,18
Fuse	A	10	10
Input power, fan motor	W	2 x 86	2 x 86
Electrical heating battery	kW	0,5	1
Filter, supply air		G3/F7**	
Filter, extract air		G3	
Weight	kg	54	54

*Accessories see page 79.

**Available as accessories.

SFP = Specific Fan Power (kW/m³/s)

The SFP value stated applies to the complete unit.

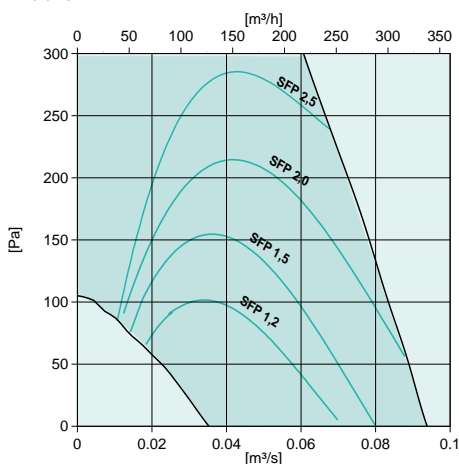
Version	Power	Art. no.
White, left	500 W	14991
Stainless steel, left	500 W	18991
White, right	500 W	14990
Stainless steel, right	500 W	18990
White, left	1000 W	14881
Stainless steel, left	1000 W	18881
White, right	1000 W	14880
Stainless steel, right	1000 W	18880

L _{WA} dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Extract	54	42	48	51	48	38	30	22	22
Supply	61	44	49	53	57	53	52	40	30
Surrounding	40	22	32	36	34	28	26	18	14

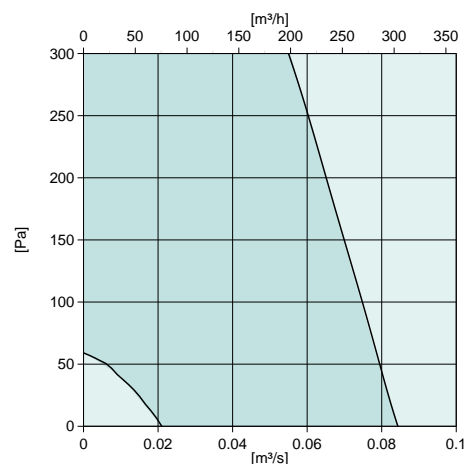
The sound data table indicates the sound power level L_{WA}, which should not be confused with the sound pressure level L_{PA} (based on the operation point at 80 Pa).

Performance data

Supply air

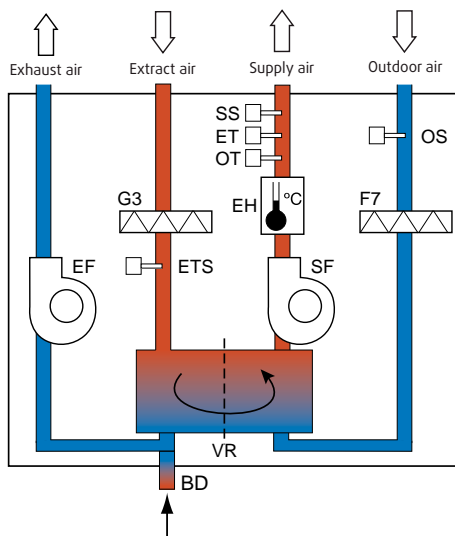


Extract air



Scheme

Right-hand version



- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electrical heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- OS Outdoor air sensor
- BD Bypass integrated cooker hood

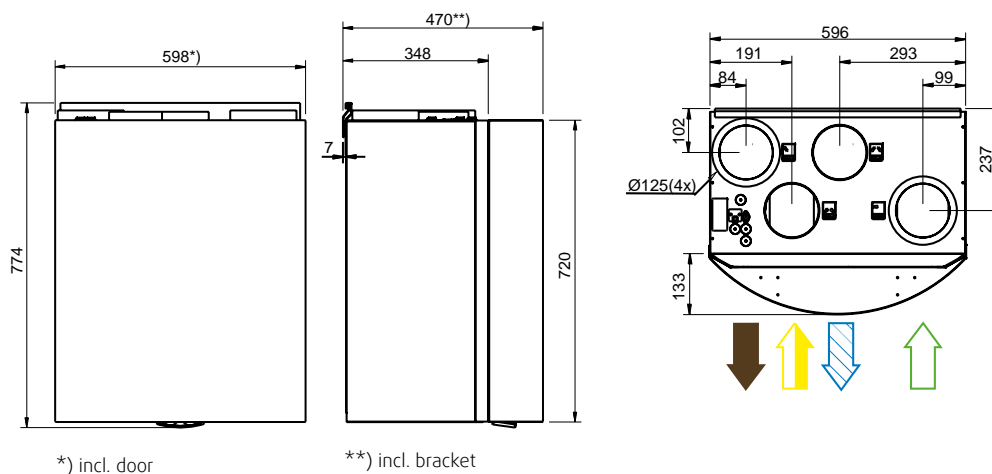
Accessories

		Art. no.
Control panel	CD 3	208175
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 125	2556
3-way valve	ZTR 15-0,4	9670
Filter grease	VTR 150/K	25255
Water heating battery	VBC 125	5457
Actuator	RVAZ4	9862
Transformer, 24V	PSS48	204385
Surface sensor	TG-A	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions

Right-hand version



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

SAVE VTR 200/B



A

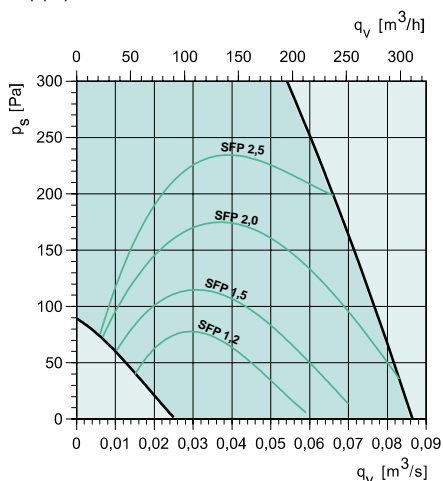


- Up to 80% heat recovery efficiency
- For approx. 100 m² living space
- Automatic change to summer operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display
- Modbus communication with RS-485

Version		Art. no.
Left	500 W	14993
Right	500 W	14992
Left	1000 W	14883
Right	1000 W	14882

Performance data

Supply air



The unit is double skinned, fully insulated and with complete control functions, high efficiency rotating heat exchanger, thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumptions. With these, up to 50% less energy consumption can be achieved in comparison to AC solutions, with the noise behavior decreased by one-half. Modern technology gives low SFP factor (Specific Fan Power). SAVE VTR 200/B is a white painted model with an integrated control panel in the front door. The option for connecting one or more external control panels is also available. Connection to an external cooker hood is available on the top of the unit. This makes the unit well suited for apartment buildings where the extract air from the cooker hood is challenging.

Technical data		500W	1000W
Energy efficiency class		B	B
Standard unit		A	A
Standard unit with accessories*		A	A
Voltage/Frequency	V/50 Hz	230	230
Power rating per fan at the operation point	W	34	34
		180 l/s at 80 Pa	
SFP	kW/m ³ /s	1,4	1,4
Fuse	A	10	10
Input power, fan motor	W	2 x 84	2 x 84
Electrical heating battery	kW	0,5	1
Filter, supply air		F7	F7
Filter, extract air		G3	G3
Weight	kg	46	46

*Accessories see page 81.

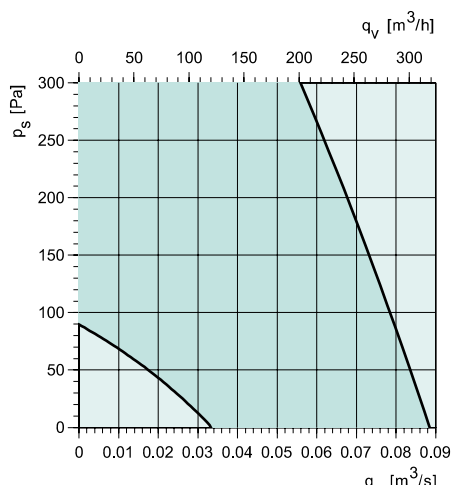
SFP = Specific Fan Power (kW/m³/s)

The SFP value stated applies to the complete unit.

LwA dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	62	48	50	55	58	54	55	45	35
Extract air	55	39	44	53	47	41	35	23	21
Surrounding	42	23	28	38	39	28	29	20	15

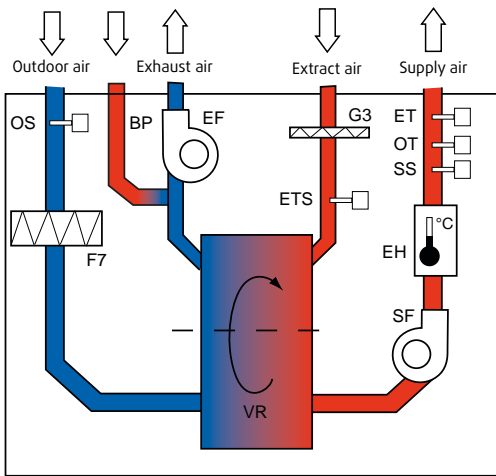
The sound data table indicates the sound power level L_{wA} , which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Extract air



Scheme

Right-hand version



- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract fan
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- OS Outdoor air sensor
- BP Bypass integrated cooker hood

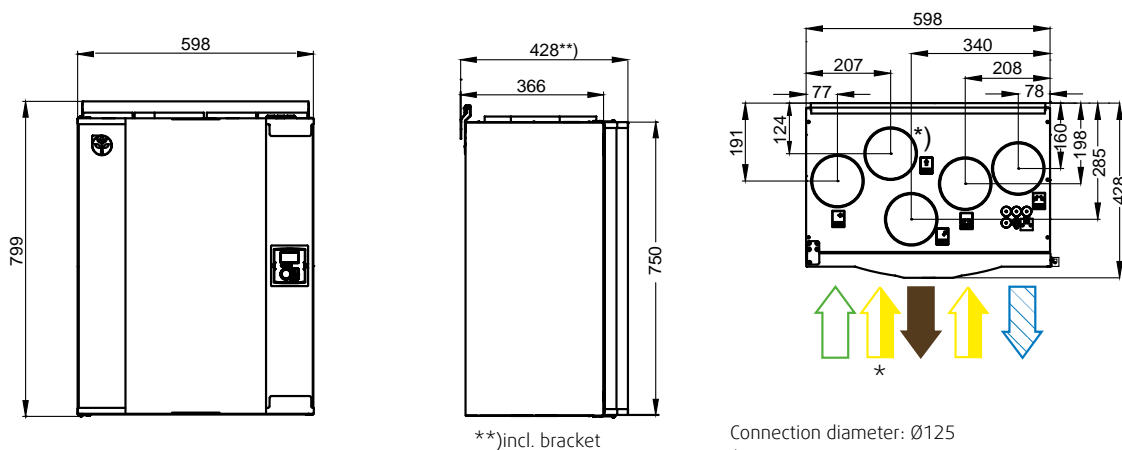
Accessories

		Art. no.
Control panel	CD 3	208175
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 125	2556
3-way valve	ZTR 15-0,4	9670
Cooker hood	251-10B	12023
Water heating battery	VBC 125	5457
Actuator	RVAZ4	9862
Transformer, 24V	PSS48	204385
Surface sensor	TG-A130	5159
Duct sensor	TG-K360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions

Right-hand version



= Supply air
 = Exhaust air
 = Extract air
 = Outdoor air

SAVE VSR 300



A



- Up to 80% heat recovery efficiency
- For approx. 240 m² living space
- Automatic change to summer operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display and 12 m connecting cable inclusive (enclosed)
- Modbus communication with RS-485

Our new units fulfill the high demands on the market on low energy consumption and sound levels. The EC-technology ensure the fans are energy efficient and contributes to a low SFP values.

The SAVE VSR 300 is double skinned, fully insulated and with complete control functions, high efficiency rotating heat exchanger, thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumption for transportation of ventilation air by apx. 50 % compared to traditional AC motors. Modern technology is contributing to a low SFP factor (Specific Fan Power) as well as an efficient design of the unit.

Technical data		
Art. no.		19427
Energy efficiency class		A
Standard unit		A
Standard unit with accessories*		A
Voltage/Frequency	V/50Hz	230
Power rating per fan at the operation point	W	ca. 50 77,77 l/s at 80 Pa
SFP	kW/m ³ /s	1,29
Fuse	A	10
Input power, fan motor	W	2x83
Electrical heating battery	W	1670
Filter, supply air		F7
Filter, extract air		G3
Weight	kg	61

*Accessories see page 83.

SFP = Specific Fan Power (kW/m³/s)

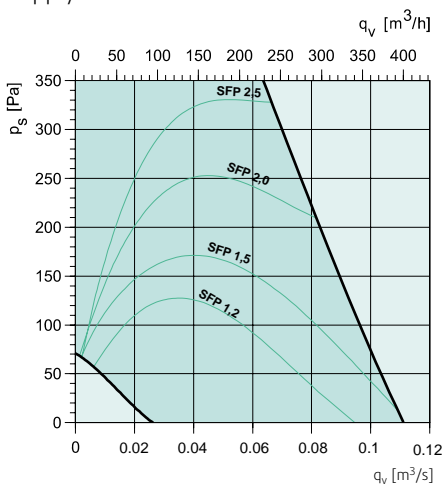
The SFP value stated applies to the complete unit.

	Mid-frequency band, Hz								
L _{WA} dB(A)	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	68	51	55	61	61	60	62	55	47
Extract air	59	42	42	58	54	41	41	30	23
Surrounding	47	27	33	42	42	37	39	33	27

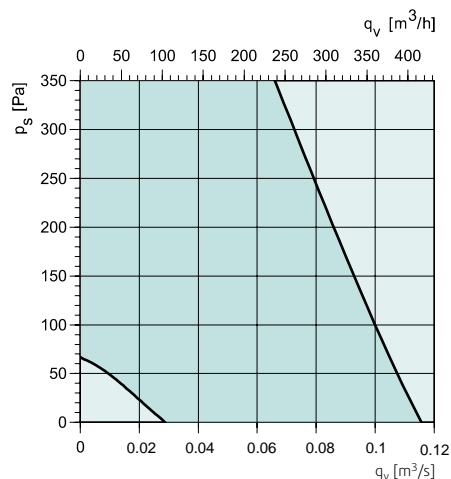
The sound data table indicates the sound power level L_{WA}, which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

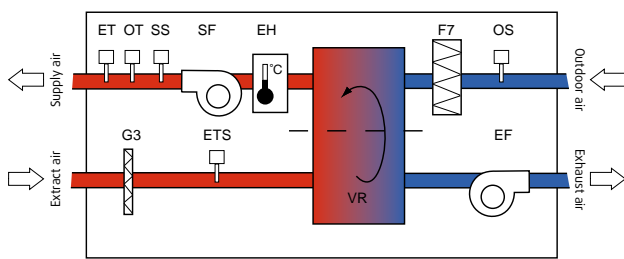
Supply air



Extract air



Scheme



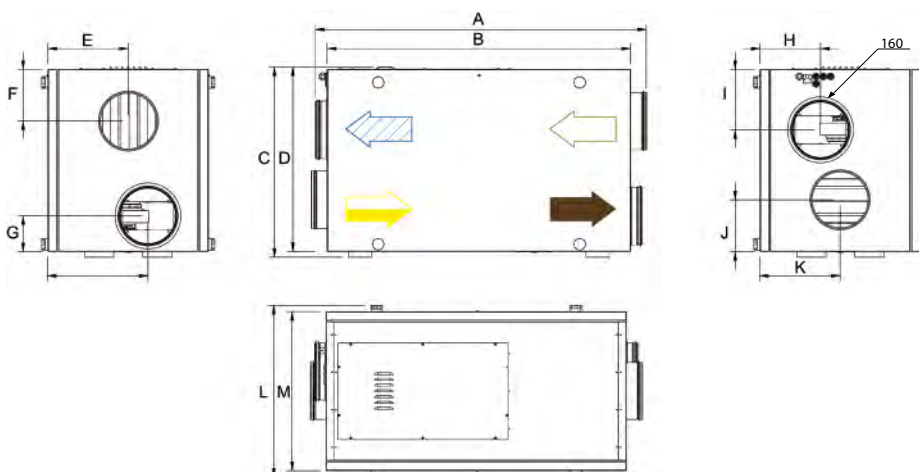
- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- OS Outdoor air sensor

Accessories

		Art. no.
Control panel	CD3	208175
Shutter damper	EFD 160	7122
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 160	2558
3-way valve	ZTR 15-0,4	9670
Water heating battery	VBC 160	5458
Actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions



= Supply air
 = Exhaust air
 = Extract air
 = Outdoor air

	A	B	C	D	E	F	G	H	I	J	K	L	M
SAVE VSR 300	1120	1040	602	582	231	188	112	160	178	136	281	505	461

Dimensions in mm.

SAVE VTR 300/B



A



- Up to 80% heat recovery efficiency
- For approx. 280 m² living space
- Automatic change to summer operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display
- Modbus communication with RS-485

The new air handling unit SAVE VTR 300/B fulfill the high demands on the market on low energy consumption and sound levels. The EC technology ensure the fans are energy efficient and contribute to a low SFP factor.

The unit is double skinned, fully insulated and with complete control functions, high efficiency rotating heat exchanger, thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumptions. With these, up to 50% less energy consumption can be achieved in comparison to AC solutions, with the noise behavior decreased by one-half. Modern technology gives low SFP factor (Specific Fan Power).

SAVE VSR 300/B

Art. no.	left/right.	19593 / 19592
Energy efficiency class		A
Standard unit		A
Standard unit with accessories*		A
Voltage/Frequency	V/50Hz	230
Power rating per fan at the operation point	W	ca. 50 77,77 l/s at 80 Pa
SFP	kW/m ³ /s	1,21
Fuse	A	10
Input power, fan motor	W	2x88
Electrical heating battery	W	1670
Filter, supply air		F7
Filter, extract air		G3
Weight	kg	69

*Accessories see page 85.

SFP = Specific Fan Power (kW/m³/s)

The SFP value stated applies to the complete unit.

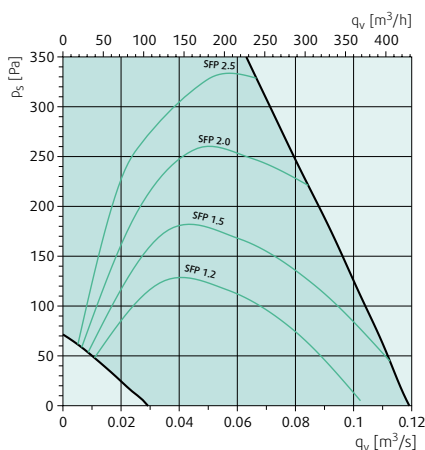
Mid-frequency band, Hz

L _{WA} dB(A)	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	66	43	51	62	59	56	59	52	45
Extract air	57	43	48	55	45	44	45	31	24
Surrounding	47	26	37	45	36	35	36	31	23

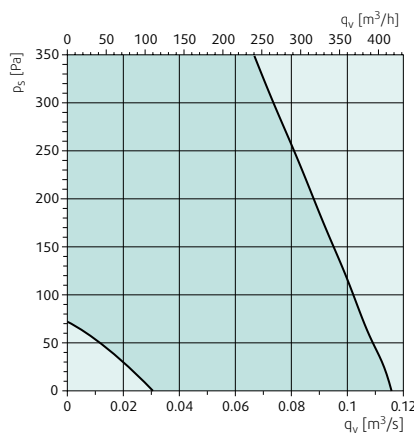
The sound data table indicates the sound power level L_{WA,r}, which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

Supply air

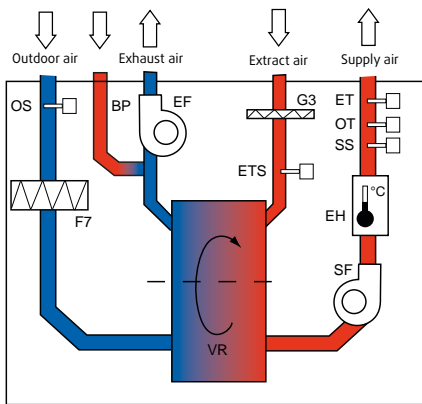


Extract air



Scheme

Right-hand version



- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- OS Outdoor air sensor

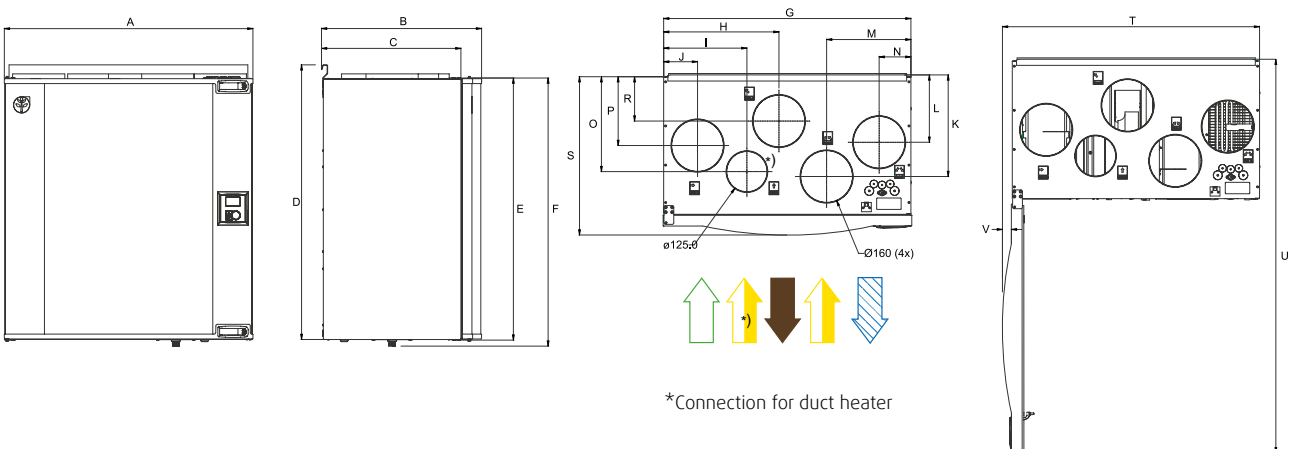
Accessories

		Art. no.
Control panel	CD3	208175
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Shutter damper	EFD 160	7122
Silencer	SCD 160	2558
3-way valve	ZTR 15-0,4	9670
Water heating battery	VBC 160	5458
Actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions

Right-hand version



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V
SAVE VTR 300/B	762	485,7	423,1	842	803,6	823,3	758	404,5	258,4	97,4	121,4	206,4	255,3	104	136,4	216,4	303,4	490	789	1205,8	28

Dimensions in mm.

SAVE VSR 500



A



- Up to 83% heat recovery efficiency
- For approx. 400 m² living space
- Automatic change to summer operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- Modbus communication with RS-485
- User friendly, control panel CD 3 with LCD-display and 12 m connecting cable inclusive (enclosed)

The new air handling unit SAVE VSR 500 fulfill the high demands on the market on low energy consumption and sound levels. The EC technology ensure the fans are energy efficient and contribute to a low SFP factor. The SAVE VSR 500 is double skinned, fully insulated and with complete control functions, high efficiency rotating heat exchanger, thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumption for transportation of ventilation air by apx. 50 % compared to traditional AC motors. Modern technology is contributing to a low SFP factor (Specific Fan Power) as well as an efficient design of the unit.

Technical data		
Art. no.	19441	
Energy efficiency class		A
Standard unit	A	
Standard unit with accessories*	A	
Voltage/Frequency	V/50Hz	230
Power rating per fan at the operation point	W	ca. 100
SFP	kW/m ³ /	1,44
Fuse	A	13
Input power, fan motor	W	2x169
Electrical heating battery	W	1670
Filter, supply air	F7	
Filter, extract air	G3	
Weight	kg	72

*Accessories see page 87.

SFP = Specific Fan Power (kW/m³/s)

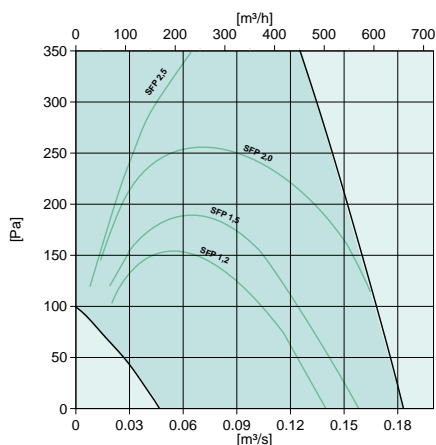
The SFP value stated applies to the complete unit.

L _{WA} dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	74	51	58	62	69	66	67	63	59
Extract air	64	38	46	57	62	51	46	38	31
Surrounding	50	28	36	41	48	42	39	29	50

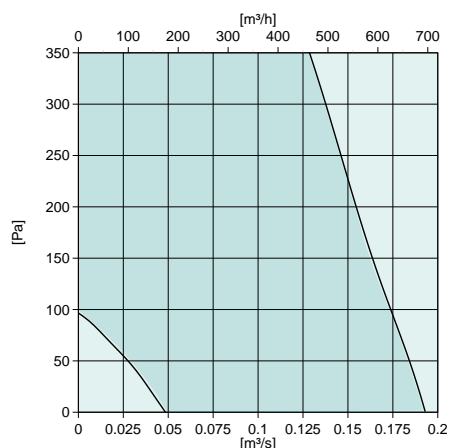
The sound data table indicates the sound power level L_{WA,r}, which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

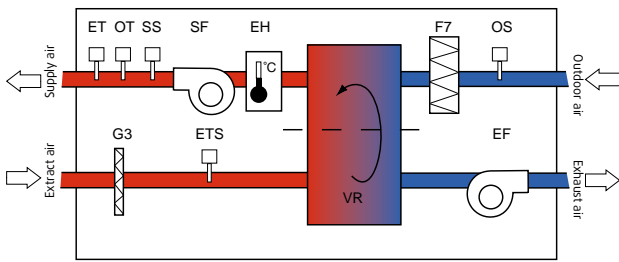
Supply air



Extract air



Scheme



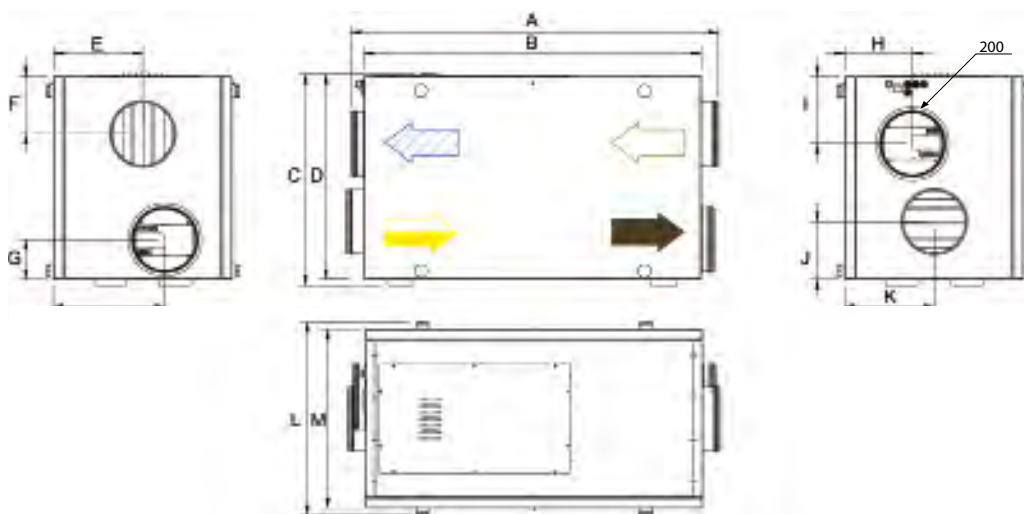
- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- OS Outdoor air sensor

Accessories

		Art. no.
Control panel	CD	208175
Shutter damper	EFD 200	7162
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 200	2560
3-way valve	ZTR 15-1,0	9672
Water heating battery	VBC 200	5459
Valve actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

SAVE VSR 500	A	B	C	D	E	F	G	H	I	J	K	L	M
	1120	1040	652	632	276	178	123	207	208	179	276	595	551

Dimensions in mm.

SAVE VTR 500



A



- Up to 80% heat recovery efficiency
- For approx. 400 m² living space
- Automatic change to summer operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display
- Modbus communication with RS-485

The new air handling unit SAVE VTR 500 fulfill the high demands on the market on low energy consumption and sound levels. The EC technology ensure the fans are energy efficient and contribute to a low SFP factor. The unit is double skinned, fully insulated and with complete control functions, high efficiency rotating heat exchanger, thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumptions. With these, up to 50% less energy consumption can be achieved in comparison to AC solutions, with the noise behavior decreased by one-half. Modern technology gives low SFP factor (Specific Fan Power).

Technical data		
Art. no.	left / right	19595 / 19594
Energy efficiency class		A
Standard unit		A
Standard unit with accessories*		A
Voltage/Frequency	V/50Hz	230
Power rating per fan at the operation point	W	ca. 100 133,33 l/s at 80 Pa
SFP	kW/m ³ /s	1,4
Fuse	A	13
Input power, fan motor	W	2x170
Electrical heating battery	W	1670
Filter, supply air		F7
Filter, extract air		G3
Weight	kg	81

*Accessories see page 89.

SFP = Specific Fan Power (kW/m³/s)

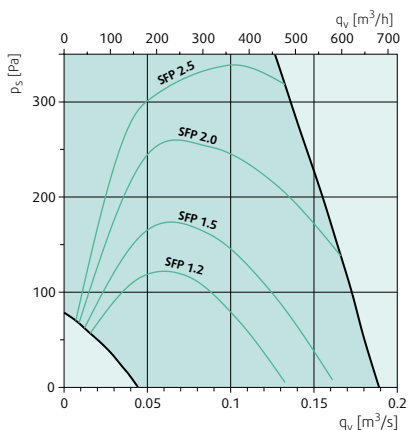
The SFP value stated applies to the complete unit.

L _{WA} dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	73	48	55	62	71	63	64	59	54
Extract air	63	44	53	59	60	51	49	40	31
Surrounding	53	25	41	46	51	37	38	36	31

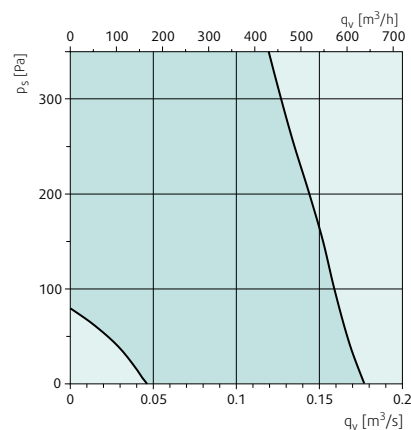
The sound data table indicates the sound power level L_{WA,r} which should not be confused with the sound pressure level L_{pA,r} (based on the operation point at 80 Pa).

Performance data

Supply air

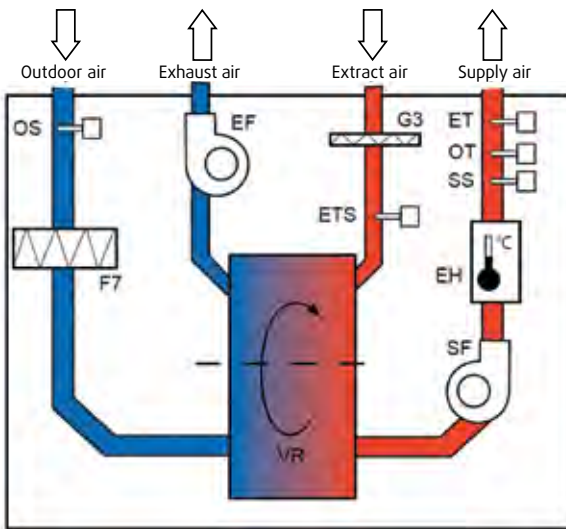


Extract air



Scheme

Right-hand version



- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- OS Outdoor air sensor

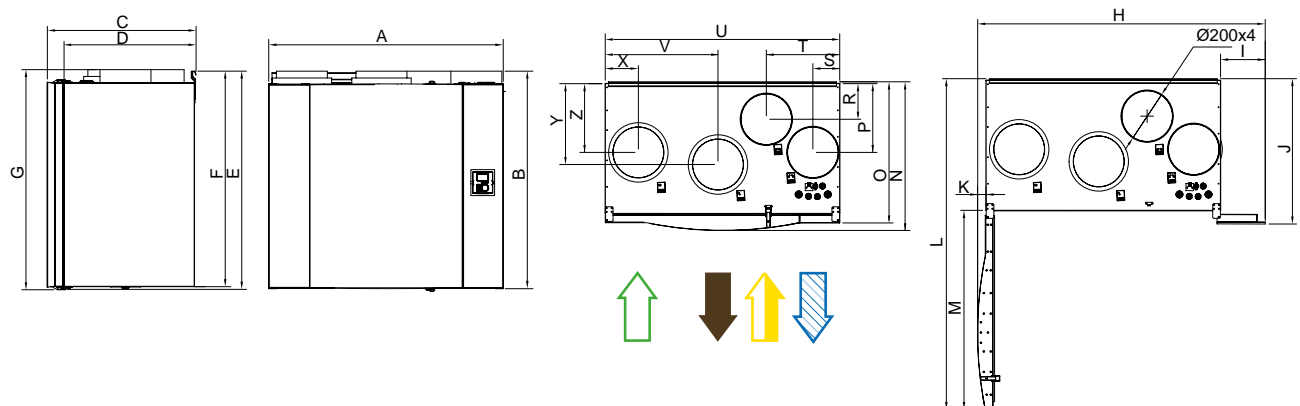
Accessories

		Art. no.
Control panel	CD3	208175
Shutter damper	EFD 200	7162
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 200	2560
3-way valve	ZTR 15-1,0	9672
Water heating battery	VBC 200	5459
Actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions

Right-hand version



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	X	Y	Z
SAVE VTR 500	920	853	583	518	856	846	863	957	175	570	34	1297	780	582	554	270	140	106	288	920	442	130	317	270

Dimensions in mm.

SAVE VSR 300/DE



A



- Up to 85% heat recovery efficiency
- For approx. 180 m² living space
- Automatic change to summer operation (without heat recovery)
- Demand control regulation
- Start-up wizard for easy commissioning
- Separate settings of supply and extract air flow
- User friendly, control panel CD 3 with LCD-display and 12 m connecting cable inclusive (enclosed)
- Modbus communication with RS-485

The new air handling unit SAVE VSR 300/DE fulfill the high demands on the market on low energy consumption and sound levels. The EC technology ensure the fans are energy efficient and contribute to a low SFP factor. The SAVE VSR 300 DE is double skinned, fully insulated and with complete control functions, high efficiency rotating heat exchanger, thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumption for transportation of ventilation air by apx. 50 % compared to traditional AC motors. Modern technology is contributing to a low SFP factor (Specific Fan Power) as well as an efficient design of the unit.

SAVE VSR 300/DE		
Art. no.	18720	
Energy efficiency class	A	
Standard unit	A	
Standard unit with accessories*	A	
Voltage/Frequency	V/50Hz	230
Power rating per fan at the operation point	W	ca. 57
		55 l/s at 80 Pa
SFP	kW/m ³ /s	2,01
Fuse	A	10
Input power, fan motor	W	2x83
Electrical heating battery	W	1670
Filter, supply air	F7	
Filter, extract air	G3	
Weight	kg	61

*Accessories see page 91.

SFP = Specific Fan Power (kW/m³/s)

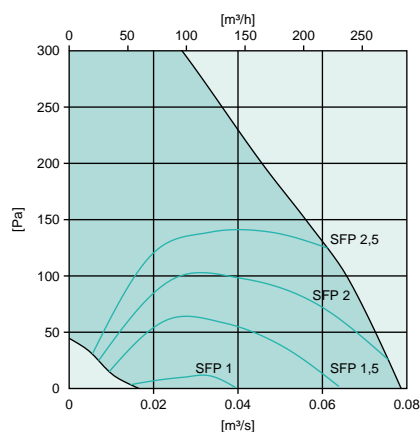
The SFP value stated applies to the complete unit.

L _{WA} dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	68	51	55	61	61	60	62	55	47
Extract air	59	42	42	58	54	41	41	30	23
Surrounding	47	27	33	42	42	37	39	33	27

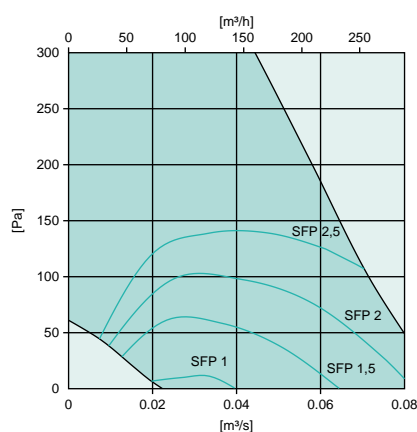
The sound data table indicates the sound power level L_{WA,r}, which should not be confused with the sound pressure level L_{pA,r} (based on the operation point at 80 Pa).

Performance data

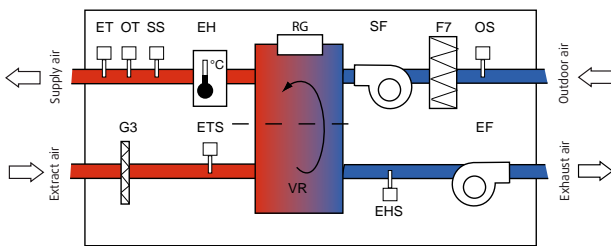
Supply air



Extract air



Scheme



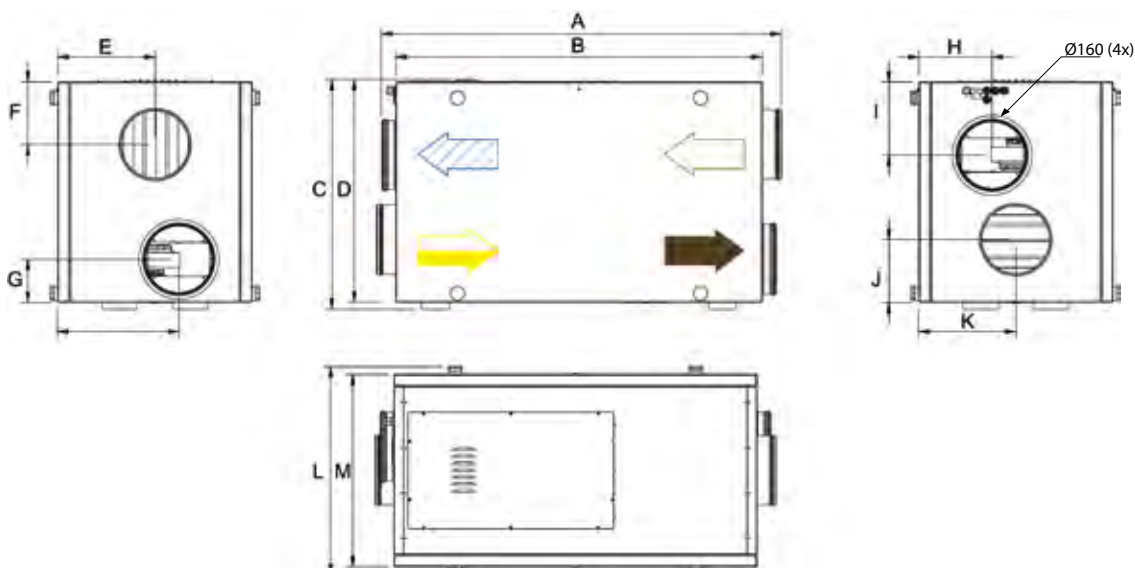
- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- OS Outdoor air sensor
- EHS Exhaust air sensor
- RG Rotation sensor

Accessories

		Art. no.
Control panel	CD3	208175
Shutter damper	EFD 160	7122
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Silencer	SCD 160	2558
3-way valve	ZTR 15-0,4	9670
Water heating battery	VBC 160	5458
Actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

	A	B	C	D	E	F	G	H	I	J	K	L	M
SAVE VSR 300/DE	1120	1040	602	582	231	188	112	160	178	136	281	505	461

Dimensions in mm.

VR 400 DCV/DE



- Up to 85% heat recover efficiency
- For approx. 200 m² living space
- Automatic change to summer operation (without heat recovery)
- Air volume 3-stage adjustable
- Humidity recovery, no condensate connection, no frost protection
- Internal leakage 0,1%
- User friendly, control panel CD 3 with LCD-display
- Modbus communication with RS-485

VR 400 DCV/DE are complete air handling units suitable for homes, smaller offices and similar premises. With EC-fan motors and a new regulation system the energy use is optimized to be able to meet the new regulations on energy management. Compared to AC-motors EC-motors maintain efficiency throughout the motor speed range when speed controlled and are therefore suitable to use in demand controlled ventilation units. Measurements show that an EC-motor reduces the energy use with up to 50% compared to a traditional voltage controlled AC-motor.

Technical data	
Art. no.	12529
Energy efficiency class	
Standard unit	B
Standard unit with accessories*	A
Voltage/Frequency	V/50 Hz 230
Power rating per fan at the operation point	W ca. 45 255,55 l/s at 80 Pa
SFP	kW/m ³ /s 1,53
Fuse	A 10
Input power, fan motor	W 2x121
Electrical heating battery	W 1670
Filter, supply air	F7
Filter, extract air	G3
Weight	kg 57

*Accessories see page 93.

SFP = Specific Fan Power (kW/m³/s)

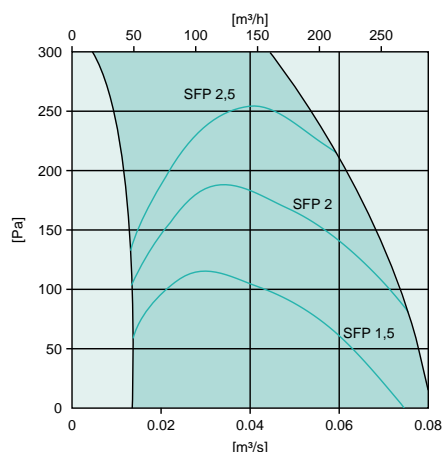
The SFP value stated applies to the complete unit.

LwA dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	54	48	51	45	44	36	31	24	20
Extract air	53	45	41	50	47	39	33	24	21
Surrounding	54	26	43	46	42	51	47	36	22

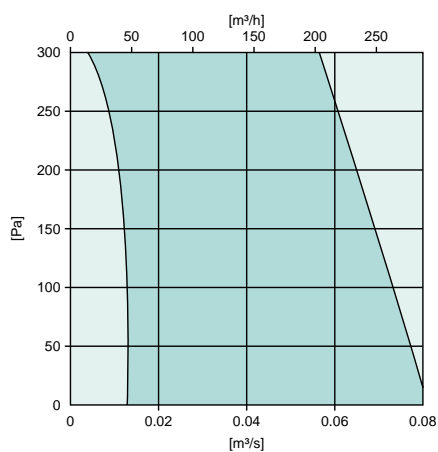
The sound data table indicates the sound power level L_{wA} , which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

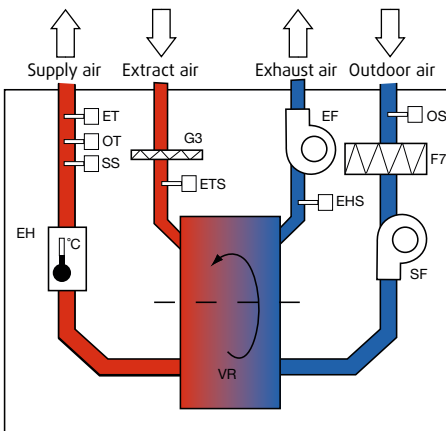
Supply air



Extract air



Scheme



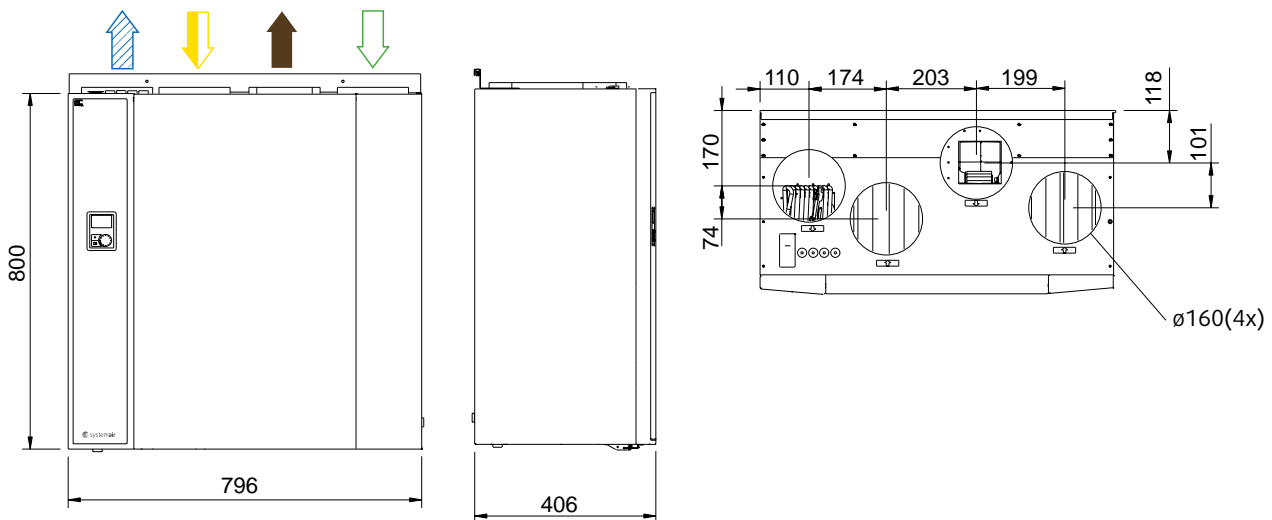
- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- EHS Exhaust air sensor
- OS Outdoor air sensor

Accessories

		Art. no.
Control panel	CD3	208175
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Fast clamp	FK 160	1610
Silencer	SCD 160	2558
3-way valve	ZTR15-0,4	9670
Shutter damper	EFD 160	7122
Water heating battery	VBC 160	5458
Actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

VR 700 DC/DE



Residential ventilation unit with efficient rotary heat exchanger and energy saving EC motors with constant air volume control and air volume balance. Modern technology gives low SFP factor (Specific Fan Power). The VR 700DC is double skinned, fully insulated and ready to plug-in. The unit will automatically alternate between normal operation with heat recovery and summer operation without heat recovery. This solution will also automatically recover chilled indoor air (from cooling).



- Up to 85% heat recovery efficiency
- For approx. 350 m² living space
- Automatic change to summer operation (without heat recovery)
- Air volume 3-stage adjustable
- Humidity recovery, no condensate connection, no frost protection
- User friendly, control panel CD 3 with LCD-display
- Modbus communications with RS-485

Technical data		
Art. no.	12523	
Energy efficiency class		
Standard unit	B	
Standard unit with accessories*	A	
Voltage/Frequency	V/50 Hz	230
Power rating per fan at the operation point	W	ca. 130 166,66 l/s at 80 Pa
SFP	kW/m ³ /s	2,21
Fuse	A	10
Electrical heating battery	W	1670
Filter, supply air	F7	
Filter, extract air	G3	
Weight	kg	72

*Accessories see page 95.

SFP = Specific Fan Power (kW/m³/s)

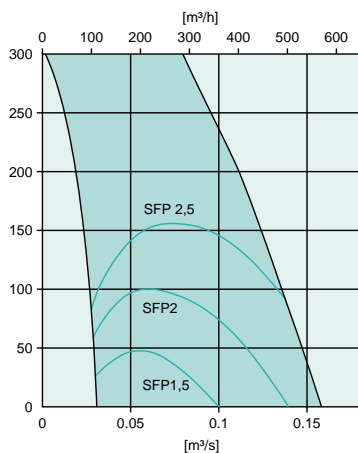
The SFP value stated applies to the complete unit.

LwA dB(A)	Mid-frequency band, Hz								
	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	67	48	62	61	59	57	57	50	42
Extract air	63	41	51	58	59	53	51	46	34
Surrounding	54	30	44	48	50	43	45	35	26

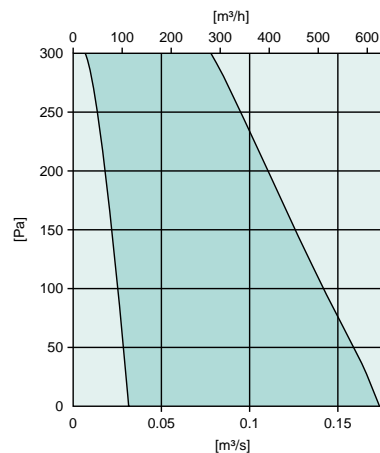
The sound data table indicates the sound power level L_{wA} , which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

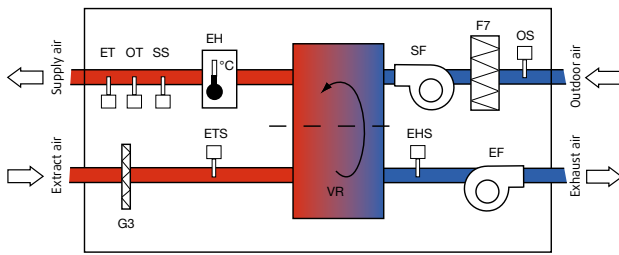
Supply air



Extract air



Scheme



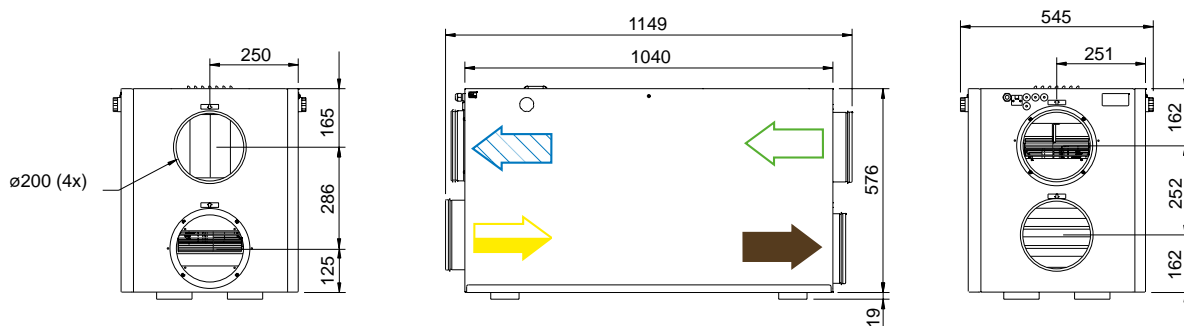
- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- SF Supply fan
- ETS Extract air temp. sensor
- EH Electrical heater
- G3 Filter extract air
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
- EHS Exhaust air sensor
- OS Outdoor air sensor

Accessories

		Art. no.
Control panel	CD3	208175
CEC cable, 15m	VK-12	24782
CEC cable, 6m	VK-6	24783
Fast clamp	FK 200	1611
Silencer	SCD 200	2560
3-way valve	ZTR15-1,0	9672
Shutter damper	EFD 200	7162
Water heating battery	VBC 200	5459
Actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverting plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

VR 700 DCV/DE



- Up to 85% heat recovery efficiency
- For approx. 350 m² living space
- Automatic change to summer operation (without heat recovery)
- Air volume 3-stage adjustable
- Humidity recovery, no condensate connection, no frost protection
- User friendly, control panel CD 3 with LCD-display
- Modbus communication with RS-485

VR 400/700 DCV and DC are complete air handling units suitable for homes, smaller offices and similar premises. With EC-fan motors and a new regulation system the energy use is optimized to be able to meet the new regulations on energy management. Compared to AC-motors EC-motors maintain efficiency throughout the motor speed range when speed controlled and are therefore suitable to use in demand controlled ventilation units. Measurements show that an EC-motor reduces the energy use with up to 50% compared to a traditional voltage controlled AC-motor.

Technical data

Art. no.	12528	
Energy efficiency class		B
Standard unit		B
Standard unit with accessories*		A
Voltage/Frequency	V/50 Hz	230
Power rating per fan at the operation point	W	ca. 130 149,33 l/s at 80 Pa
SFP	kW/m ³ /s	2,19
Fuse	A	10
Electrical heating battery	W	1670
Filter, supply air		F7
Filter, extract air		G3
Weight	kg	67

*Accessories see page 97.

SFP = Specific Fan Power (kW/m³/s)

The SFP value stated applies to the complete unit.

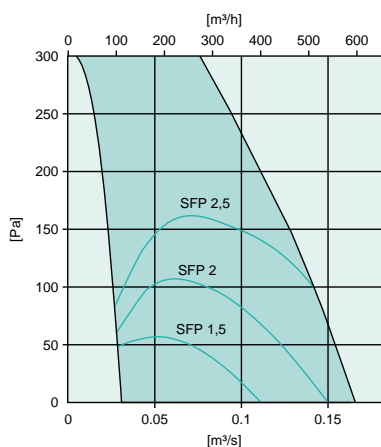
Mid-frequency band, Hz

LwA dB(A)	Tot	63	125	250	500	1k	2k	4k	8k
Supply air	63	47	58	56	57	53	49	41	27
Extract air	64	42	58	60	58	51	49	42	28
Surrounding	53	27	44	47	48	47	43	37	27

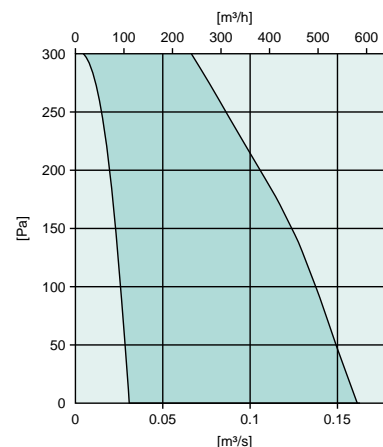
The sound data table indicates the sound power level L_{wAr} , which should not be confused with the sound pressure level L_{pA} (based on the operation point at 80 Pa).

Performance data

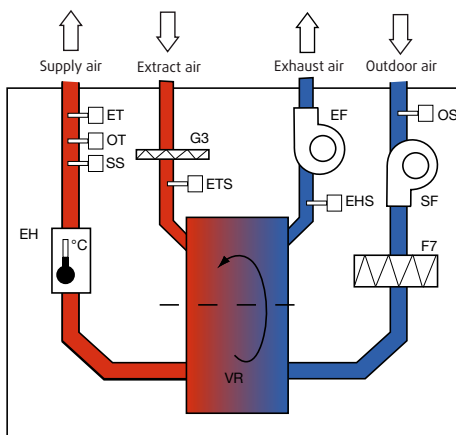
Supply air



Extract air



Scheme



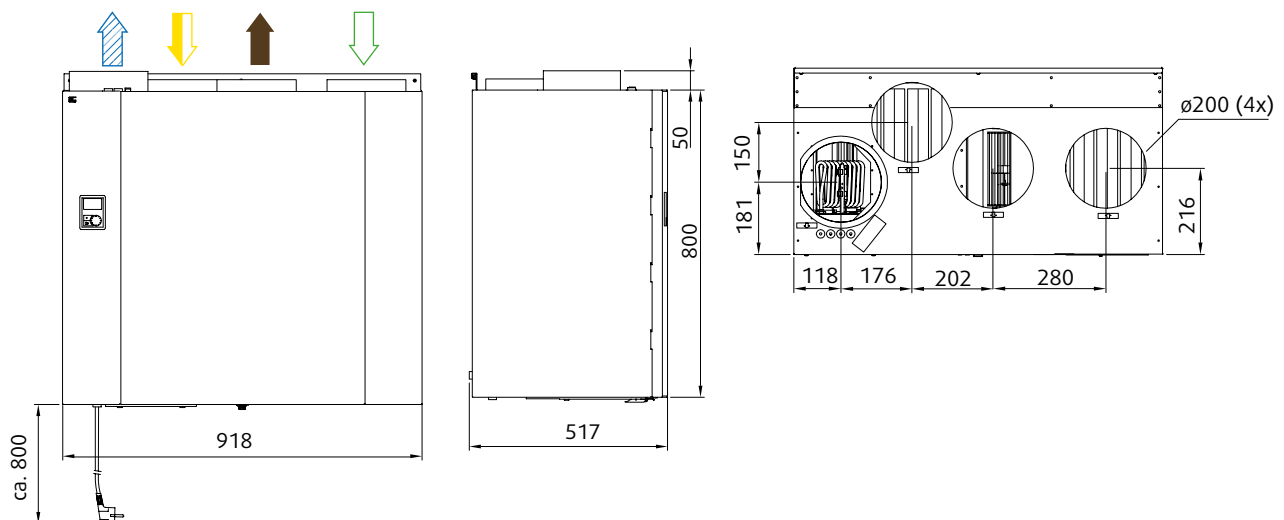
- F7 Filter outdoor air
- VR Rotary heat recovery unit
- EF Extract fan
- G3 Filter extract air
- ETS Extract air temp. sensor
- SF Supply fan
- EH Electric heater
- SS Supply air temp. sensor
- OT Overheating thermostat
- ET Emergency thermostat
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Accessories

		Art. no.
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Silencer	SCD 200	2560
3-way valve	ZTR15-1,0	9672
Shutter damper	EFD 200	7162
Water heating battery	VBC 200	5459
Actuator 0-10V	RVAZ4	9862
Transformer 24V	PSS48	204385
Surface sensor	TG-A 130	5159
Duct sensor	TG-K 360	4846
Input Modul Wireless	-	25128
SmartDial	-	25129

Accessories Energy efficiency class A		Art. no.
Wireless		
Diverging plug	CE/CD	37367
Cable	CEC	208263
Gateway Wireless	RS485	25130
CO2 Sensor Wireless	-	25126
Cabel-bound		
CO2 Transmitter	CO2RT-R-D	6993

Dimensions



➡ = Supply air
 ➡ = Exhaust air
 ➡ = Extract air
 ➡ = Outdoor air

Accessories

Control panel

For VR-400/700 and SAVE units.



- Plain text display
- User friendly control
- 3-stage adjustable
- Supply and exhaust air ventilator can be equalised
- Temperature control from 12°C to 22°C
- Weekly time switch integrated
- Alarm indicates possible malfunction and time for filter change
- Dimensions: 80x88x20 mm (WxHxD)

CD	Art. no.
CD 3	208175
CD 4	On request

SAVE VTR/VTC units for wall mounting are delivered with a built-in control panel.

The separate control panel CD, is used to the SAVE VSR units to remotely control the units.

Airflow and supply air temperature is set from one or more control panel(s). Symbol and text in the display indicate chosen settings; re-heater on, summer operation and time for filter change. Commissioning of airflow on supply and extract on each step is set from the CD panel. Timer function, for automatic change between day and night operation (installations in commercial buildings) is integrated. Alarms will indicate possible malfunctions and ensure safe and energy efficient operation.

The CD panel is connected to the unit by means of cable with quick connectors (modular plugs), alternatively via 4-pole terminal block. Diverging plugs to be used for fitting of more than one control panel.

Cable



With both side plug for CD control panel.

CEC	6 m	12m
Art. no.	24783	24782

Diverting plug



Twin plugs for installation of several control panels typ CD or CE for one unit. Cable approx. 0,2 m

CE/CD	
Art. no.	37367

CO2 Transmitter



Measuring the CO₂-level gives a direct indication about the indoor air quality. With this basic information ventilation can be controlled with high precision and air quality improved. At the same time supply air will only be increased when it is necessary thus cutting energy cost.

CO2RT-R-D	
Art. no.	6993

Raum-Hygrostat HU



Room humidistat HU used for demand control of fans or residential air handling units. Enables humidity control devices to be switched on or switched fan speed according to needs. Monitoring and controlling relative air humidity in rooms, suitable for wall mounting. Variable relative humidity as set point based on printed scale in % rh. Set point adjuster on front with setting range 30...90% rh. Measurement is effected using a sensor made of stabilised synthetic textile tape. The Housing is of pure-white, flame-retardant thermoplastic (RAL 9010). Included micro switch with fixed switching difference X_{Sd} (6% rh). Screw terminals for wires of up to 1.5 mm². Switching capacity: up to 3 A. When the relative air humidity is increasing and after the upper change-over point is reached, contacts 1-2 are opened and 1-3 are closed. Set point X_{Sd} corresponds to the upper change-over point. The contacts are reset when the humidity value falls below the upper change-over point again by the amount of the fixed switching difference. The ageing effect of the measuring element causes the change-over point to shift gradually and permanently. Therefore, recalibration may be necessary.

HU	
Art. no.	30213

Gateway wireless



Wireless transmitter and receiver to be placed close to the residential unit. Works together with wireless control panel, CO₂ sensor, RH sensor and input module. The gateway is always needed if a wireless sensor or control panel is desired for the system. Compatible with residential air handling units SAVE or VR at least with plate PCUEC3 and version 4.02.00.

RS485	
Art. no.	25130

CO₂ sensor wireless



Wireless CO₂ sensor for residential units, for simplified installation. Should be ordered together with a RS485 Gateway wireless.

CO ₂ sensor wireless	
Art. no.	25126

Humidity sensor wireless



Wireless RH sensor for residential units, for simplified installation. Should be ordered together with a RS485 Gateway wireless.

Humidity sensor wireless	
Artikel-Nr.	25127

Cable w/plug & end bushing



Communication cable to connect the wireless gateway (Art. no. 25130) to residential unit SAVE or VR. Cable length approx. 2 m.

CEC	
Art. no.	208263

Input Module Wireless



Wireless digital input. Can be used with any sensor that you have a need for (Pressure guard, presence sensor etc). With this input you will simplify the installation and no need for long cables around the house will be needed. One digital input is normally open and one is closed. Should be ordered together with a RS485 Gateway wireless.

Art. no. 25128

SmartDial



Wireless control panel with communication through RF gives the user access to the following functions and features through the panel:

- Temperature control
- Airflow control
- Party mode
- Home/ Away mode
- Auto mode
- Alarm

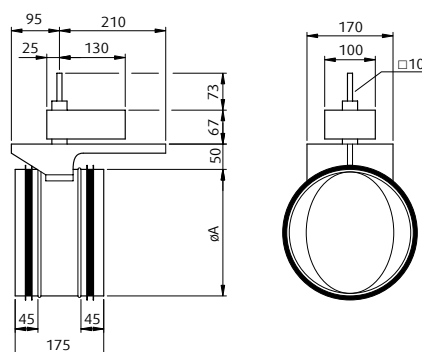
Art. no. 25129

Circular shutter damper



The damper is provided with 230 V motors with spring-return actuators. EFD are made in leakage performance class 3 according to EN 1751:1998 Annex C.2. Outdoor/exhaust air dampers have the function to prevent the hot water battery to freeze. EFD connects to a connection block inside the electrical box.

EFD	160	200	250	315
Art. no.	7122	7162	6748	6749
øA	160	200	250	315



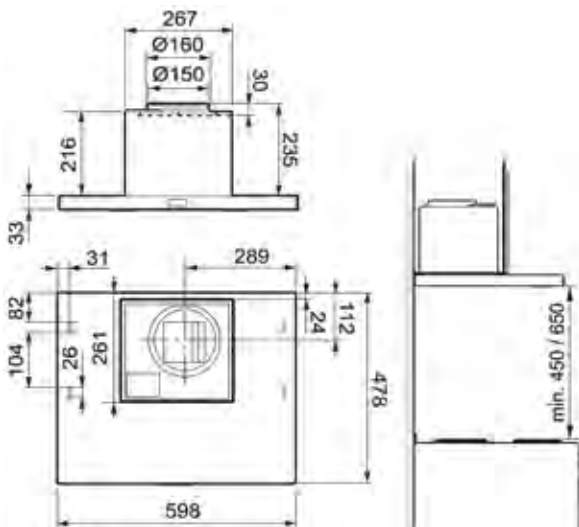
Cooker hood



602-10/B	Art. no.
White	47561
Stainless Steel	47562

Suitable for SAVE VSR 150/B, SAVE VTR 200/B and SAVE VTR 300. Modern cooker hood for fitting below, recessed or between cabinet and has a slim 33 mm front. The cover provides good lighting over the workspace with its LED lighting (2* 2W) and has a stainless steel wire filter easily cleaned by hand or in the dishwasher (recommended to do once a month). It's construction and design allows for good odor extraction.

Dimensions



Wall bracket



For standard units as DC units or SAVE VSR units. Manufactured from galvanised steel. The corners are welded. Available in pairs.

WBK 315/355	Art. no.	2721
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Telescope suspension



For the SAVE VSR 150.

Telescope	Art. no.	37251
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Wall mounting kit VSR 150/B



Wall mounting kit for horizontal installation of the SAVE VSR 150/B unit.

Wall mounting kit VSR 150/B	Art. no.	115599
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Ceiling mounting kit



Ceiling mounting kit for SAVE VSR 300 and SAVE VSR 500. The kit is necessary for mounting the Unit horizontally under the ceiling.

Ceiling mounting kit	Art. no.
SAVE VSR 300	131610
SAVE VSR 500	131620

Where Oil, Gas and water once came – we now do it all with Air.

Air heating system from Systemair



Genius is the compact Central Building Services Unit which can do everything: ventilation, heating, cooling and hot water production. All Genius needs is a secondary air circuit in addition to the conventional ventilation ducts. Thanks to the integrated air/air heat pump, a heating system using water becomes unnecessary.

KEY

- Outdoor air
- Supply air
- Secondary air
- Extract air
- Exhaust air

Nowadays, whoever builds a new building or renovates an old one must fulfil the European Directive Energy Performance of Buildings (EPBD). The result is often highly insulated, airtight building envelopes which require mechanical residential ventilation – for a healthy indoor climate and as little energy loss as possible. At the same time, thanks to today's improved standards for insulation, the heating energy required is less. For this reason, classical heating systems are generally overdimensioned for energy-efficient houses. This is why we developed Genius. A central building services unit which with its integrated air-air heat pump is, on the one hand, able to ventilate efficiently with heat recovery, and on the other hand is able to use the air for heating or cooling the rooms. But that's not all: thanks to an integrated air-water heat pump, even hot water production is included. That is to say, you only need one system. This saves a great deal of time in the planning phase, reduces investment costs and, what's more, needs less space. Convincing arguments for demanding customers. And promising prospects for you.

How the air heating system works

At the heart of the system is the Genius combi-unit. It continually supplies the living and sleeping quarters with fresh, clean air, and transports the extract air to the exterior, via the kitchen, bathroom and WC. A rotary heat exchanger removes the heat from the extract air and, if necessary, uses it to preheat the cool supply air. Furthermore, it ensures that the air is not too dry. In summer, the principle functions in reverse, so that the extract air cools the supply air and excessive ambient air humidity is removed.

Heating and cooling modes

The heating load is covered by an increase in the volumetric flow. Here a fan draws air from the living area via a separate duct system (secondary air). A stepless controlled air-air heat pump heats this depending on the requirements and conveys it to the living and sleeping quarters. In summer, the heat pump works in reverse so that the dwelling is cooled.

Hot water production

All the functions of Genius can be used individually or in parallel. This applies to hot water production as well. A 150 litre tank is integrated for storing the drinking water. A heating rod is installed inside to ensure the system functions perfectly, even if the outside temperatures are extremely low.

Poor Indoor Environment is History with the Genius unit

The idea of using air as a heat transfer medium and transporting it from room to room through ducts has been around a long time. However, until now it was common for unpleasant smells and impurities to be transported too. Thanks to Systemair's secondary air system, your customers will only experience pure air quality, because the extract air system remains completely untouched. This ensures that the transmission of odours or substances is excluded. Furthermore, high-quality pollen and dust filters clean the air. The result: the very best air quality and a pleasant indoor climate for your customers.

One for all. All with air.

Genius – the modern central building services unit

Genius from Systemair is the intelligent solution for detached energy-efficient houses*. Saving space, it combines controlled residential ventilation including heat recovery (up to 85%) with heating / cooling and hot water production. In combination with a photovoltaic system, it is even possible to realise a virtually self-sufficient and CO₂ neutral system. Best of all: with Genius you save a lot of time in the planning phase, because Systemair will take on the entire project engineering for you.

Advantageous. For your customers and for you.

All the functions of Genius are possible independently or in parallel operation – just as you need them. This means the optimum utilisation of the required energy and conservation of resources. Additional electric heating is only necessary in exceptional situations, since Genius is equipped with modern, powerful heat pump technology.

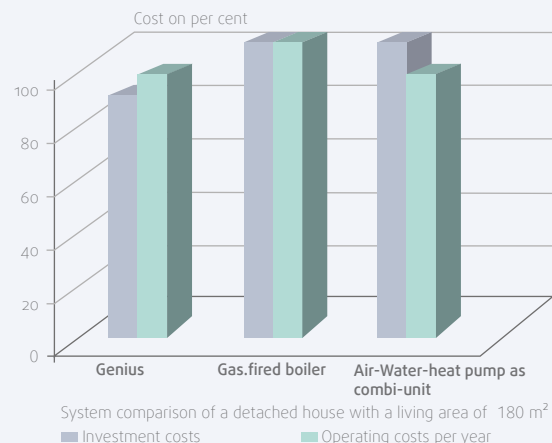
This makes high room temperatures possible, even on very cold days. If your customer still wants to have a multi-fuel or wood-burning stove, or a tiled stove, there is nothing to stop them: the heat from the stove is distributed throughout the entire house via the secondary air. In summer, the stepless controlled heat pump works in reverse, actively cooling the ambient air. This way, your customer can enjoy an ideal indoor climate and the highest level of comfort throughout the whole year with just one system.

By the way: Genius can easily be operated via the Internet. This means you and your customers have unlimited access, even from outside.

Clever, don't you think?

! Good for the environment and the budget

Modern buildings require a ventilation system. So the expenditure for this is unavoidable. However, with Genius you save by not having to install a separate distribution system for the heating, which also results in lower maintenance costs. Furthermore, Genius is an absolute pioneer with regard to efficiency, making the operating costs comparable or cheaper than for other systems.





Ventilation module

- Rotary heat exchanger with humidity recovery
- Heating and cooling of the building via the ventilation system's supply air ducts.



Heat pump module



- With stepless controlled compressor for precise adjustment
- Reversible air-air/air-water heat pump for heating/cooling/hot water

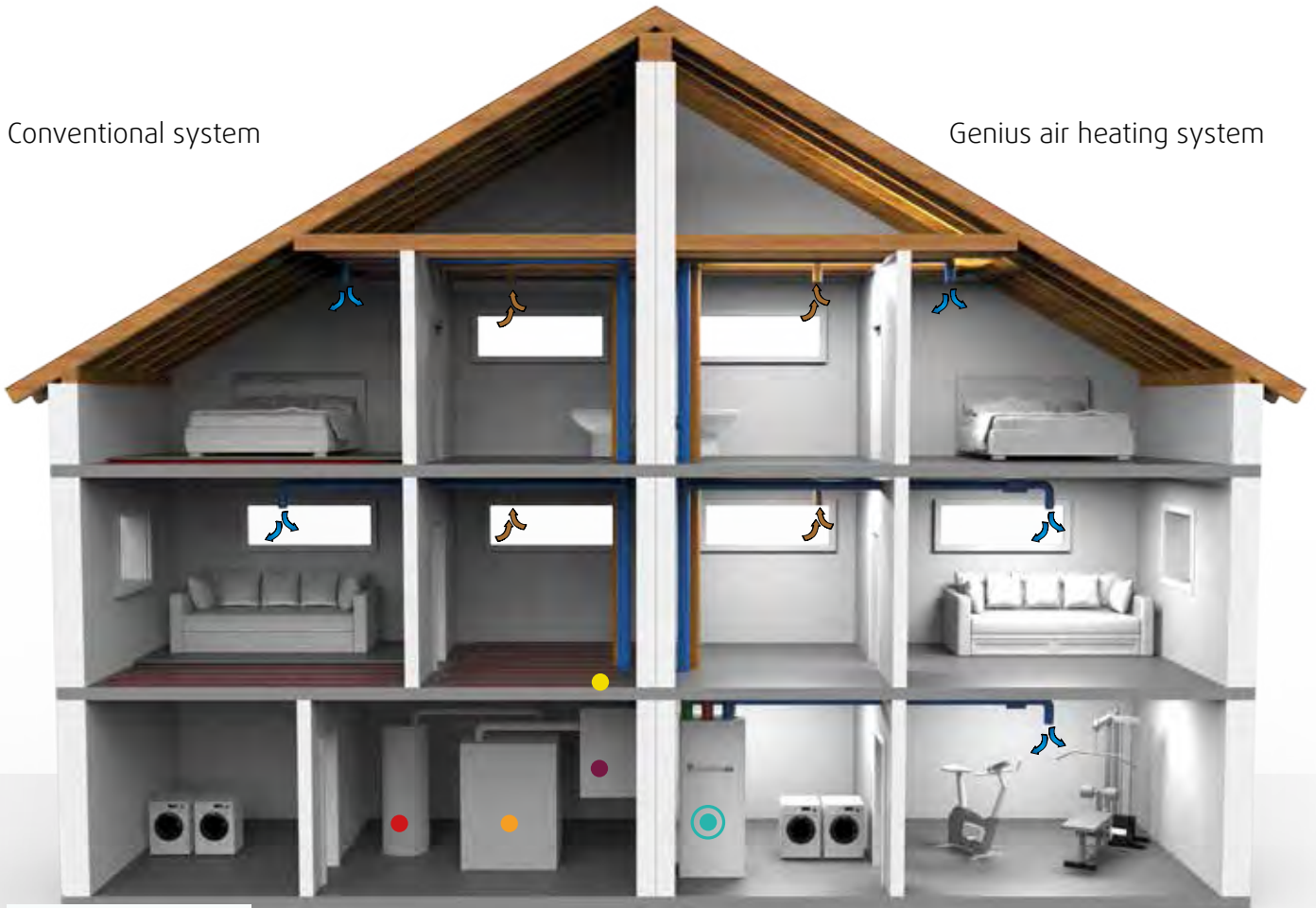


Hot water module

- Incl. control cabinet and 150 L hot water tank
- Hot water production parallel to heating and cooling operation



Increased comfort, decreased space requirement

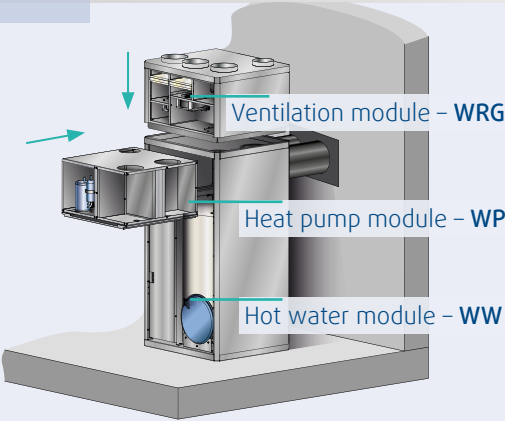


KEY

- Genius
- Hot water tank
- Boiler
- Air handling unit
- Underfloor heating

! Good to know

The individual Genius components for ventilation, the heat pump and hot water are installed in compact modules, which can simply be pushed into the housing or placed on top. This makes installation and maintenance easier.



● **An overview of all the advantages of Genius:**

- Humidity recovery via rotary heat exchanger
- Low space requirement
- Control system optimises consumption
- Easy to operate: via display, app, Internet, cloud
- Advanced components from renowned manufacturers (ebmpapst, Danfoss, Carel, Regin, Mitsubishi)
- PLUS X AWARD innovation prize

- In general, no additional heating is necessary – not even on very cold days
- Heat recovery up to 85%
- Project engineering by Systemair
- Integrated 150 litre drinking water storage tank
- Reversible heat pump
- Contemporary, dimensioned for the requirements of energy-efficient houses

- Can be used with independent fireplace
- Possible to combine with photovoltaics



Exceptional in every discipline.

The technical data

Electrical data

Voltage	V	230
Frequency	Hz	50
Max. compressor power consumption	W	max 1800
Max. fan power consumption Ventilation module	W	each 80
Max. fan power consumption Heat pump module	W	170
Storage charging pump power consumption	W	6–28

Ventilation

Air flow (normal mode)	m ³ /h	190
Max. air flow heating/cooling (incl. secondary air)	m ³ /h	600
Outdoor air heat recovery	%	up to 85
Outdoor air filter class		F7
Extract air filter class		G4
Secondary air filter class		G4

Dimensions/weights

Width	mm	865
Height	mm	2070
Depth	mm	750
Ventilation modul weight	kg	75
Heat pump modul weight	kg	60
Basic Modul/hot water unit weight	kg	170
Total weight when empty	kg	305
Total weight when full	kg	460

Other

Refrigerant		R410A
Refrigerant fill quantity	kg	1.2
Tank volume	l	150
Expansion tank	l	6
Hot water safety valve	bar	6

Connections

Cold water		1" AG
Hot water		1" AG
Circulation		1" AG
Condensate	mm	DN 40 hose connection (5 pcs)
Safety valve		3/4"
Outdoor air ventilation	mm	DN 160
Outdoor air heat pump	mm	DN 250
Extract air	mm	DN 160
Supply air	mm	DN 200
Secondary air	mm	DN 200
Exhaust air ventilation/Heat pump	mm	DN 250

Performance data

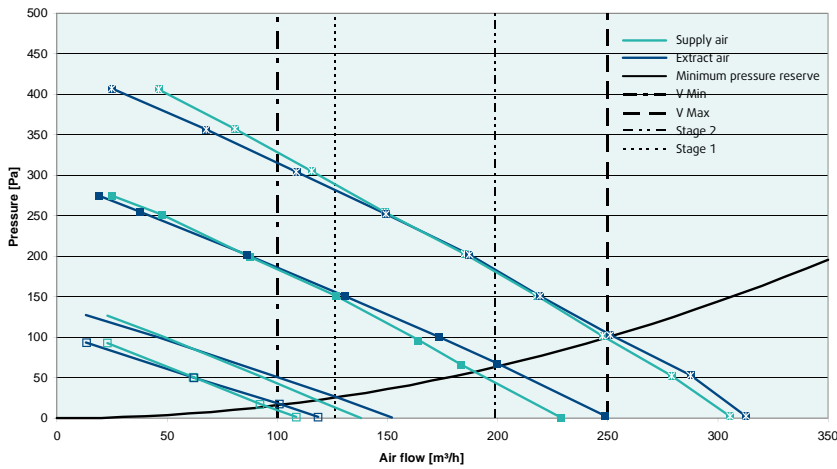
Max. heating capacity	kW	6
Max. cooling capacity	kW	4
PTC element output	W	500 each
Heating rod output WW	kW	3

Setpoint airflow Heat pump	m ³ /h	125	190	
	%	60	60	
Temperature outdoor air	°C	-3	10	10
Temperature extract air	°C	21	21	21
Temperature supply air	°C	41.8	43.4	44
Heat recovery efficiency total unit (fictitious)	%	253	399	391
Performance rating (COP) total unit		6.39	5.99	6.52
Volume related electr. compressor capacity	W/(m ³ /h)	4.63	4.52	4.69
Volume related electr. ventilation capacity	W/(m ³ /h)	0.73	1.11	1.25
Electrical efficiency		5.9	5.44	5.97

Central building services unit

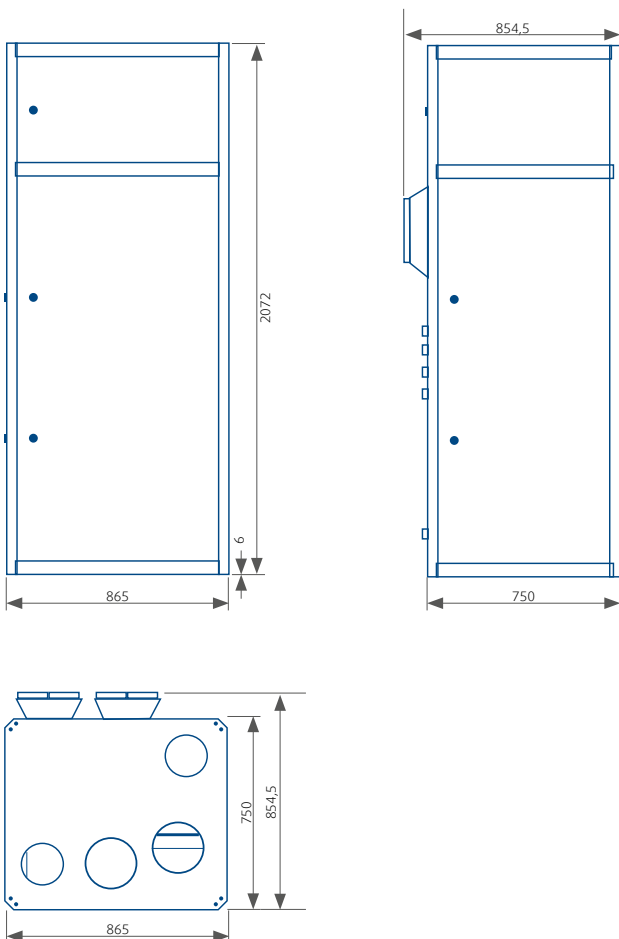
	Art. no.	Description
Genius	36098	Whole building services in Haustechnik in one device. Functions: Heating, cooling, ventilation and water heating.
Genius Modul PTC	312784	PTC heating element
Argus-RS-CDO	2994	Room controller, connection via RS485 (Modbus or EXoline)
Filter F7, supply air	306380	Supply air filter for Genius, filter class F7
Filter G4, extract air	306346	Extract air filter for Genius, filter class G4
Filter G4, secondary air	306374	Secondary air for Genius, filter class G4

Air flow/pressure diagram



Distinct design, concentrated power

Despite its many functions, Genius doesn't take up much space. What's more, the appealing design of the unit means it doesn't need to be hidden away in a special service room.



! Products you can rely on



Quality:

Systemair is certified according to ISO 9001, ISO 14001 and ATEX. Our testing and development laboratories are among the most modern facilities in Europe; measurements are taken according to international standards such as AMCA and ISO.



Save energy, reduce operating costs!

Our "Green Ventilation" label identifies all products which are particularly energy-efficient. All products which are marked with "Green Ventilation" unite economy with energy-efficiency.



Prize-winning:

Genius was awarded the Plus X Award in the categories Innovation, High Quality, Functionality and Ecology.



systemair.de/genius

You need more technical information?
Follow the QR code to the Internet.

Comfortable in all areas.

Modules, control, functions



Modern technology requires contemporary, convenient operation. This is why we have designed Genius so that you and your customers can control the system easily with a PC and even via the Internet: as an expert via the service level and as an end user via the user level. This enables you and your customers to have permanent

access, even from outside, and an optimum overview of all functions and parameters. Control of individual rooms via a display is just as easy as controlling the system via an operating panel on the unit. The Systemair App permits you to control the system using your mobile phone.

The functions in detail:

- 4 ventilation steps according to DIN 1946/6:
 - Ventilation for humidity protection
 - Reduced ventilation
 - Nominal ventilation
 - Intensive ventilation
 - Additional option to switch off
- Temperature control in the winter:
 - Setpoint adjustment based on external temperature
 - Temperature control of individual rooms
 - Fixed value
 - Setpoint = average setpoint temperature for the room
 - Setpoint = Reference room setpoint
- Temperature control in the summer:
 - Setpoint adjustment based on external temperature
 - Fixed value
 - Cooling can be deactivated
- Fireplace operation
- Legionella control program
- Fast charging hot water
- Emergency mode hot water
- Emergency mode heating
- Adjustment of the maximum supply air temperature based on external temperature, alternatively manually
- Minimum supply air temperature
- Time programs:
 - Ventilation/heating/cooling
 - Hot water: automatic, individual
 - Decrease mode: setpoint temperature, ventilation stage
 - Holiday mode
- Filter monitoring
- Passive night-time cooling, individually adjustable
- Chart function: recording of conditions/parameters
- Electric reheating elements (PTCs):
 - Temperature control of individual rooms
 - Emergency operation
 - Start delay
 - Can be switched off



Sven Haustein, haalplatz architekten, Schwäbisch Hall, Germany

„For years now we have been planning high-quality, airtight houses. They are very well-insulated with the best components and very low energy consumption. But due to the lack of alternatives for building services, until now we have always had to use expensive elements which were mostly oversized for the specific requirements, or were to a certain extent unnecessary. The Genius combi-unit is exactly the alternative that we needed.“

Systemair duct systems

Very flexible

Spiral seam pipe or plastic pipe system

Systemair offers spiral seam pipes in round and oval versions (flat duct) and Systemair-FLEX⁺, ISO⁺, OVAL⁺ plastic pipes. All inner sides are smooth and therefore aerodynamical and easy to clean.

Dimensioning of duct systems

The dimensioning of the ducts for the ventilation system is made according to the requirements of the unit (calculation of the required supply air according to DIN 1946-6) and according to the situation in the building. Flow engineering and acoustic properties have first priorities. The duct installation has to be coordinated early enough with other disciplines on site. The duct size depends on the air volume. To avoid high pressure losses and unwanted noise, we recommend an air velocity of max. 3 m/s in the main duct. When round, rectangular or oval ducts are used, the air velocity is lower at the same pressure loss in the duct. Different diameters must not be proportional installed. The pressure differences between the longest and the shortest sections have to be reduced to guarantee the previously defined air flow for all air outlets.

SystemairFLEX⁺ the flexible plastic pipe

The FLEX⁺ pipe is made of physiologically and toxicologically safe PE with no recycling materials. Thus, it is neutral in odour, free of halogens, emission-free, antistatic and antibacterial. Easy and time saving installation by a click system. Hermetically sealed connections ensure an absolutely air tight system without further sealing work. Therefore, it works economically and hygienically because no air can leak and no other substances can enter from outside. Deliverable sizes: DN 50, 63, 75, 90.

Systemair OVAL⁺ air distribution system with click system

The OVAL⁺ is made from a physiologically harmless and non-toxic plastic that does not contain any recycled additives. This makes it odourless and free of halogen and emissions, as well as antistatic and antibacterial. The smooth inside walls improve aerodynamics. The system can also be stood on and is easy to integrate in flooring thanks to its low height. The click system makes assembly quick and easy.

Available sizes: 133 x 52mm, 45m³/h at 3m/s.





Systemair ISO+ a perfect combination of heat and sound insulation

Outer sheath made of polyethylene with high density (HDPE); inner sheath made of polyolefin with closed cell structure. Flexible fast clamp made of EPDM. The special design of the pipes provides thermal and acoustic insulation. This pipe should be preferably used as a connection between unit and facade (outdoor and extract air) and in unheated areas. Available nominal widths (inner diameter): DN 125 and DN 180.

Flat duct

Flat ducts are made of galvanized steel sheet. The elements are made of stainless steel and are connected by a plug-in system. Fixing and sealing is made by cold shrink tape.

Available sizes:

- System 100 (129 x 52); length 3 m
- System 151 (208 x 52); length 3 m

Spiral seam pipe with telescopic pipe

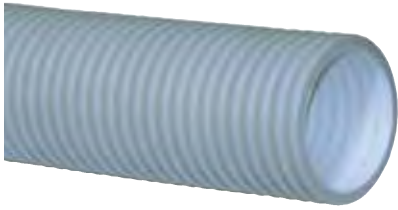
For duct systems with spiral seam pipes, Systemair uses folded spiral seam pipes with a length of 1.2 m as well as telescopic pipes. The elements are equipped with rubberlip seals. The length of the telescopic pipe can be freely adjusted. The most important advantage of this duct system is that it can be installed without cutting or trimming work. This saves installation time and makes maintenance and cleaning easier. All joints have to be fixed by sheet metal screws and also sealed with tape.

Pipe kit available

Ventilation systems from Systemair are individually planned for each building. The air volume is calculated according to DIN 1946-6, the unit is accordingly specified and the duct system is planned inclusive silencers, insulation, outlets and mounting material. The duct system is assembled and delivered according to the material list of the planning.



SystemairFLEX+ plastic duct system



The flexible duct system from systemair ensures an optimal and safe air distribution in a building. Due to the hermetic joints the system is absolutely airtight. So it works economically and hygienically because no air can leak and nothing can penetrate into the duct from the outside. Due to the small diameters and the click-system FLEX+ is easy and space-saving to install and flexible to adapt.

- Material: PE without recycling rate
- Antistatic and antibacterial
- Operating temperature: -20 °C to +60 °C
- Ring stiffness: 8 kN/m²
- Fire classification: DIN EN 13501-1

Technical Data Sheet
Systemair Flex+ - duct system

DN	Ø [mm]	Ø [mm]	Max. weight [kg/m]	Bending radius [m]
DN 50	51	41	0,4	0,15
DN 63	64	54	0,5	0,15
DN 75	76	64	0,6	0,15
DN 90	91	78	0,7	0,15

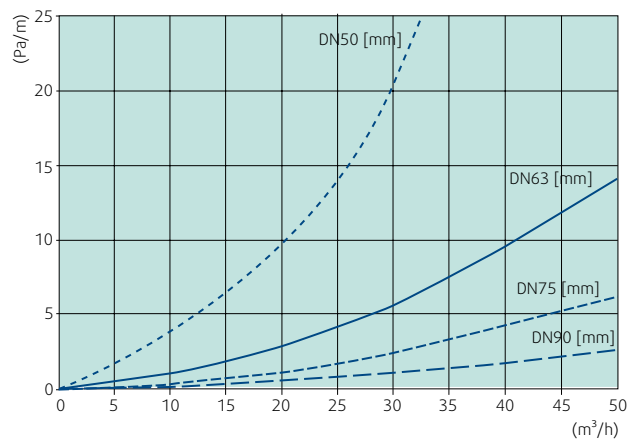
Duct type: composite material, smooth inner surface, low pressure losses
Resilience: > 8 kN/m², according to EN ISO 9969
Length: flexible duct, 50 m/bundle
Color: grey outside, white inside
Packing: duct is closed with two end plugs and packed in plastic bag (UV protected)
Material properties: physiologically and technologically safe PE, flame-retardant, antibacterial and recycled components, odourless, halogen- and emission free, lightness class D as per DIN EN 12237
Special treatment: antistatic and antibacterial inner surface, normal flammability as per building material class E, DIN EN 13501-1

Technical Data Systemair Flex+ - terminals and diverter
Material properties: physiologically and technologically safe PE, flame-retardant, antibacterial and recycled components, odourless, halogen- and emission free, lightness class D as per DIN EN 12237
Special treatment: antistatic and antibacterial coating, normal flammability as per building material class E, DIN EN 13501-1

The Systemair Flex+ - duct system offers ideal preconditions for perfect air hygiene.

Systemair GmbH · Seehöfer Straße 45 · 97944 Windsbach
 Telefon 0 97 92 72 72-0 · info@systemair.de · www.systemair.de

Pressure drop



Air duct	Ø outside [mm]	Ø inside [mm]	Max. corrugation inside [mm]	Bending radius [m]
DN 50	51	41	0,4	0,15
DN 63	64	54	0,5	0,15
DN 75	76	64	0,6	0,15
DN 90	91	78	0,7	0,15

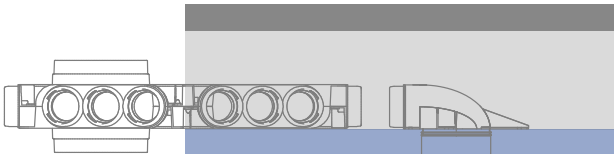
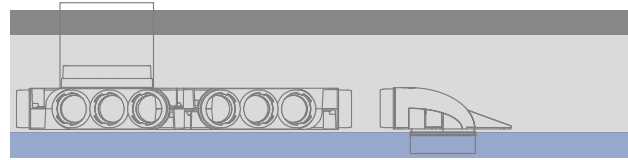
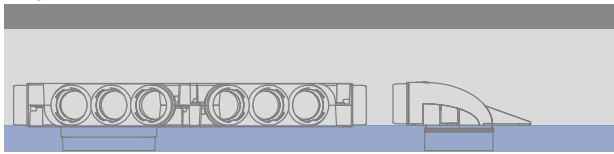
Pressure drop data

	DN 50			DN 63			DN 75			DN 90			
Air flow in m ³ /h ca.:	2 m/s	2,5 m/s	3 m/s	2m/s	2,5 m/s	3 m/s	2m/s	2,5 m/s	3 m/s	2m/s	2,5 m/s	3 m/s	
1 duct	10 m ³ /h	12,5 m ³ /h	15 m ³ /h	15 m ³ /h	20 m ³ /h	25 m ³ /h	22 m ³ /h	28 m ³ /h	34 m ³ /h	34 m ³ /h	42 m ³ /h	51 m ³ /h	
2 ducts	20 m ³ /h	25 m ³ /h	30 m ³ /h	30 m ³ /h	40 m ³ /h	50 m ³ /h	44 m ³ /h	56 m ³ /h	68 m ³ /h	-	-	-	
3 ducts	30 m ³ /h	37,5 m ³ /h	45 m ³ /h	45 m ³ /h	60 m ³ /h	75 m ³ /h	-	-	-	-	-	-	
Length of ducts (m)	2	7,6	10,0	12,6	4,0	5,6	8,4	2,6	4,0	6,0	2,6	4,0	5,4
	4	15,2	20,0	25,2	8,0	11,2	16,8	5,2	8,0	12,0	5,2	8,0	10,8
	6	22,8	30,0	37,8	12,0	16,8	25,2	7,8	12,0	18,0	7,8	12,0	16,2
	8	30,4	40,0	50,4	16,0	22,4	33,6	10,4	16,0	24,0	10,4	16,0	21,6
	10	38,0	50,0	63,0	20,0	28,0	42,0	13,0	20,0	30,0	13,0	20,0	27,0
	12	45,6	60,0	-	24,0	33,6	50,4	15,6	24,0	36,0	15,6	24,0	32,4
	14	53,2	-	-	28,0	39,2	58,8	18,2	28,0	42,0	18,2	28,0	37,8
	16	60,8	-	-	32,0	44,8	-	20,8	32,0	48,0	20,8	32,0	43,2
	18	-	-	-	36,0	50,4	-	23,4	36,0	54,0	23,4	36,0	48,6
Pressure (Pa)													

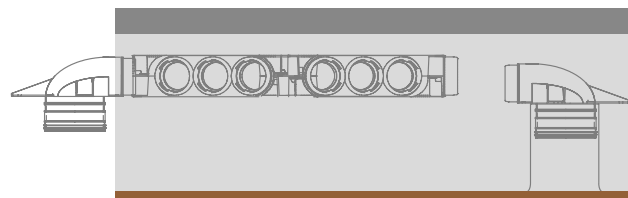
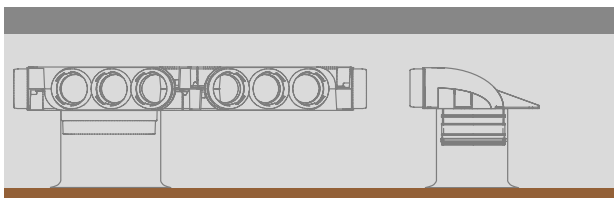
Applications

In concrete

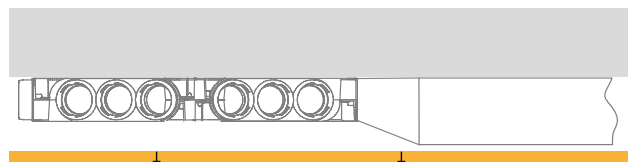
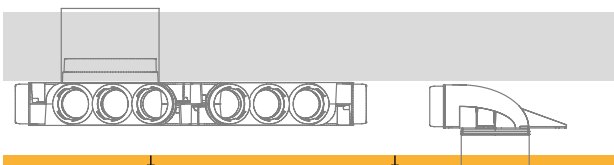
Filigran slab



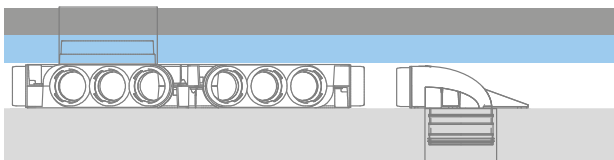
In-situ concrete



In a suspended-ceiling

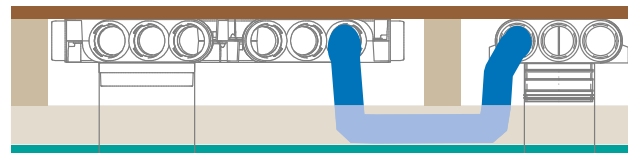


In modular ceilings











min. h = 80 mm

In a suspended timber ceiling

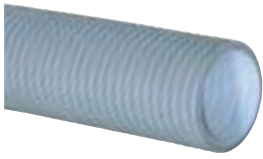


Ventil connection in lightweight construction wall



-  Flooring
-  Concrete
-  Filigree ceiling
-  wall or ceiling lining (plasterboards/wood)
-  Wood
-  Insulation
-  Suspended ceiling
-  Stone/insulation

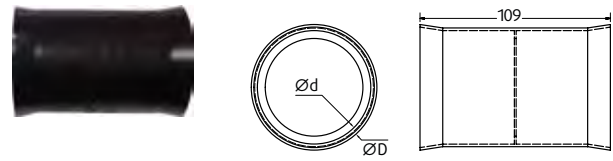
FLEX+ flexible plastic duct



Delivery length: 50 m/roll.

	DN	Art. no.
FLEX+ FR50	DN 50	309462
FLEX+ FR63	DN 63	309461
FLEX+ FR75	DN 75	310975
FLEX+ FR90	DN 90	310976

FLEX+ duct connection



Made of plastic to connect FLEX+ ducts.
Incl. 2 sealing rings.

	DN	Art. no.	Ø d mm	Ø D mm
FLEX+ RV50	DN 50	309468	-	-
FLEX+ RV63	DN 63	309467	65	72
FLEX+ RV75	DN 75	310991	77	84
FLEX+ RV90	DN 90	310992	92	100

FLEX+ duct insulation



Insulation thickness: 13 mm
Delivery in 2 m pieces.

	DN	Art. no.
FLEX+ RI 50/60 m	DN 50	310988
FLEX+ RI 63/48 m	DN 63	310989
FLEX+ RI 75/40 m	DN 75	310990
FLEX+ RI 90/26 m	DN 90	314302

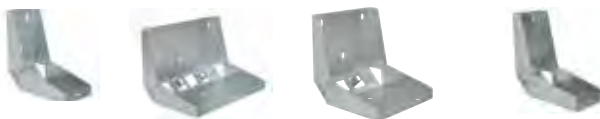
FLEX+ duct cutter



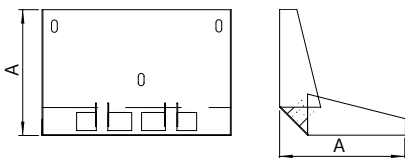
Useable for FLEX+ FR ducts.

	DN	Art. no.
FLEX+ RS50	DN 50	310993
FLEX+ RS63	DN 63	309475
FLEX+ RS75	DN 75	310994
FLEX+ RS90	DN 90	310995

FLEX+ angle plate 90°

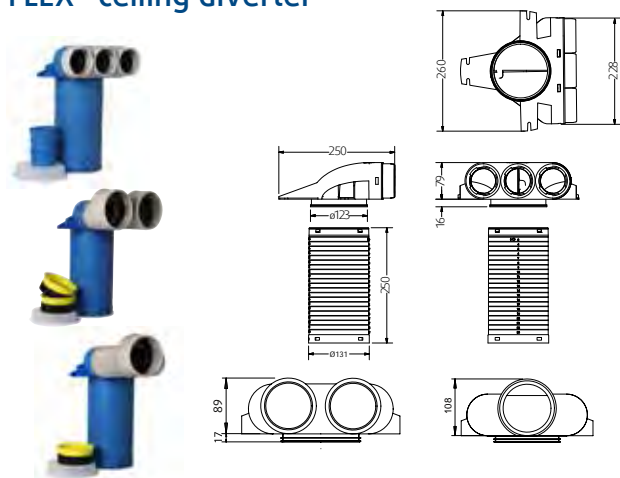


Made of galvanized steele. Redirecting of FLEX+ ducts.
Delivery with 1 cable strap.



	Art. no.	A	
FLEX+ BS 90°/1xDN63 - 1 duct	DN 63	309472	153
FLEX+ BS 90°/3xDN63 - 3 ducts	DN 63	309473	153
FLEX+ BS 90°/2xDN75 - 2 ducts	DN 75	311402	189
FLEX+ BS 90°/1xDN90 - 1 duct	DN 90	311401	226

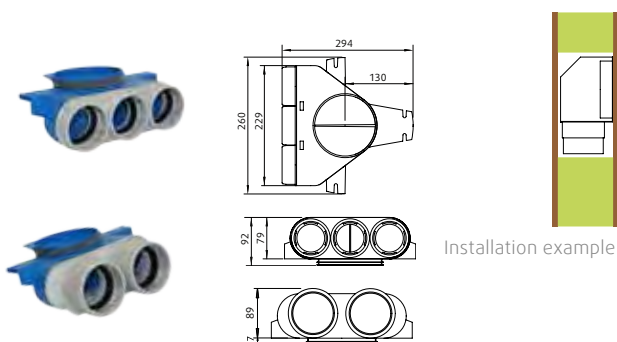
FLEX+ ceiling diverter



Made of plastic. Useable to connect FLEX+ to valve.
End caps are included.

Typ	Art. no.	Length of socket*	Connections
DN 63 FLEX+ US 3x63/125/230	313739	230	3x DN 63 + 1x DN 125
DN 75 FLEX+ US 2x75/125/230	313740	230	2x DN 75 + 1x DN 125
DN 90 FLEX+ US 1x90/125/230	313741	230	1x DN 90 + 1x DN 125
DN 90 FLEX+ US 2x90/125/230	313743	230	2x DN 90 + 1x DN 125

*Length changeable

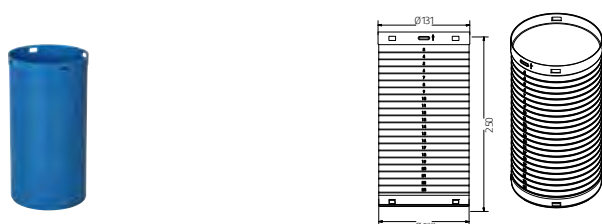


Wall diverter

Inside wall with min. 80 mm. Length of socket 13 mm.
Not to be used for installation in/on the floor.

Typ	Art. no.	Length of socket	Connection
DN 63 FLEX+ US 3x63/125/13	311995	13	3x DN 63 + 1x DN 125
DN 75 FLEX+ US 2x75/125/13	313353	13	2x DN 75 + 1x DN 125

FLEX+ extended adapter for diverter

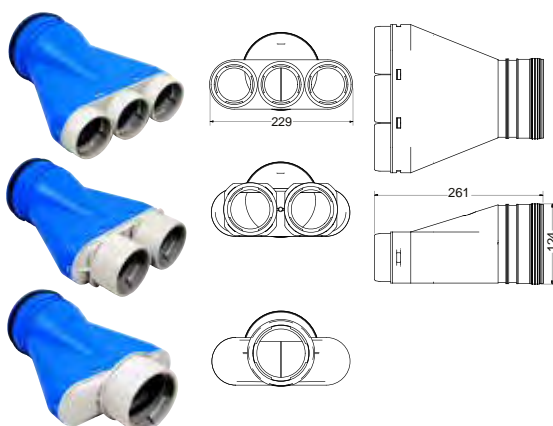


Made of plastic.

	Art. no.	Length of socket*
FLEX+/OVAL+ US 230	313742	230

*Length changeable

FLEX+ adapter

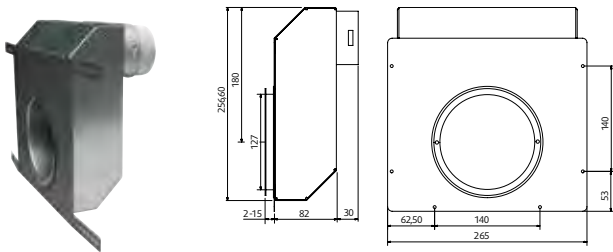


Asymmetric adapter

Made of plastic. To connect FLEX+ or OVAL+ ducts.
Sealing rings and end caps are including.

Typ	Art. no.	Connections
FLEX+ US DN 125 3x63	312504	3x DN 63 + 1x DN 125
FLEX+ US DN 125 2x75	312804	2x DN 75 + 1x DN 125
FLEX+ US DN 125 1x90	312805	1x DN 90 + 1x DN 125

FLEX+ diverter



For pipe laying under the ceiling or ceiling void installation. End caps are included.

Typ	Art. no.	Valve connection
DN 63 FLEX+ US-W 3x63/125	312503	DN 125

FLEX+ horizontal terminal



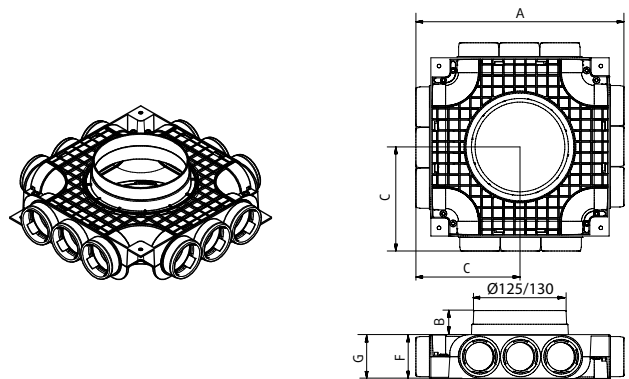
12 Connections



8 Connections

Made of plastic for FLEX+ duct systems. Distribution of supply air and exhaust air. End caps are included.

	DN 63 FLEX+ HV 12x DN 63/125	DN 75 FLEX+ HV 8x DN 75/125
Art. no.	313531	37903
A	384	475
B	45	45
C	192	237,5
F	80	80
G	80	89
Connections	12x DN 63 + 1x DN 125	8x DN 75 + 1x DN 125



12 Connections



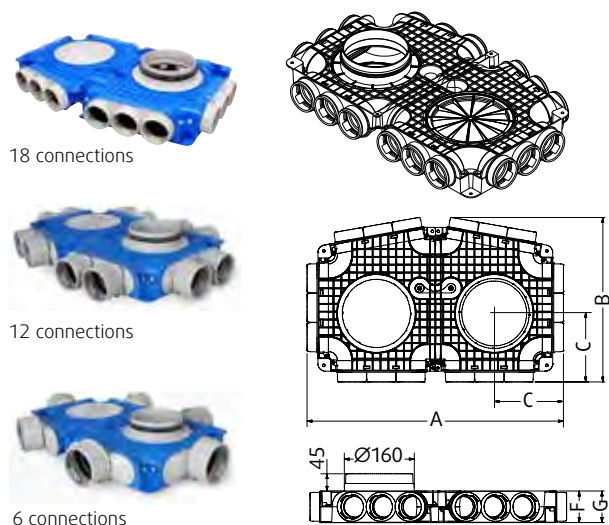
8 Connections



4 Connections

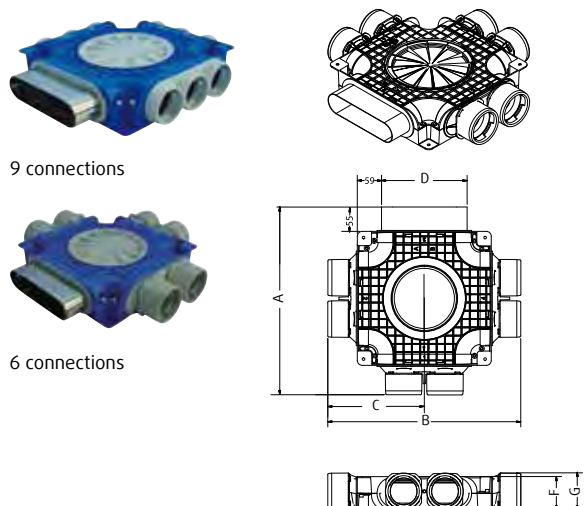
	DN 63 FLEX+ HV 12x DN 63/160	DN 75 FLEX+ HV 8x DN 75/160	DN 90 FLEX+ HV 4x DN 90/160
Art. no.	312783	312796	37902
A	384	475	495
B	45	45	45
C	192	237,5	247,5
F	80	80	80
G	80	89	110
Connections	12x DN63 + 1x DN160	8 x DN75 + 1x DN160	4x DN90 + 1x DN160

FLEX+ horizontal terminal



Made of plastic for FLEX+ duct systems. Distribution of supply air and exhaust air. End caps are included.

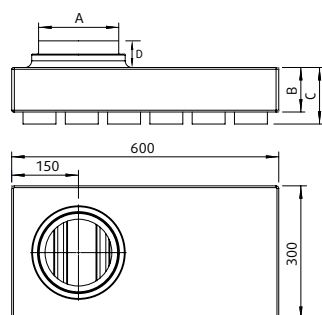
	DN 63 FLEX+ HV 18xDN 63/160	DN 75 FLEX+ HV 12xDN 75/160	DN 90 FLEX+ HV 6xDN 90/160
Art. no.	37906	312797	37905
A	655	742	755
B	420	504	509
C	177	220	227
F	80	80	80
G	80	89	110
Connections	18x DN63 + 1x DN160	12x DN75+ 1x DN160	6x DN90 + 1x DN160



	DN 63 FLEX+ HV 9xDN 63/Syst. 151	DN 75 FLEX+ HV 6xDN 75/Syst. 151
Art. no.	313518	37904
A	411	454
B	379	467
C	190	234
D	207	207
F	80	80
G	454	89
H	52	52
I	66	66
Connections	9x DN 63 + 1xSystem 151	6x DN 75 + 1xSystem 151

FLEX+ vertical terminal

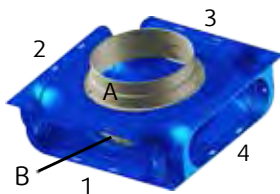
Made of plastic. End caps are included.



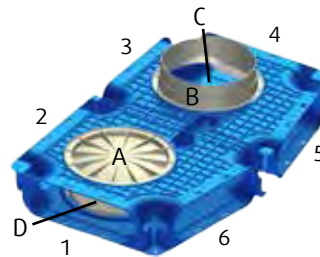
	DN 63* FLEX+ VV 18xDN 63/180	DN 75** FLEX+ VV 12xDN 75/160
Art. no.	309470	310977
A	180	160
B	105	105
C	130	205
D	50	variabel
Connections	18 + 1x DN 180	12 + 1x DN 160

*Connection piece 3 cm.
**Connection piece 12 cm.

FLEX+ horizontal terminal, variable



Small terminal



Large terminal

Order key

The connections of the variable terminal can be configured according to requirements. Certain things must be selected carefully when compiling the order key. The key, detailed in the adjacent table, consists of four parts and the codes.

- Part 1** Floor (B) - or ceiling (D) installation – particularly important for the connections 2x DN 75 (code 7), 1x DN 90 (code 9) and 2x DN 90 (code 2). The nominal diameters of these connections extend beyond the height of the terminal. This allows for offset connection - downwards for ceiling installation and upwards for floor installation. → Select B or D
- Part 2** Following this, the desired side connections (possible codes: 6, 7, 9, 2, D, K, W in the adjacent table) are determined for the sides (no. 1-4 or 1-6 according to the diagram above). The sequence is numbered on the terminal according to the diagram above. Bear the installation situation of the terminal in mind when placing. *This is followed by a decimal point in the order number.*
- Part 3** The position and nominal diameter of the inlet to the terminal and the cap(s) must now be determined (possible codes: 2, 6, 8, D). Small terminals have one possible connection on the upper and lower side: (A and B). Large terminals have 2 possible connections on both the upper and lower side (A, B and C, D according to the diagram above). The supports and caps (possible codes: 2, 6, 8, D) can be replaced easily.
- Part 4** If the terminal be fitted with an additional adapter on one of the side connections, the type of this adapter must be indicated (code H or V). In the order number, this comes after the „+“. In point 2, the coupler plug (code K) must be included. If not, the order number will end before the „+“.

	Connections	Code *
	3x Ø63 mm	6*
	2x Ø75 mm	7*
	1x Ø90 mm	9*
	2x Ø90 mm	2*
	End cap	D*
	Coupler plug	K*
	Connection oval, Syst. 151	W*
	Connection piece Ø125 mm	2
	Connection piece Ø160 mm	6
	Connection piece Ø180 mm	8
	End cap Ø200 mm	D
	Adapter, asymetrical / Ø125 mm	H*
	Adapter, 90° / Ø125 mm	V*

*Not available individually!

Sample ordering code

„Small“ terminal	CFLEX+HV4:	D 7W6D . D2
„Large“ terminal	CFLEX+HV6:	B 66D79K . 6DDD + V
Part 1: Installation:	Floor B Ceiling D	
Part 2: Side connections:	3x Ø 63mm = 6 2x Ø 75mm = 7 1x Ø 90mm = 9 2x Ø 90mm = 2 Cap = D Couple plug = K Oval conn. = W	
Part 3: Upper/lower connections:	Ø 125 = 2 Ø 160 = 6 Ø 180 = 8 Deckel, Ø 200 = D	
Part 4: Side inlet:	Vertical = V Horizontal = H	

Max. air volume

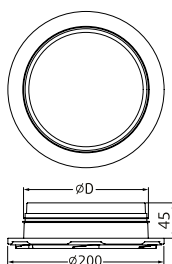
Ø63	=	20 m ³ /h
Ø75	=	30 m ³ /h
Ø90	=	45 m ³ /h
Terminal	=	360 m ³ /h

FLEX+/OVAL+ adapter

Made of plastic. To connect the riser duct with a rotary locking system. Also for connection ISO+ or GEO.

Adapter is delivered with a end cap.

Colour: white

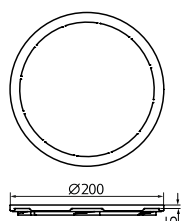


Typ	Art. no.	$\varnothing D$
FLEX+/OVAL+ adapter 125	312803	125
FLEX+/OVAL+ adapter 160	312802	160
FLEX+/OVAL+ adapter 180	312801	180

FLEX+/OVAL+ end cap

Made of plastic. For airtight closure of openings with a rotary locking system.

Colour: white

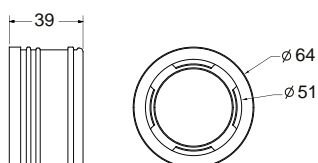


Typ	Art. no.	DN
FLEX+/OVAL+ end cap DN 200	312800	200

FLEX+ reducer

Made of plastic. Useable for FLEX+ duct systems.

Reducing: DN 63-50mm.



	Art. no.
FLEX+ RED 63-50 mm	309466

SystemairOVAL+ plastic duct system



- Unique Click system: easy installation and space saving construction
- Low height: Construction height of only 52 mm
- Flexibility: allowed to react during installation of unforeseen circumstances.
- Few components: quick and easy assembly
- Antistatic and antibacterial complete system with flexible flat duct

Flat air distribution system

With its minimal installation height, OVAL+ is an air distribution system ideally suited to underfloor installation in houses and apartment blocks. Thanks to the flat air ducts and the associated components with an installation height of 52 mm, the system can be used in all those places where round air ducts cannot. The flat duct system is therefore the ideal solution for installation in floors, suspended ceilings or walls and anywhere where a low installation height is required.

Features

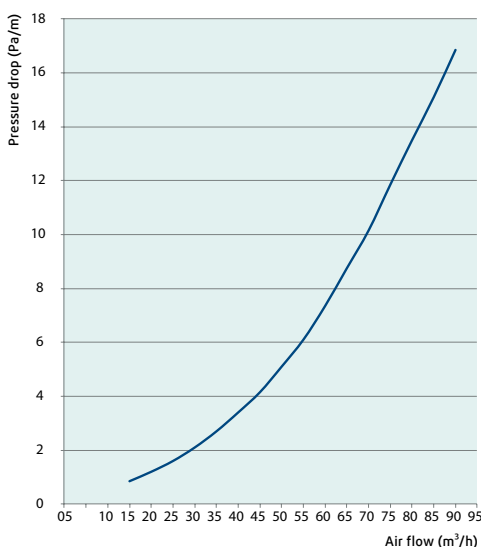
Air tightness: Tightness class D according to DIN EN 12237 (the highest tightness class in the standard)
 Material: Physiologically and toxicologically harmless PE, with no recycled materials, halogen and emission free, odour neutral
 Optional: Antistatic and antibacterial duct interior
 Permissible operating range: -20 °C to +60 °C
 Fire protection class: Normal flammability, building material class E according to DIN EN 13501 – 1

Maintenance and cleaning

OVAL+ was developed to avoid contamination in the system and to make cleaning easier. Both the interior of the duct and the distributor are antistatic and antibacterial. The fixation points located outside the system ensure that no screws penetrate the airflow. The rounded flexible ducts and distributors permit easy cleaning. There is a direct connection without branches between the distributor and the valves.

The air ducts must be thoroughly inspected every five years and cleaned if necessary. This inspection should be carried out by an authorised installation company. A cleaning set with rotating brush, inspection camera and vacuum cleaner is available for this purpose.

Pressure drop

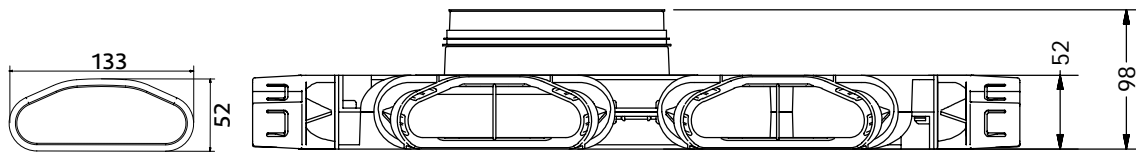


Technical data

Performance m³/h

Main duct			
4 m/s	4,5 m/s	5 m/s	-
60,2	67,7	75,2	-
Branch duct			
2 m/s	2,5 m/s	3 m/s	3,5 m/s
30,1	37,6	45,1	52,6

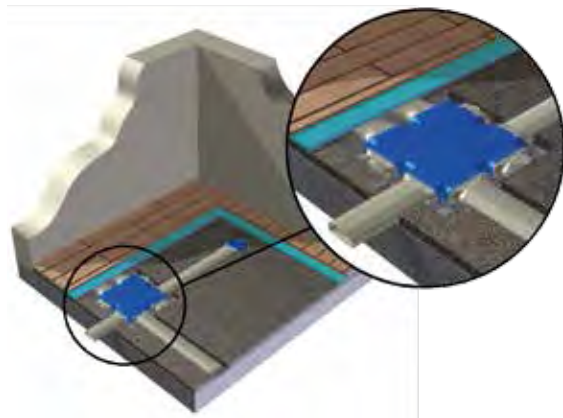
Dimensions



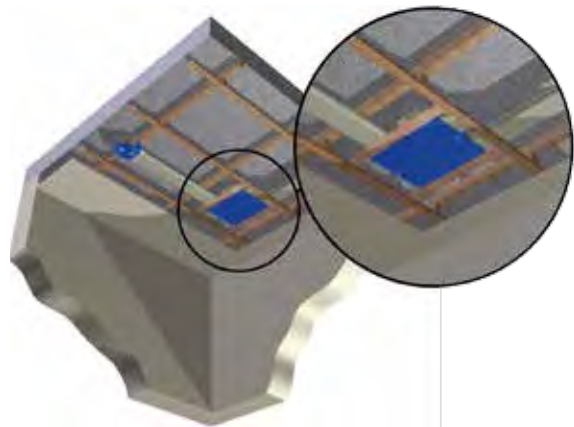
The installation height of the distributor box is also just 52 mm.

Installation examples

In the floor



In a suspended ceiling



OVAL⁺ duct



Duct coil

Delivery length: 20 m/roll.

System	Art. no.
OVAL ⁺ S130 plastic duct	313098

OVAL⁺ mounting bracket



Mounting bracket

For fixing OVAL⁺ duct system.

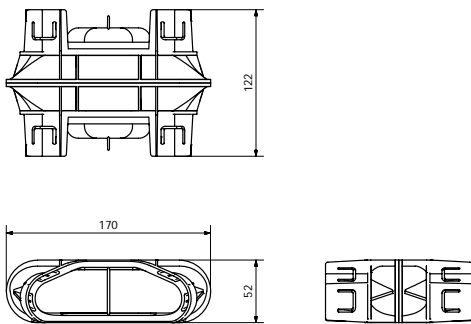
System	Art. no.
OVAL ⁺ mounting bracket	313895

OVAL+ connector



Made of plastic.

	Art. no.
OVAL+ connector S130	314468
OVAL+ connector 180°	314376

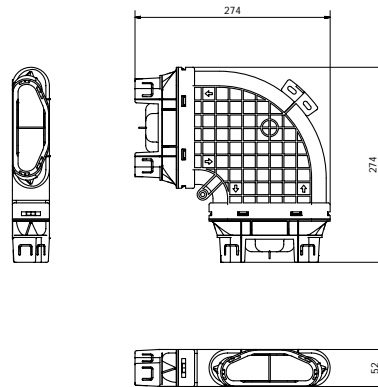


OVAL+ angle 90°, narrow sided



Made of plastic.

	Art. no.
OVAL+ S130, angel 90°	314469

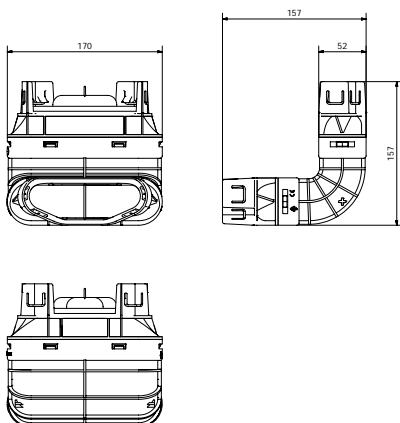


OVAL+ angel 90°, broadsided



Made of plastic.

	Art. no.
OVAL+ S130, angel 90°	314470



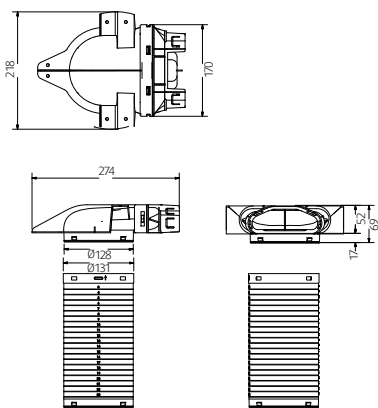
OVAL+ diverter valve



Made of plastic. Useable to connect OVAL+ ducts with supply air valves and exhaust air valves, L=230mm.

	Art. no.
OVAL+ US 1xS130/125/230*	313862

*Length changeable



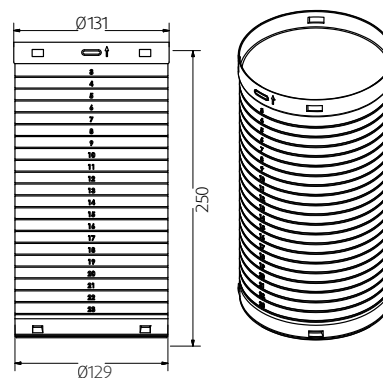
OVAL+ extension connecting



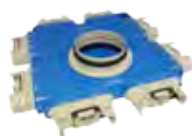
Made of plastic. Length 230 mm.

	Art. no.
OVAL+ US ext. adapter 230*	313742

*Length changeable

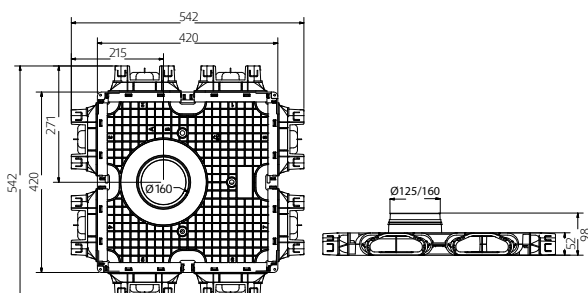


OVAL+ Horizontal distributor



Made of plastic, incl. end caps.

	Art. no.
OVAL+ HV 8xS130/125	313863
OVAL+ HV 8xS130/160	313864



OVAL+ Duct cutter

For cutting OVAL+ plastic duct.

	Art. no.
OVAL+ RS Duct cutter	313865



Systemair ISO+ plastic duct system, insulated

Sound absorbing and thermal insulated

- Sound absorbing: excellent sound properties by the combination of a ribbed hard outer shell with trapped air chambers and a foam insulation on the inside.
- Solid: due to the robust PE outer shell sagging of the duct is considerably reduced. Faster installation with fewer anchor points.
- Easy to handle: two nominal sizes DN 125 mm and DN 180 mm, with transitions to spiral seam duct with nominal sizes of DN 125, 150, 160, 180 and 200 mm.
- The connectors are flexible and compensate tension of the duct. The connectors are a solid and secure connection.
- The entire product line is fully recyclable and there is no waste during production.



ISO+ duct



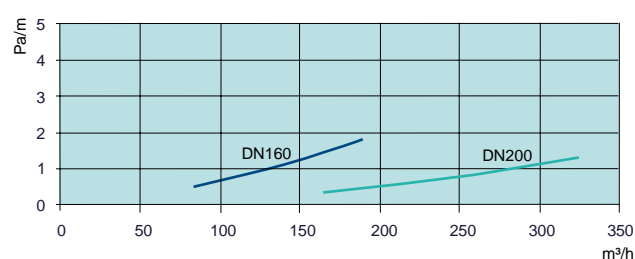
Noise-absorbing, sturdy duct, preferably in unheated areas. Outer sheath made of polyethylene with high density (HDPE); inner sheath made of polyolefin with closed cell structure.

Thermal conductivity: 0.040 W/mK at 40 °C.

Fire protection class: Outer casing B2, internal duct B1

Typ	Art. no.	Outside-Ø	Inside-Ø	Length
DN 160-125	311838	160	125	2 m
DN 200-180	311844	200	180	2 m

Pressure drop



ISO+ T-piece



Typ	Art. no.	Outside-Ø	Inside-Ø
on request			

ISO+ bend 90°



Typ	Art. no.	Outside-Ø	Inside-Ø	Typ
B90/160-125	311839	160	125	incl. 1
B90/200-180	311845	200	180	connector

ISO+ bend 45°



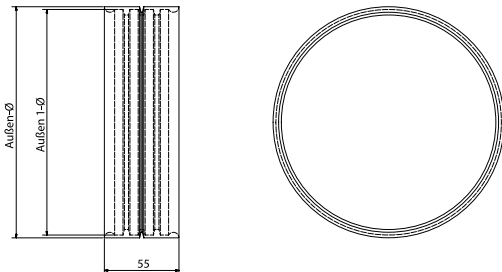
Typ	Art. no.	Outside-Ø	Inside-Ø	Typ
B45/160-125	311840	160	125	incl. 1
B45/200-180	311846	200	180	connector

ISO+ connector



Flexible connector made of EPDM.

Typ	Art. no.	Outside-Ø	Outside 1-Ø
C 160-160	311841	160 (167)	163
C 200-200	311847	200 (206)	202



ISO+ hose clip



To fix rubber collars for Spiro duct.

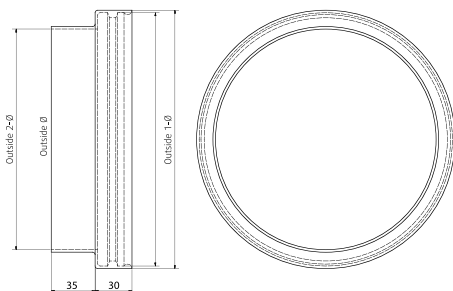
Typ	Art. no.	For Spiro duct
SK 60-165	312510	160
SK 60-215	312511	200

ISO+ transition to spiro, symmetric



Material: EPDM

Typ	Art. no.	Outside-Ø	Outside 1-Ø	Outside 2-Ø
R 160-125	311842	160 (160)	167	125 (121)
R 200-180	311848	200 (202)	206	180 (176)
R 200-160	311849	200 (202)	206	150/160 (146)

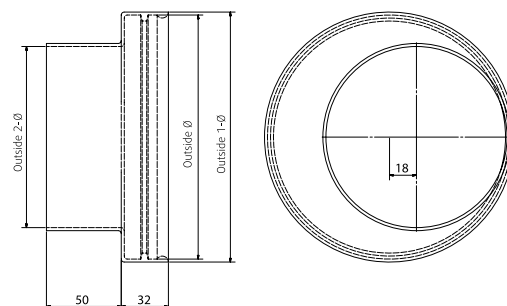


ISO+ transition to spiro, asymmetric



Material: EPDM

Typ	Art. no.	Outside-Ø	Outside 1-Ø	Outside 2-Ø
R 160-125A	311843	160 (163)	167	125 (121)

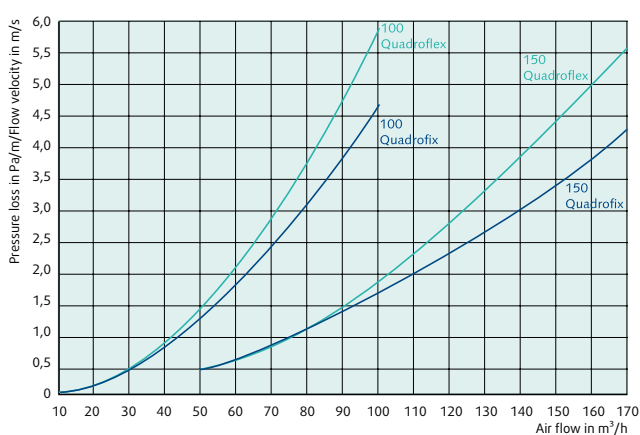


Flat ducts, oval, galvanized

Flat ducts are used for long pipes with small ceiling dimensions, since they have the lowest pressure drop. To reduce the pressure loss further, a smooth film is processed. The folding technique makes the duct stable and easy to handle with a weight saving of up to 60 % compared to a similar rigid sheet metal duct.



Pressure drop



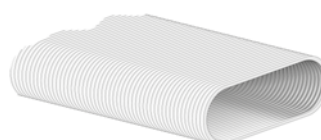
Quadrofix, smooth interior



Rigid, oval installations ducts, smooth interior for air flow, made of galvanized steel band. Fire protection class A1 according to DIN 4102. Temperature resistance: up to +200 °C Length: 3m

System	Art. no.	Inside	Outside
100	305045	129 x 52	130 x 53
151	305046	208 x 52	209 x 53

Quadroflex, corrugated



Corrugated, folded spiral seam pipe made of galvanized steel band for higher vertex pressure resistance. Fire protection class 1A according to DIN 4102. Temperature resistance: up to +200 °C Length: 3m

System	Art. no.	Inside	Delivery length
100	305043	129 x 52	3 m
100	305047	129 x 52	15 m/roll
151	305044	208 x 52	3 m

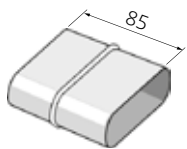


Inside connector, tight/tight



Made of stainless steel, to connect two Quadroflex or Quadrofix pipes.

System	Art. no.	Outside dimension
100	305007	128 x 51
151	305008	207 x 51

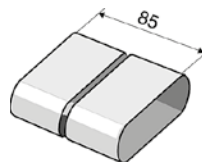


External connector, large/large



Made of stainless steel, to connect two Quadroflex or Quadrofix pipes.

System	Art. no.	Outside dimension
100	305064	129 x 52
151	305009	208 x 52

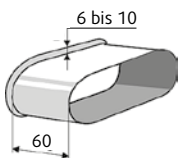


Matching flange

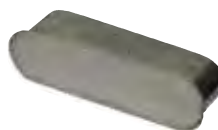


Made of stainless steel, for Quadroflex or Quadrofix pipes.

System	Art. no.	Outside dimension
100	305010	128 x 51
151	305011	207 x 51

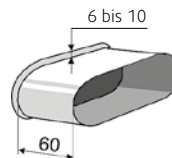


End cap

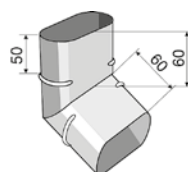


Made of stainless steel, for Quadroflex or Quadrofix pipes.

System	Art. no.	Outside dimension
100	305055	128 x 51
151	305056	207 x 51



Angel 45°, broadsided



Angel 45° made of galvanized steel to bypass Quadroflex or Quadrofix pipes, when little space.

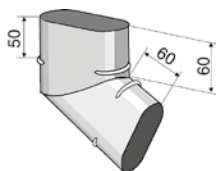
System	Art. no.	Outside dimension
100	305027	128 x 51
151	305028	207 x 51

Angel 45°, narrow sided



Made of stainless steel, to bypass Quadroflex or Quadrofix pipes, when little space.

System	Art. no.	Outside dimension
100	305029	128 x 51
151	305030	207 x 51

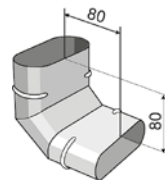


Angel 90°, broadsided



Made of stainless steel, in 3 segments to bypass Quadroflex or Quadrofix pipes.

System	Art. no.	Outside dimension
100	305031	128 x 51
151	305032	207 x 51

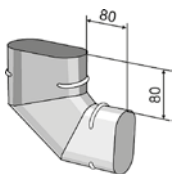


Angel 90°, narrow sided



Made of stainless steel, in 3 segments to bypass Quadroflex or Quadrofix pipes.

System	Art. no.	Outside dimension
100	305033	128 x 51
151	305034	207 x 51

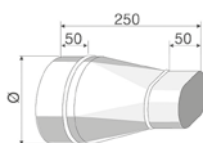


Adapter, oval to round

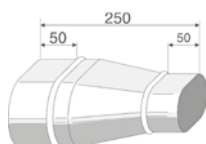


Made of stainless steel, to adapt oval pipe ends to round sections.

System	Art. no.	From	To
100	305018	ø99	128x51
151	305019	ø150	207x51



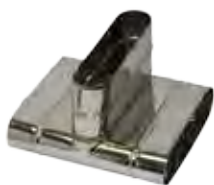
Section reducer, flat on flat



Made of stainless steel, for Quadroflex or Quadrofix pipes.

System	Art. no.	From	To
151-100	305022	207 x 51	128 x 51

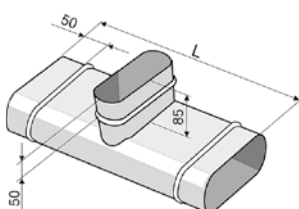
Branch piece 90°, broadside



Made of stainless steel, 3 connection spigots for Quadroflex or Quadrofix pipes.

System	Art. no.	Passage	Outlet	L
151-100	305016	207 x 51	128 x 51	220
151-151	305048	207 x 51	207 x 51	240

Dimensions, outside



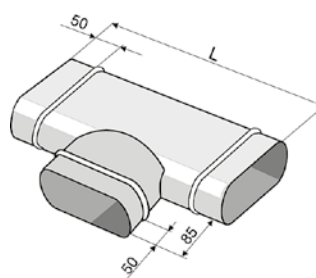
Branch piece 90°, narrow sided



Made of stainless steel, 3 connection spigots for Quadroflex or Quadrofix pipes.

System	Art. no.	Passage	Outlet	L
100-100	305013	128 x 51	128 x 51	300
100-151	305014	128 x 51	207 x 51	360
151-100	305015	207 x 51	128 x 51	300
151-151	305040	207 x 51	207 x 51	360

Dimensions, outside

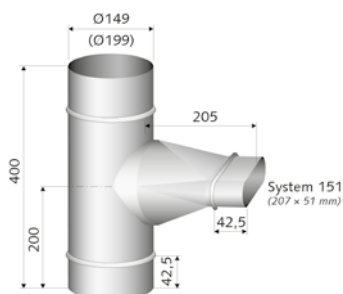


Branch piece 90°, outlet S 151



Made of stainless steel, 1 connection spigot for Quadroflex or Quadrofix pipes system 151.

System	Art. no.
DN 150/151	305017
DN 200/151	303177

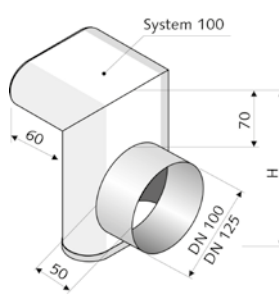


Angel diverter 90°

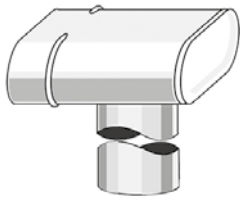


Made of stainless steel, to connect valves.

System	Art. no.	H
100/DN 100	303052	185,5
100/DN 125	303053	210,5



Connector system



Diverter 90° from round to oval to connect air passages. Suitable for wall installation. Material: stainless steel

System	Art. no.
151/DN 150	305426

Connector



Diverter 90° from round to oval to connect air passages. Material: plastic

System	Art. no.
100/DN 100	311240
100/DN 125	311241



Accessories flat ducts

Poly-nail tape



Width 1.5 cm
Coil: 15 m

	Art. no.
Poly-nail tape	302361

Cold sealing tape

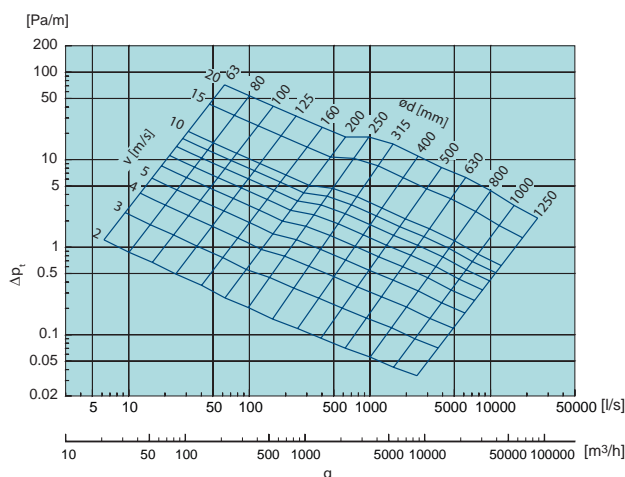


Width: 5 cm
Coil: 15 m

	Art. no.
Cold sealing tape	305001

Circular ducts, galvanized

Folded spiral seam ducts are built according to DIN EN 12237 and DIN EN 1506 and correspond to the tightness class D. Our spiral seam ducts meet the pressure requirements of DIN EN 12237: - 750 Pa / + 2000 Pa.

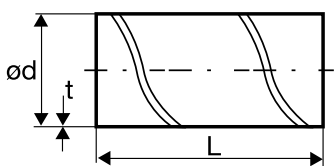


Spiral duct



Made of galvanized sheet steel, with stiffening beadings.

SR	Art. no.	ød	t	L
DN 100	12142	100	0,6	1200
DN 125	12143	125	0,6	1200
DN 160	12144	160	0,6	1200
DN 200	12145	200	0,6	1200
DN 250	313563	250	0,6	1200



Telescope duct, extensible



Made of galvanized sheet steel, and extensible.

Typ	DN 100	DN 125	DN 160	DN 200
Length 0,25 / 0,36 m	12109	12110	12111	12112
Length 0,63 / 1,14 m	12113	12114	12115	12116

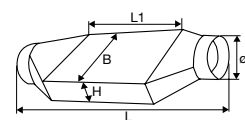
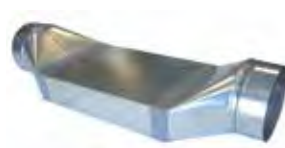
Flexible plain duct



Compressed, double-sided sleeve.

Length / extended length	UIS DN 100	UIS DN 125	UIS DN 160	UIS DN 200
230 mm / 1 m	12121	12122	12123	12124

Duct cross



Made of galvanized steel, with double sleeves.

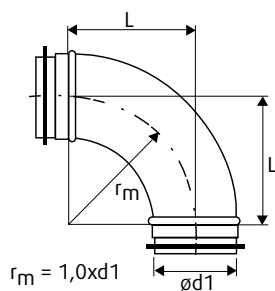
DN	Art. no.	ød	L	L1	H	B
125	12178	125	610	315	63	210
160	12179	160	647	315	80	300

90° degree bend



Made of galvanized sheet steel, with double-sided seals.

DN	Art. no.	ød1	L
100	12085	100	100
125	12086	125	125
160	12087	160	160
180	309618	180	200
200	12088	200	242
250	313565	250	242

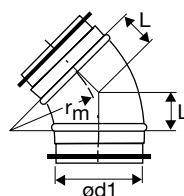


45° degree bend



Made of galvanized sheet steel, with double-sided seals.

DN	Art. no.	ød1	L
100	12089	100	41
125	12090	125	52
160	12091	160	66
200	12092	200	83
250	313564	250	120



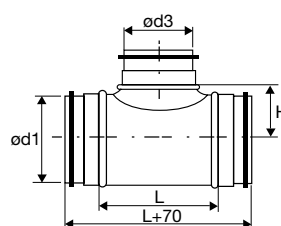
T-piece with rubber seal



Made of galvanized sheet steel.

Outflow: 90°

DN	Art. no.	ød1	ød3	H	L
100	12068	100	100	60	180
125	12070	125	125	75	200
160	12063	160	160	92	250
200	12071	200	200	112	305



T-piece with reduce Outlet / Passage

DN	Art. no.	ød1	ød3	H	L
100	12069	100	125	95	215
125	12067	125	100	75	180
125	12073	125	160	75	200
160	12065	160	100	92	180
160	12064	160	125	92	180
160	305485	160	150	100	260
200	12074	200	100	112	200
200	12075	200	125	112	250
200	12072	200	160	112	250
250	37257	200	250	165	385
250	37258	250	160	150	256
250	37259	250	200	150	306

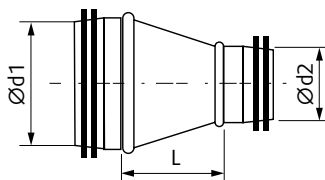
Reducer



Reducer 1

Duct channel adapter made of galvanized steel sheet, double-sided rubber lip seal.

Typ	Art. no.	ød1	ød2	L
R 150/125	305038	150	125	66
R 160/150	305039	160	150	59
R 250/200	305054	250	200	103



Reducer 2

Reducer seal, made of galvanized sheet steel, one-sided with muffle and one-sided with rubber seal.

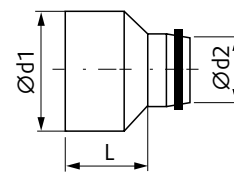
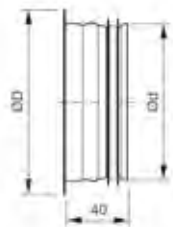
Typ	Art. no.	ød1	ød2	L
R 100/80	12080	100	80	61
R 125/100	12081	125	100	64
R 160/100	12079	160	100	83
R 160/125	12078	160	125	71
R 160/150	6233	160	150	59
R 180/125	309621	180	125	85
R 180/160	309816	180	160	66
R 200/125	12082	200	125	90
R 200/160	12077	200	160	73
R 200/180	309817	200	180	63

Mounting frame



The VRFU mounting frame accessories are manufactured from galvanized sheet steel.

VRFU	Artikel-Nr.	ød	øD
DN 100	48373	100	125
DN 125	48428	125	150
DN 160	48429	160	185

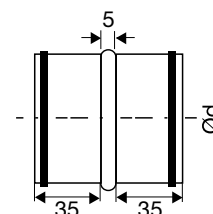


Male connector



Made of galvanized sheet steel, incl. double-sided rubber seal.

Typ	Art. no.	ød
NP DN 100	12059	100
NP DN 125	201348	125
NP DN 160	12060	160
NP DN 200	12061	200
NP DN 250	301760	250

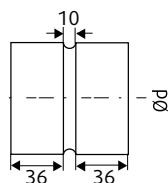


Female connector



Made of galvanized sheet steel, with doubled-sided sleeve.

MF	Art. no.	ød
DN 100	12062	100
DN 125	200140	125
DN 150	305037	150
DN 160	200817	160
DN 180	309867	180
DN 200	200818	200
DN 250	313562	250

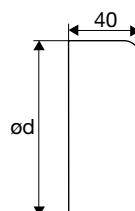


Blind cap



Made of galvanized sheet steel, to close open duct ends, with sleeve.

EB	Art. no.	ød
DN 100	200820	100
DN 125	200821	125
DN 160	12093	160
DN 200	12094	200



Flexible duct



Compressed, with insulation.

	Art. no. IS (Length 1 m, Insulation 25 mm)	Art. no. IS (Length 3 m, Insulation 25 mm)	Art. no. DIS (Length 3 m, Insulation 50 mm)
DN 100	-	12129	12147
DN 125	12495	12130	12148
DN 160	12496	12131	12149
DN 200	12497	12132	-



Available with 50 mm mineral wool. Length 3 m.

Insulation sleeve

	Art. no. DIS (Insulation 50 mm)
DN 100	12154
DN 125	12155
DN 160	12156
DN 200	12157

PE-Insulating hose



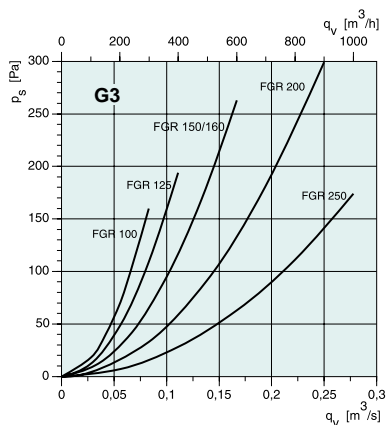
with 4 mm insulation for DN160 or System 151.
Length 10 m.

	Art. no.
DN 160 or System 151	305630



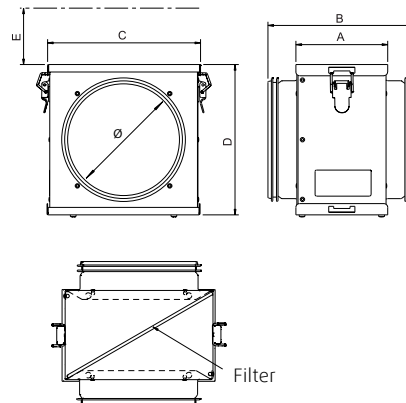
FGR-I	Art. no.	Fleece filter mat*	Filter class
125	37064	PFR 100-160	G3
160	37065	PFR 100-160	G3
200	37066	PFR 200-250	G3
250	37316	PFR 200-250	G3

*including



FGR-I

Insulated filter cassette FGR-I ist fitted with a standard type G3 panel filter. The cassette housing is manufactured from galvanized sheet steel with 13 mm insulation, rubber-sealed circular connections, toggle locks and disposable filters. Replacement PFR filters are sold in packs of five. The filter cassette is suitable for use as a supply-air filter in heavy industry and industrial workshops. The recommended final pressure drop is 170 Pa.



FGR-I**	ϕ	A	B	C	D	E*
125	125	156	190	241	213,5	190
160	160	156	190	241	213,5	190
200	200	156	215	320	308,5	280
250	247	156	206	320	305	280

*Space requirement filter change

**insulate

Accessories round ducts

Tapping screw



Self-tapping screw thread.

	Art. no.
Package 100 pcs.	312227
Package 500 pcs	312228

Duct tape



Duct tape, width 50 mm.
Roll: 10 m
Material: Polypropylene

	Art. no.
Duct tape	302351

Silencer

LF

Silencer - flexible

Perforated aluminium flex pipe inside, PVC cover outside
Sound insulation made of 25 mm mineral wool. Connection sleeve on one side, connection fitting on the other side.

Length: 800 mm



LF	Art. no	Connection	Insertion losses in dB Octave centre frequency in Hz							
			125	250	500	1k	2k	4k	8k	tot
100	12436	Ø100	8	14	22	30	25	10	8	15
125	12533	Ø125	6	12	22	28	25	11	9	14

SCD

Silencer, flexible

The SCD silencer from Systemair is characterized by high flexibility and excellent sound insulation values. The internal duct consists of a closed, non-woven internal hose (washable) and an insulation layer made of glass wool with a thickness of 25 mm and sound reducing and thermal effective properties. The outer casing is made of glass-fibre reinforced, tear-resistant aluminium laminate. The silencer (1 m length) provides duct connections made of galvanized steel sheet on both sides for the connection directly to the duct system. One side is equipped with a connection sleeve and the other side with a connection fitting to guarantee connection flexibility.



Technical data	
Material (internal)	non-woven mat
Insulation	25 mm Mineralwolle/Vlies
Material (external)	glass-fibre reinforced, tear-resistant aluminium laminate
Connection	Sheet steel, galvanized, one side sleeve, one side fitting
Fire classification	Bs1 (EN13501-1)
Temperature range	°C -30 bis +140
Working pressure	Pa max. 2000
Air velocity	m/s max. 10
Length	m 1,0 (without sleeve/fitting)

Sound absorption (dB), non-woven insulation 25 mm

SCD	Art. no.	D (mm)	L (m)	Mid-frequency band, Hz								
				63	125	250	500	1000	2000	4000	8000	Tot (dB)
100	2555	100	1,0	15,9	22,9	31,1	38,6	36,4	40,6	50,1	35,9	39
125	2556	125	1,0	11,7	18,9	32,4	29,9	28,8	34,5	40,9	24,5	32
160	2558	160	1,0	19,3	25,4	30,5	27,1	23,8	32,2	27,8	17,3	28
200	2560	200	1,0	10,7	12,1	28,7	22,8	22,8	30,6	19,4	11,9	26
250	2561	250	1,0	12,9	18,7	24,3	19,5	19,9	27,7	12,9	10,2	22

(Test Report Nr. A1672-1, Peutzbv)

Silencer



Perforated aluminium flex pipe inside, PVC cover outside
Sound insulation made of 25 mm mineral wool.

Length: 1 m

LF	Art. no.	Connection	Insertion losses in dB							
			Octave centre frequency in Hz							
			125	250	500	1k	2k	4k	8k	tot
Sleeve										
100	12491	ø100	15	31	31	32	29	13	11	24
125	12492	ø125	26	36	30	31	28	14	11	24
160	12493	ø160	17	31	25	27	18	8	8	19
200	12494	ø200	15	29	22	23	18	8	7	18

Silencer, system 100



Silencer for noise reduction Oval duct connection, made of aluminium.

Absorption material: mineral fibre-free.

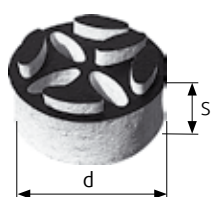
Fire protection class A2 according to DIN 4102.

Temperature resistance from -60 °C to +150 °C.

System	Art. no.	Length	Inside	Outside	Connection
100	305012	500	129 x 52	202x117	128 x 51

Insertion losses in dB Octave centre frequency in Hz							
125	250	500	1k	2k	4k	8k	tot
8	10	18	46	50	44	38	19

IRS

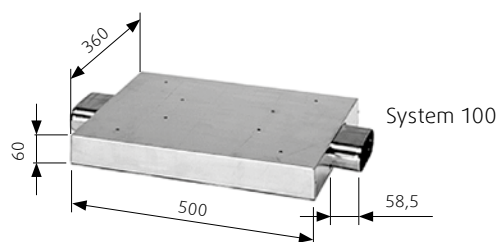


Inline tube silencer

Inside duct silencer, made of fire and mould protected foam material according to the requirements of emission class M1 (melamine resin). Complete valve function for sound insulation and pressure control.

DN	Art. no.	d	s	Insertion losses in dB							
				Octave centre frequency in Hz							
				125	250	500	1k	2k	4k	8k	tot
100	305049	102	50	14	12	8	7	7	11	18	8
125	305050	127	50	14	9	5	8	6	11	16	7
160	305051	162	50	14	9	8	7	7	14	17	8
200	305193	202	50	12	4	4	8	8	13	14	6

Silencer flat, stiff



Mineral fibre-free silencer in combination with Quadro System 100. Fire protection class A1 according to DIN 4102. Temperature resistance: up to +200 °C

System	Art. no.	Length	Connection	Insertion losses in dB							
				Octave centre frequency in Hz							
				125	250	500	1k	2k	4k	8k	
100	305036	500	128 x 51	9,2	10,2	20,4	21,1	15,2	9,4	4,8	

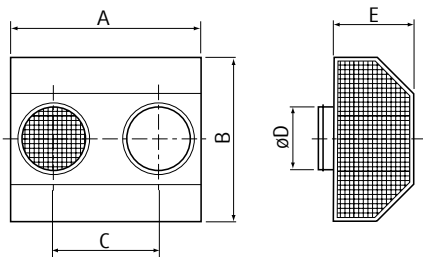
Outdoor and exhaust air grille

Combi grille



Made of powder coated galvanized sheet steel, manufactured in black (RAL 9005). Suitable for mounting on outside walls. The outside-air intake and exhaust-air are separated from each other so that the air cannot 'short circuit'.

CVVX	Black Art. no.	White Art. no.	A	B	C	øD	E
CVVX 125	26421	26422	418	291	185	125	130
CVVX 160	25394	25369	470	362	215	160	130
CVVX 200	25395	25397	550	402	255	200	130
CVVX 250	8498	-	680	550	350	250	136

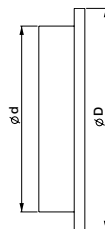


Round weather protection



The IGC-LI is a round weather protection grille for installation in exterior walls. The grid is used in ductwork for supply and exhaust air. Made of aluminum.

IGC-LI	Art. no.	ød	øD
IGC-LI 100	37357	100	131
IGC-LI 125	37358	125	151
IGC-LI 160	37359	160	188
IGC-LI 200	37360	200	230
IGC-LI 250	37361	250	278
IGC-LI 315	37362	315	350



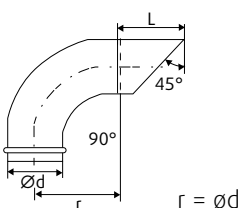
D = Outside
ød = Connection

Exhaust bend 90°



With diagonally cut outlet and protection grille.

AB	Art. no.	ød	L	kg
150	305041	150	250	2,9
200	313674	200	300	4,7

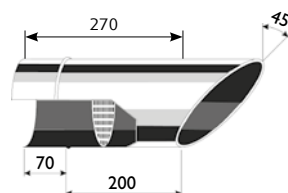


Inlet / Outlet nozzle



Made of mirror-bright stainless steel, for outside and extract air, with bird-protection grille.

ABS	Art. no.	Connection
150	305035	ø150
200	313673	ø200



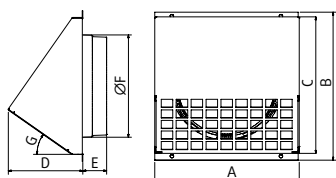
ISO+ Outdoor / Exhaust air grill



The duct connection fits directly into ISO+ duct with diameter 125 mm (ISO+ DN 160).
Material: steel, powder coated (black)

Typ	Art. no.	A	B	C	D	E*	øF	G
ISO+ grille 125	312506	252	262	239	130	-	125	35°
ISO+ grille 180	304635	252	262	239	130	41	180	35°

*E= on request

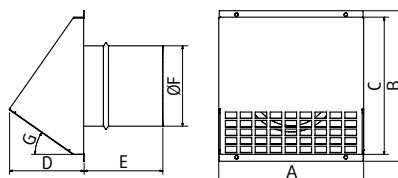


Outdoor / Exhaust air grill



The duct connection fits directly into duct.
Material: steel, powder coated (black).

VKR-SR	Art. no.	A	B	C	D	E	øF	G
160	312507	326	306	280	149	137	160	33°
200	312508	326	306	280	149	137	200	33°
250	312509	326	306	280	149	137	250	33°



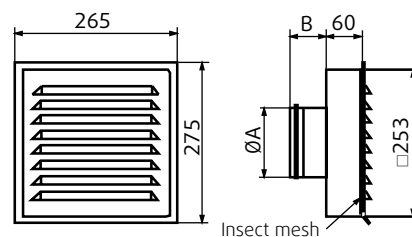
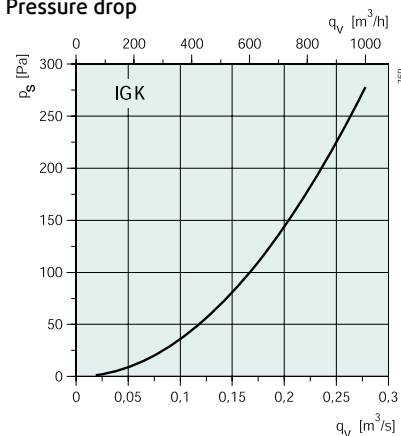
Wall grid



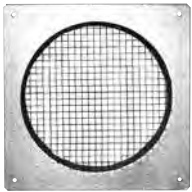
Intake grid manufactured from galvanised sheet steel with wall flange and insect mesh. Connection sleeve with rubber seal.

IGK	Art. no.	øA	B
IGK 100	1630	100	37
IGK 125	1631	125	37
IGK 160	1632	160	37
IGK 200	1633	200	41

Pressure drop

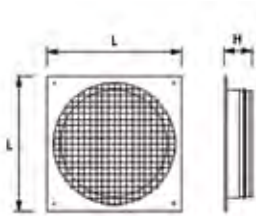


Outdoor-/Exhaust air grille



Made of galvanized steel sheet.

Typ	Art. no.	L	H	L Connecting piece
ITR 160 G	12161	200	40	35
ITR 200 G	12162	250	40	35

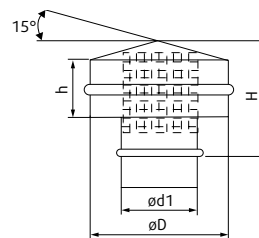


Roof chamber



The hood can be used for fresh or exhaust air. Made of galvanized steel sheet. The internal protective grille protects from rain, leaves etc.

Typ	Art. no.	ød1	øD	h	H	kg
DH 200	305042	200	360	100	197	1,9



Intake cowl

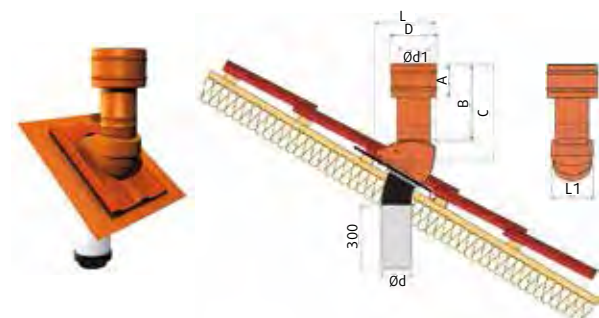


Made of stainless steel, consists of a lamella hood (delivery incl.), a pipe of 1,000 mm length, two static brackets and a pipe adapter DN200.

Intake cowl should be at min. 100 cm over the ground. The hood is removable to clean or change the internal filter.

Typ	Art. no.
Intake cowl	305052
Filter for intake cowl, G4, packaging unit 2 pcs.	305053

Roof pitch



For outdoor- and exhaust air.

Roof pitch 6-60°. Available in set: Universal pan, Cap roof hood and basic elements in colour red and black.

More roof pitches on request.

Typ	Art. no.	Colour	ød	ød1	D	L1	A	B	C	D
SDL 125	313335	red	138	123	250	177	145	320	380	204
SDL 160	313336	red	178	158	268	212	180	360	420	260
SDL 200	313337	red	198	218	288	252	230	410	470	310
SDL 125	313338	black	138	123	250	177	145	320	380	204
SDL 160	313339	black	178	158	268	212	180	360	420	260
SDL 200	313340	black	198	218	288	252	230	410	470	310

Diffusers from Systemair

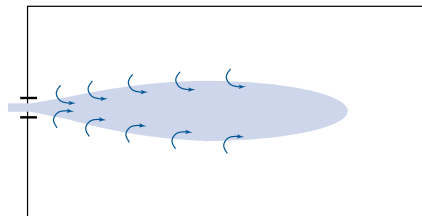
Design meets function

Systemair offers a wide range of high quality diffusers. In this catalogue we have compiled a choice of the most favoured and most used diffusers in residential ventilation.

Ventilation

Residential ventilation works with very small amounts of air on the principle of mixing ventilation. Fresh air is mixed with the room air. The particle control (dust, smells, etc.) takes place through the effect of dilution. The flow energy in the air stream is reduced by the fact that surrounding air from the room is “aspirated” and mixed with the air stream (Induction).

The air movements caused by the air stream very soon mix all the air in the room thoroughly. Impurities in the air are not only attenuated but also evenly distributed. The temperatures in the different parts of the room are also evened out.

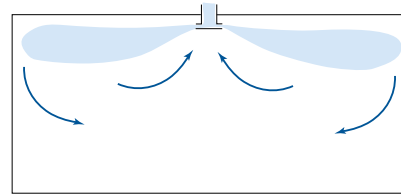


Induction of the surrounding air into the air stream.

Installation information

When dimensioning for ventilation by diffusion, the most important consideration is to ensure that the air velocity in the occupied zone will not be too high, as this will be experienced as a draught.

Experience has shown that the introduction of the air from the top is (ceiling or wall below the ceiling) the most convenient. Blowing supply air horizontally from the ceiling works excellently for most rooms. If the supply air is above ambient temperature and also used



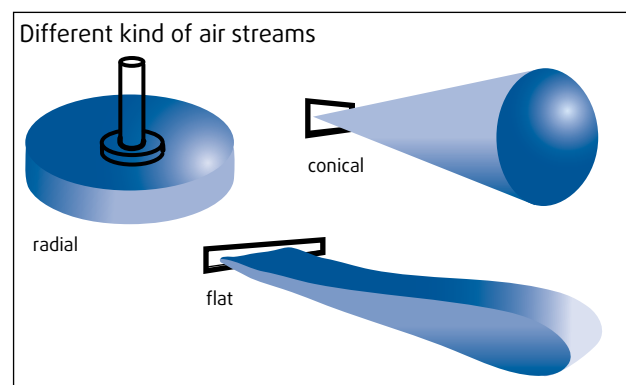
Blowing supply air horizontally from a ceiling diffuser.

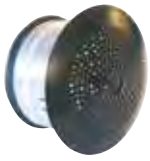
to heat the premises, practical experiments have shown that this works well in rooms with ceiling heights of no more than 3.5 metres. This assumes that the maximum temperature difference is 10-15°C.

Wall diffusers that produce a conical/flat stream should have a max. distance of 30 cm to the ceiling, that the Coanda effect will work. Radial wall diffusers should have a shielding at the bottom, that the stream does not touch the occupied zone, causing draught.



If the diffusers are near the floor, the danger of obstacles in the air stream causing the air velocity being disturbed is very high. The result is, that the mixing and induction is not ensured any more. Also the air distribution differs with changing temperatures, as well as the perception of air quality. If the diffusers are too small, they cause draught, as the blow directly into the occupied zone. If they are too big, the air stream is too slow, so that the penetration of fresh into the room is not enough. Extract valves should always be placed in or near the ceiling, because the warm and moistured air always rises to the top and should be extracted there. The placing in the room is unimportant, as the extract air is not directed.





AT/VE



VI/VS



VT

Elegant

Supply /extract air diffuser

Description

Systemair Elegant supply diffuser for wall mounting, with a perforated front plate and guide jet opening (VI and VS). The VS version also has a removable damper with test points.

Function

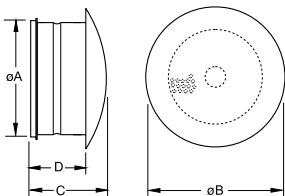
The Elegant has been especially developed for providing a draughtfree air supply from the rear walls of offices, hotel rooms etc. The VI or VS version with guide jet is recommended for cooled air. The guide jet prevents the air stream from falling into the occupied zone before it has reached an acceptable temperature. Max. temperature difference dT 10K is permissible. The Elegant is also suitable for VAV systems, as the distribution pattern is maintained across the entire flow area.

Design

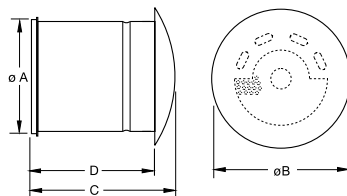
The Elegant is manufactured from steel and consists of a convex front plate with perforations and guide jet opening. The front plate is finished in the standard white powdercoating (RAL 9010-80).

Dimensions

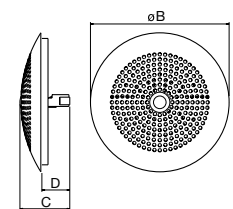
AT/VE



VI/VS



VT



Elegant	AT		VE			VI		VS		VT	
	100	125	100	125	160	125	160	125	160	100	125
Art. no.	6920	6973	6298	6827	6828	6829	6830	6831	6832	6202	6207
Max. air volume [m ³ /h]	30	60	30	60	140	70	150	60	140	30	60
øA	98	123	98	123	158	123	158	123	158	-	-
øB	165	165	165	165	198	165	198	165	198	165	165
C	111	115	111	115	124	115	124	240	274	59,3	59,3
D	87	89	87	89	86	89	86	214	236	33,2	33,2

TFF Ceiling diffuser

Description

The Systemair TFF circular supply or extract air diffuser has a shielding device for producing a directional (180°) distribution pattern and has an adjustable gap.

Function

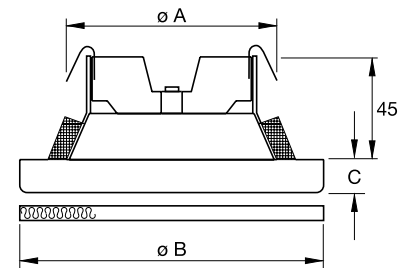
The TFF is a circular diffuser for ceiling or wall installation. The TFF consists of an inlet cone and diffuser unit containing sound-absorbent material. The technical specifications of the diffuser unit give it a wide range of applications. By rotating diffuser unit, the throw and pressure drop can be adjusted steplessly. Both concentric and eccentric distribution patterns can be selected by using the shielding device provided.

Design

The TFF is manufactured from sheet steel with a white powder-coated finish (RAL 9010-80).



TFF	80	100	125	150	160	200
Art. no.	6089	6090	6091	7509	6092	6093
Max. air volume [m ³ /h]	15	20	50	100	100	150
øA	80	100	125	149	159	200
øB	106	135	160	191	196	195
C	15	15	15	15	15	15



Balance-S Ceiling-/Wall diffuser

Description

Systemair Balance-S supply or extract air diffuser for the installation on ceiling or wall.

Function

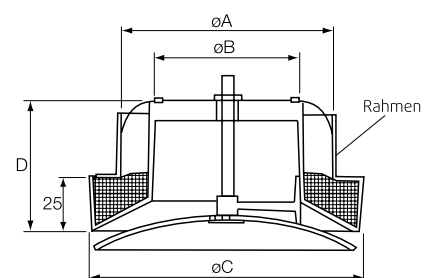
The Balance-S is a circular diffuser with an aerodynamically shaped valve cone. The Balance-S performs extremely well with regard to sound level, pressure drop, air flow and selfdamping. The Balance-S is installed in a frame or directly into the duct.

Design

The Balance-S is manufactured from recyclable polypropylene and tolerates temperatures up to 100°C. The Balance-S is supplied in a white finish which matches RAL 9010.t.

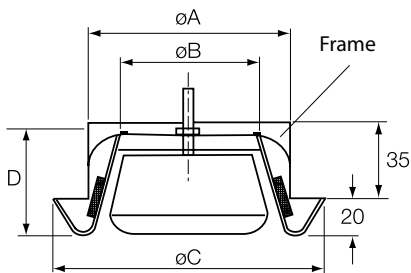


Balance-S	100	125	160
Art. no.	6965	6966	6967
Max. air volume [m ³ /h]	20	50	100
øA	100	125	160
øB	81	104	120
øC	156	182	206
D	72	78	86





Balance	Art. no.	Max. air volume [m ³ /h]	øA	øB	øC	D
100	6961	20	100	70	142	61
125	6962	50	125	87	160	61
160	6963	100	160	118	195	57
200	6964	150	200	167	240	64



Balance-E Ceiling-/Wall diffuser

Description

Systemair Balance-E extract diffuser for installation on ceiling or wall with lockable settings..

Function

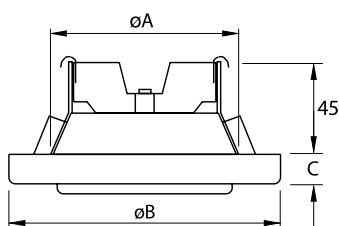
The Balance-E is a round extract diffuser with an aerodynamically shaped valve cone. The Balance-E performs extremely well with regard to sound level, pressure drop and air flow characteristics. It is installed in a frame or directly into the duct.

Design

The Balance-E is manufactured from recyclable polypropylene and tolerates temperatures up to 100°C. This material also withstands most chemicals in small concentrations. Polyether packing. It is supplied in a white finish matching RAL 9010-80.



Balance	Art. no.	Max. air volume [m ³ /h]	øA	øB	C
63	6144	10	63	90	15
80	6145	15	80	106	15
100	6146	20	100	135	15
125	6147	50	125	160	15
150	7490	100	149	191	15
160	6148	100	159	196	15
200	6149	150	200	238	18



EFF Ceiling-/Wall diffuser

Description

Systemair EFF exhaust diffuser for installation on ceiling or wall with lockable settings.

Function

The EFF is an exhaust diffuser for installation on ceiling or wall. It can also be used for supply air. The diffuser has a lockable central cone which is rotated to adjust the pressure and consequently the air volume.

Design

The EFF is manufactured from sheet steel with a white powder-coated finish (RAL 9010-80).

BOREA Ceiling-/Wall diffuser

Description

The Borea valve is adjustable and can be used for supply and exhaust air. The valve can be installed in ceilings and walls.

Function

The outlet can be partly closed for an individual regulation of supply air flow.

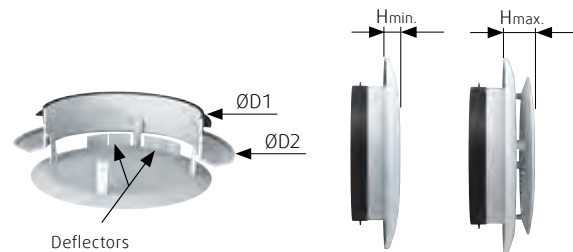
Design

Borea is completely made of polystyrene. It consists of a main casting, a plate valve with an adjustable front grid. Therefore, different flow forms and routes can easily be adjusted. They can be inserted into DN125 pipes or DN125 flange collars.



	Art. no.	ØD1	ØD2	Hmin.	Hmax.
Borea 125	68872	119	165	12	24

Dimensions

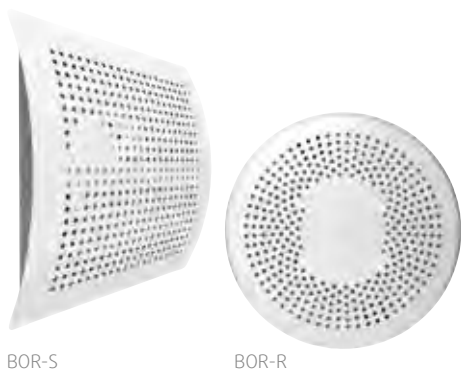


Typ	Air volume Qv[m³/h]	Supply air								Extract air					
		Grid open, Valve closed, wall mounting		without deflector				with deflector		Grid open, valve open		Grid closed, valve open			
				Grid closed, valve open, ceiling mounting		Position 2		Position 2				Position 1		Position 2	
				Position 1	Position 2	Position 2	Position 2	Position 1	Position 2						
dp (Pa)	Lw (dB(A))	dp (Pa)	Lw (dB(A))	dp (Pa)	Lw (dB(A))	dp (Pa)	Lw (dB(A))	dp (Pa)	Lw (dB(A))	dp (Pa)	Lw (dB(A))	dp (Pa)	Lw (dB(A))		
BOREA 125	45	9	< 20	18	26	7	< 20	13	22	3	< 20	20	23	7	< 20
	60	17	< 20	30	31	13	21	20	27	5	< 20	37	33	13	21
	75	25	24	40	35	18	24	31	32	8	< 20	57	41	20	25
	90	36	31	56	39	25	28	43	36	11	20	80	46	27	29
	120	62	43	-	-	40	36	70	43	19	28	-	-	48	36
150	-	-	-	-	62	41	-	-	28	34	-	-	74	43	

Settings

	Wall mounting		Ceiling mounting			
Supply air						
	Grid open/plate closed		Grid closed/plate in position 1 without shielding		Grid closed/plate in position 2 with or without shielding	
Extract air						
	Grid open/plate in position 2 without shielding		Grid closed/plate in position 1 without shielding		Grid closed/plate in position 2 without shielding	

The plate inlet can be partly closed by deflectors to shield some areas.
Deflectors can be removed for extract or 4-sided outlet.



BOR-S

BOR-R

BOR-S/-R	Art. no.
BOR-S 100*	26078
BOR-S 125*	26079
BOR-R 100	26076
BOR-R 125	26077

*Filter BOR-S, packaging unit 10 pcs, Art. no. 314449

BOR-S/-R Supply air diffuser

Description

BOR-S has been especially developed for providing a draught-free and low acoustic noise air supply from the rear walls of offices, hotel and residential rooms etc. The flow pattern prevents the air stream from falling into the occupied zone before it has reached an acceptable temperature. Max. temperature difference ΔT 10K is permissible. BOR is also suitable for VAV systems, as the distribution pattern is maintained across the entire flow area. The product is equipped for air flow adjustment and commissioning measurement.

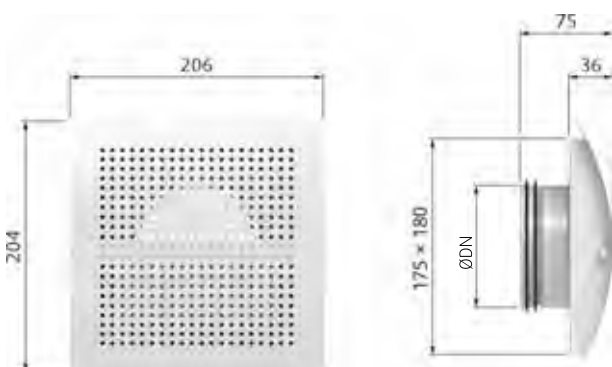
Function

The diffuser is equipped by an adjustable blind that changes the effective air flow aperture and so tunes the air flow volume. The mechanism is movable from outside by two miniature ears sliding in grooves on the sidewalls of the product. The movement has 9 fixed positions along the path defined by the notches in the groove. For adjustment only these positions provide desired noise parameters. The tables show the k-factors of the product.

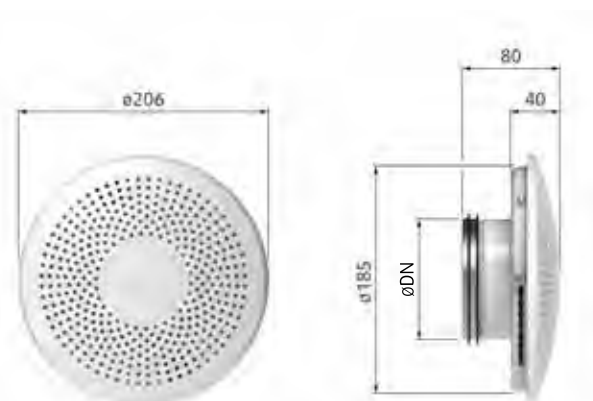
Design

The body of BOR is manufactured from galvanized steel with a convex front plate with perforation. The front plate is finished in the standard white powder-coating (RAL 9010).

Dimensions

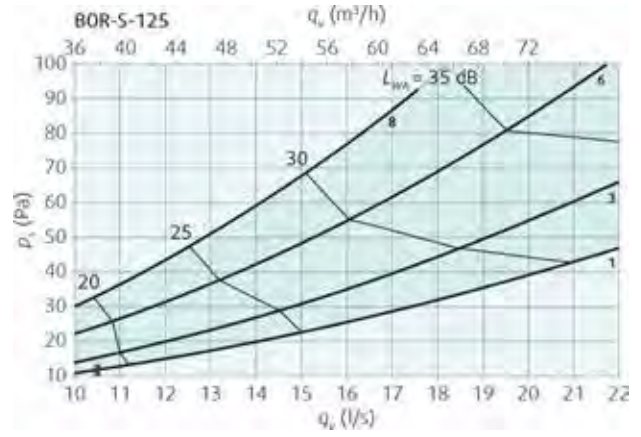
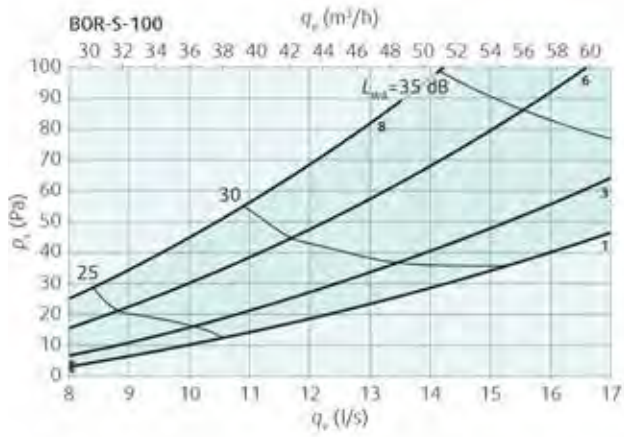


BOR-S	ØDN
BOR-S 100	Ø100
BOR-S 125	Ø125

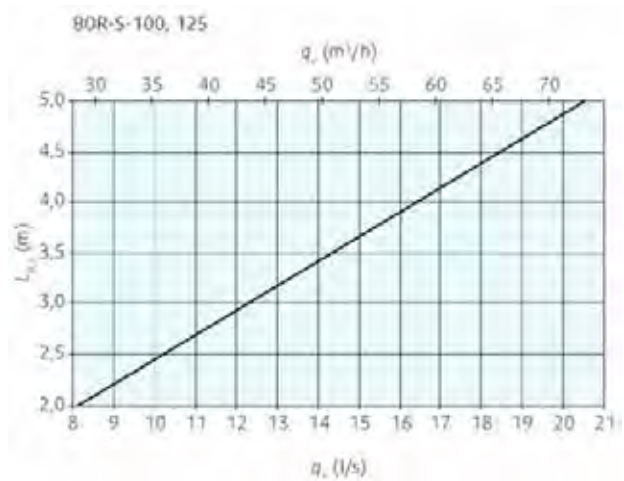


BOR-R	ØDN
BOR-R 100	Ø100
BOR-R 125	Ø125

Performance diagram



Throw length





PLUTO

Art. no..

73377

PLUTO

Floor diffuser

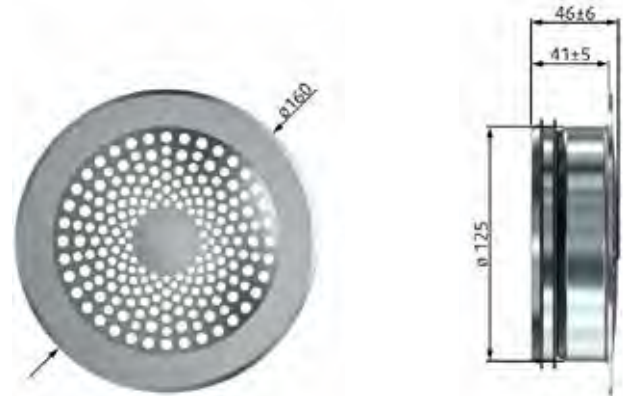
Description

Pluto is floor installation type ventilation diffuser with smaller capacity intended for use in residential-, hotel room, small office ventilation. It is possible to use the diffuser for air extract.

Design

The diffuser is completed from A304 stainless steel perforated circular front plate and galvanized steel circular duct connection part with rubber gasket. The parts are tied together high quality adhesive. The product is available in one size for 125mm duct.

Dimensions



Self regulating extract air valves



Typ	Art. no.
AE 15/30	31412
AE 30/60	31413
AE 45/120	31414

AE Exhaust valve

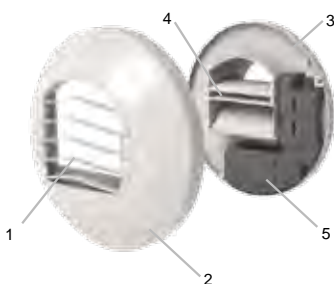
- Two air volumes for basic and demand ventilation
- Adjusting / balancing of the system is not necessary with constant volume systems
- Attractive design
- High quality construction in an aerodynamic shape with low sound levels
- Offering an airtight seal against the wall
- Easy cleaning without the risk of air volume changing

Function

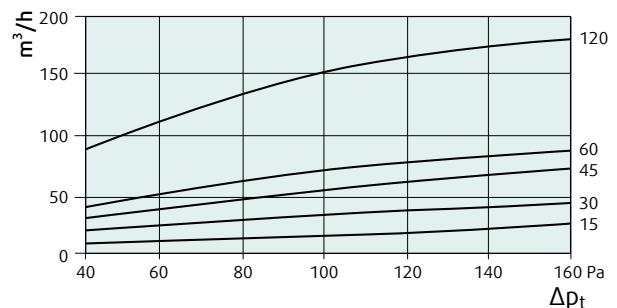
Extract air valve with electric timer for two air volumes (basic and demand ventilation). Ideal for extract air in kitchens, bathrooms and toilets, for central exhaust ventilation systems. The basic air volume is increased to the demanded air volume using a switch. After 30 min. it automatically returns to the basic air volume. Mechanical reliability, proven functionality, good performance in ventilation and noise are the major assets of all AE air valves series.

Supplied incl. mounting ring.

The protection class is IP X1



- 1 Removable louvre grill
- 2 Casing vent
- 3 Support plate with sleeve and rubber ring
- 4 Control module
- 5 Electric connection box



Acoustic

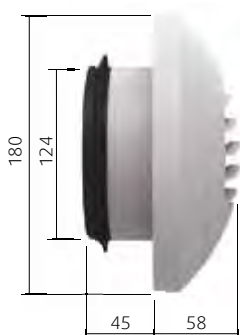
Typ	L_w dB(A)			
	70 Pa	100 Pa	130 Pa	160 Pa
AE 15/30	24	27	30	33
AE 30/60	25	31	34	36
AE 45/120	27	33	34	37



Type		Art. no.
AH 10/40	Variable exhaust valve incl. humidity control, DN125, RAL 9010	49988
AH 15/50	Variable exhaust valve incl. humidity control, DN125, RAL 9010	941238
AH 15/75	Variable exhaust valve incl. humidity control, DN125, RAL 9010	941239
AHC 6/40/90	Variable exhaust valve incl. humidity control, DN125, RAL 9010, activation of the demand ventilation via cord	49989
AHE 6/40/90	Variable exhaust valve incl. humidity control, DN125, RAL 9010, activation of the demand ventilation via 230 V signal (on-site switch)	49991
AHE 12/45/105	Variable exhaust valve incl. humidity control, DN125, RAL 9010, activation of the demand ventilation via 230 V signal (on-site switch)	941240
AHP 10/60/60	Variable exhaust valve incl. humidity control, DN125, RAL 9010, activation of the demand ventilation via motion sensor (12 V)	73072
Transformer	Transformer 230 V AC / 12 V AC	37364

Acoustic characteristics

Typ	L_w dB(A)		
	100 Pa	130 Pa	160 Pa
AH	27	30	33
AHC	31	34	36
AHE	33	34	37
AHP	33	37	39



AH Exhaust air valve, hygrostatic

Function

The exhaust valve AH is a variable exhaust valve. Ideal for venting of kitchen, bathroom and toilet, as well as for central ventilation systems in residential construction.

The exhaust valve AH is equipped with a humidity control, increasing the airflow with increasing humidity and switches back with decreasing humidity to the basic airflow. The mechanical humidity control unit requires no power supply. The protection class is IP X1.

Design

Made of plastic in RAL 9010 (white). Size DN 125. The exhaust air valve in DN 100 is available on request. High quality construction in an aerodynamic shape with low sound levels.

Mounting

For direct wall mounting incl. mounting ring.

Settings

Balancing the system does not apply to pressure constant systems.

Maintenance

Easy cleaning without the risk of air volume change.



Self regulating outdoor air valves

FAV

Sound insulated wall diffuser

The FAV wall diffuser impresses with its design and outstanding sound insulation properties. The new designed intake valve is suitable for normal and high sound insulation requirements by its excellent functions and air distribution characteristics. All necessary components for the installation are available as a complete package.

Application / installation possibilities

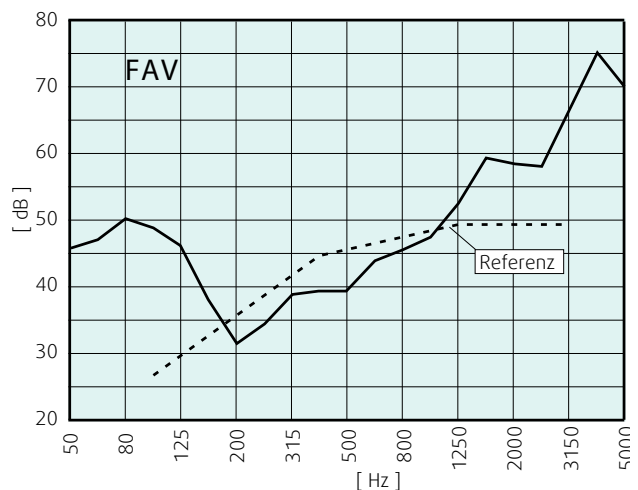
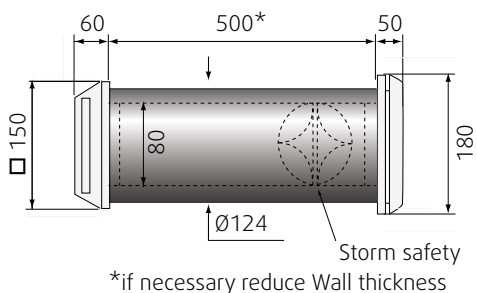
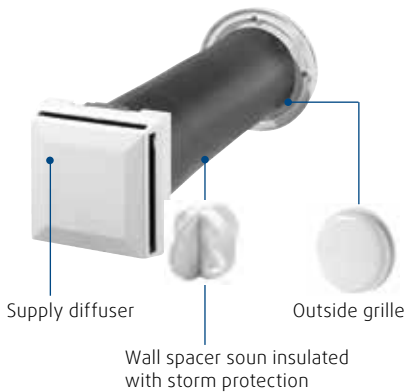
For installation in facades as wall diffuser for outdoor air supply in single-family houses, office buildings and multi-storey residential buildings. The wall diffuser is particularly suitable in living rooms and bedrooms.

Function

Used air from kitchens, bathrooms, lumber-rooms and toilet rooms is exhausted via an exhaust system. Outdoor air is filtered by the FAV and well distributed into living rooms, bedrooms, children rooms and lounges. Stepless adjustable volume flow via iris damper. An optimal efficiency can be achieved by an installation position on the upper wall next to windows, in a height of 2.0-2.2 m above a radiator. A storm protection limits supply air to 30 m³/h and avoids draught.



FAV



Art. no.	Type	Ø Bore	max. air volume with standard filter G3	Noise level $D_{n,w}^*$ at wall thickness	R_w, R^{**}	Version / Colour ^{***}
312214	FAV	124 mm	10 Pa 30 m ³ /h	400 mm / 48 dB 500 mm / 51 dB	18 dB 20 dB	PVC, white Inside: square Outside: round

Dimensions in mm.

*Weighted element standardised sound level difference $D_{n,w}$ according to DIN EN ISO 140-10

**Sound insulation value according to DIN 4109

***Colour white: similar to RAL 9010

Accessories

FAV Outdoor grille



Art. no.	Colour
312217	white, RAL 9010

FAV Raincover for outdoor grille



Art. no.	Colour
312216	white, RAL 9010

FAV standard filter mat, G2



Art. no.	
314279	standarf filter mat, G2

FAV filter cartridge, F7

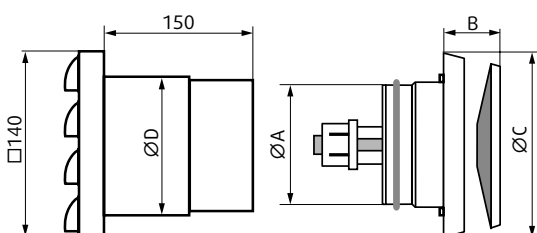


Art. no.	
312215	L= 94 mm, DN80

VTK

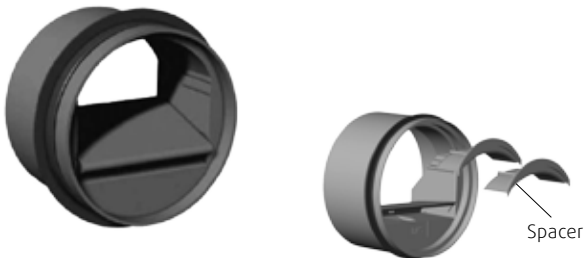
Self-adjusting outdoor air vent

This self-adjusting outdoor air vent has a temperature-sensitive thermostat bulb which regulates the vent plate, adjusting the air gap and air flow according to the outside temperature. When it is set to 'automatic' the valve disc reduces the air supply when the outside temperature falls, and increases the flow when the outside temperature rises. Spacers for maintaining minimum air flow are available as an accessory. Supplied complete with a thermostat bulb for temperatures between -5 and +10°C, plus a wall duct and external grille.



VTK	80	100	160
Art. no.	5657	5658	5659
ØA	80	95	157
B	40	40	47
ØC	147	147	207
ØD	85	104	163

Air volume controller



RDR	Art. no.
80/15-50 (m ³ /h)	37293
100/15-50 (m ³ /h)	37294
100/50-100 (m ³ /h)	37295
125/15-50 (m ³ /h)	37296
125/50-100 (m ³ /h)	37297
125/100-180 (m ³ /h)	37292
150/50-100 (m ³ /h)	37309
150/100-180 (m ³ /h)	37298

RDR

Description

The air flow regulator RDR is an element placed inside the duct in order to obtain a constant flow within a pressure range from 50 to 250 Pascal. It is used in ventilation or air conditioning systems for supply or return air. Made in plastic material class M1 and in galvanized steel for sleeves in 125 to 250 mm.

Function

The air is forced to pass through predetermined space in which a flap can change the position according to the specified air flow. The requested airflow is fixed by a screwdriver, torx no10.

Design

RDR is made from plastic material (polystyrene) classified M1. Operating temperature is from 5 to 60°C.

Installation

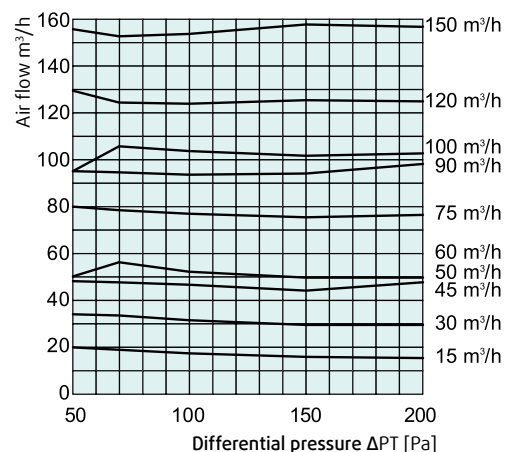
RDR is simply fitted into vertical or horizontal ducts. On the horizontal duct, respect the mention «DOWN» indicated at the front of the product. A leap seal ensures the air tightness. The flow regulator must remain accessible to permit its maintenance. When the flow regulator is associated with a diffuser, the minimum distance between the diffuser and the regulator is at least one \emptyset in extraction mode and 3 \emptyset in blowing mode.

RDR	80	100	125
L	55	70	86
\emptyset D1	76	96	120
\emptyset D2	76	93	117

Flow regulators are characterized by their noise level in dB(A).

Airflow (m ³ /h)	LW dB(A)			
	50Pa	100Pa	150Pa	200Pa
15	25	29	32	35
30	26	31	35	38
45	27	33	36	39
60	32	37	39	42
75	32	37	40	42
90	32	38	41	44
120	30	34	39	42
150	33	37	41	45
180	34	40	44	47
210	34	40	42	44
240	35	41	44	47
270	37	43	45	49
300	33	37	42	45

Test reports: CETIAT 2315002 für air flow RD Ø80 bis RD Ø125 mm



SPI Iris damper

Function

The SPI is an iris damper for measuring and adjusting the air flow. The SPI has the following specifications: low noise level, centrally formed air flow and fixed test points for precise measurements. The damper also has an adjustment aperture which can be opened completely, which means no separate access for cleaning is needed. Iris Damper Ø 80-630 mm sizes. Max temperature for SPI is 70°C.



Design

The damper is manufactured from galvanised sheet steel and is fitted with a rubber seal tested for air-tightness.

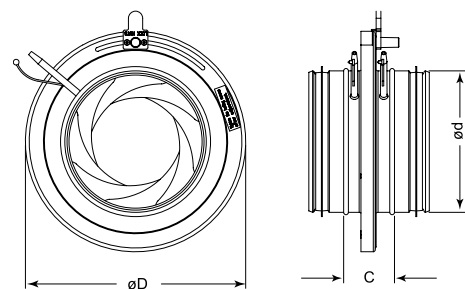
Installation

The SPI adjustment damper must be installed in accordance with the distances required to minimise airflow deviation. The SPI enables the taking of precise airflow measurements at all points including points close to duct deviations such as T junctions and bends, and points in front of other supply-air devices (see below).

Distance

Before bends - 1 x ØD
 After bends - 1 x ØD
 Before T-piece - 3 x ØD
 After T-piece - 1 x ØD
 Before air outlet - 3 x ØD

SPI	Art. no.	Ød	C	ØD
80	7621	79	110	125
100	6750	99	54	163
125	6751	124	63	210
150	6752	149	54	230
160	6753	159	60	230
200	6754	199	62	285
250	6755	249	62	333
300	6756	299	65	405
315	6757	314	63	406
400	6758	399	70	560
500	7625	499	60	644
630	7626	629	60	811
800	6881	798	70	1015



GEO heat exchanger box



	Art. no.
GEO heat exchanger box, inkl. G4-Filter, heat exchanger, Control and Pump group	312513
GEO PE-Rohr, ND 12,5, DN 32, 100m/Rolle	304981
GEO Glycol up to -14 °C, 5 liters canister	313303
GEO Glycol up to -14 °C, 20 liters canister	304989
GEO Fleecefilter, G4	313877
GEO Filter frame, Wechselrahmen für Vliesfiltermatte	313876

Why choose a geothermal heat exchanger?

In winter, domestic heat recovery units switch to a frost protection mode at low temperatures outside. This usually means that the supply fan slows down, causing an imbalance between the outside and exhaust air through the heat recovery unit. Another possibility is that a (pre-) heater is turned on, which usually consumes 1 to 2 kW of energy. In summer, at high temperatures, the outside air can be warmer than the air inside the house. Therefore, the warm supply air can increase the temperature in the house which is undesirable. The horizontal geothermal heat exchanger GEO offers a solution for these problems using a minimum of energy.

Why choose a GEO?

GEO has its own control which can be used in combination with any type of heat recovery unit. This control will start the highly energyefficient pump of the GEO at specific set outside temperatures, causing the liquid to flow through the duct. The temperature of the liquid approaches the temperature of the soil and transfers its energy to the outside air before it passes the heat recovery system. By using GEO, the efficiency of the heat recovery can be increased.

Benefits

- With 8W energy, you can gain up to 1.5 kW.
- Can be used in combination with any heat recovery unit up to 300 m³/h.
- Increases the efficiency of the heat recovery unit.
- Has its own control, allowing energy consumption only when needed.
- Has an A label-EC pump and a G4 filter for the protection of the heat exchanger.
- Is easy to install, all-in-one set (pump, control, sensors, filters, filling and venting unit, battery, gauge, vent valve, volume meter, and pressure vessel).
- Has a right/left version in one unit and the air to the heat recovery unit can be mounted both on the top and on the side.
- Thanks to relatively thin duct (DN32), it is easy to install.
- Is an hygienic and attractive solution.
- Is easy to clean: condensation develops in the GEO, which is led to the sewer through the condensate drain.

Why Glycol (monopropylene glycol)?

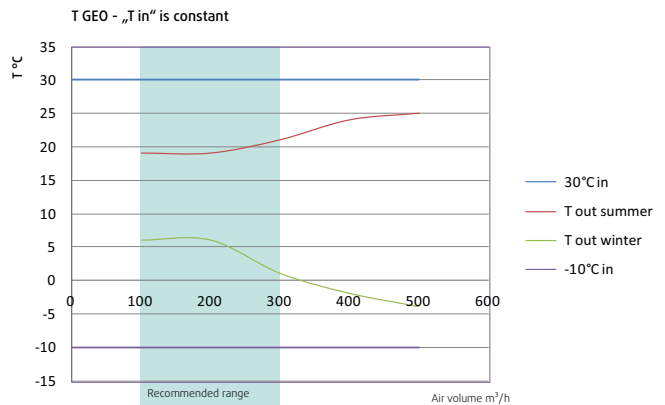
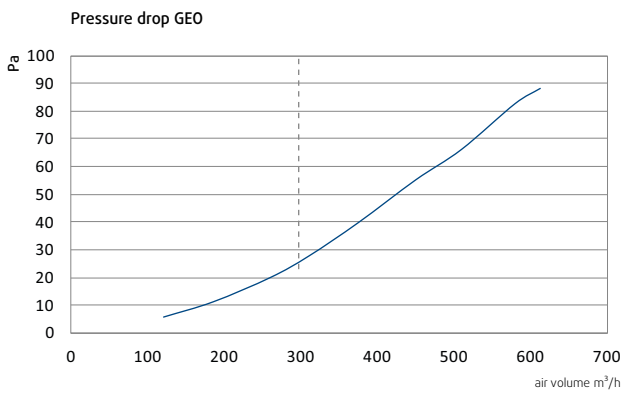
In GEO, heat is exchanged between brine fluid and the outside air. At very low temperatures, pure water could freeze in the exchanger and make it burst. To prevent this, frost protection must be added to the water, just like in a car radiator. When laying 100 m of PE pipe, around 85l of brine fluid is required. The mixing ratio must be between 30 and 50% (see GEO instructions). Therefore, around 30 litres of glycol (monopropylene glycol) is required to give a 35% mixture.



The diagrams above are valid with a glycol/water supply temperature of 10°C. Depending on the outdoor temperature the mixing ratio of the bio-degradable Monopropylenglycol is 30-50% in Water.

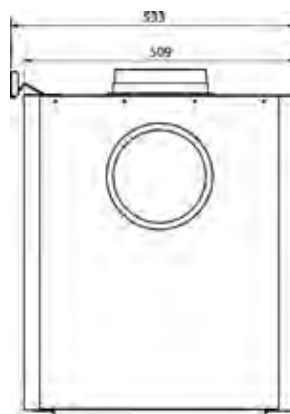
For example:

In a house with an air exchange of approx. 250 m³/h, in summer, the GEO is able to cool the outside temperature of 30°C down to 20°C. In winter, the GEO is able to warm up the outside temperature of -10°C to 2.5°C. The performance data is, among other things, dependent on the depth of installation, type of ground, duration of the temperature peaks and flow quantities.



Dimensions

Connection diameter DN 180(176)



Villavent® Central vacuum cleaner system



- Sturdy housing from plastic
- Appealing design
- Good suction performance
- Easy and flexible mounting
- Easy operation and maintenance
- Long service life

The Villavent V20/V30 central vacuum cleaner is a powerful and low noise device. The central unit is connected with the vacuum socket via a low voltage control line and is activated by this control line. The dust container is located in the lower section of the unit. The dust is collected in a filter bag. To optimise the dust collection, our vacuum cleaners are equipped with safety filters and filter barriers.

Basic configuration

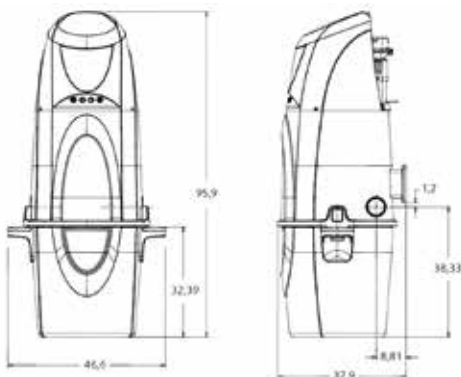
This consists of the central vacuum cleaner, a pipe set (selection of three sizes) and the Premium 2 hose set with a two-stage on/off switch on the handle.



Ready-to use pipe set with all the necessary pipe components, adhesive, pipe clips, control line and assembly instructions. Three sizes are available: for 1, 2 or 3 suction sockets. See the table on page 160 for the item number.



Dimensions



The Premium 2 hose set is a complete package with 10 m flexible hose, 1 m telescopic suction pipe, floor nozzle with adjustable brush, parquet nozzle, 3 in 1 multibrush (integrated dust brush, furniture brush and flat nozzle) and wall holder. The central vacuum cleaner is switched on or off via the switch on the handle.

Premium 2 hose set, 11 m

Art. no.

26430



Specially-shaped handle

Improves the airflow, the cleaning performance and reduces flow noise. Transition to adjustable and light-weight telescopic pipe made from aluminium. With adjustable power during vacuum cleaning. User-friendly and ergonomic handle.



Premium 2 multi-brush 3 in 1

With the combi-brush you will always have the right cleaning attachment. Dust brush, furniture brush and flat nozzle in one..

Premium 2 floor nozzle

With rolls and adjustable brush.



Connection to vacuum socket

Contact connector for vacuum socket with 10 m flexible hose..

Technical data

Typ	V20	V30
Art. no.	12547	12548
Power (max.)	1600 W	1650 W
Motor cooling	Surrounding	Surrounding
Voltage	230 V (50 Hz)	230 V (50 Hz)
Control signal	24 V	24 V
Suction effect	540 W	620 W
Current	6,3 A	6,5 A
Delay fuse	10 A	10 A
Low pressure (max.)	2730 mmWs	2880 mmWs
Air flow	50 l/s	57 l/s
Sound pressure level L _{pA} (1 m)	68 dB(A)	67 dB(A)
Vacuum unit container	31 l	31 l
Vacuum cleaner bag	23 l, single-use	23 l, single-use
Weight	ca. 7,4 kg	ca. 7,9 kg
Max. pipe length*	ca. 30 m	ca. 30 m
Pipe diameter	Ø 50,8 mm (2")	Ø 50,8 mm (2")
Cable length	~2,5 m cable (incl. plug)	~2,5 m cable (incl. plug)

*Pipe length between the appliance and the farthest vacuum point, including exhaust air hose. The exhaust air hose should not exceed a length of 10 m.

Content pipe kit	1 socket	2 sockets	3 sockets
Art. no.	3734	3735	3736
Elbow 90° for connection vacuum point	1 pcs.	2 pcs.	3 pcs.
Elbow 90° (One pipe bend of each set swivel-mounted)	3 pcs.	7 pcs.	10 pcs.
Elbow 45° for connection pipe system	2 pcs.	4 pcs.	6 pcs.
Y-Tee 45° for connection pipe system	1 pcs.	1 pcs.	1 pcs.
Y-Tee 90° for connection pipe system	-	-	1 pcs.
Pipe socket	4 pcs.	6 pcs.	8 pcs.
Pipe brackets	3 pcs.	5 pcs.	6 pcs.
Vacuum socket (wall-mounted component)	1 pcs.	2 pcs.	3 pcs.
Mounting frame for vacuum socket (building shell)	1 pcs.	2 pcs.	3 pcs.
Cover plate for vacuum socket (building protection)	1 pcs.	2 pcs.	3 pcs.
Low voltage cable 24 V	10 m	17 m	30 m
Mounting material (package)	1	1	1
Glue (bottle)	100 ml	100 ml	100 ml
Pipe, length 1.15 m	6 pcs.	10 pcs.	14 pcs.
Installation manual	1 pcs.	1 pcs.	1 pcs.

Accessories

Vacuum socket

With mounting frame and cover plate.
Made of plastic, white.

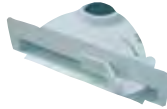


Vacuum socket

Art. no. 8485

Suction socket

Made of plastic, white.



Suction socket

Art. no. 12315

Silencer for exhaust air

Made of plastic, white.



Silencer for exhaust air

Art. no. 3744

Wall grid for exhaust air



Wall grid for exhaust air

Art. no. 3745

Hepa filter



Hepa filter

Art. no. 12549

Premium 2 parquet nozzle

With rolls and brush for hard floors.



Premium 2 parquet nozzle

Art. no. 30156

Premium 2 floor nozzle

With rolls and adjustable brush.



Premium 2 floor nozzle

Art. no. 30660

Premium 2 turbo nozzle

With rotating brush for carpets.



Premium 2 turbo nozzle

Art. no. 39605

Premium 2 multi-brush 3 in 1

Dust brush, furniture brush and flat nozzle in one.



Premium 2 multi-brush 3 in 1

Art. no. 30748

Premium 2 Adapter

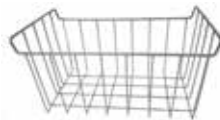
Round to oval.



Premium 2 Adapter

Art. no. 30779

Basket for accessories



Basket for accessories

Art. no. 313881

Ashcan



Ashcan

Art. no. 12320

Filter bag



Filter bag V20/V30

Art. no. 12552

Systemair Worldwide



Systemair production facilities worldwide:

Skinnskatteberg, Sweden:

Head office of the Systemair group, distribution center and largest production facility with one of Europe's most advanced R&D-centers. Frico's central warehouse is also located here.

Windischbuch, Germany:

Production facility for fans and modular air handling units, specialized on engineered products (e.g. tunnel and jet fans). Distribution center.

Mülheim an der Ruhr, Germany:

Menerga is a leading European producer of air handling units for swimming pool halls and comfort ventilation with extra high efficiency.

Langenfeld, Germany:

Production of air curtains.

Hässleholm, Sweden:

VEAB is the leading European manufacturer of electric duct heaters. Production of heating and cooling coils, electric and water based.

Ukmerge, Lithuania:

Production of smaller air handling units with energy recovery systems.

Maribor, Slovenia:

Specialized in centrifugal smoke extract fans, EN certified.

Hasselager, Denmark:

Production of modular air handling units.

Dal, Eidsvoll, Norway:

Production of air handling units for the Norwegian market.

Bratislava, Slovakia:

The factory in Bratislava manufactures air distribution products and EN certified fire and smoke dampers.

Madrid, Spain:

Production of air handling units for the southern European market.



Quality:

Systemair is certified in accordance with ISO 9001; ISO 14001 and ATEX. Our research and development laboratories are one of the most modern in Europe; measurements are made in accordance with international standards like AMCA and ISO.

Save energy, lower running cost!

Our label "Green Ventilation" features products with a high energy saving potential. All products labelled with "Green Ventilation" combine energy economy with energy efficiency.



Milan, Italy:

Our factory in Italy, Systemair AC, develops and manufactures a wide range of air conditioner.

Waalwijk, Netherlands:

Holland Heating is Netherlands leading manufacturer of air handling units.

Tilières-sur-Avre, France:

Production of air conditioning products.

Istanbul, Turkey:

Systemair-HSK is Turkey's leading manufacturer of air handling units.

Bouctouche, Canada:

Our main North American production facility of air handling units and inline fans for commercial and residential applications is located in Bouctouche.

Tillsonburg, Canada:

In Tillsonburg we develop, engineer, service and manufacture school classroom ventilation equipment for the American market.

Kansas City, USA:

Production of fans for the US market.

Kuala Lumpur, Malaysia :

Production and marketing of products for Tunnel and garage ventilation.

Hyderabad, India:

Production of air distribution products.

New Delhi, India:

The factories in New Delhi and Noida manufacture grilles and diffusers.

Wujiang, China:

Production of air handling units for the Asian market.

