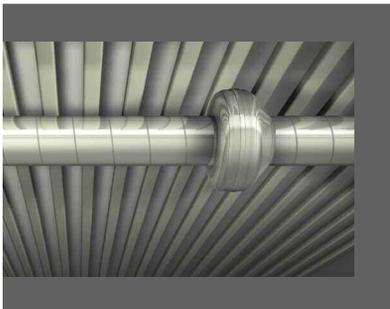
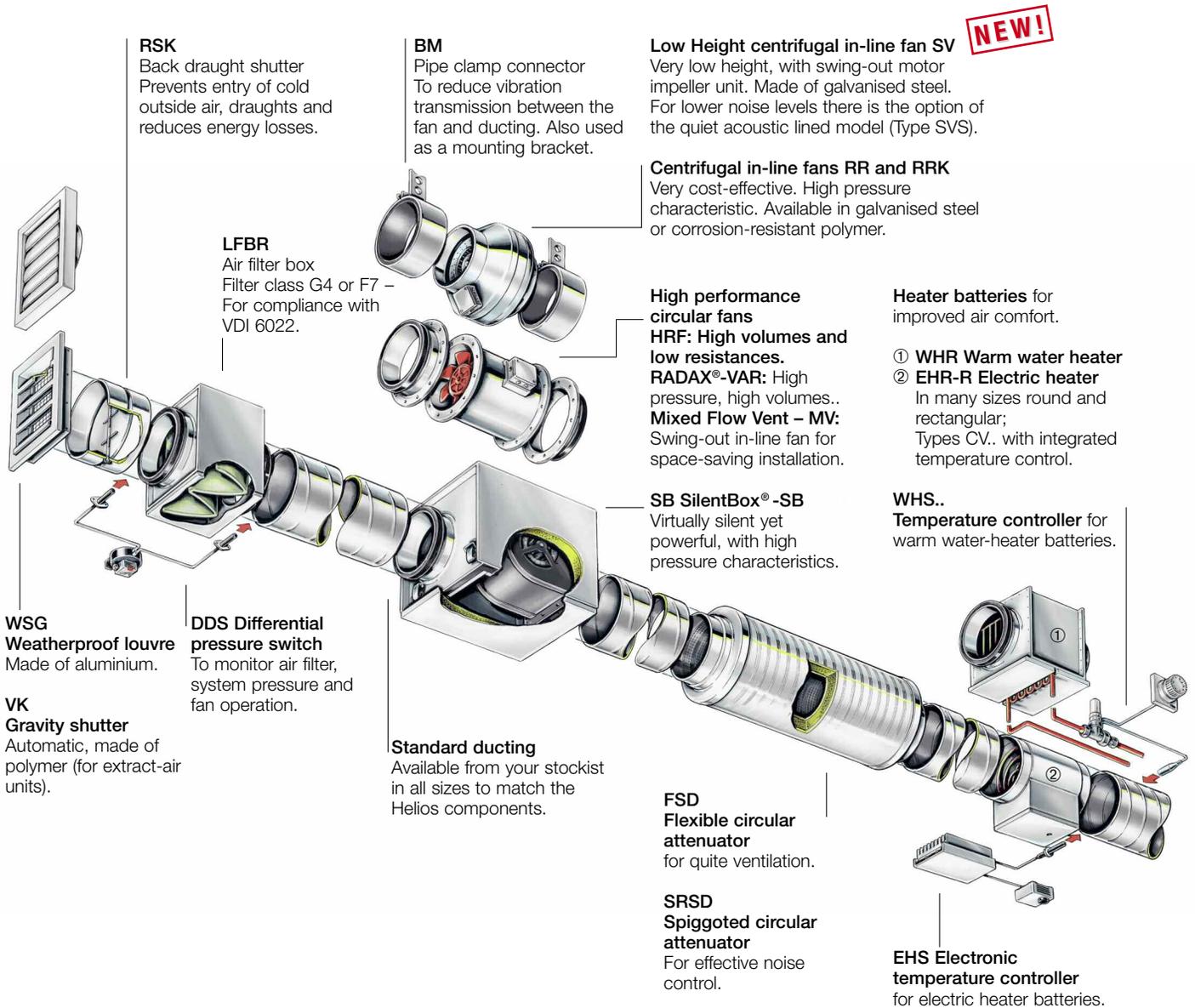


## Advantages:

- The components are available in every size and every performance level.
- All the components are compatible with each other and fit exactly together.
- Short installation time, simple design and matched accessories.



**Effective system solutions from your leading supplier.**

**In-Line Mixed flow fan MV.**  
 High pressure characteristics and high air flow volumes in space saving design.  
 $V = 200 - 2500 \text{ m}^3/\text{h}$

In-line fans with plug in fan section in one or two-stage options as well as in parallel models. 21 types in 7 diameters from 100 up to 315 mm. In a plastic case with an easy fastening system. With two speed motors as standard.

**InlineVent® RR, RRK., SV.**  
 For effective performance of medium and lower air volumes against high resistances.  
 $V = 100 - 1600 \text{ m}^3/\text{h}$

**Market leading in line centrifugal range RR..**, with the option of galvanised steel, corrosion resistant polymer or as explosionproof small fans. Model RR with additional energy saving speed as standard.  
**Low height SlimVent model SV..**, with swing-out motor impeller unit. Compact design, ideal for the installation in false ceilings or other restricted spaces.

**NEW!**

**NEW!**

**Quite range SB, SVS**  
 Sound absorbent units for specific noise levels  
 $V = 230 - 2650 \text{ m}^3/\text{h}$

**Helios SilentBox® SB..**  
 Almost silent, with high air flow volume and high pressure characteristic. Unit casing is designed for sound absorption.  
**SlimVent SVS** Low height and ultra quiet extract unit. Unit casing with sound absorbent mineral wool lining. Energy saving centrifugal fan with a swing-out motor impeller unit.



from page 218



from page 234



from page 250



Duct fans

■ **Specifications**

InlineVent® and Mixed Flow Vent circular fans provide the advantages of axial fans such as the straight in-line air flow design, and the benefit of a simple and cost effective installation with the advantage of the high pressure characteristic of a centrifugal fan.

There are many advantages of this range:

- Less space required.
- Complete speed controllability.
- Quick installation.
- Cost effective mounting.
- Low noise level.
- High pressure development.

■ **Ranges – Overview**

□ **Model Mixed Flow Vent MV..**

High pressure and air flow volume characteristic in a space saving design.

From 200 to 2500 m<sup>3</sup>/h developing up to 1000 Pa this versatile range is suitable for the ventilation of most small and medium size rooms.

There are 21 types in nominal diameters from 100 up to 315 mm with one or two-stage configurations plus parallel models to give a wide range of performance.

□ **Model RR..**

Market leading design that is a very cost effective solution. Centrifugal in-line fans for smaller and medium sized ducted systems in nominal diameters 100 – 315 mm.

□ **Model RRK**

An alternative range in corrosive and impact-resistant polymer casing. For smaller and medium sized ducted systems in nominal diameters 100 – 315 mm.

□ **Model SV..**

SlimVent® compact, flat in-line fans from 80 – 200 mm. With an energy efficient centrifugal impeller for effective performance from low to higher air flow volumes.

□ **Model RRK Ex**

Atex certified explosion proof small fans for 230 V, 1 phase 50 Hertz current. For ventilation of chemical, pharmaceutical laboratories, workshops, battery rooms etc. For in-line installation, approved for operation in group II category 2G for operation in zones 1, 2 and according to DIN EN 60079/VDE 0165.

□ **Acoustic Line SB..**

Helios SilentBox® - the virtually noise free solution for high performance centrifugal fans with duct connection in diameters from 125 up to 400 mm.

□ **Acoustic Line SVS**

Fully insulated with sound absorbent mineral wool. Extremely compact design, ideal for false ceilings and restricted spaces. Duct connection in nominal diameters from 125 up to 200 mm.

■ **For complete information see the “general technical information” and descriptions on the product pages.**

□ **Installation position, mounting and drainage holes**

All models can be installed in any position. For the SV.. models please ensure that the Swing-out areas are kept clear to provide easy access for service and maintenance .

If condensation may occur (e.g. intermittent operation, high humidity or varying temperatures) the fan must be installed in a manner that allows the condensation to drain off unhindered. If required additional holes may have to be drilled into the casing at the appropriate positions to allow condensate drainage. In models RR.. condensate drains are mounted on the impeller plate and motor casing. Alternatively the duct system may have to be insulated to avoid condensation.

□ **Noise/vibration transmission**

must be avoided from the ducting and building. Therefore the fan should not be connected directly to the ducting. Suitable mounting sleeves (BM.. pipe clamps) are available as an accessory.

□ **Explosion proof models**

With regards to regulations and requirements please refer to chapter “Design of ventilation systems – explosion proof” and to the Local Health and Safety Executive. The ex-proof models RRK.. Ex corresponds to the unit group II, category 2G for operation in zone 1 and 2.

□ **Motor - Impeller**

All models incorporate an external rotor motor, protected to IP 44 within the air flow. They conform to DIN EN 60034/VDE 0530 and DIN EN 60335-1/VDE 0700 with an insulation class F, plus moisture protection. They are maintenance free, radio-suppressed, speed controllable and suitable for continuous operation. The ball bearings are greased for life. The centrifugal impellers are pressed onto the motor body and dynamically balanced to DIN ISO 1940 T.1 – class 6.3 as one unit.

□ **Speed control**

All InlineVent®-, Mixed Flow Vent and Acoustic Line-fans are speed controllable via voltage reduction of 10–100%. Thus the performance can be adjusted to the required air flow volumes.

Model SVV 80 is speed controllable with three-step switch and the models SVR, SVS and RR are controllable with a five-step transformer or electronic speed controller or two speed with an optional two-step switch. Mixed Flow Vent MV can be controlled either with two-speed switch or five-step transformer controller.

Our speed controllers are suitable to control a range of Helios fans (one or more) up to their maximum nominal output. When selecting a controller not shown on the tables, allow for a 10% safety margin.

□ **Air flow direction**

The air flow direction of centrifugal fans is fixed and cannot be reversed; but the units are suitable for installation in any position and can be installed for supply or extract airflow. The direction of rotation and the direction of air flow are marked on the unit with arrows and must be checked when installing.

□ **Incorrect direction of rotation**

If the fan is operated in the reverse direction of rotation the motor will overheat and the thermal contact will trip. Typical indication of this is a very low air flow combined with high noise levels and vibration.

□ **Air flow temperature**

All models are suitable for ambient temperatures between –40 °C up to a minimum of +40 °C. The maximum temperature varies between models and can be found at the tables on the individual product page.

■ **Note**

The integration of F7 air filters and differential pressure switch DDS (Ref. No. 0445) in outside air units comply with the requirements of VDI 6022.

Note	Page
Design of systems, acoustics, explosion protection	12 on
General techn. information, speed control	17 on



# Mixed Flow Vent, SlimVent, Acoustic Line and Centrifugal in-line fans Selection chart

This table is designed for easy selection of in-line fans.  $\Delta p_{stat}$ , air flow volumes, noise breakout and intake sound levels as sound

pressure levels at 1 m distance (free field conditions).

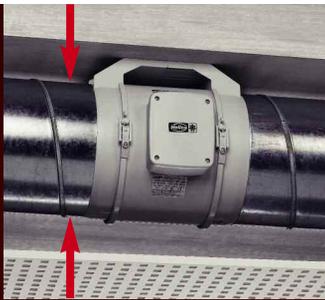
Type	Sound press. breakout	Sound press. intake	Air flow volumes volume in m <sup>3</sup> /s against static pressure												
	L <sub>PA</sub> dB(A)	L <sub>PA</sub> dB(A)	$(\Delta P_{stat.})$ in Pa												
	in 1 m dist.	in 1 m dist.	0	50	100	150	200	250	300	350	400	500	600	700	800
MV 100 A	34/38	45/50	0.053												
MV 100 B	32/38	46/52	0.064	0.033	0.011										
MV 125	35/42	49/56	0.097	0.083	0.028										
MV 150	40/48	56/64	0.144	0.133	0.117	0.097	0.022								
MV 160	41/49	57/65	0.153	0.131	0.114	0.097	0.033								
MV 200	48/53	64/69	0.278	0.258	0.239	0.214	0.175								
MV 250	52/58	66/72	0.353	0.331	0.306	0.281	0.253	0.211	0.147	0.095	0.053				
MV 315	56/63	69/76	0.631	0.575	0.519	0.467	0.414	0.364	0.314	0.264	0.217	0.136			
MVP 100 B	35/41	49/55	0.128	0.064	0.025										
MVP 125	38/45	52/59	0.195	0.167	0.56										
MVP 150	43/51	59/67	0.289	0.264	0.233	0.197	0.044								
MVP 160	44/52	60/68	0.308	0.261	0.231	0.197	0.069								
MVP 200	51/56	67/72	0.556	0.519	0.478	0.428	0.353								
MVP 250	55/61	69/75	0.706	0.661	0.614	0.561	0.503	0.422	0.294	0.192	0.108				
MVZ 100 B	37/43	49/55	0.064	0.056	0.042	0.019	0.014								
MVZ 125	40/47	52/59	0.097	0.092	0.083	0.075	0.028	0.017							
MVZ 150	46/54	59/67	0.144	0.139	0.133	0.125	0.117	0.108	0.100	0.042	0.025				
MVZ 160	47/55	59/67	0.153	0.142	0.131	0.119	0.114	0.106	0.100	0.047	0.36				
MVZ 200	54/59	66/71	0.278	0.269	0.261	0.250	0.239	0.230	0.214	0.200	0.178				
MVZ 250	58/64	69/75	0.353	0.342	0.331	0.319	0.308	0.294	0.281	0.269	0.253	0.214	0.150	0.097	0.056
MVZ 315	60/68	72/79	0.631	0.603	0.575	0.497	0.519	0.494	0.467	0.442	0.417	0.367	0.314	0.267	0.217
RR 100 A	36	59	0.069	0.056	0.044	0.033	0.025	0.017	0.008						
RR 100 C	42	63	0.092	0.081	0.067	0.053	0.042	0.028	0.019	0.006					
RR 125 C	42	63	0.133	0.117	0.097	0.69	0.470	0.033	0.019	0.008					
RR 160 B	42	62	0.147	0.131	0.106	0.083	0.067	0.044	0.028						
RR 160 C	49	66	0.242	0.222	0.203	0.167	0.139	0.111	0.089	0.050					
RR 200 A	47	65	0.258	0.239	0.219	0.203	0.175	0.144	0.108	0.075	0.039				
RR 200 B	48	66	0.294	0.275	0.256	0.233	0.208	0.178	0.150	0.117	0.089	0.033			
RR 250 A	47	67	0.258	0.236	0.211	0.192	0.167	0.136	0.108	0.072					
RR 250 C	49	67	0.314	0.292	0.267	0.242	0.219	0.019	0.167	0.139	0.106	0.039			
RR 315 B	47	67	0.392	0.367	0.339	0.314	0.286	0.256	0.222	0.186	0.153	0.072			
RR 315 C	50	68	0.453	0.431	0.408	0.386	0.361	0.333	0.306	0.275	0.242	0.175	0.100	0.022	
RRK 100	45	54	0.064	0.050	0.036	0.028	0.019	0.008							
RRK 125	48	54	0.092	0.081	0.072	0.061	0.047	0.031	0.008						
RRK 160	46	61	0.122	0.108	0.094	0.083	0.069	0.050	0.019						
RRK 200	56	66	0.214	0.194	0.172	0.150	0.122	0.094	0.058	0.022					
RRK 250	53	61	0.231	0.211	0.192	0.166	0.142	0.108	0.072	0.028					
RRK 315	57	66	0.353	0.331	0.306	0.278	0.253	0.225	0.194	0.161	0.122	0.033			
RRK 180 Ex	47	56	0.081	0.069	0.053	0.036	0.006								
RRK 200 Ex	59	66	0.158	0.142	0.122	0.103	0.081	0.053	0.017						
RRK 250 Ex	65	72	0.278	0.247	0.214	0.181	0.147	0.114	0.078	0.022					
SB 125 A	28	46	0.064	0.058	0.053	0.047	0.039	0.022							
SB 125 C	37	55	440	410	0.108	0.100	0.092	0.081	0.067	0.031					
SB 160 B	36	54	1)	0.106	0.097	0.092	0.083	0.072	0.058	0.031					
SB 160 D	39	58	1)	1)	0.133	0.122	0.114	0.103	0.092	0.081					
SB 200 C	41	56	1)	0.183	0.175	0.164	0.147	0.128	0.106	0.069	0.014				
SB 200 D	42	55	0.228	0.214	0.203	0.189	0.175	0.161	0.147	0.131	0.117	0.083	0.036		
SB 250 C	43	56	1)	1)	1)	0.261	0.247	0.228	0.206	0.164	0.092				
SB 250 E	44	55	0.314	0.294	0.275	0.256	0.236	0.214	0.197	0.178	0.156	0.114	0.067	0.017	
SB 315 B	45	64	1)	1)	0.531	0.489	0.444	0.408	0.347	0.219					
SB 315 C	37	56	1)	1)	0.403	0.378	0.356	0.322	0.264	0.167					
SB 355 C	39	60	1)	1)	1)	0.503	0.458	0.408	0.350	0.281	0.167				
SB 400 F	46	61	1)	1)	0.692	0.650	0.611	0.569	0.522	0.472	0.397				
SVR 125 B	42/51	52/61	0.119	0.106	0.094	0.081	0.067	0.050	0.031	0.011					
SVR 160 K	37/48	50/61	0.128	0.117	0.106	0.092	0.075	0.056	0.036	0.014					
SVR 200 K	47/54	59/66	0.231	0.206	0.186	0.169	0.156	0.136	0.114	0.089	0.058				
SVS 125 B	35/44	37/46	0.111	0.100	0.089	0.078	0.064	0.050	0.028	0.006					
SVS 160 K	33/44	38/48	0.128	0.117	0.103	0.089	0.069	0.053	0.028	0.003					
SVS 200 K	44/51	48/55	0.233	0.214	0.194	0.178	0.161	0.142	0.117	0.081	0.44				
SVV 80	24/26/37	25/32/43	0.031	0.028	0.025	0.022	0.019	0.017	0.006						
SVV 100 B	51	54	0.078	0.072	0.067	0.061	0.056	0.047	0.031						

1) These duties are not available as the fan requires the minimum pressure shown.

## In-Line Mixed flow fan

With air flow volumes of 200 to 2500 m<sup>3</sup>/h and up to 1000 Pa pressure (as a two-stage fan), the Helios Mixed Flow Vent is suitable for the ventilation of most small and medium size rooms.

These fans are a very compact design resulting in a powerful fan range with slim dimensions. The casing diameter is only just slightly larger than the ducting making it ideal for restricted spaces. With the ability to be fitted in any position: horizontal, vertical or diagonal, makes these fans very versatile.



*Fits directly into the ducting. The perfect solution for any place with restricted space, e.g. behind false ceilings. The real advantage of the Helios Mixed Flow Vent is space saving and it is easy to install.*



*The terminal box with the central fan section can be rotated inside the frame to any position. Thus local obstructions can easily be avoided.*



*Maintenance and cleaning? No problem with Mixed Flow Vent. Open the clips and pull out the fan unit. Everything is freely accessible, it's so easy!*

**In-Line Mixed flow fan.  
Slim by design powerful in performance.**

Within the very compact casing of Mixed Flow Vent In-line fans are the built in guide vanes and combined with the powerful impellers produce high pressures and high air flow volumes. The units have a two speed operation as standard and the high speed is fully variable through a speed controller (accessory).

The casing with integral fixing brackets can be mounted in any position. The central fan section with terminal box can be rotated to any direction. By releasing the clamps, the central fan section can be removed easily. The unit concept provides the easiest in-duct installation and simplifies maintenance and cleaning. The unit concept complies with the requirements of VDI 6022.

The energy saving condenser motors (protection class IP 44) are equipped with ball bearings for smooth running and an operation period of at least 30.000 hours and they are totally enclosed.

Thus, they are suitable for every application and can even be used handling polluted and dusty air.

*The powerful Mixed Flow Vent impellers produce high pressures and high air flow volumes.*

The new Helios in-line fans Mixed Flow Vent extend the VAR success story to smaller fans and lower air flow volumes. Helios Mixed Flow Vent has many advantages over

conventional solutions in many respects and suits most applications. A leading-edge product for modern innovative installations in ventilation systems.

**High air flow volume and high pressure characteristic in a space saving design.**

Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

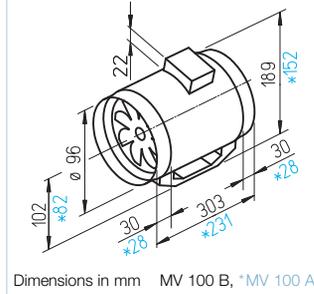
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed.
- Installation in any position.
- Long life ball bearings, designed for 30.000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and radio suppressed.
- Motor protection**  
Thermal overload protection fitted in the winding as standard.
- Sound level**  
See explanations on page 223.

**MV – Single-stage**

Swing-out in-line fan for space-saving in-duct installation.

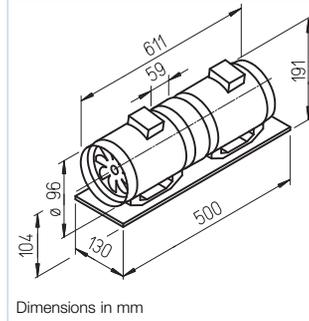


**Specification MV**

- Impeller**  
Mixed flow for high volume flow and high pressure performance. Made of high-grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: two in-line fans mounted in series.

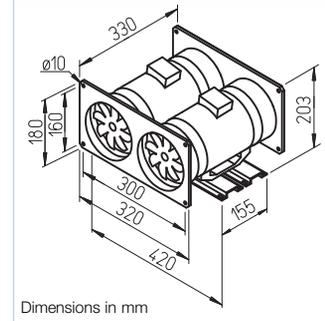


**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits.
- Electrical connection**  
Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



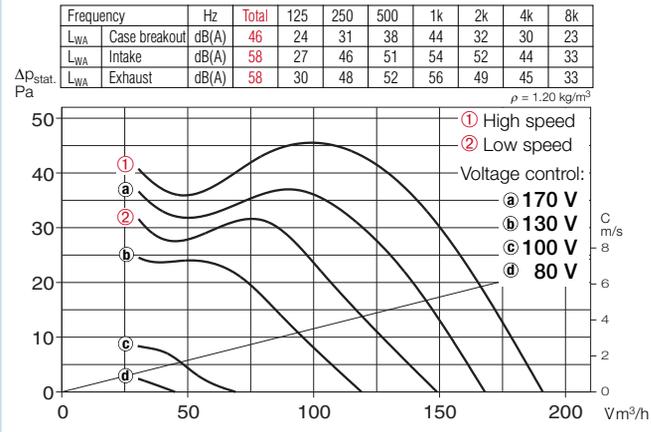
**Specification MVP**

- Impeller**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the re-circulation, two exhaust back draught shutters are required (RSK, accessory).

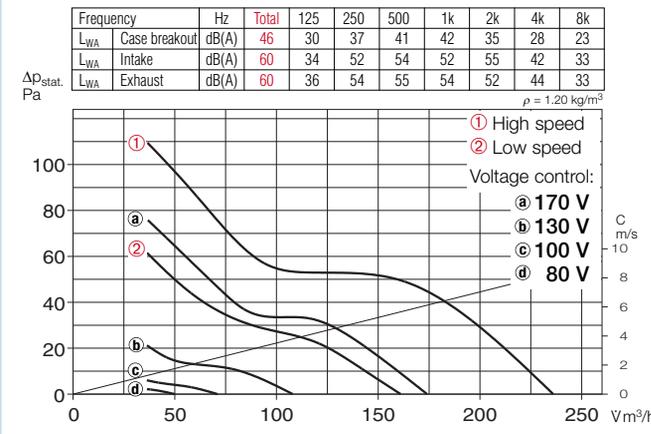
Type	Ref. No.	Spigot dia. mm	Air flow volume min./max. $\checkmark$ m <sup>3</sup> /h	R.P.M. min./max. min <sup>-1</sup>	Sound pressure level at 1m case breakout air noise min./max. dB (A)		Power consumption min./max. W	Current min./max. A	Wiring diagram No.	Max. air flow temperature + °C	Nominal weight (net) kg	Transformer-speed controller 5-step		Electronic* speed controller, stepless surface mounted	
					Type	Ref. No.						Type	Ref. No.		
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 100 A	6050	100	150/190	2070/2620	34/38	45/50	12/15	0.05/0.07	844.1	60	1.2	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
MV 100 B	6051	100	170/240	1590/2170	32/38	46/52	20/23	0.09/0.11	844.1	60	1.7	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 100 B	6058	100	170/240	1590/2170	37/43	49/55	40/46	0.18/0.22	845.1	60	4.5	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 100 B	6065	–	340/480	1590/2170	35/41	49/55	40/46	0.18/0.22	845.1	60	5.7	TSW 0.3	3608	ESU 1/ESA 1	0236/0238

\* In noise sensitive cases, transformer-control devices should be used. Electronic phase angle control may generate disturbing increase in motor noise.

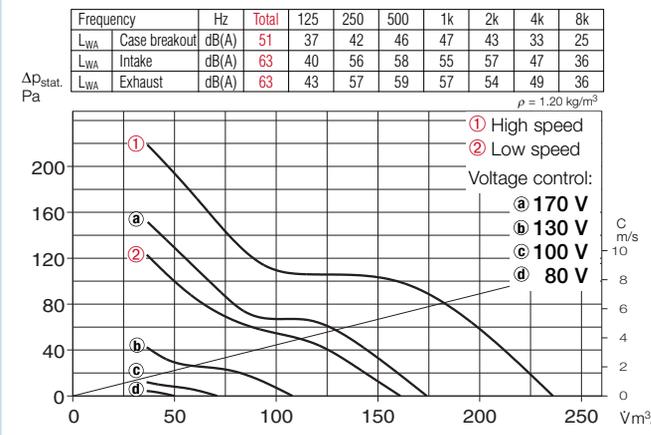
**MV 100 A – Single-stage**



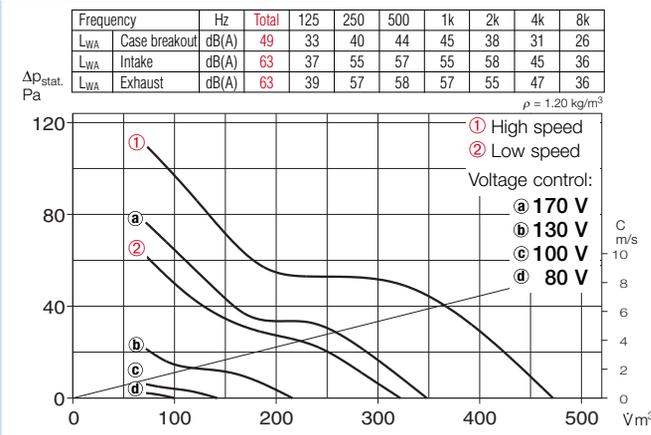
**MV 100 B – Single-stage**



**MVZ 100 B – Two-stage**



**MVP 100 B – Parallel**



**Accessories for MV and MVZ**

**Flexible connector**

**FM 100** Ref. No.1681  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



**Gravity shutter**

**VK 100** Ref. No. 0757  
Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer; colour: light grey.



**External wall grille**

**G 100** Ref. No. 0796  
To cover or insert into circular ventilation holes. Made of impact resistant, white polymer.



**Guard for spigot connection**

**MVS 100** Ref. No. 6071  
For intake and exhaust installation on the ventilation unit.



**Spigotted attenuator**  
with 50 mm insulation.

**FSD 100** Ref. No. 0676  
flexible, from aluminium, length 1 m.  
**SRSD 100/...** see page 319  
circular, from galvanised steel, length 300–1200 mm.



**Air filter box**

**LFBR 100 G4** Ref. No. 8576  
With a large cross section area, for in-duct installation.



**Electric heater batteries**

**EHR-R 0,4/100** 0,4 kW No. 8708  
In circular casing, made of galvanised steel.



**Warm-water heater batteries**

**WHR 100** Ref. No. 9479  
For in-duct installation.



**Accessories for all types**

**Back draught shutter**

**RSKK 100** Ref. No. 5106  
Automatic, made of polymer. For in-duct installation.



**Operating switch 0-1-2**

**MVB** Ref. No. 6091  
With on/off, low and high speed functions.



**Transformer speed controller**

**TSW** see table  
Five-step transformer speed controller for surface mounting.



**Electronic speed controller**

**ESU/ESA** see table  
For flush-/surface mounting.



**Electronic run-on switch**

**ZNE** Ref. No. 0342  
With continuously adjustable follow-up time.



**High air flow volume and high pressure characteristic in a space saving design.**

Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

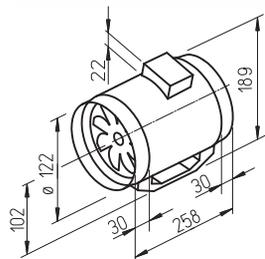
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed.
- Installation in any position.
- Long life ball bearings, designed for 30.000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and radio suppressed.
- Motor protection**  
Thermal overload protection fitted in the winding.

**MV – Single-stage**

Swing-out in-line fan for space-saving in-duct installation.



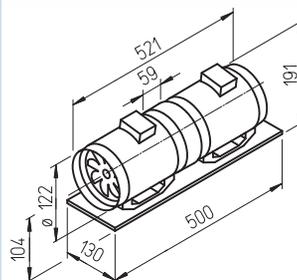
Dimensions in mm

**Specification MV**

- Impeller**  
Mixed flow for high volume flow and high pressure performance. Made of high-grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: two in-line fans mounted in series.



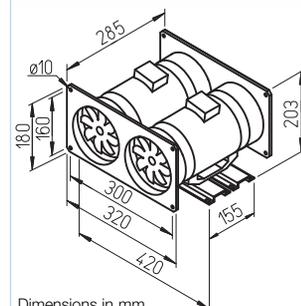
Dimensions in mm

**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



Dimensions in mm

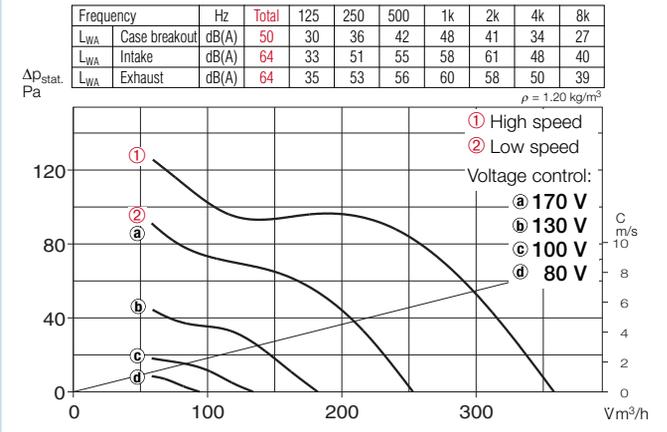
**Specification MVP**

- Impeller**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the re-circulation, two exhaust back draught shutters are required (RSK, accessory).

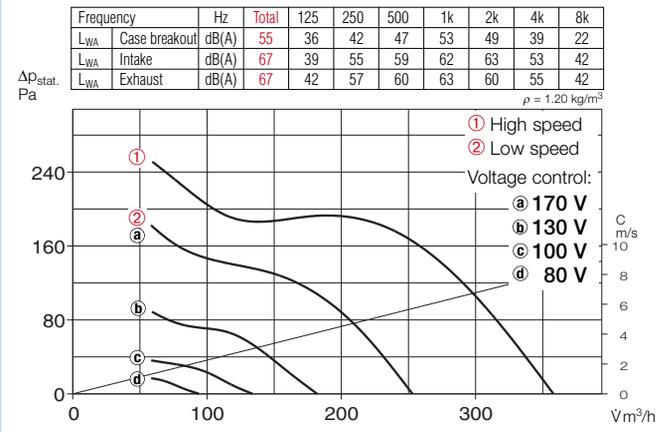
Type	Ref. No.	Spigot dia.	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1 m case breakout	Sound pressure level in 1 m air noise min./max.	Power consumption min./max.	Current usage min./max.	Connection by wiring diagram	Max. air flow temperature	Nominal weight (net)	Transformer-speed controller 5-step	Electronic* speed controller, stepless surface mounted		
		mm	∇ m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 125	6052	125	250/360	1670/2300	35/42	49/56	25/33	0.11/0.15	844.1	60	1.7	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Two-stage ventilation unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 125	6059	125	250/360	1670/2300	40/47	52/59	50/66	0.22/0.30	845.1	60	4.6	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 125	6066	–	500/720	1670/2300	38/45	52/59	50/66	0.22/0.30	845.1	60	5.8	TSW 0.3	3608	ESU 1/ESA 1	0236/0238

\* In noise relevant cases, transformer-control devices shall be provided. Electronic phase angle control may generate disturbing increase in motor noise.

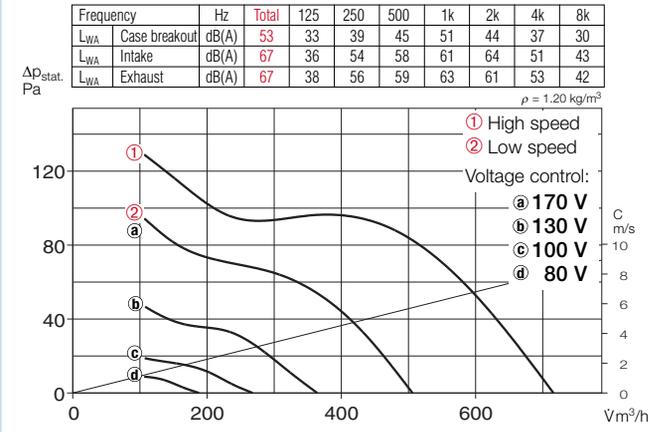
**MV 125 – Single-stage**



**MVZ 125 – Two-stage**



**MVP 125 – Parallel**



**Sound levels**

The total values and the spectrum figures are given above the performance curves for

- Sound levels at case breakout.
- Sound levels of intake and exhaust air in dB(A). On the table (see left page)
- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

**The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.**

**Info Accessories Page**

Filters, heater batteries and silencers	305
Temperature controllers for heater batteries	311, 315
Flexible ventilation pipes, ventilation grilles, fittings, roof ducts	361
Ceiling valves	380
Speed controllers, control units and switches	397

**Accessories for MV and MVZ**

**Flexible connector**

**FM 125** Ref. No. 1682  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



**Gravity shutter**

**VK 125** Ref. No. 0857  
Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer; colour: light grey.



**External wall grille**

**G 160** Ref. No. 0893  
To cover or insert into circular ventilation holes. Made of impact resistant, white polymer.



**Guard for spigot connection**

**MVS 125** Ref. No. 6072  
For intake and exhaust installation on the ventilation unit.



**Spigotted attenuator with 50 mm insulation.**

**FSD 125** Ref. No. 0677 flexible, from aluminium, length 1 m.  
**SRSD 125/...** see page 319 circular, from galvanised steel, length 300–1200 mm.



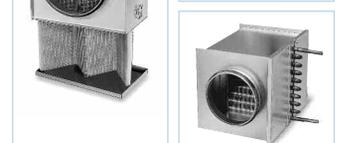
**Air filter box**

**LFBR 125 G4** Ref. No. 8577  
With a large cross section area, for in-duct installation.



**Electric heater batteries**

**EHR-R 0.8/125** 0.8 kW No. 8709  
In circular casing, made of galvanised steel.



**Warm-water heater batteries**

**WHR 125** Ref. No. 9480  
For in-duct installation.



**Accessories for all types**

**Back draught shutter**

**RSKK 125** Ref. No. 5107  
Automatic, made of polymer. For in-duct installation.



**Operating switch 0-1-2**

**MVB** Ref. No. 6091  
With on/off, low and high speed functions.



**Transformer speed controller**

**TSW** see table  
Five-step transformer speed controller for surface mounting.



**Electronic speed controller**

**ESU/ESA** see table  
For flush-/surface mounting.



**Electronic run-on switch**

**ZNE** Ref. No. 0342  
With continuously adjustable follow-up time.



Duct fans

**High air flow volume and high pressure characteristic in a space saving design.**

Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

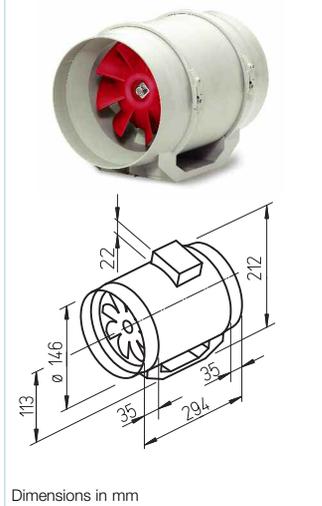
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed.
- Installation in any position.
- Long life ball bearings, designed for 30.000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and radio suppressed.
- Motor protection**  
Thermal overload protection fitted in the winding.

**MV – Single-stage**

Swing-out in-line fan for space-saving in-duct installation.

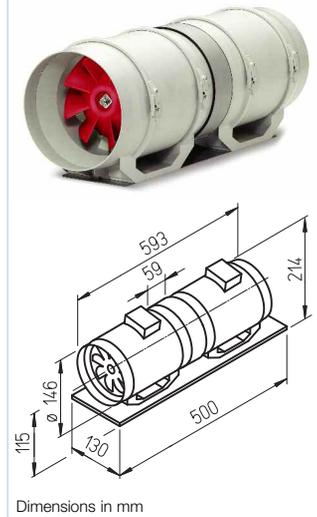


**Specification MV**

- Impeller**  
Mixed flow for high volume flow and high pressure performance. Made of high-grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: two in-line fans mounted in series.

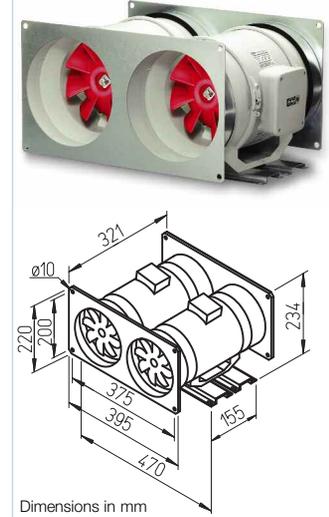


**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



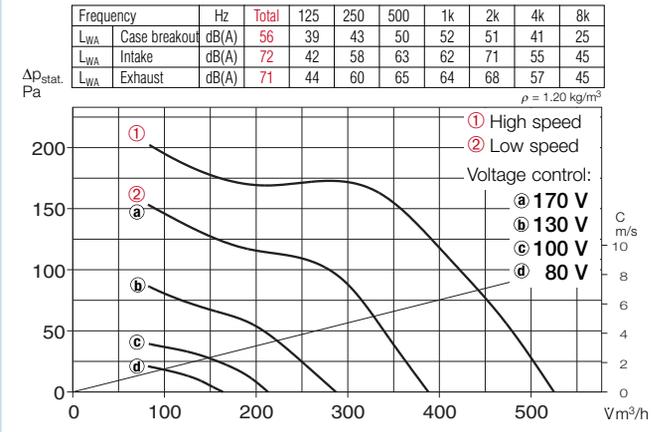
**Specification MVP**

- Impeller**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the re-circulation, two exhaust back draught shutters are required (RSK, accessory).

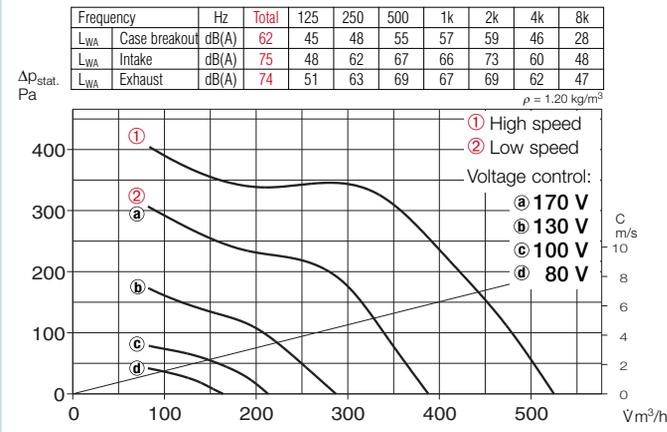
Type	Ref. No.	Spigot dia.	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1 m case breakout	Sound pressure level in 1 m air noise min./max.	Power consumption min./max.	Current usage min./max.	Connection by wiring diagram	Max. air flow temperature	Nominal weight (net)	Transformer-speed controller 5-step	Electronic* speed controller, stepless surface mounted		
		mm	V m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 150	6053	150	380/520	1520/2290	40/48	56/64	40/58	0.18/0.26	844.1	60	2.3	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Two-stage ventilation unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 150	6060	150	380/520	1520/2290	46/54	59/67	80/116	0.36/0.52	845.1	60	5.8	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 150	6067	–	760/1040	1520/2290	43/51	59/67	80/116	0.36/0.52	845.1	60	8.0	TSW 1.5	1495	ESU 1/ESA 1	0236/0238

\* In noise relevant cases, transformer-control devices shall be provided. Electronic phase angle control may generate disturbing increase in motor noise.

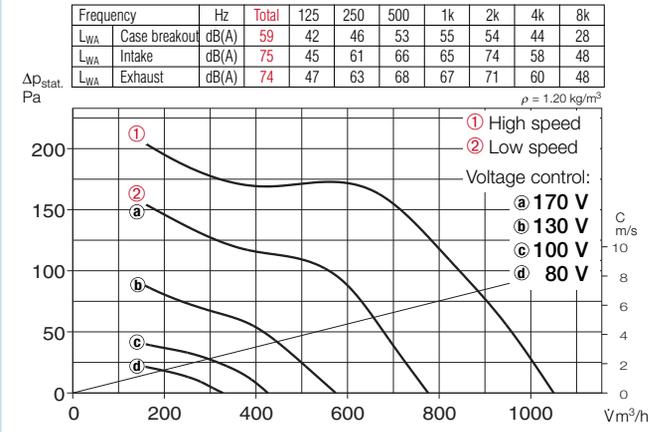
**MV 150 – Single-stage**



**MVZ 150 – Two-stage**



**MVP 150 – Parallel**



**Sound levels**

The total values and the spectrum figures are given above the performance curves for

- Sound levels at case breakout.
- Sound levels of intake and exhaust air in dB(A). On the table (see left page)
- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

**The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.**

**Accessories Page**

Filters, heater batteries and silencers	305
Temperature controllers for heater batteries	311, 315
Flexible ventilation pipes, ventilation grilles, fittings, roof ducts	361
Ceiling valves	380
Speed controllers, control units and switches	397

**Accessories for MV and MVZ**

**Flexible connector**

**FM 150** Ref. No. 1683  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



**Gravity shutter**

**VK 160** Ref. No. 0892  
Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer; colour: light grey.



**External wall grille**

**G 160** Ref. No. 0893  
To cover or insert into circular ventilation holes. Made of impact resistant, white polymer.



**Guard for spigot connection**

**MVS 150** Ref. No. 6073  
For intake and exhaust installation on the ventilation unit.



**Spigotted attenuator**  
with 50 mm insulation.

**FSD 160<sup>1)</sup>** Ref. No. 0678  
flexible, from aluminium, length 1 m.  
**SRSD 160/...** see page 319  
circular, from galvanised steel, length 300–1200 mm.



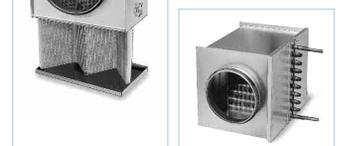
**Air filter box**

**LFBR 160 G4<sup>1)</sup>** Ref. No. 8578  
With a large cross section area, for in-duct installation.



**Electric heater batteries**

**EHR-R 1.2/160<sup>1)</sup>** 1.2 kW No. 9434  
In circular casing, made of galvanised steel.



**Warm-water heater batteries**

**WHR 160<sup>1)</sup>** Ref. No. 9481  
For in-duct installation.



**Accessories for all types**

**Back draught shutter**

**RSK 150** Ref. No. 5073  
Automatic, made of metal. For in-duct installation.



**Operating switch 0-1-2**

**MVB** Ref. No. 6091  
With on/off, low and high speed functions.



**Transformer speed controller**

**TSW** see table  
Five-step transformer speed controller for surface mounting.



**Electronic speed controller**

**ESU/ESA** see table  
For flush-/surface mounting.



**Electronic run-on switch**

**ZNE** Ref. No. 0342  
With continuously adjustable follow-up time.

<sup>1)</sup> This accessory with ND 160 mm is applicable for ø 150 mm ducting by use of foam rubber.

**High air flow volume and high pressure characteristic in a space saving design.**

Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

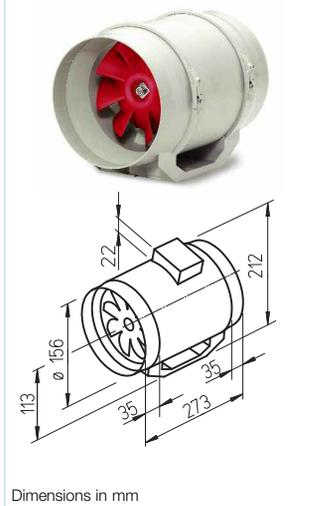
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed.
- Installation in any position.
- Long life ball bearings, designed for 30.000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and radio suppressed.
- Motor protection**  
Thermal overload protection fitted in the winding.

**MV – Single-stage**

Swing-out in-line fan for space-saving in-duct installation.

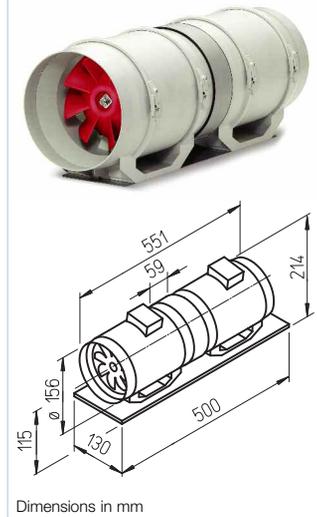


**Specification MV**

- Impeller**  
Optimised for high volume flow and high pressure performance. Made of high-grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Suitable in any position – horizontal – without restrictions for intake and extract ventilation by appropriate installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: two in-line fans mounted in series.

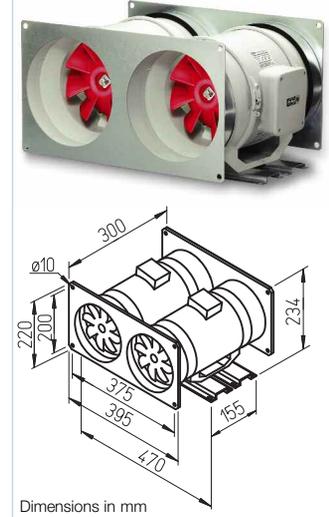


**Specification MVZ**

- Impeller**  
Two MV fans are connected in series by means of a sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan is located with separate terminal box on outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. By using a speed controller, the high speed amps have to be used.
- Installation**  
Suitable in any position – horizontal, vertical or diagonal – without restrictions for intake and extract ventilation by appropriate installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



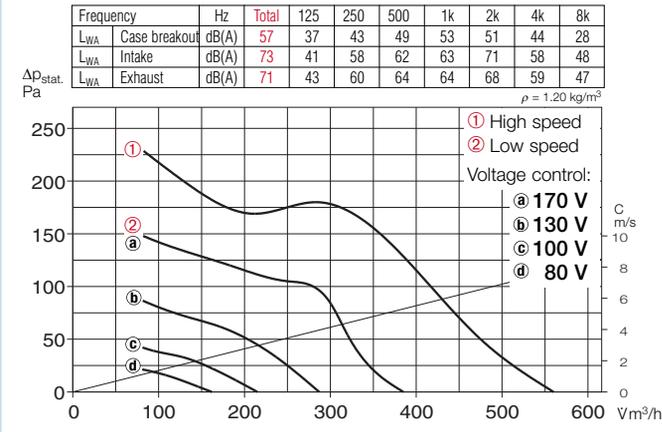
**Specification MVP**

- Impeller**  
Two parallel MV fans are connected by square channel-connection plates, which are placed on the intake and exhaust air side, and screwed together with mounting rails. Delivered as ready-to-assemble kits. Parallel operation (joint control) doubles the volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with separate terminal box on outer casing. When operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a pair of relays has to be used as shown in the wiring diagram. By using a speed controller, the high speed amps have to be used. Each fan can also be operated separately or together when necessary. To prevent the recirculation, two exhaust back draught flaps are required (RSK, accessory).

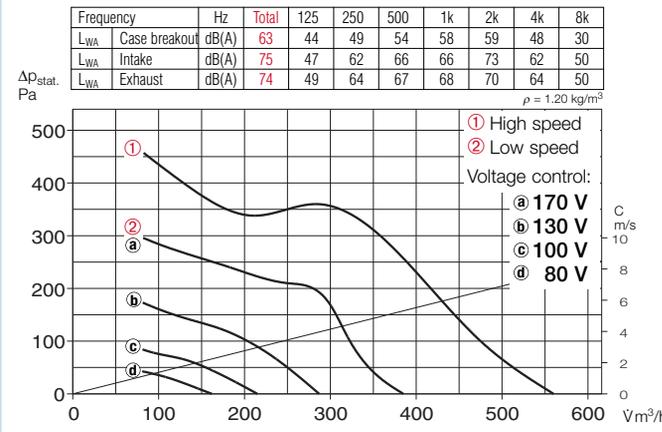
Type	Ref. No.	Connection- Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1 m case breakout	Sound pressure level in 1 m air noise min./max.	Power consumption min./max.	Current usage min./max.	Connection by wiring diagram	Max. air flow temperature	Nominal weight (net)	Transformer- speed controller 5-step	Electronic* speed controller, stepless flush / surface mounting		
		mm	V m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
<b>MV 160</b>	6054	160	390/550	1520/2290	41/49	57/65	40/58	0.18/0.26	844.1	60	2.3	<b>TSW 0.3</b>	3608	<b>ESU 1/ESA 1</b>	0236/0238
<b>Two-stage ventilation unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
<b>MVZ 160</b>	6061	160	390/550	1520/2290	47/55	59/67	80/116	0.36/0.52	845.1	60	5.8	<b>TSW 1.5</b>	1495	<b>ESU 1/ESA 1</b>	0236/0238
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
<b>MVP 160</b>	6068	–	780/1100	1520/2290	44/52	60/68	80/116	0.36/0.52	845.1	60	7.7	<b>TSW 1.5</b>	1495	<b>ESU 1/ESA 1</b>	0236/0238

\* In noise relevant cases, transformer-control devices shall be provided. Electronic phase angle control may generate disturbing magnetisation buzzing noise.

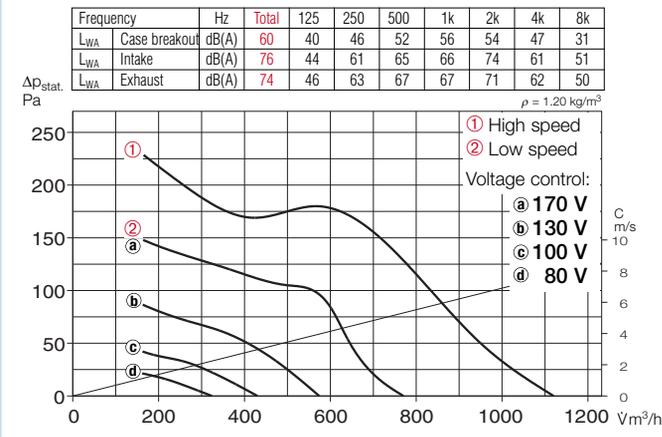
**MV 160 – Single-stage**



**MVZ 160 – Two-stage**



**MVP 160 – Parallel**



**Sound levels**

The total values and the spectrum figures are given above the performance curves for

- Sound levels at case breakout.
- Sound levels of intake and exhaust air in dB(A). On the table (see left page)
- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

**The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.**

**Accessories Page**

Filters, heater batteries and silencers	305
Temperature controllers for heater batteries	311, 315
Flexible ventilation pipes, ventilation grilles, fittings, roof ducts	361
Ceiling valves	380
Speed controllers, control units and switches	397

**Accessories for MV and MVZ**

**Flexible connector**

**FM 160** Ref. No. 1684  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



**Gravity shutter**

**VK 160** Ref. No. 0892  
Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer; colour: light grey.



**External wall grille**

**G 160** Ref. No. 0893  
To cover or insert into circular vent holes. Made of impact resistant, white polymer.



**Guard for spigot connection**

**MVS 160** Ref. No. 6074  
For intake and exhaust installation on the ventilation unit.



**Spigotted attenuator with 50 mm insulation.**

**FSD 160** Ref. No. 0678 flexible, from aluminium, length 1 m.  
**SRSD 160/...** see page 319 circular, from galvanised steel, length 300–1200 mm.



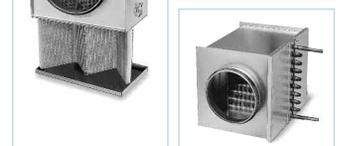
**Air filter box**

**LFBR 160 G4** Ref. No. 8578  
With a large cross section area, for in-duct installation.



**Electric heater batteries**

**EHR-R 1.2/160** 1.2 kW No. 9434  
In circular casing, made of galvanised steel.



**Warm-water heater batteries**

**WHR 160** Ref. No. 9481  
For in-duct installation.



**Accessories for all types**

**Back draught shutter**

**RSK 160** Ref. No. 5669  
Automatic, made of metal. For in-duct installation.



**Operating switch 0-1-2**

**MVB** Ref. No. 6091  
With on/off, low and high speed functions.



**Transformer speed controller**

**TSW** see table  
Five-step transformer speed controller for surface mounting.



**Electronic speed controller**

**ESU/ESA** see table  
For flush-/surface mounting.



**Electronic run-on switch**

**ZNE** Ref. No. 0342  
With continuously adjustable follow-up time.



**High air flow volume and high pressure characteristic in a space saving design.**

Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

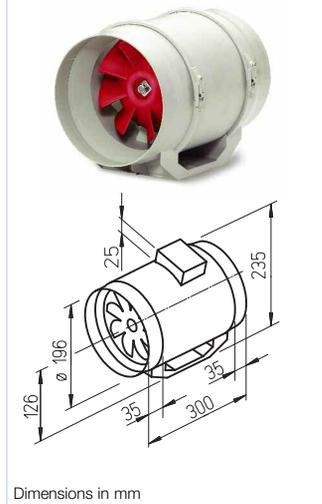
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed.
- Installation in any position.
- Long life ball bearings, designed for 30.000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and radio suppressed.
- Motor protection**  
Thermal overload protection fitted in the winding as standard.

**MV – Single-stage**

Swing-out in-line fan for space-saving in-duct installation.

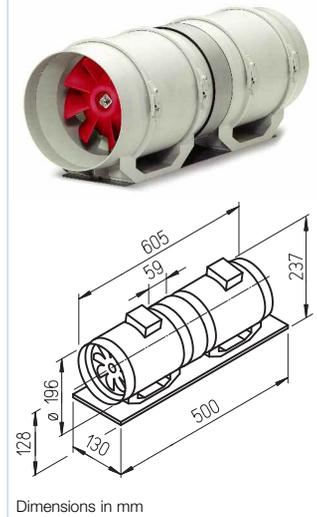


**Specification MV**

- Impeller**  
Optimised for high volume flow and high pressure performance. Made of high-grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Suitable in any position – horizontal – vertical or diagonal – without restrictions for intake and extract ventilation by appropriate installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: two in-line fans mounted in series.

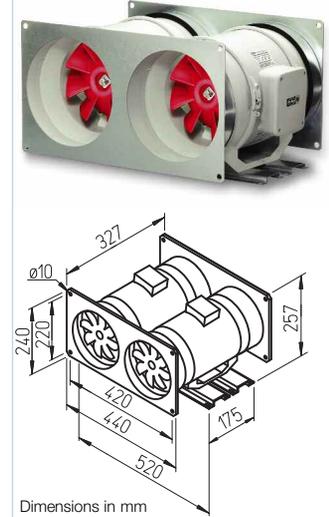


**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



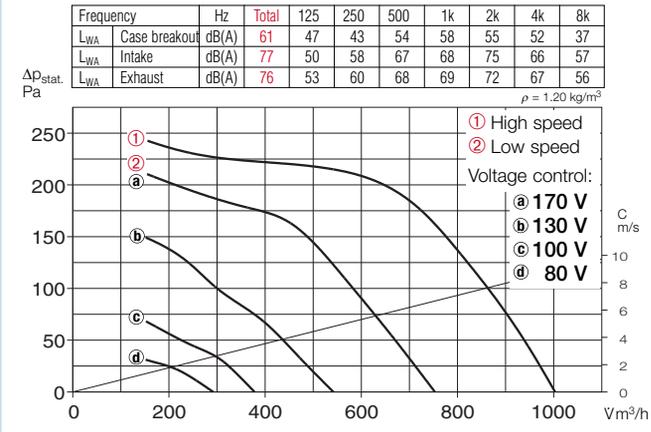
**Specification MVP**

- Impeller**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the re-circulation, two exhaust back draught shutters are required (RSK, accessory).

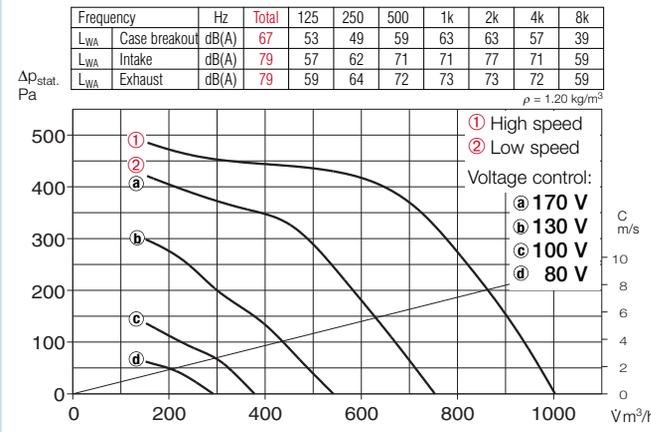
Type	Ref. No.	Spigot dia.	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1 m case breakout	Sound pressure level in 1 m air noise min./max.	Power consumption min./max.	Current usage min./max.	Connection by wiring diagram	Max. air flow temperature	Nominal weight (net)	Transformer-speed controller 5-step	Electronic* speed controller, stepless surface mounted		
		mm	V m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 200	6055	200	750/1000	1900/2390	48/53	64/69	98/145	0.43/0.64	844.1	60	3.7	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Two-stage ventilation unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 200	6062	200	750/1000	1900/2390	54/59	66/71	196/290	0.86/1.28	845.1	60	8.5	TSW 1.5	1495	ESU 3/ESA 3	0237/0239
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 200	6069	–	1500/2000	1900/2390	51/56	67/72	196/290	0.86/1.28	845.1	60	11.2	TSW 1.5	1495	ESU 3/ESA 3	0237/0239

\* In noise relevant cases, transformer-control devices shall be provided. Electronic phase angle control may generate disturbing increase in motor noise.

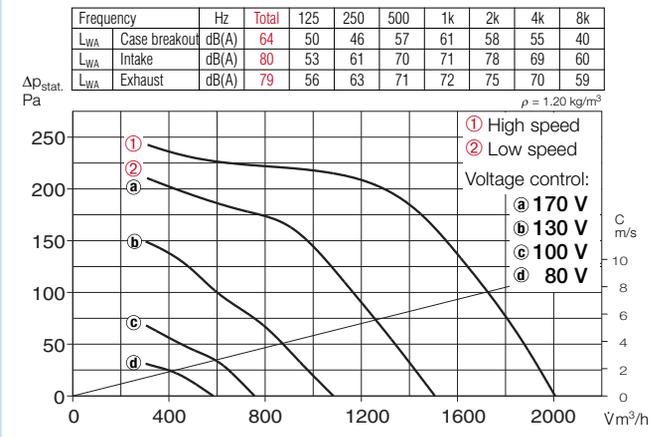
**MV 200 – Single-stage**



**MVZ 200 – Two-stage**



**MVP 200 – Parallel**



**■ Sound levels**

The total values and the spectrum figures are given above the performance curves for

- Sound levels at case breakout.
- Sound levels of intake and exhaust air in dB(A). On the table (see left page)
- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

**The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.**

**■ Accessories** Page

Filters, heater batteries and silencers	305
Temperature controllers for heater batteries	311, 315
Flexible ventilation pipes, ventilation grilles, fittings, roof ducts	361
Ceiling valves	380
Speed controllers, control units and switches	397

**■ Accessories for MV and MVZ**

**Flexible connector**

**FM 200** Ref. No. 1670  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



**Gravity shutter**

**VK 200** Ref. No. 0758  
Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer; colour: light grey.



**External wall grille**

**RAG 200** Ref. No. 0750  
To position in front of air inlets and outlets in facades. Made of polymer; colour: light grey



**Guard for spigot connection**

**MVS 200** Ref. No. 6075  
For intake and exhaust installation on the ventilation unit.



**Spigotted attenuator**  
with 50 mm insulation.

**FSD 200** Ref. No. 0679  
flexible, from aluminium, length 1 m.  
**SRSD 200/...** see page 319  
circular, from galvanised steel, length 300–1200 mm.



**Air filter box**

**LFBR 200 G4** Ref. No. 8579  
With a large cross section area, for in-duct installation.



**Electric heater batteries**

**EHR-R 1.2/200** 1.2 kW No. 9436  
In circular casing, made of galvanised steel.



**Warm-water heater batteries**

**WHR 200** Ref. No. 9482  
For in-duct installation.



**■ Accessories for all types**

**Back draught shutter**

**RSK 200** Ref. No. 5074  
Automatic, made of metal. For in-duct installation.



**Operating switch 0-1-2**

**MVB** Ref. No. 6091  
With on/off, low and high speed functions.



**Transformer speed controller**

**TSW** see table  
Five-step transformer speed controller for surface mounting.



**Electronic speed controller**

**ESU/ESA** see table

**Electronic run-on switch**

– for MV  
**ZNE** Ref. No. 0342  
– for MVZ and MVP  
**ZT** Ref. No. 1277



**High air flow volume and high pressure characteristic in a space saving design.**

Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

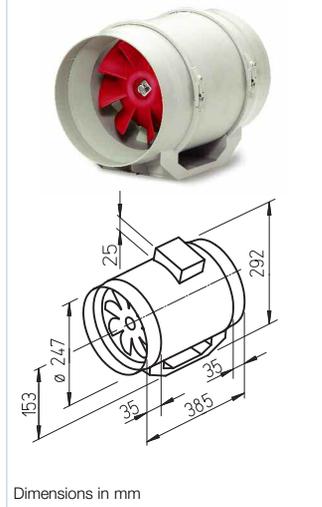
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed.
- Installation in any position.
- Long life ball bearings, designed for 30.000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and radio suppressed.
- Motor protection**  
Through a thermal contact that is connected in series with the winding and Turns the motor off at elevated temperatures to prevent motor damage. Resets after cooling and motor restart.

**MV – Single-stage**

Swing-out in-line fan for space-saving in-duct installation.

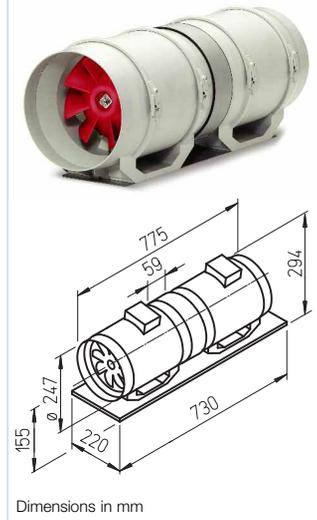


**Specification MV**

- Impeller**  
Mixed flow for high volume flow and high pressure performance. Made of high-grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: two in-line fans mounted in series.

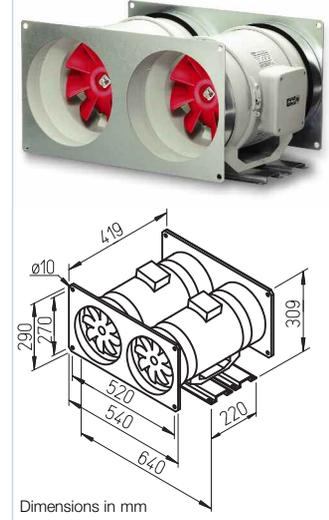


**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



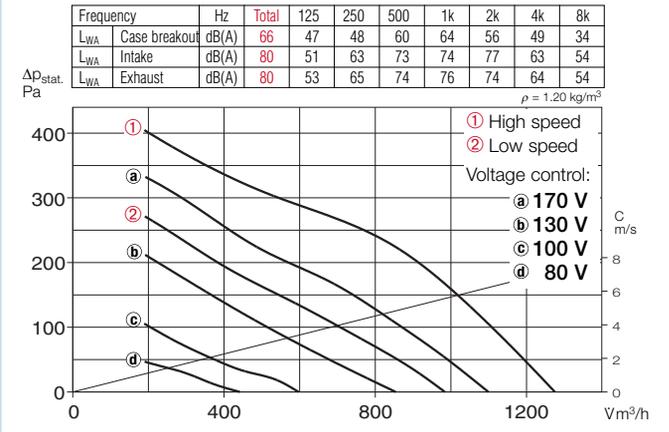
**Specification MVP**

- Impeller**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the re-circulation, two exhaust back draught shutters are required (RSK, accessory).

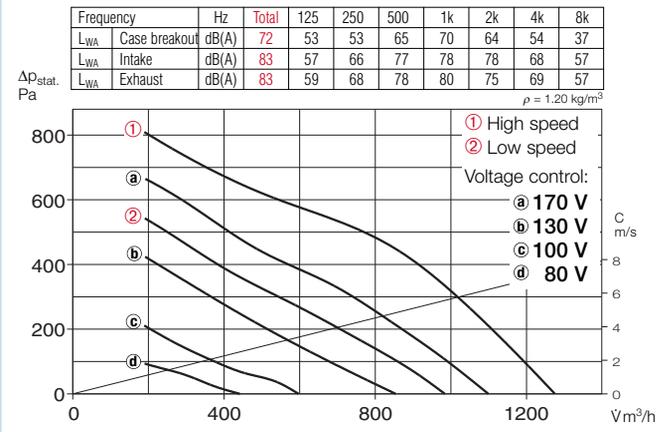
Type	Ref. No.	Spigot dia.	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1m case breakout	Sound pressure level in 1m air noise min./max	Power consumption min./max.	Current usage min./max.	Connection by wiring diagram	Max. air flow temperature	Nominal weight (net)	Transformer-speed controller 5-step	Electronic* speed controller, stepless surface mounted		
		mm	∇ m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 250	6056	250	980/1270	1950/2640	52/58	66/72	110/180	0.48/0.78	844.1	60	7.0	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Two-stage ventilation unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 250	6063	250	980/1270	1950/2640	58/64	69/75	220/360	0.96/1.56	845.1	60	17.6	TSW 3.0	1496	ESU 3/ESA 3	0237/0239
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 250	6070	–	1860/2540	1950/2640	55/61	69/75	220/360	0.96/1.56	845.1	60	18.7	TSW 3.0	1496	ESU 3/ESA 3	0237/0239

\* In noise relevant cases, transformer-control devices shall be provided. Electronic phase angle control may generate disturbing increase in motor noise.

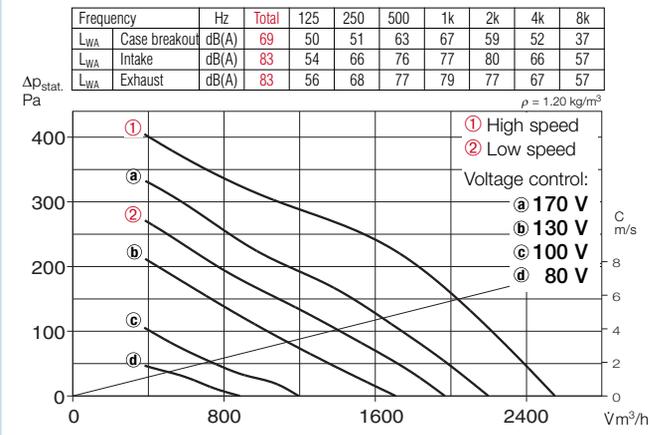
**MV 250 – Single-stage**



**MVZ 250 – Two-stage**



**MVP 250 – Parallel**



**Sound levels**

The total values and the spectrum figures are given above the performance curves for

- Sound levels at case breakout.
- Sound levels of intake and exhaust air in dB(A). On the table (see left page)
- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

**The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.**

**Accessories Page**

Filters, heater batteries and silencers	305
Temperature controllers for heater batteries	311, 315
Flexible ventilation pipes, ventilation grilles, fittings, roof ducts	361
Ceiling valves	380
Speed controllers, control units and switches	397

**Accessories for MV and MVZ**

**Flexible connector**

**FM 250** Ref. No. 1672  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



**Gravity shutter**

**VK 250** Ref. No. 0759  
Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer; colour: light grey.



**External wall grille**

**RAG 250** Ref. No. 0751  
To position in front of air inlets and outlets in facades. Made of polymer; colour: light grey



**Guard for spigot connection**

**MVS 250** Ref. No. 6076  
For intake and exhaust installation on the ventilation unit.



**Spigotted attenuator**

with 50 mm insulation.  
**FSD 250** Ref. No. 0680 flexible, from aluminium, length 1 m.  
**SRSD 250/...** see page 319 circular, from galvanised steel, length 300–1200 mm.



**Air filter box**

**LFBR 250 G4** Ref. No. 8580  
With a large cross section area, for in-duct installation.



**Electric heater batteries**

**EHR-R 6/250** 6.0 kW No. 8712  
In circular casing, made of galvanised steel.



**Warm-water heater batteries**

**WHR 250** Ref. No. 9483  
For in-duct installation.



**Accessories for all types**

**Back draught shutter**

**RSK 250** Ref. No. 5673  
Automatic, made of metal. For in-duct installation.



**Operating switch 0-1-2**

**MVB** Ref. No. 6091  
With on/off, low and high speed functions.



**Transformer speed controller**

**TSW** see table  
Five-step transformer speed controller for surface mounting.



**Electronic speed controller**

**ESU/ESA** see table  
For flush-/surface mounting.

**Thermoelectric run-on switch**

**ZT** Ref. No. 1277  
With variable follow-up time.



**High air flow volume and high pressure characteristic in a space saving design.**

Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

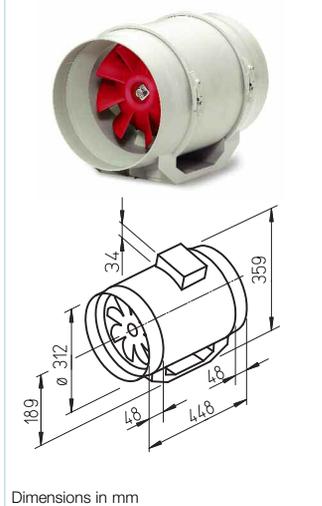
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed.
- Installation in any position.
- Long life ball bearings, designed for 30.000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and radio suppressed.
- Motor protection**  
Through a thermal contact that is connected in series with the winding and Turns the motor off at elevated temperatures to prevent motor damage. Resets after cooling and motor restart.

**MV – Single-stage**

Swing-out in-line fan for space-saving in-duct installation.

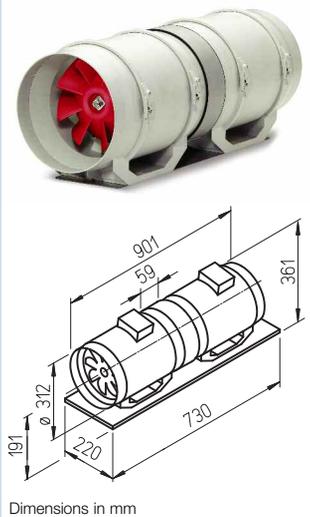


**Specification MV**

- Impeller**  
Mixed flow for high volume flow and high pressure performance. Made of high-grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: two in-line fans mounted in series.



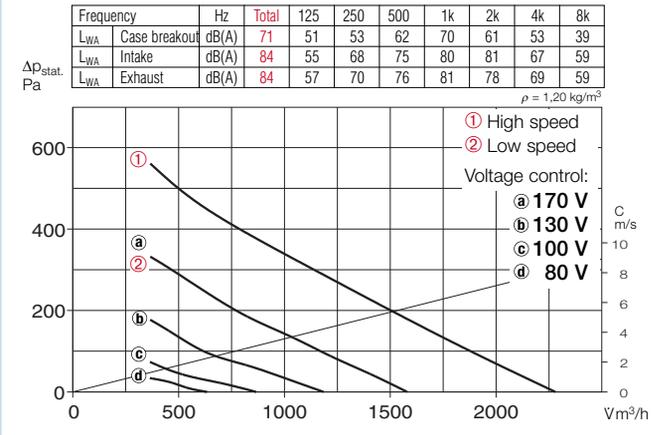
**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using an operation switch MVB (accessory) or a change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

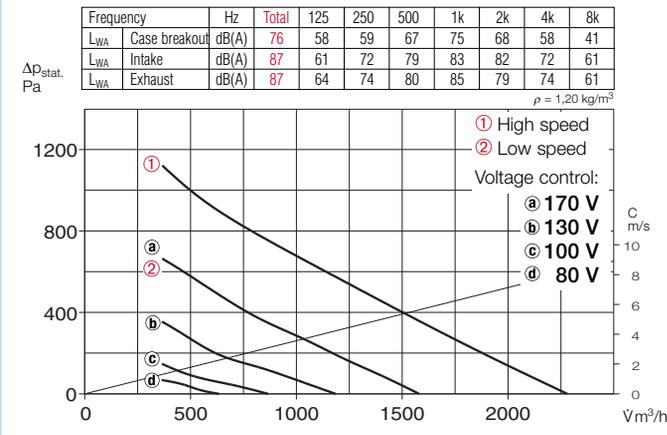
Type	Ref. No.	Spigot dia. mm	Air flow volume min./max. $\checkmark$ m <sup>3</sup> /h	R.P.M. min./max. min <sup>-1</sup>	Sound pressure level in 1m case breakout		Power consumption min./max. W	Current usage min./max. A	Connection by wiring diagram No.	Max. air flow temperature + °C	Nominal weight (net) kg	Transformer-speed controller 5-step		Electronic* speed controller, stepless surface mounted	
					dB (A)	dB (A)						Type	Ref. No.	Type	Ref. No.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
<b>MV 315</b>	6057	315	1580/2270	1820/2500	56/63	69/76	200/300	0.90/1.32	844.1	60	11.5	<b>TSW 1.5</b>	1495	<b>ESU 3/ESA 3</b>	0237/0239
<b>Two-stage ventilation unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
<b>MVZ 315</b>	6064	315	1580/2270	1820/2500	60/68	72/79	400/600	1.80/2.64	845.1	60	26.8	<b>TSW 3.0</b>	1496	<b>ESU 5/ESA 5</b>	1296/1299

\* In noise relevant cases, transformer-control devices shall be provided. Electronic phase angle control may generate disturbing increase in motor noise.

**MV 315 – Single-stage**



**MVZ 315 – Two-stage**



**Sound levels**

The total values and the spectrum figures are given above the performance curves for

- Sound levels at case breakout.
- Sound levels of intake and exhaust air in dB(A). On the table (see left page)
- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at **1 m** (free-field conditions). **The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.**

**Accessories Page**

Filters, heater batteries and silencers	305
Temperature controllers for heater batteries	311, 315
Flexible ventilation pipes, ventilation grilles, fittings, roof ducts	361
Ceiling valves	380
Speed controllers, control units and switches	397

**Accessories for all types**

**Flexible connector**

**FM 315** Ref. No. 1674  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



**Gravity shutter**

**VK 315** Ref. No. 0760  
Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer; colour: light grey.



**External wall grille**

**RAG 315** Ref. No. 0752  
To position in front of air inlets and outlets in facades. Made of polymer; colour: light grey



**Guard for spigot connection**

**MVS 315** Ref. No. 6077  
For intake and exhaust installation on the ventilation unit.



**Spigotted attenuator**

with 50 mm insulation.  
**FSD 315** Ref. No. 0681 flexible, from aluminium, length 1 m.  
**SRSD 315/...** see page 319 circular, from galvanised steel, length 300–1200 mm.



**Air filter box**

**LFBR 315 G4** Ref. No. 8581  
With a large cross section area, for in-duct installation.



**Electric heater batteries**

**EHR-R 6/315** 6.0 kW No. 8713  
In circular casing, made of galvanised steel.



**Warm-water heater batteries**

**WHR 315** Ref. No. 9484  
For in-duct installation.



**Back draught shutter**

**RSK 315** Ref. No. 5674  
Automatic, made of metal. For in-duct installation.



**Operating switch 0-1-2**

**MVB** Ref. No. 6091  
With on/off, low and high speed functions.



**Transformer speed controller**

**TSW** see table  
Five-step transformer speed controller for surface mounting.



**Electronic speed controller**

**ESU/ESA** see table  
For flush-/surface mounting.



**Thermoelectric run-on switch**

**ZT** Ref. No. 1277  
With variable follow-up time.

## Explosion proof fans 230 V / 1 ph. InlineVent® RRK Ex e II 2G

The requirements for facilities and utilities, from which an ignition hazard can occur, were European-wide harmonized and specified in the ATEX guideline 94/9/EG, dated 1.7.2003.

This contains the fundamental health and safety requirements for explosion proof products and describes the conformity evaluation process for devices, which are used in potentially hazardous atmospheres or substances.

The in-line explosion proof fans RRK.. Ex for operation in or to move potentially hazardous atmospheres or substances must be in accordance with the guideline 94/9/EG.

They are protected to class "e" (= increased safety). Thus they are suitable for product group II, product category 2G for operation in zone 1 and 2. In these zones explosive atmosphere can be likely but rarely occur, if so they will exist for a for a short time only.

With professional installation RRK.. Ex fulfills all fundamental health and safety requirements.

RRK.. Ex are designed to ventilate small rooms and work places in commercial and industrial applications.  
Ø 180 – 250 mm  
V = 300 – 1 000 m³/h



**Explosion proof in-line fan certified to  
ATEX guideline 94/9/EG.**

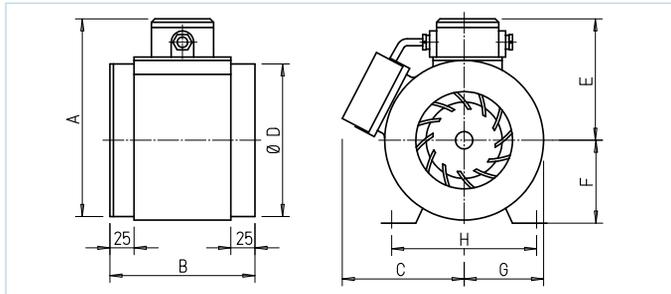
RRK 180 Ex



RRK 200 Ex



RRK 250 Ex



Type	RRK 180 Ex	200 Ex	250 Ex
Dimensions in mm			
A	231	278	304
B	164	267	205
C	160	195	210
D	Ø 178	Ø 198 <sup>1)</sup>	Ø 248
E	142	166	180
F	120	140	160
G	92	115	128
H	275	299	311

<sup>1)</sup> with reducers mounted on intake and exhaust

Designed to ventilate small rooms and working places in commercial and industrial applications where a hazardous atmosphere can occur. Suitable for in-line duct installation.

Approved for installation in zones 1, 2 to DIN EN 60079-10.

Specially designed for ventilating chemical and pharmaceutical laboratories, warehouses, dye works, battery rooms etc.

Ex e II 2G

**Special features**

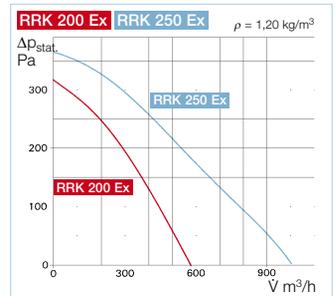
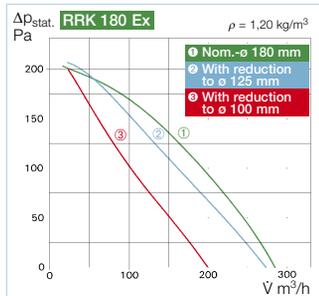
- EC-Type Examination Certificate according to guidelines 94/9 EG.
- Explosion proof E Exe II 2G, increased safety to DIN EN 60079-0, 60079-7, 1127-1, 14986.
- Single phase 230 V, 50 Hz.
- Ideally to be installed in-line with ducting. Three performances for model RRK 180 Ex by use of reducers (see perf. curve).
- Very compact in design and low installation cost through straight air flow.
- Installation in any position.

**Specification**

- Casing and impeller**  
Made from impact resistant, anti static polymers offering an electrical resistance of less than 10<sup>9</sup>Ω.
- Motor** Totally enclosed, IP 54, suitable for continuous operation. Maintenance free ball bearing motor with tropical protection of windings and radio suppression.
- Electrical connection** terminal box made from polymer, IP 54, ex-proofed, mounted on the fan casing.
- Installation** in any position. Suitable for intake and extract.

**Installation notes**

The regulations of DIN EN 60079-10 apply. The motor must be protected by a circuit breaker which isolates the equipment in case of a short circuit within the time shown on the explosion proof certificate. The inlet and exhaust must be protected by guards or other devices to prevent items bigger than 12 mm from entering the fan. Admitted operation mode according to VDE 0530 / DIN EN 60034-1 = S1 (continuous operation). Speed control is not allowed.



**Accessories for RRK 180 Ex Reducers**

- RZ 180/125** Ref. No. 5876
- RZ 180/100** Ref. No. 5877

**Accessory for all models Mounting feet**

- MK 4** Ref. No. 5824

**Flexible sleeve**

For installation between fan and ducting.

- FM 180 Ex** Ref. No. 1685
- FM 200 Ex** Ref. No. 1686
- FM 250 Ex** Ref. No. 1688

**Guards**

- SGR 180 Ex** Ref. No. 5051
- SGR 200 Ex** Ref. No. 5049
- SGR 250 Ex** Ref. No. 5052

**Backdraught shutter**

- RSK 180** Ref. No. 5662
- RSK 200** Ref. No. 5074
- RSK 250** Ref. No. 5673



**Other accessories Pages**

Filters and attenuators	305 on
Flexible ventilation ducts, grilles, circular spigots and roof outlets	361 on
Valves	380 on

**Information Pages**

Explosionproof	
– danger area,	
– zoning	16, 18

Type	Ref. No.	Impeller-Ø	Air flow volume (FID)	R.P.M.	Sound power level L <sub>WA</sub>	Sound press. level 1 m	Power Watts	Current Amps	Wiring diagram	Maximum air flow temperatur	Nominal weight
		mm	V m <sup>3</sup> /h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg
<b>Explosion proof Ex e II, 1 phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54</b>											
<b>RRK 180 Ex</b> <sup>1)</sup>	5889	170	310	2780	66	58	50	0.25	453	50	3.0
<b>RRK 200 Ex</b> <sup>2)</sup>	5890	215	560	2860	73	65	200	0.92	453	50	5.5
<b>RRK 250 Ex</b> <sup>2)</sup>	5891	240	970	2860	77	69	300	1.40	453	50	7.0

<sup>1)</sup> Temperature class T1-T4

<sup>2)</sup> Temperature class T1-T3

## Centrifugal in-line fan InlineVent® RR, RRK.. and Slim centrifugal fan box SV

The Helios InlineVent is the first choice for medium to smaller air flow volumes against high resistances.

They combine the pressure characteristic of centrifugal fans with the advantages of axial fans. The straight in-line air flow makes a simple, cost effective installation in circular ducting possible.

### **Type SlimVent SV.**

The exceptionally flat SlimVent centrifugal fans are ideal for spatially limited installation situations in applications for domestic, commercial and industrial purposes. The casings are only a little higher than the pipe diameter, so that an easy installation is possible in false ceilings, panelling or above and in built-in cupboards.

$\dot{V} = 100 - 850 \text{ m}^3/\text{h}$ .

**NEW!**

### **Type RR and RRK**

For medium to smaller air flow volumes against high resistances. Universal in application for domestic, commercial and industrial purposes. Optionally made from galvanised sheet steel or corrosion resistant polymers.

$\dot{V} = 200 - 1600 \text{ m}^3/\text{h}$ .

**NEW!**

### **AcousticLine**

Centrifugal in-line fans especially for silent operation.

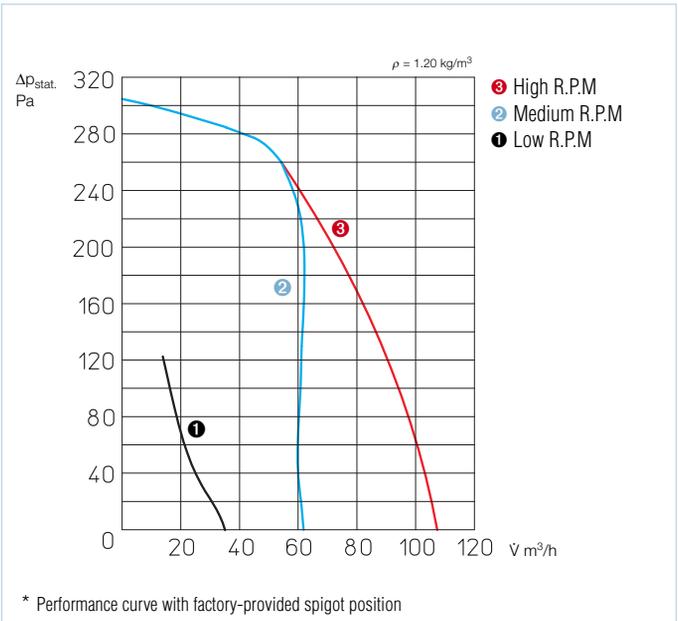
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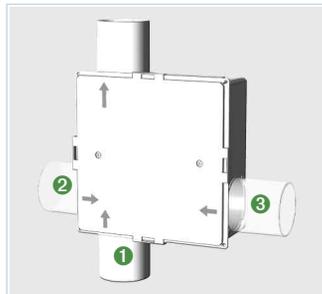
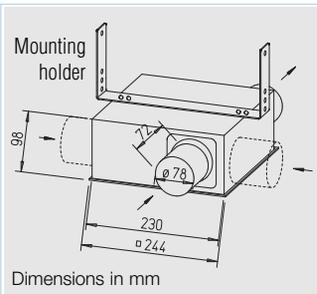
Well-proven technology and brand new design: Robust, super flat centrifugal in-line fans.

SVV 80

**NEW!**



\* Performance curve with factory-provided spigot position



spigot position			Total Power
No. 1	No. 2	No. 3	V m³/h
35	45	45	125
65	zu	60	125
zu	45	75	120
50	60	close	110
110*	close*	close*	110*
close	close	110	110
close	100	zu	100

■ Explanation of chart: The air flow volume varies with the number and position of the extract spigots

■ Description

□ Exceptionally flat and robust unit from impact resistant polymer. Suitable for ventilation of bathrooms, toilets, etc. in industrial, commercial and domestic applications. Delivered complete with extract and supply connection spigot for standard pipe diameter. For the ventilation of several rooms one or two further intake air spigots can be attached to the casing by removing the blanking covers.

□ Simply take off cover plate to remove fan unit, leaving the casing in situ.

□ Impeller

Highly efficient forward curved centrifugal impeller made from high quality polymer.

□ Motor

Totally enclosed, maintenance-free and energy saving ball bearing motor.

□ Motor protection

Thermal contacts fitted as standard.

□ Speed control

Three speeds are available low, medium and high. The DSEL speed controller (accessory) provides switching between speeds and on/off.

□ Electrical connection

Terminal box (IP 55) located on outer casing.

□ Installation

May be fitted in any position. The removing of the fan unit from its casing allows change or cleaning without removing the casing from the ducting.

□ Protection

When connected to a ducted system protection to IP 54.

■ Scope of delivery and accessories

SlimVent is supplied with mounting holder. One intake and extract spigot. One or two further intake spigots (accessories Ø 75/80) can be assembled to the casing by removing the blanking cover.

ELS-ZAS Ref. No. 8184

■ Three speed operation and on/off operation switch

Cannot be used with light switch operation. Fits into single gang box using clamps fitted (minimum depth 55 mm).

Dim. mm (WxHxD) 80 x 80 x 23  
DSEL 3 Ref. No. 1611



Duct fans

Type	Ref. No.	Connection-Ø	Free inlet discharge*	R.P.M.*	Sound pressure level case breakout*	Sound pressure level intake*	Power*	Current*	Connection to wiring diagram <sup>1)</sup>	max. air flow temperature	Weight approx.
		mm	V m³/h	min <sup>-1</sup>	dB(A) in 3m/1m	dB(A) in 3m/1m	W	A	No.	+ °C	kg
<b>Single-phase a.c. motor 230 V, 50 Hz, IP 45</b>											
<b>SVV 80</b>	2660	80	110 / 65 / 35	2710 / 1200 / 650	29/37 18/26 16/24	35/43 24/32 17/25	34 / 19 / 10	0.16 / 0.13 / 0.09	913	40	2.0

\* Values are related to the 3 speeds (see performance diagram).

<sup>1)</sup> With three speed operation switch DSEL 3: Connection according to wiring diagram no. 914.

For medium to smaller air flow volumes against high resistances.

Specially designed to be installed in-line in circular ducting. High pressure characteristic to overcome resistances of bends, filters etc.

Universal in application for domestic, commercial and industrial purposes.

**Special features**

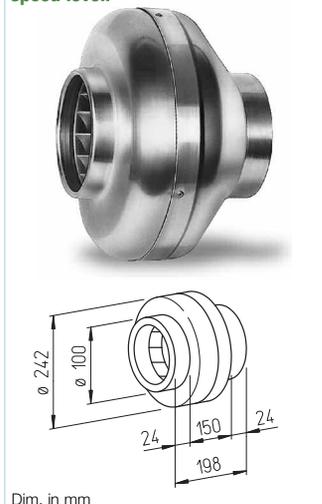
- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit standard duct sizes.
- 100 % speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

**Features of both models**

- Motor**  
Low noise external rotor motor with ball bearings, impregnated windings, insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- Motor protection**  
Motors have thermal contacts wired in series with the windings which automatically reset.
- Installation**  
Installation in any position without restriction:  
– horizontally, vertically or pitched – suitable for intake or extract according on installation position. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.
- Sound level**  
see page 241.

**Models RR**

Market leading range offering an excellent value for money.  
Now with energy-saving second speed level.



**Specification RR**

- Casing**  
Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- Speed control**  
With type RR 100 A stepless 0 – 100 % by use of electronic controller or 5 stepped by transformer possible (see technical data table). Additional two speed operation with type RR 100 C by using external operation switch DS 2/2 (accessories).  
**DS 2/2** Ref. No. 1267
- Electrical connection**  
Terminal box (IP 55) located on outer casing.
- Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on motor and dynamically balanced as a unit providing low noise levels and high efficiency.
- Protection class**  
When installed in ducting the fan is rated IP 44.

**Models RRK**

Alternative version made from impact resistant polymers.

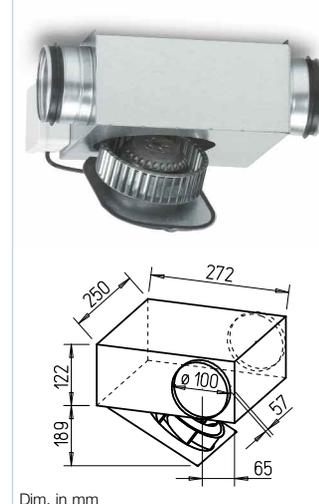


**Specification RRK**

- Casing**  
All components are made from corrosion and impact resistant polymers. Six guide vanes increase the fan's efficiency. Colour: lightgrey.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- Electrical connection**  
Terminal box (IP 44) located on outer casing.
- Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on the motor and dynamically balanced as a unit providing low noise levels and high efficiency.
- Protection**  
Splashproof to IP 44.

**Models SV**

SlimVent – New exceptionally flat space saving miracle with swing out motor and impeller unit.



**Specification SV**

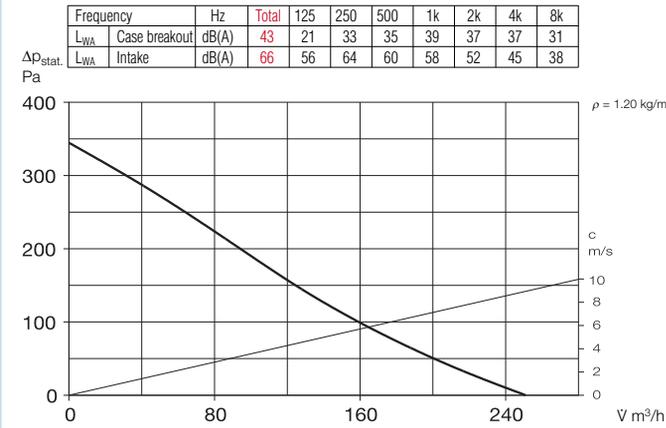
- Casing**  
Flat and robust casing from galvanised sheet steel. Spigots on intake and extract with twin-seal rubber gaskets fit into standard ducts. Particularly service friendly (cleaning) through swing out motor and impeller unit without disassembly of system components. Space for the swing out facility must be considered.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or transformer controller (see table).
- Electrical connection**  
Terminal box (IP 55) located on outer casing.
- Impeller**  
Energy-saving centrifugal impeller with forward curved blades. Dynamically balanced for low noise operation.
- Protection**  
When installed in ducting the fan is rated IP 54.

Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperature	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	l/s	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type RR.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RR 100 A	5653	100	250	1730	36	59	41	0.18	508	80	2.9	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
RR 100 C <sup>1)</sup>	5654	100	330 <sup>1)</sup> /220	2530 <sup>1)</sup> /1265	42	61	62 <sup>1)</sup> /49	0.27 <sup>1)</sup> /0.22	934.1	70	2.9	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Type RRK.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RRK 100	5973	100	230	2200	45	54	34	0.15	508	60	2.4	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Type SVV.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SVV 100 B	2670	100	275	1800	51	54	77	0.34	508	50	3.5	TSW 1.5	1495	ESU 1/ESA 1	0236/0238

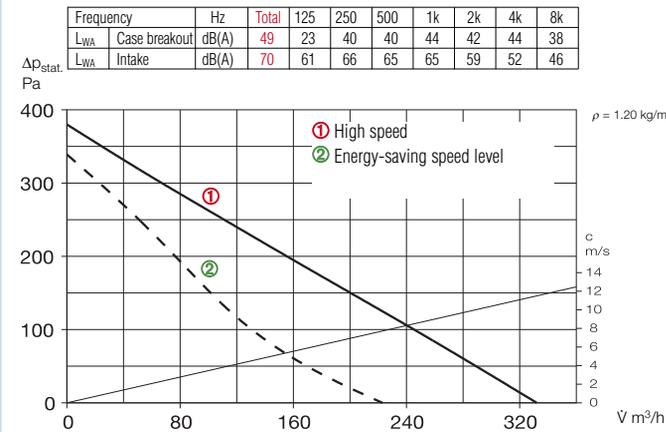
<sup>1)</sup> Type with high speed; standard with additional energy-saving speed level (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

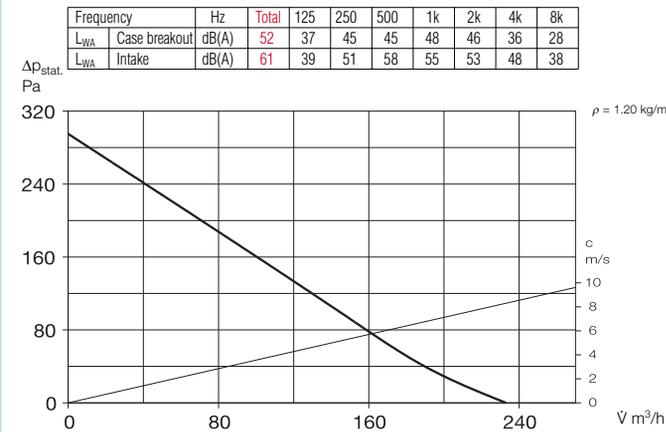
### RR 100 A



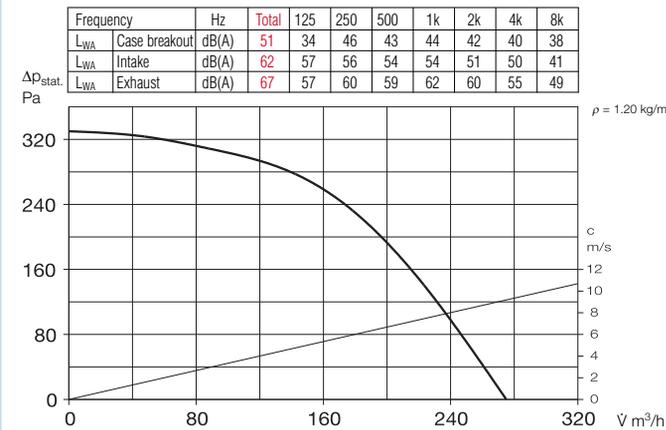
### RR 100 C



### RRK 100



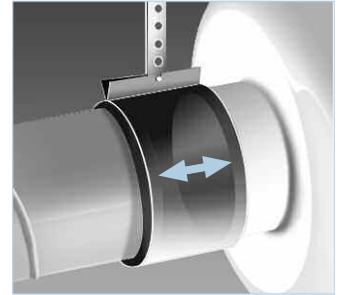
### SVV 100 B



### Accessories

#### Pipe clamp connectors

**BM 100** Ref. No. 5075  
A quick-fix method for connecting fans to ducting, reducing vibration transmission (1 kit = 2 pieces). When installing leave a little gap between fan and ducting. Supplied in pairs.



#### Mounting feet for RR

**MK 4** Ref. No. 5824

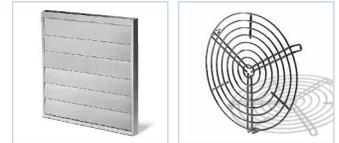
#### Mounting feet for RRK

**MK 1** Ref. No. 5821  
Made from galvanised steel.



#### Gravity shutter (automatic)

**VK 100** Ref. No. 0757  
Made from polymers, white.



#### Fixed grille

**G 100** Ref. No. 0796  
Made from polymers, white.

#### Guards

**SGR 100** Ref. No. 5063  
For intake and exhaust installation on fan, made from galvanised steel.



#### Backdraught shutter

**RSKK 100** Ref. No. 5106  
Automatic, made from polymer.



#### Flexible attenuator

**FSD 100** Ref. No. 0676  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 100/...** see page 319  
Spigotted attenuator from galvanised steel with 50 mm insulation. Length 300 – 1200 mm.



#### Air filter box

**LFBR 100 G4** Ref. No. 8576  
**LFBR 100 F7** Ref. No. 8530  
Air filter with large cross sectional area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 0,4/100** 0,4 kW No. 8708  
In duct casing made from galvanised sheet steel, for in-line installation.  
**CV 10-04-1** 0,4 kW No. S582  
Room or duct sensor (TFK/TFR, accessory) is necessary.

#### Temperature regulating system for electro heater battery

**EHS** Ref. No. 5002

#### Water heater battery

**WHR 100** Ref. No. 9479  
Compact unit for in-line installation.

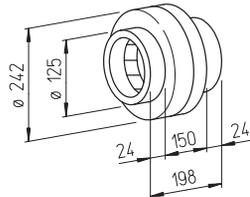
#### Temperature regulating system for water heater battery

**WHST 300 T38** Ref. No. 8817

**NEW!**

**Models RR**

Market leading range offering an excellent value for money.  
Now with energy-saving second speed level.



Dim. in mm

**■ Specification RR**

**□ Casing**  
Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.

**□ Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).  
**DS 2/2** Ref. No. 1267

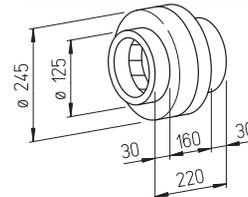
**□ Electrical connection**  
Terminal box (IP 55) located on outer casing.

**□ Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on motor and dynamically balanced as a unit providing low noise levels and high efficiency.

**□ Protection class**  
When installed in ducting the fan is rated IP 44.

**Models RRK**

Alternative version made from impact resistant polymers.



Dim. in mm

**■ Specification RRK**

**□ Casing**  
All components are made from corrosion and impact resistant polymers. Six guide vanes increase the fan's efficiency. Colour: lightgrey.

**□ Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.

**□ Electrical connection**  
Terminal box (IP 44) located on outer casing.

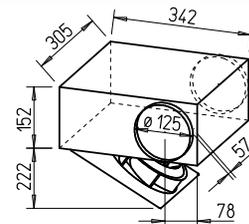
**□ Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on the motor and dynamically balanced as a unit providing low noise levels and high efficiency.

**□ Protection**  
Splashproof to IP 44.

**NEW!**

**Models SV**

SlimVent – New exceptionally flat space saving miracle with swing out motor and impeller unit.



Dim. in mm

**■ Specification SV**

**□ Casing**  
Flat and robust casing from galvanised sheet steel. Spigots on intake and extract with twin-seal rubber gaskets fit into standard ducts. Particularly service friendly (cleaning) through swing out motor and impeller unit without disassembly of system components. Space for the swing out facility must be considered.

**□ Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).  
**DS 2/2** Ref. No. 1267

**□ Electrical connection**  
Terminal box (IP 55) located on outer casing.

**□ Impeller**  
Energy-saving centrifugal impeller with backward curved blades from high quality polymer. Dynamically balanced for low noise operation.

**□ Protection**  
When installed in ducting the fan is rated IP 54.

**For medium to smaller air flow volumes against high resistances.**

Specially designed to be installed in-line in circular ducting. High pressure characteristic to overcome resistances of bends, filters etc.  
Universal in application for domestic, commercial and industrial purposes.

**■ Special features**

- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit standard duct sizes.
- 100 % speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

**■ Features of both models**

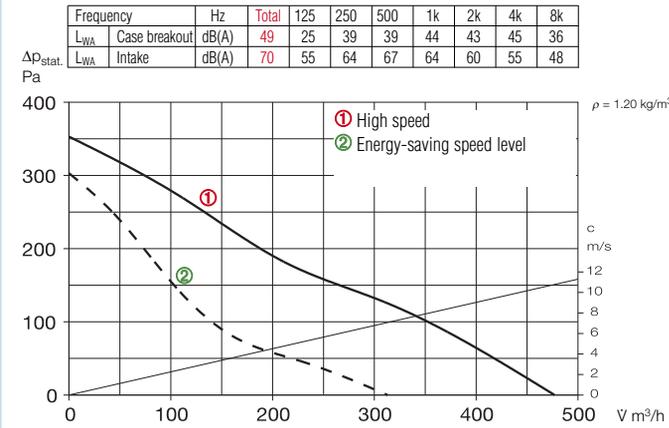
- Motor**  
Low noise external rotor motor with ball bearings, impregnated windings, insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- Motor protection**  
Motors have thermal contacts wired in series with the windings which automatically reset.
- Installation**  
Installation in any position without restriction:  
– horizontally, vertically or pitched – suitable for intake or extract according to installation position. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

Type	Ref. No.	Connection spigot Ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperature	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	∑ m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type RR..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RR 125 C <sup>1)</sup>	5655	125	480 <sup>1)</sup> /310	2480 <sup>1)</sup> /1240	42	61	62 <sup>1)</sup> /47	0.27 <sup>1)</sup> /0.21	934.1	70	2.9	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Type RRK..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RRK 125	5974	125	330	2420	48	54	68	0.30	508	50	3.1	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
<b>Type SVR..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SVR 125 B	2671	125	430/310 <sup>2)</sup>	2550/1830 <sup>2)</sup>	51/42 <sup>2)</sup>	61/52 <sup>2)</sup>	57/39 <sup>2)</sup>	0.25/0.18 <sup>2)</sup>	934.1	80	6.5	TSW 0.3	3608	ESU 1/ESA 1	0236/0238

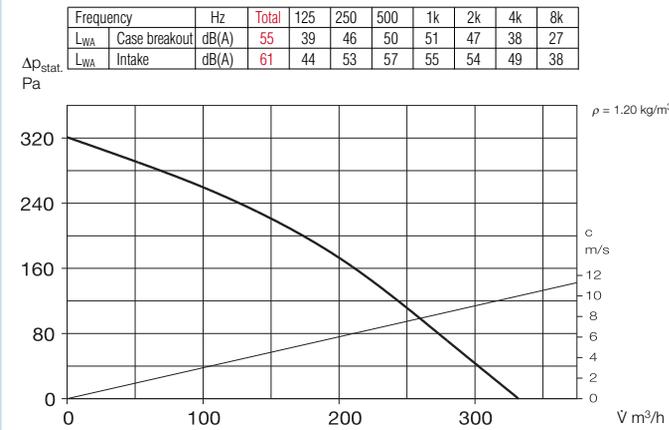
<sup>1)</sup> Type with high speed; standard with additional energy-saving speed level (see performance diagram). <sup>2)</sup> Values are related to the 2 speeds (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

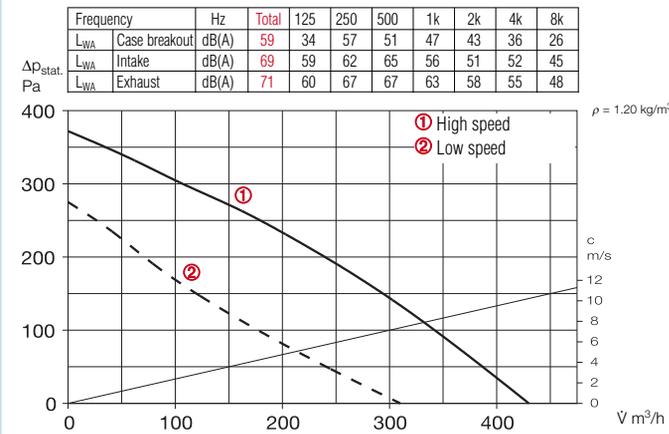
### RR 125 C



### RRK 125



### SVR 125 B



### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for

- case breakout
- intake and exhaust in the tables above the performance curves.

In addition the case breakout figure is given as a sound pressure level at 1 metre (free-field conditions) in the technical data table (see facing page).

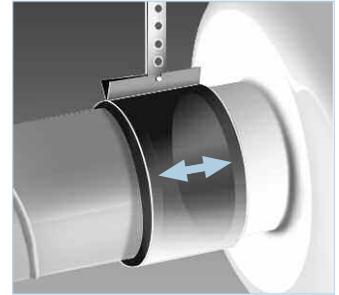
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Flexible ducting, grilles, spigots and roof outlets	361 on
Valves	380 on
Speed controllers and switches	397 on

### Accessories

#### Pipe clamp connectors

**BM 125** Ref. No. 5076  
A quick-fix method for connecting fans to ducting, reducing vibration transmission (1 kit = 2 pieces). When installing leave a little gap between fan and ducting. Supplied in pairs.



#### Mounting feet for RR

**MK 4** Ref. No. 5824  
**Mounting feet for RRK**  
**MK 1** Ref. No. 5821  
Made from galvanised steel.



#### Gravity shutter

**VK 125** Ref. No. 0857  
Air stream operated, polymer, white.



#### Fixed grille

**G 160** Ref. No. 0893  
Made from polymer, white.

#### Protection guard

**SGR 125** Ref. No. 5064  
For intake and exhaust installation on fan, made from galvanised steel.



#### Backdraught shutter

**RSKK 125** Ref. No. 5107  
Air stream operated, polymer.



#### Flexible attenuator

**FSD 125** Ref. No. 0677  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.

#### Spigotted circular attenuator

**SRSD 125/...** see page 319  
Spigotted attenuator from galvanised steel with 50 mm insulation. Length 300 – 1200 mm.



#### In-line air filter box

**LFBR 125 G4** Ref. No. 8577  
**LFBR 125 F7** Ref. No. 8531  
Air filter with big cross sectional area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 0.8/125** 0.8 kW No. 8709  
**EHR-R 1.2/125** 1.2 kW No. 9433  
– with integrated temp. controller  
**CV 12-12-1** 1.2 kW No. S588  
Room or duct sensor (TFK/TFR, accessory) is necessary.



**Temp. regulating system for electric heater batteries EHR-R..**  
**EHS** Ref. No. 5002

#### Water heater battery

**WHR 125** Ref. No. 9480  
Compact heat exchanger for installation in the ducting system.



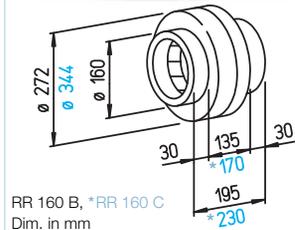
**Temperature regulating system for water heater batteries**  
**WHST 300 T38** Ref. No. 8817



**NEW!**

**Models RR**

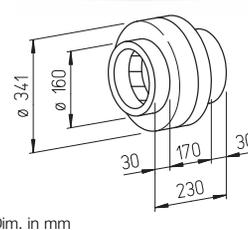
Market leading range offering an excellent value for money.  
Now with energy-saving second speed level.



RR 160 B, \*RR 160 C  
Dim. in mm

**Models RRK**

Alternative version made from impact resistant polymers.

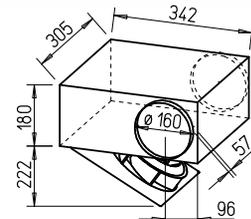


Dim. in mm

**NEW!**

**Models SV**

SlimVent – New exceptionally flat space saving miracle with swing out motor and impeller unit.



Dim. in mm

For medium to smaller air flow volumes against high resistances.

Specially designed to be installed in-line in circular ducting. High pressure characteristic to overcome resistances of bends, filters etc. Universal in application for domestic, commercial and industrial purposes.

**Special features**

- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit standard duct sizes.
- 100 % speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

**Features of both models**

**Motor**

Low noise external rotor motor with ball bearings, impregnated windings, insulation class B, designed for continuous operation, maintenance free and radio suppressed.

**Motor protection**

Motors have thermal contacts wired in series with the windings which automatically reset.

**Installation**

Installation in any position without restriction:  
– horizontally, vertically or pitched – suitable for intake or extract according on installation position. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

**Sound level**

see page 241.

**Specification RR**

**Casing**

Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.

**Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).

DS 2/2 Ref. No. 1267

**Electrical connection**

Terminal box (IP 55) located on outer casing.

**Impeller**

Backward curved centrifugal impeller made from polymers. Directly fitted on motor and dynamically balanced as a unit providing low noise levels and high efficiency.

**Protection class**

When installed in ducting the fan is rated IP 44.

**Specification RRK**

**Casing**

All components are made from corrosion and impact resistant polymers. Six guide vanes increase the fan's efficiency. Colour: lightgrey.

**Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.

**Electrical connection**

Terminal box (IP 44) located on outer casing.

**Impeller**

Backward curved centrifugal impeller made from polymers. Directly fitted on the motor and dynamically balanced as a unit providing low noise levels and high efficiency.

**Protection**

Splashproof to IP 44.

**Specification SV**

**Casing**

Flat and robust casing from galvanised sheet steel. Spigots on intake and extract with twin-seal rubber gaskets fit into standard ducts. Particularly service friendly (cleaning) through swing out motor and impeller unit without disassembly of system components. Space for the swing out facility must be considered.

**Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).

DS 2/2 Ref. No. 1267

**Electrical connection**

Terminal box (IP 55) located on outer casing.

**Impeller**

Energy-saving centrifugal impeller with backward curved blades from high quality polymer. Dynamically balanced for low noise operation.

**Protection**

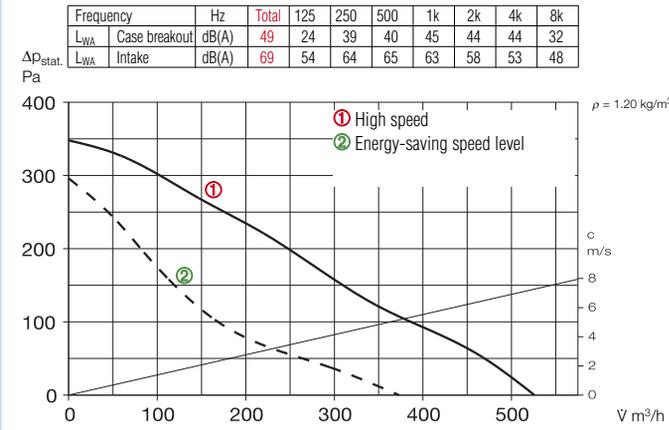
When installed in ducting the fan is rated IP 54.

Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperature	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
Type RR..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44															
RR 160 B <sup>1)</sup>	5656	160	530 <sup>1)</sup> /370	2540 <sup>1)</sup> /1270	42	62	62 <sup>1)</sup> /49	0.27 <sup>1)</sup> /0.22	934.1	70	3.2	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
RR 160 C <sup>1)</sup>	5657	160	870 <sup>1)</sup> /610	2480 <sup>1)</sup> /1240	49	66	101 <sup>1)</sup> /66	0.44 <sup>1)</sup> /0.29	934.1	65	4.3	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
Type RRK..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44															
RRK 160	5976	160	430	2400	46	52	70	0.31	508	50	3.4	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
Type SVR..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44															
SVR 160 K	2672	160	460/330 <sup>2)</sup>	2540/1790 <sup>2)</sup>	48/37 <sup>2)</sup>	61/50 <sup>2)</sup>	58/40 <sup>2)</sup>	0.25/0.18 <sup>2)</sup>	934.1	80	7.5	TSW 0.3	3608	ESU 1/ESA 1	0236/0238

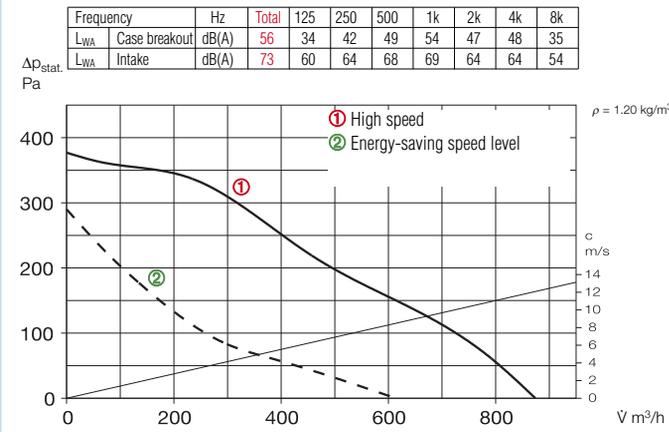
<sup>1)</sup> Type with high speed; standard with additional energy-saving speed level (see performance diagram). <sup>2)</sup> Values are related to the 2 speeds (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

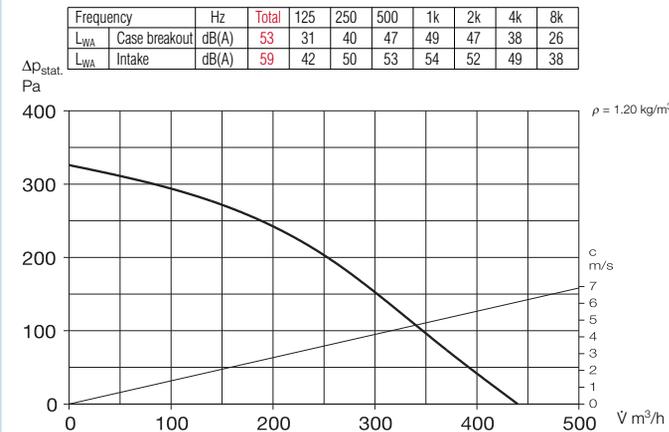
### RR 160 B



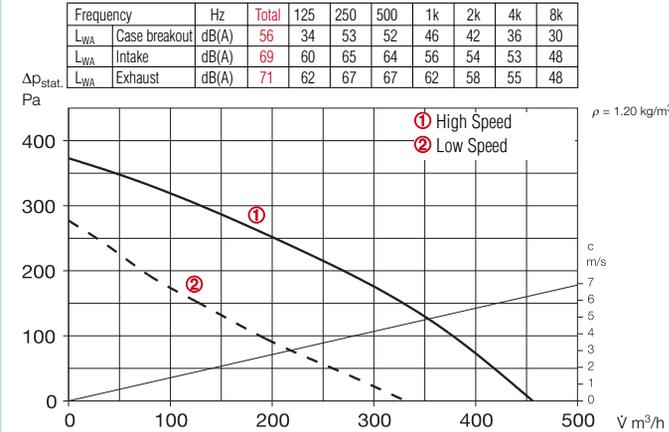
### RR 160 C



### RRK 160



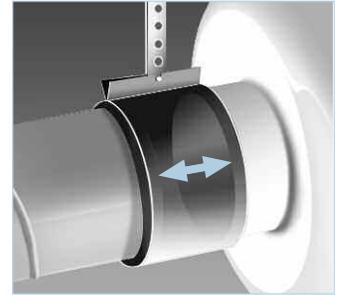
### SVR 160 K



### Accessories

#### Pipe clamp connectors

**BM 160** Ref. No. 5077  
A quick-fix method for connecting fans to ducting, reducing vibration transmission (1 kit = 2 pieces). When installing leave a little gap between fan and ducting.



#### Mounting feet for RR

**MK 4** Ref. No. 5824

#### Mounting feet for RRK

**MK 2** Ref. No. 5822  
Made from galvanised steel.



#### Gravity shutter

**VK 160** Ref. No. 0892  
Made from polymer, light-grey.



#### Fixed grille

**G 160** Ref. No. 0893  
Made from polymer, white.

#### Guard for spigot protection

**SGR 160** Ref. No. 5069  
For intake and exhaust installation on fan, made from galvanised steel.



#### Backdraught shutter

**RSK 160** Ref. No. 5669  
Automatic, made from metal.



#### Flexible attenuator

**FSD 160** Ref. No. 0678  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 160/...** see page 319  
Spigotted attenuator from galvanised steel with 50 mm insulation. Length 300 – 1200 mm.



#### In-line air filter box

**LFBR 160 G4** Ref. No. 8578  
**LFBR 160 F7** Ref. No. 8532  
Air filter with big cross sectional area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 1.2/160** 1.2 kW No. 9434  
**EHR-R 2.4/160** 2.4 kW No. 9435  
**EHR-R 5/160** 5.0 kW No. 8710  
– with integrated temp. controller  
**CV 16-24-1** 2.4 kW No. 5294  
Room or duct sensor (TFK/TFR, accessory) is necessary.



**Temp. regulating system for electric heater batteries EHR-R..**  
**EHS** Ref. No. 5002

#### Water heater battery

**WHR 160** Ref. No. 9481  
Compact heat exchanger for installation in the ducting system.



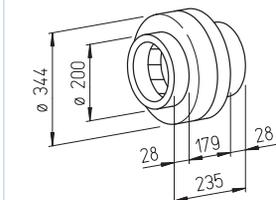
**Temperature regulating system for water heater battery**  
**WHST 300 T38** Ref. No. 8817



**NEW!**

**Models RR**

Market leading range offering an excellent value for money.  
Now with energy-saving second speed level.



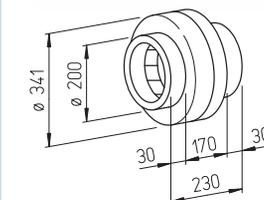
Dim. in mm

**Specification RR**

- Casing**  
Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).  
**DS 2/2** Ref. No. 1267
- Electrical connection**  
Terminal box (IP 55) located on outer casing.
- Impeller**  
Backward curved centrifugal impeller made from polymers (Type RR 200 B from galvanised sheet steel.) Directly fitted on motor and dynamically balanced as a unit providing low noise levels and high efficiency.
- Protection class**  
When installed in ducting the fan is rated IP 44.

**Models RRK**

Alternative version made from impact resistant polymers.



Dim. in mm

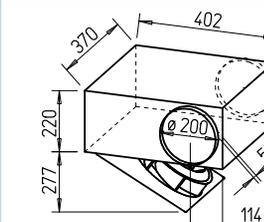
**Specification RRK**

- Casing**  
All components are made from corrosion and impact resistant polymers. Six guide vanes increase the fan's efficiency. Colour: lightgrey.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- Electrical connection**  
Terminal box (IP 44) located on outer casing.
- Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on the motor and dynamically balanced as a unit providing low noise levels and high efficiency.
- Protection**  
Splashproof to IP 44.

**NEW!**

**Models SV**

SlimVent – New exceptionally flat space saving miracle with swing out motor and impeller unit.



Dim. in mm

**Specification SV**

- Casing**  
Flat and robust casing from galvanised sheet steel. Spigots on intake and extract with twin-seal rubber gaskets fit into standard ducts. Particularly service friendly (cleaning) through swing out motor and impeller unit without disassembly of system components. Space for the swing out facility must be considered.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).  
**DS 2/2** Ref. No. 1267
- Electrical connection**  
Terminal box (IP 55) located on outer casing.
- Impeller**  
Energy-saving centrifugal impeller with backward curved blades from high quality polymer. Dynamically balanced for low noise operation.
- Protection**  
When installed in ducting the fan is rated IP 54.

For medium to smaller air flow volumes against high resistances.

Specially designed to be installed in-line in circular ducting. High pressure characteristic to overcome resistances of bends, filters etc. Universal in application for domestic, commercial and industrial purposes.

**Special features**

- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit standard duct sizes.
- 100 % speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

**Features of both models**

- Motor**  
Low noise external rotor motor with ball bearings, impregnated windings, insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- Motor protection**  
Motors have thermal contacts wired in series with the windings which automatically reset.
- Installation**  
Installation in any position without restriction:  
– horizontally, vertically or pitched – suitable for intake or extract according on installation position. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.
- Sound level**  
see page 241.

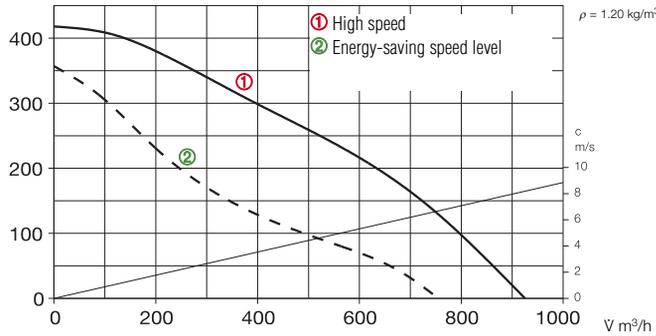
Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperatur	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
mm															
V m³/h															
min <sup>-1</sup>															
dB (A)															
dB (A)															
W															
A															
No.															
+ °C															
kg															
Type															
Ref. No.															
Type															
Ref. No.															
<b>Type RR.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RR 200 A <sup>1)</sup>	5658	200	930 <sup>1)</sup> /760	2580 <sup>1)</sup> /1290	47	65	115 <sup>1)</sup> /94	0.51 <sup>1)</sup> /0.44	934.1	60	4.6	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
RR 200 B <sup>1)</sup>	5659	200	1060 <sup>1)</sup> /750	2500 <sup>1)</sup> /1250	48	66	165 <sup>1)</sup> /105	0.71 <sup>1)</sup> /0.48	934.1	60	5.1	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Type RRK.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RRK 200	5977	200	780	2395	56	66	115	0.50	508	45	3.6	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Type SVR.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SVR 200 K	2673	200	830/540 <sup>2)</sup>	2420/1620 <sup>2)</sup>	54/47 <sup>2)</sup>	66/59 <sup>2)</sup>	139/98 <sup>2)</sup>	0.60/0.45 <sup>2)</sup>	934.1	55	8.5	TSW 1.5	1495	ESU 1/ESA 1	0236/0238

<sup>1)</sup> Type with high speed; standard with additional energy-saving speed level (see performance diagram). <sup>2)</sup> Values are related to the 2 speeds (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

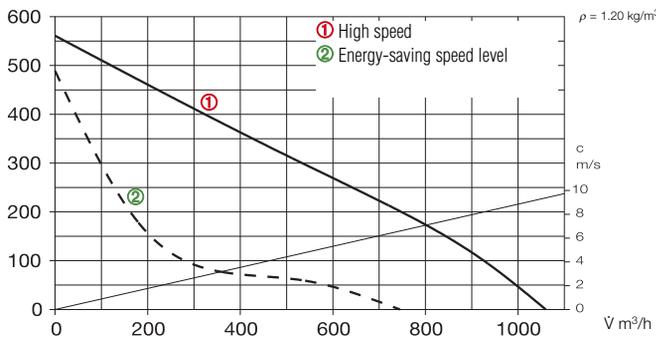
## RR 200 A

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout		dB(A) 54	31	42	46	50	47	48	34
L <sub>WA</sub> Intake		dB(A) 72	60	64	67	66	64	65	55



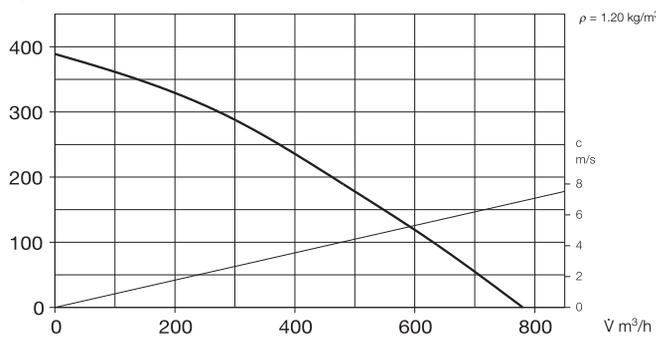
## RR 200 B

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout		dB(A) 55	30	40	48	52	48	49	41
L <sub>WA</sub> Intake		dB(A) 73	62	66	67	66	65	64	58



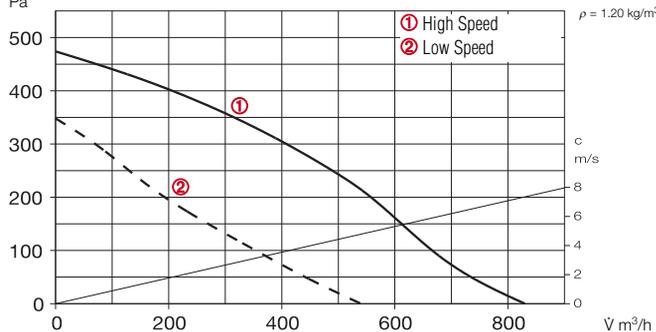
## RRK 200

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout		dB(A) 63	42	47	57	58	57	51	38
L <sub>WA</sub> Intake		dB(A) 73	51	64	71	69	65	62	54



## SVR 200 K

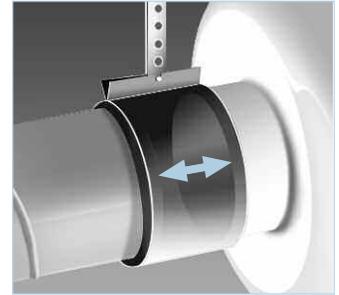
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout		dB(A) 62	41	51	61	50	48	43	36
L <sub>WA</sub> Intake		dB(A) 74	64	64	73	61	59	60	56
L <sub>WA</sub> Exhaust		dB(A) 78	65	67	75	68	67	64	58



## Accessories

### Pipe clamp connectors

**BM 200** Ref. No. 5078  
A quick-fix method for connecting fans to ducting, reducing vibration transmission (1 kit = 2 pieces). When installing leave a little gap between fan and ducting.



### Mounting feet for RR

**MK 4** Ref. No. 5824  
**Mounting feet for RRK**  
**MK 2** Ref. No. 5822  
Made from galvanised steel.



### Gravity shutter

**VK 200** Ref. No. 0758  
Made from polymer, light-grey.



### Rain repellent grille

**RAG 200** Ref. No. 0750  
Made from polymer, light-grey.



### Guard for spigot protection

**SGR 200** Ref. No. 5066  
For intake and exhaust installation on fan, made from galvanised steel.



### Backdraught shutter

**RSK 200** Ref. No. 5074  
Automatic, made from metal.



### Flexible attenuator

**FSD 200** Ref. No. 0679  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



### Spigotted circular attenuator

**SRSD 200/...** see page 319  
Spigotted attenuator from galvanised steel with 50 mm insulation. Length 300 – 1200 mm.



### In-line air filter box

**LFBR 200 G4** Ref. No. 8579  
**LFBR 200 F7** Ref. No. 8533  
Air filter with big cross sectional area to be installed in-line with ducting.



### Electric heater battery

**EHR-R 1.2/200** 1.2 kW No. 9436  
**EHR-R 2/200** 2.0 kW No. 9437  
**EHR-R 5/200** 5.0 kW No. 8711  
– with integrated temp. controller  
**CV 20-21-1** 2.1 kW No. S579  
Room or duct sensor (TFK/TFR, accessory) is necessary.



### Temp. regulating system for electric heater batteries EHR-R..

**EHS** Ref. No. 5002

### Water heater battery

**WHR 200** Ref. No. 9482  
Compact heat exchanger for installation in the ducting system.



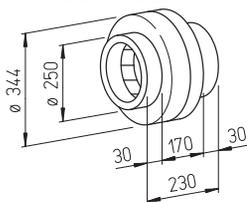
### Temperature regulating system for water heater battery

**WHST 300 T38** Ref. No. 8817

**NEW!**

**Models RR**

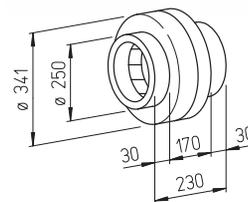
Market leading range offering an excellent value for money.  
Now with energy-saving second speed level.



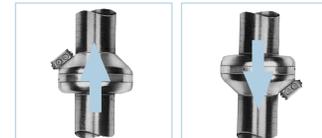
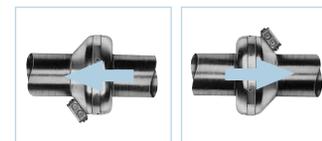
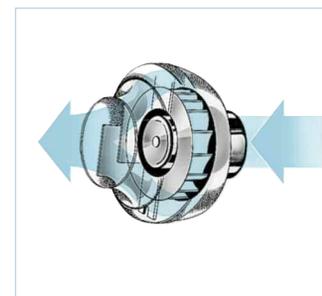
Dim. in mm

**Models RRK**

Alternative version made from impact resistant polymers.



Dim. in mm



For medium to smaller air flow volumes against high resistances.

Specially designed to be installed in-line in circular ducting. High pressure characteristic to overcome resistances of bends, filters etc. Universal in application for domestic, commercial and industrial purposes.

**Special features**

- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit standard duct sizes.
- 100 % speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

**Features of both models**

- Motor**  
Low noise external rotor motor with ball bearings, impregnated windings, insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- Motor protection**  
Motors have thermal contacts wired in series with the windings which automatically reset.

**Specification RR**

- Casing**  
Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).  
**DS 2/2** Ref. No. 1267
- Electrical connection**  
Terminal box (IP 55) located on outer casing.
- Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on motor and dynamically balanced as a unit providing low noise levels and high efficiency.
- Protection class**  
When installed in ducting the fan is rated IP 44.

**Specification RRK**

- Casing**  
All components are made from corrosion and impact resistant polymers. Six guide vanes increase the fan's efficiency. Colour: lightgrey.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- Electrical connection**  
Terminal box (IP 44) located on outer casing.
- Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on the motor and dynamically balanced as a unit providing low noise levels and high efficiency.
- Protection**  
Splashproof to IP 44.

**Installation**

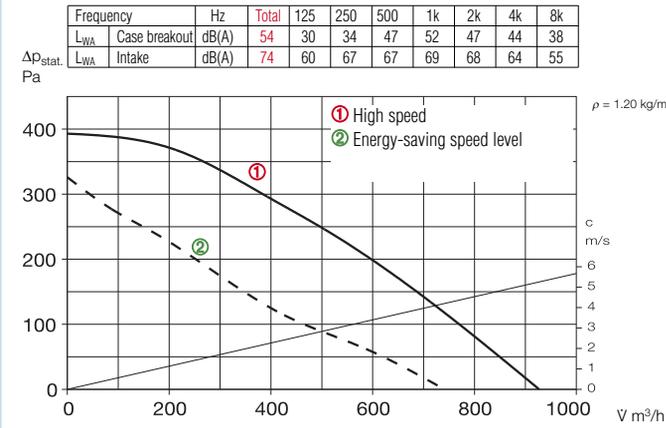
Installation in any position without restriction:  
– horizontally, vertically or pitched – suitable for intake or extract according to installation position. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperature	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	∇ m <sup>3</sup> /h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type RR..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RR 250 A <sup>1)</sup>	5652	250	930 <sup>1)</sup> /740	2580 <sup>1)</sup> /1290	47	67	115 <sup>1)</sup> /95	0.50 <sup>1)</sup> /0.44	934.1	60	4.6	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
RR 250 C <sup>1)</sup>	5660	250	1130 <sup>1)</sup> /890	2420 <sup>1)</sup> /1210	49	67	185 <sup>1)</sup> /130	0.81 <sup>1)</sup> /0.59	934.1	55	5.3	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Type RRK..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RRK 250	5978	250	840	2450	53	61	115	0.50	508	50	3.9	TSW 1.5	1495	ESU 1/ESA 1	0236/0238

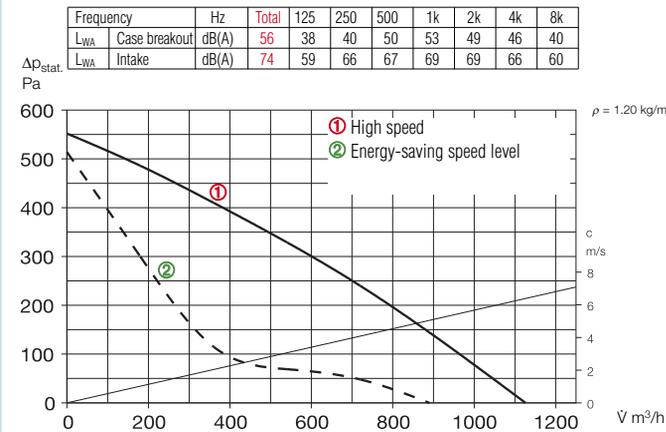
<sup>1)</sup> Type with high speed; standard with additional energy-saving speed level (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

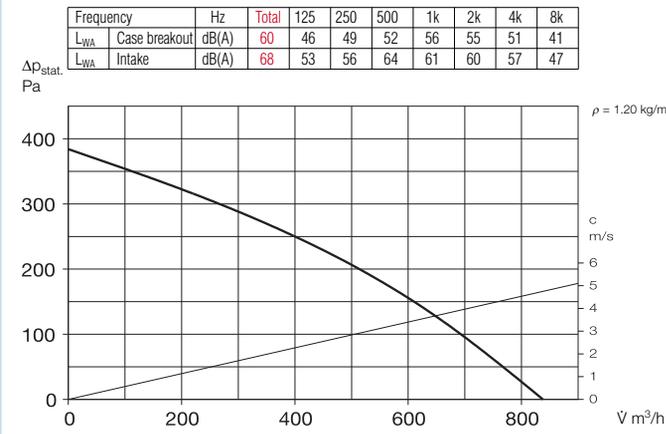
### RR 250 A



### RR 250 C



### RRK 250



### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for

- case breakout
- intake and exhaust in the tables above the performance curves.

In addition the case breakout figure is given as a sound pressure level at 1 metre (free-field conditions) in the technical data table (see facing page).

### Information Pages

Technical description	216
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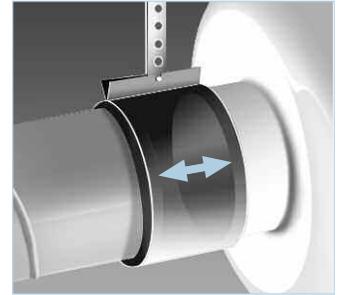
### Other accessories Pages

Filters, heater batteries and attenuators	305 on
Temp. regulating systems for heater batteries	311, 316
Flexible ducting, grilles, spigots and roof outlets	361 on
Valves	380 on
Speed controllers and switches	397 on

### Accessories

#### Pipe clamp connectors

**BM 250** Ref. No. 5079  
A quick-fix method for connecting fans to ducting, reducing vibration transmission (1 kit = 2 pieces). When installing leave a little gap between fan and ducting.



#### Mounting feet for RR

**MK 4** Ref. No. 5824

#### Mounting feet for RRK

**MK 2** Ref. No. 5822  
Made from galvanised steel.



#### Gravity shutter (automatic)

**VK 250** Ref. No. 0759  
Made from polymer, light-grey.



#### Rain repellent grille

**RAG 250** Ref. No. 0751  
Made from polymer, light-grey.

#### Guard for spigot protection

**SGR 250** Ref. No. 5067  
For intake and exhaust installation on fan, made from galvanised steel.



#### Backdraught shutter

**RSK 250** Ref. No. 5673  
Automatic, made from metal.



#### Flexible attenuator

**FSD 250** Ref. No. 0680  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 250/...** see page 319  
Spigotted attenuator from galvanised steel with 50 mm insulation. Length 300 – 1200 mm.



#### In-line air filter box

**LFBR 250 G4** Ref. No. 8580  
**LFBR 250 F7** Ref. No. 8534  
Air filter with big cross sectional area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 6/250** 6.0 kW No. 8712  
– with integrated temp. controller  
**CV 25-60-3** 6.0 kW No. 5296  
Room or duct sensor (TFK/TFR, accessory) is necessary.



**Temperature regulating system for electric heater battery EHR-R..**  
**EHS** Ref. No. 5002

#### Water heater battery

**WHR 250** Ref. No. 9483  
Compact heat exchanger for installation in the ducting system.



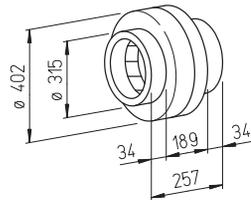
**Temperature regulating system for water heater battery**  
**WHS 1100** Ref. No. 8815



**NEW!**

**Models RR**

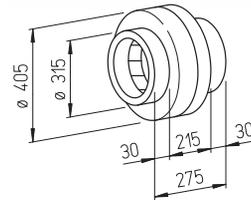
Market leading range offering an excellent value for money.  
Now with energy-saving second speed level.



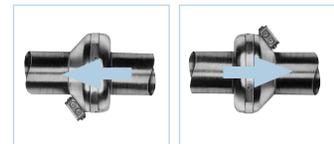
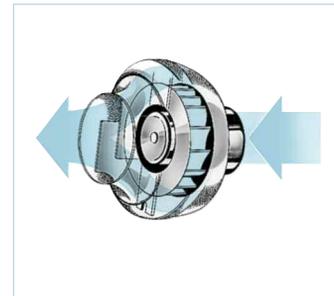
Dim. in mm

**Models RRK**

Alternative version made from impact resistant polymers.



Dim. in mm



For medium to smaller air flow volumes against high resistances.

Specially designed to be installed in-line in circular ducting. High pressure characteristic to overcome resistances of bends, filters etc. Universal in application for domestic, commercial and industrial purposes.

**Special features**

- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit standard duct sizes.
- 100 % speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

**Features of both models**

- Motor**  
Low noise external rotor motor with ball bearings, impregnated windings, insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- Motor protection**  
Motors have thermal contacts wired in series with the windings which automatically reset.

**Specification RR**

- Casing**  
Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).  
**DS 2/2** Ref. No. 1267
- Electrical connection**  
Terminal box (IP 55) located on outer casing.
- Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on motor and dynamically balanced as a unit providing low noise levels and high efficiency.
- Protection class**  
When installed in ducting the fan is rated IP 44.

**Specification RRK**

- Casing**  
All components are made from corrosion and impact resistant polymers. Six guide vanes increase the fan's efficiency. Colour: lightgrey.
- Speed control**  
Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- Electrical connection**  
Terminal box (IP 44) located on outer casing.
- Impeller**  
Backward curved centrifugal impeller made from polymers. Directly fitted on the motor and dynamically balanced as a unit providing low noise levels and high efficiency.
- Protection**  
Splashproof to IP 44.

**Installation**

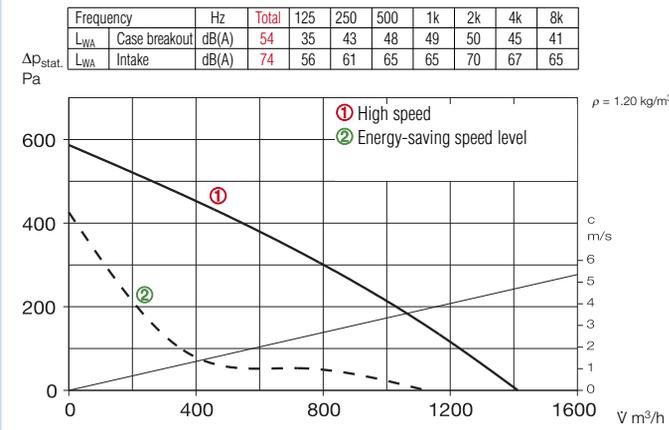
Installation in any position without restriction:  
– horizontally, vertically or pitched – suitable for intake or extract according to installation position. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperature	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	∇ m <sup>3</sup> /h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type RR..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RR 315 B <sup>1)</sup>	5661	315	1410 <sup>1)</sup> /1120	2465 <sup>1)</sup> /1233	47	67	190 <sup>1)</sup> /129	0.84 <sup>1)</sup> /0.59	934.1	50	6.1	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
RR 315 C <sup>1)</sup>	5920	315	1630 <sup>1)</sup> /1320	2500 <sup>1)</sup> /1250	50	68	274 <sup>1)</sup> /200	1.19 <sup>1)</sup> /0.91	934.1	50	6.5	TSW 1.5	1495	ESU 3/ESA 3	0237/0239
<b>Type RRK..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
RRK 315	5979	315	1280	2540	57	66	220	0.98	508	70	5.6	TSW 1.5	1495	ESU 3/ESA 3	0237/0239

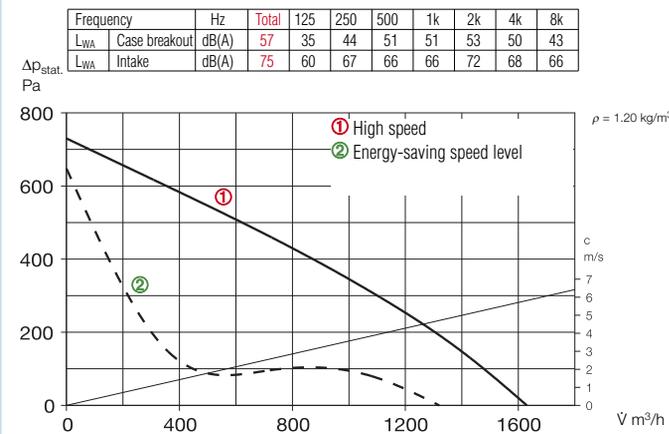
<sup>1)</sup> Type with high speed; standard with additional energy-saving speed level (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

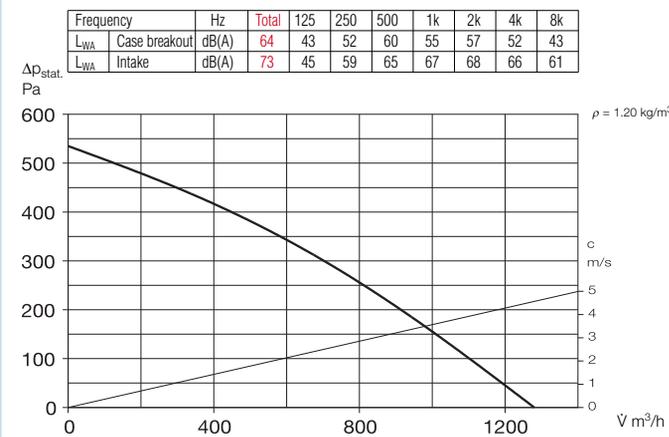
### RR 315 B



### RR 315 C



### RRK 315



#### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for

- case breakout
- intake and exhaust in the tables above the performance curves.

In addition the case breakout figure is given as a sound pressure level at 1 metre (free-field conditions) in the technical data table (see facing page).

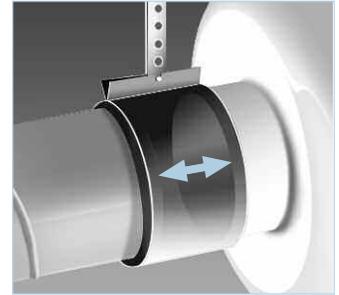
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Valves	380 on
Speed controllers and switches	397 on

#### Accessories

##### Pipe clamp connectors

**BM 315** Ref. No. 5080  
A quick-fix method for connecting fans to ducting, reducing vibration transmission (1 kit = 2 pieces). When installing leave a little gap between fan and ducting.



##### Mounting feet for RR

**MK 4** Ref. No. 5824

##### Mounting feet for RRRK

**MK 3** Ref. No. 5823  
Made from galvanised steel.



##### Gravity shutter (automatic)

**VK 315** Ref. No. 0760  
Made from polymer, light-grey.



##### Rain repellent grille

**RAG 315** Ref. No. 0752  
Made from polymer, light-grey.



##### Guard for spigot protection

**SGR 315** Ref. No. 5068  
For intake and exhaust installation on fan, made from galvanised steel.



##### Backdraught shutter

**RSK 315** Ref. No. 5674  
Automatic, made from metal.



##### Flexible attenuator

**FSD 315** Ref. No. 0681  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



##### Spigotted circular attenuator

**SRSD 315/...** see page 319  
Spigotted attenuator from galvanised steel with 50 mm insulation. Length 300 – 1200 mm.



##### In-line air filter box

**LFBR 315 G4** Ref. No. 8581  
**LFBR 315 F7** Ref. No. 8535  
Air filter with big cross sectional area to be installed in-line with ducting.



##### Electric heater battery

**EHR-R 6/315** 6.0 kW No. 8713  
– with integrated temp. controller  
**CV 31-60-3** 6.0 kW No. S589  
Room or duct sensor (TFK/TFR, accessory) is necessary.



**Temperature regulating system for electric heater battery EHR-R..**  
**EHS** Ref. No. 5002

##### Water heater battery

**WHR 315** Ref. No. 9484  
Compact heat exchanger for installation in the ducting system.



**Temperature regulating system for water heater battery**  
**WHS 1100** Ref. No. 8815

## Acoustic Line – Acoustically insulated centrifugal in-line fans SilentBox® and SlimVent SVS

Up to five million employees in Britain are exposed to damaging and concentration diminishing noise at their working place. Helios is specialized in the development of smooth running fans and offers solutions for exceptionally noise-sensitive operational environments across the whole range of products.

The AcousticLine in-line fans guarantee lowest noise levels for intake and case breakout. Universal in application for domestic, commercial and industrial purposes they are equipped with highly efficient and at the same time energy-efficient low noise impellers. Casing is like an internal attenuator. Lined with 50 mm thick mineral wool fibreboard and furthermore guarantees a functionality with lowest noise level.



**Acoustic Line from Helios.  
Ventilation cannot be more silent.**

Acoustic Line – Acoustically insulated centrifugal in-line fans  
SilentBox® and SlimVent SVS

**NEW!**

**Helios SilentBox®**  
Ø 125 – 400 mm  
V̇ = 230 – 2650 m³/h

The professional solution for extract and outdoor air systems with special requirements for noise levels. With sound insulated casing for an almost noise free operation. Ideal for maintenance and cleaning through removable casing cover and fan unit.

**NEW!**

**Helios SlimVent**  
Ø 125 – 200 mm  
V̇ = 400 – 850 m³/h

The flat SlimVent is only a little higher than the duct diameter and permits a simple and space-saving assembly in any position. The high pressure characteristic permits longer duct sections and overcomes further system resistances. Due to complete mineral wool lining the lowest noise levels are obtained.



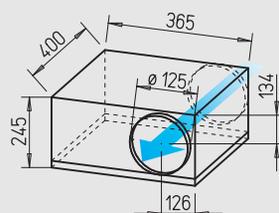
Duct fans

Models SilentBox® SB..



Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.

**NEW!**



Dim. in mm

■ **Similarities SB and SVS**

□ **Installation**

Installation in any position without restriction – horizontally, vertically or pitched – suitable for intake or extract.

□ **Motor**

Totally enclosed external rotor motor with ball bearings, impregnated windings insulation class F, designed for continuous operation, maintenance free and radio suppressed.

■ **Specification SilentBox®**

□ **Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clamps permit easy access to motor scroll and impeller set. Swing out motor and impeller. Spigots on intake and exhaust twin-seal rubber gaskets fit

standard ducts. All parts manufactured from galvanised sheet steel.

□ **Impeller**

Low noise forward curved centrifugal impeller, housed within an aero dynamically shaped scroll from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

□ **Electrical connection**

Terminal box (IP 55) is supplied with a 60 cm long electric cable.

□ **Motor protection**

With thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off and on.

□ **Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table).

□ **Protection**

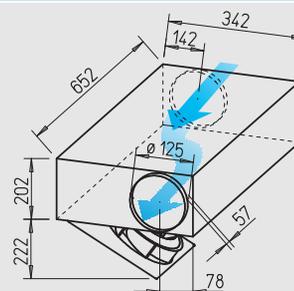
IP 44

Models SlimVent SVS



**Ultra low profile. Ideal for applications with limited installation space.** With sound-insulating mineral wool lining for particularly noise free operation.

**NEW!**



Dim. in mm

■ **Specification SlimVent SVS**

□ **Casing**

Extremely flat casing in longer design with more than 50 mm thick sound-absorbing mineral wool lining and glass fibre surface. The acoustic box which is placed in front of the fan reduces the sound level for the intake significantly. The sound level of the case breakout is reduced to a smaller extent (see sound levels in the tables above the performance curves).

□ The swing out motor and impeller unit permits maintenance and cleaning without disassembly of system components.

□ **Impeller**

Energy-saving centrifugal impeller with backward curved blades from high quality polymer. Dynamically balanced for low noise operation.

□ **Electrical connection**

Terminal box (IP 54) located on outer casing.

□ **Motor protection**

With thermal contacts wired in series with the windings which automatically reset.

□ **Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).

**DS 2/2** Ref. No. 1267

□ **Protection**

When installed in ducting the fan is rated IP 54.

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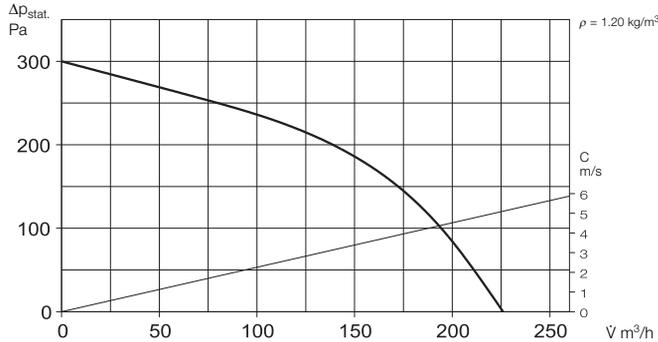
Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperatur	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type SilentBox® SB.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SB 125 A	9506	125	230	1130	28	46	61	0.27	508	80	12.0	TSW 0.3	3608	ESU 1/ESA 1	0236/0238
SB 125 C	9562	125	440	1850	37	55	122	0.53	508	65	12.0	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Type SVS.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SVS 125 B	2674	125	395/270 <sup>1)</sup>	2550/1810 <sup>1)</sup>	46/35 <sup>1)</sup>	46/37 <sup>1)</sup>	58/40 <sup>1)</sup>	0.25/0.18 <sup>1)</sup>	934.1	80	8.5	TSW 0.3	3608	ESU 1/ESA 1	0236/0238

<sup>1)</sup> Values are related to the 2 speeds (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

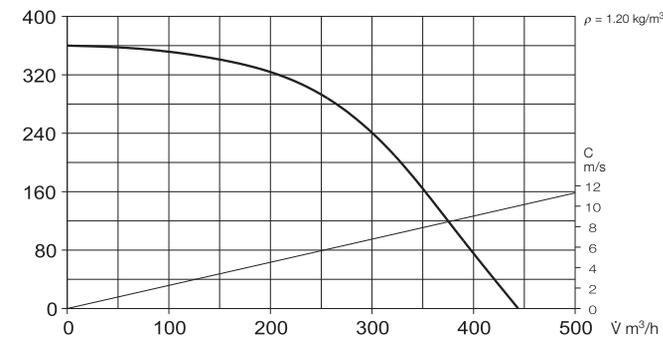
## SB 125 A

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout		dB(A) 35	28	28	27	27	25	26	27
L <sub>WA</sub> Intake		dB(A) 53	51	48	43	38	33	29	17
L <sub>WA</sub> Exhaust		dB(A) 61	53	54	55	56	50	43	30



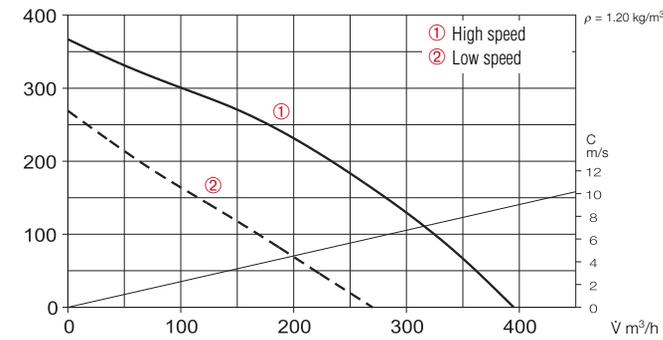
## SB 125 C

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout		dB(A) 44	35	42	36	33	29	28	28
L <sub>WA</sub> Intake		dB(A) 62	59	57	54	46	44	40	30
L <sub>WA</sub> Exhaust		dB(A) 70	62	63	65	64	62	55	46



## SVS 125 B

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout		dB(A) 52	26	48	48	42	39	32	28
L <sub>WA</sub> Intake		dB(A) 54	51	49	39	27	23	23	25
L <sub>WA</sub> Exhaust		dB(A) 71	60	67	67	63	58	55	48



### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for  
 - case breakout  
 - intake and exhaust  
 in the tables above the performances curves.  
 In addition the case breakout figure and air noise on intake are given as a sound pressure level at 1 m (freefield conditions) in the technical data table.  
 Note: For SilentBox the sound level on intake is lower than on exhaust.

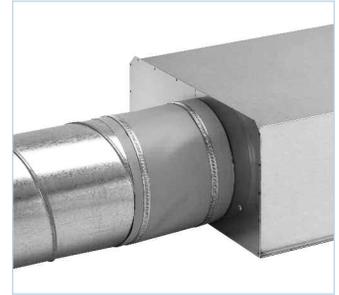
### Other accessories Page

Filters, heater batteries and attenuators	305 on
Temp. regulating systems for heater batteries	311, 315
Flexible ducting, grilles, spigots and roof outlets	361 on
Valves	380 on
Speed controllers and switches	397 on

### Accessories

#### Flexible sleeve

**FM 125** Ref. No. 1682  
 Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission to ducting and corrects small site misalignments. For intake or extract two sleeves are needed for complete isolation.



#### Louvre shutter

**VK 125** Ref. No. 0857  
 Wall mounted air steam operated shutter for the outlet. Made from white polymer.



#### Fixed grille

**G 160** Ref. No. 0893  
 To cover or insert into circular openings of duct systems. Made from high quality impact resistant polymer.



#### Guard

**SGR 125** Ref. No. 5064  
 For intake and extract installation. Made from powder-coated steel wire.



#### Back draught shutter

**RSKK 125** Ref. No. 5107  
 Air stream operated, made from polymer. For in-duct installation.



#### Flexible circular attenuator

**FSD 125** Ref. No. 0677  
 Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 125/...** see page 319  
 Spigotted attenuator from galvanized steel with 50 mm insulation. Length 300 – 1200 mm.

#### Air filter box

**LFBR 125 G4** Ref. No. 8577  
**LFBR 125 F7** Ref. No. 8531  
 Air filter with large surface filter area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 0,8/125** 0,8 kW No. 8709  
**EHR-R 1,2/125** 1,2 kW No. 9433  
 - with integrated temp. controller  
**CV 12-12-1** 1,2 kW No. S588  
 Room and/or duct sensor (TFK/TFR, accessories) necessary.



#### Temperature control system for electric heater battery EHR-R..

**EHS** Ref. No. 5002



#### Water heater battery

**WHR 125** Ref. No. 9480  
 Compact unit for in-line installation.



#### Temperature control system for water heater battery

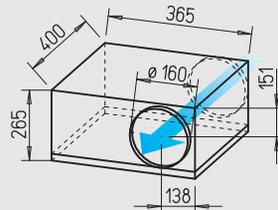
**WHST 300 T38** Ref. No. 8817

Models SilentBox® SB..



Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.

**NEW!**



Dim. in mm

■ **Similarities SB and SVS**

□ **Installation**

Installation in any position without restriction – horizontally, vertically or pitched – suitable for intake or extract.

□ **Motor**

Totally enclosed external rotor motor with ball bearings, impregnated windings insulation class F, designed for continuous operation, maintenance free and radio suppressed.

■ **Specification SilentBox®**

□ **Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clamps permit easy access to motor scroll and impeller set. Swing out motor and impeller. Spigots on intake and exhaust twin-seal rubber gaskets fit

standard ducts. All parts manufactured from galvanised sheet steel.

□ **Impeller**

Low noise forward curved centrifugal impeller, housed within an aero dynamically shaped scroll from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

□ **Electrical connection**

Terminal box (IP 55) is supplied with a 60 cm long electric cable.

□ **Motor protection**

With thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off and on.

□ **Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table).

□ **Protection**

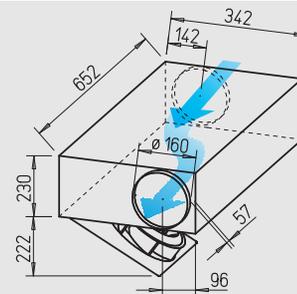
IP 44

Models SlimVent SVS



**Ultra low profile. Ideal for applications with limited installation space.** With sound-insulating mineral wool lining for particularly noise free operation.

**NEW!**



Dim. in mm

■ **Specification SlimVent SVS**

□ **Casing**

Extremely flat casing in longer design with more than 50 mm thick sound-absorbing mineral wool lining and glass fibre surface. The acoustic box which is placed in front of the fan reduces the sound level for the intake significantly. The sound level of the case breakout is reduced to a smaller extent (see sound levels in the tables above the performance curves).

□ The swing out motor and impeller unit permits maintenance and cleaning without disassembly of system components.

□ **Impeller**

Energy-saving centrifugal impeller with backward curved blades from high quality polymer. Dynamically balanced for low noise operation.

□ **Electrical connection**

Terminal box (IP 54) located on outer casing.

□ **Motor protection**

With thermal contacts wired in series with the windings which automatically reset.

□ **Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).

**DS 2/2** Ref. No. 1267

□ **Protection**

When installed in ducting the fan is rated IP 54.

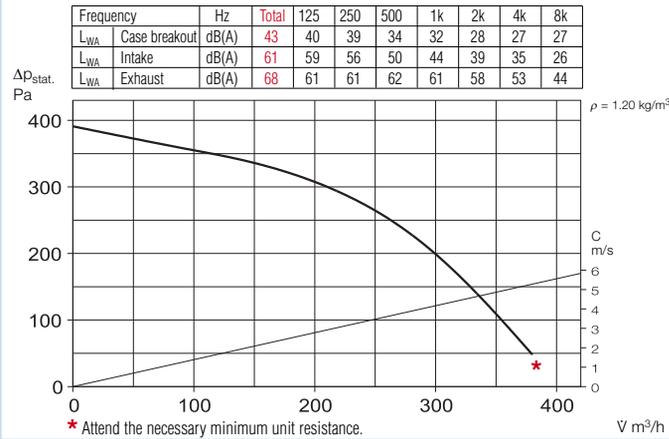
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Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperatur	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type SilentBox® SB.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SB 160 B	9508	160	380	1650	36	54	105	0.46	508	65	13.0	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
SB 160 D	9563	160	500	2200	39	58	157	0.68	508	55	13.0	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Type SVS.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SVS 160 K	2675	160	460/320 <sup>1)</sup>	2520/1730 <sup>1)</sup>	44/33 <sup>1)</sup>	49/38 <sup>1)</sup>	58/40 <sup>1)</sup>	0.25/0.18 <sup>1)</sup>	934.1	70	9.0	TSW 0.3	3608	ESU 1/ESA 1	0236/0238

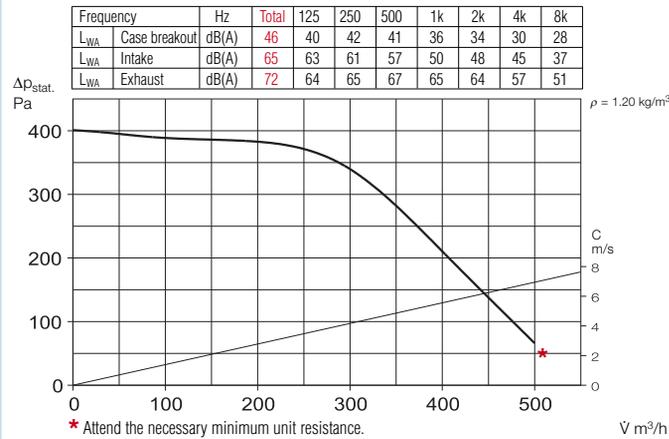
<sup>1)</sup> Values are related to the 2 speeds (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

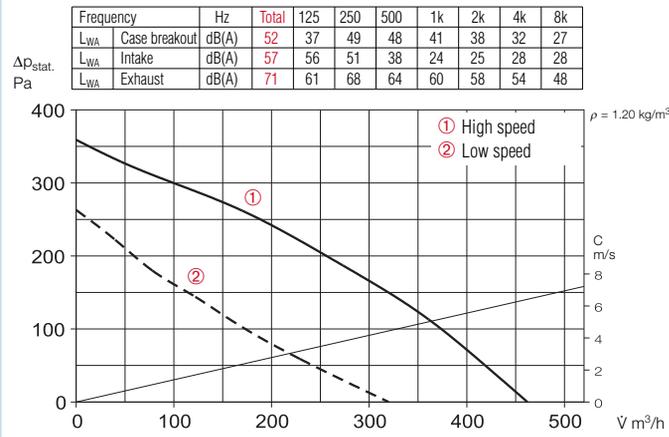
### SB 160 B



### SB 160 D



### SVS 160 K



### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for

- case breakout
- intake and exhaust

in the tables above the performances curves.

In addition the case breakout figure and air noise on intake are given as a sound pressure level at 1 m (freefield conditions) in the technical data table.

Note: For SilentBox the sound level on intake is lower than on exhaust.

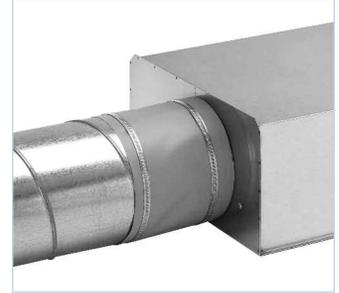
### Other accessories Page

Filters, heater batteries and attenuators	305 on
Temp. regulating systems for heater batteries	311, 315
Flexible ducting, grilles, spigots and roof outlets	361 on
Valves	380 on
Speed controllers and switches	397 on

### Accessories

#### Flexible sleeve

**FM 160** Ref. No. 1684  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission to ducting and corrects small site misalignments. For intake or extract two sleeves are needed for complete isolation.



#### Louvre shutter

**VK 160** Ref. No. 0892  
Wall mounted air steam operated shutter for the outlet. Made from white polymer.



#### Fixed grille

**G 160** Ref. No. 0893  
To cover or insert into circular openings of duct systems. Made from high quality impact resistant polymer.



#### Guard

**SGR 160** Ref. No. 5069  
For intake and extract installation. Made from powder-coated steel wire.



#### Back draught shutter

**RSK 160** Ref. No. 5669  
Air stream operated, made from polymer. For in-duct installation.



#### Flexible circular attenuator

**FSD 160** Ref. No. 0678  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 160/...** see page 319  
Spigotted attenuator from galvanized steel with 50 mm insulation. Length 300 – 1200 mm.

#### Air filter box

**LFBR 160 G4** Ref. No. 8578  
**LFBR 160 F7** Ref. No. 8532  
Air filter with large surface filter area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 1,2/160** 1,2 kW No. 9434  
**EHR-R 2,4/160** 2,4 kW No. 9435  
**EHR-R 5/160** 5,0 kW No. 8710  
– with integrated temp. controller  
**CV 16-24-1** 2,4 kW No. 5294  
Room and/or duct sensor (TFK/TFR, accessories) necessary.



#### Temperature control system for electric heater battery EHR-R.. EHS

Ref. No. 5002



#### Water heater battery

**WHR 160** Ref. No. 9481  
Compact unit for in-line installation.



#### Temperature control system for water heater battery

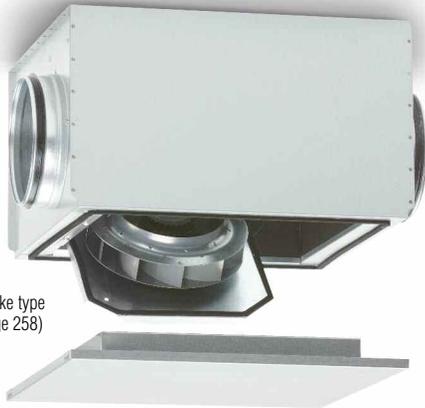
**WHST 300 T38** Ref. No. 8817

Models SilentBox® SB..

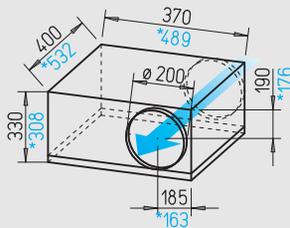


Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.

**NEW!**



(Fig. SB 200 C like type  
SB 250 C on page 258)



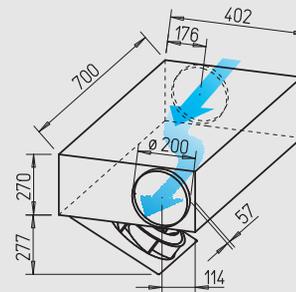
Dim. in mm SB 200 C, \*SB 200 D

Models SlimVent SVS



Ultra low profile. Ideal for applications with limited installation space. With sound-insulating mineral wool lining for particularly noise free operation.

**NEW!**



Dim. in mm

■ **Similarities SB and SVS**

□ **Installation**

Installation in any position without restriction – horizontally, vertically or pitched – suitable for intake or extract.

□ **Motor**

Totally enclosed external rotor motor with ball bearings, impregnated windings insulation class F, designed for continuous operation, maintenance free and radio suppressed.

■ **Specification SilentBox®**

□ **Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clamps permit easy access to motor scroll and impeller set. Swing out motor and impeller. Spigots on intake and exhaust twin-seal rubber gaskets fit

standard ducts. All parts manufactured from galvanised sheet steel.

□ **Impeller**

Low noise forward curved centrifugal impeller, housed within an aero dynamically shaped scroll from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

□ **Electrical connection**

Terminal box (IP 55) is supplied with a 60 cm long electric cable.

□ **Motor protection**

With thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off and on.

□ **Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table).

□ **Protection**

IP 44

■ **Specification SlimVent SVS**

□ **Casing**

Extremely flat casing in longer design with more than 50 mm thick sound-absorbing mineral wool lining and glass fibre surface. The acoustic box which is placed in front of the fan reduces the sound level for the intake significantly. The sound level of the case breakout is reduced to a smaller extent (see sound levels in the tables above the performance curves).

□ The swing out motor and impeller unit permits maintenance and cleaning without disassembly of system components.

□ **Impeller**

Energy-saving centrifugal impeller with backward curved blades from high quality polymer. Dynamically balanced for low noise operation.

□ **Electrical connection**

Terminal box (IP 54) located on outer casing.

□ **Motor protection**

With thermal contacts wired in series with the windings which automatically reset.

□ **Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table) or 2 speed operation with DS 2/2 (accessories).

**DS 2/2** Ref. No. 1267

□ **Protection**

When installed in ducting the fan is rated IP 54.

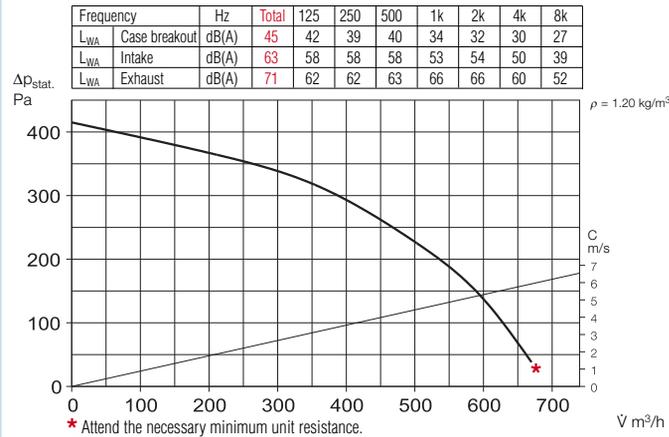
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Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperatur	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	∇ m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type SilentBox® SB.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SB 200 C	9510	200	680	1800	41	56	188	0.83	508	55	14.0	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
SB 200 D	9564	200	820	2600	42	55	157	0.69	508	75	22.0	TSW 1.5	1495	ESU 1/ESA 1	0236/0238
<b>Type SVS.., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SVS 200 K	2676	200	840/560 <sup>1)</sup>	2410/1600 <sup>1)</sup>	51/44 <sup>1)</sup>	55/48 <sup>1)</sup>	140/100 <sup>1)</sup>	0.60/0.45 <sup>1)</sup>	934.1	55	11.0	TSW 1.5	1495	ESU 1/ESA 1	0236/0238

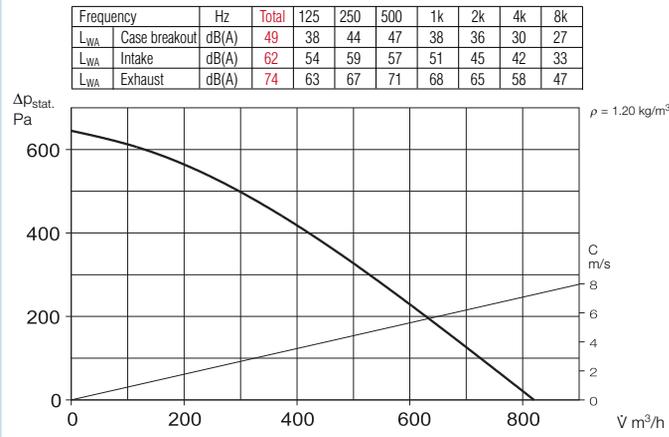
<sup>1)</sup> Values are related to the 2 speeds (see performance diagram).

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

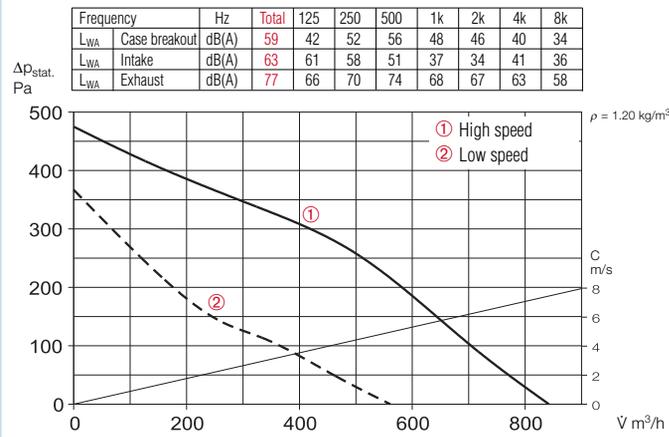
### SB 200 C



### SB 200 D



### SVS 200 K



### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for

- case breakout
- intake and exhaust

in the tables above the performances curves. In addition the case breakout figure and air noise on intake are given as a sound pressure level at 1 m (freefield conditions) in the technical data table. Note: For SilentBox the sound level on intake is lower than on exhaust.

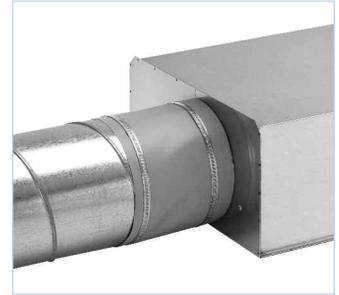
### Other accessories Page

Filters, heater batteries, attenuators	305 on
Temperature control for heater batteries	311, 315
Flexible ducting, guards, duct components and roof outlets	361 on
Valves	380 on
Speed controllers and switches	397 on

### Accessories

#### Flexible sleeve

**FM 200** Ref. No. 1670  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission to ducting and corrects small site misalignments. For intake or extract two sleeves are needed for complete isolation.



#### Louvre shutter

**VK 200** Ref. No. 0758  
Wall mounted air steam operated shutter for the outlet. Made from white polymer.



#### Rain repellent grille

**RAG 200** Ref. No. 0750  
Made from polymer, light-grey.



#### Guard

**SGR 200** Ref. No. 5066  
For intake and extract installation. Made from powder-coated steel wire.



#### Back draught shutter

**RSK 200** Ref. No. 5074  
Air stream operated, made from polymer. For in-duct installation.



#### Flexible circular attenuator

**FSD 200** Ref. No. 0679  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 200/...** see page 319  
Spigotted attenuator from galvanized steel with 50 mm insulation. Length 300 – 1200 mm.

#### Air filter box

**LFBR 200 G4** Ref. No. 8579  
**LFBR 200 F7** Ref. No. 8533  
Air filter with large surface filter area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 1,2/200** 1.2 kW No. 9436  
**EHR-R 2/200** 2.0 kW No. 9437  
**EHR-R 5/200** 5.0 kW No. 8711  
– with integrated temp. controller  
**CV 20-21-1** 2.1 kW No. S579  
Room and/or duct sensor (TFK/TFR, accessories) necessary.



#### Temperature control system for electric heater battery EHR-R.. EHS

Ref. No. 5002



#### Water heater battery

**WHR 200** Ref. No. 9482  
Compact unit for in-line installation.



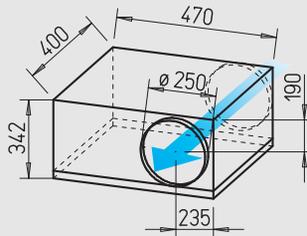
#### Temperature control system for water heater battery

**WHST 300 T38** Ref. No. 8817

SilentBox® SB 250 C



Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.



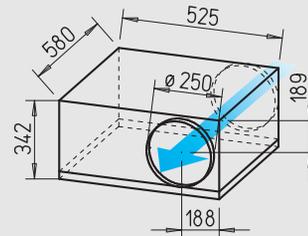
Dim. in mm

SilentBox® SB 250 E



Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.

**NEW!**



Dim. in mm

**Similarities**  
SB 250 C and E

**Installation**

Installation in any position without restriction – horizontally, vertically or pitched – suitable for intake or extract.

**Motor**

Totally enclosed external rotor motor with ball bearings, impregnated windings insulation class F, designed for continuous operation, maintenance free and radio suppressed.

**Motor protection**

With thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switch off and on.

**Speed control**

Stepless 0 – 100 % by use of electronic controller or 5 step transformer controller (see table).

**Electrical connection**

Terminal box (IP 55) is supplied with a 60 cm long electric cable.

**Protection**

IP 44

**Specification SB 250 C**

**Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. For quick release clamps permit easy access to motor scroll and impeller set. Extractable motor and impeller unit. Spigots on intake and exhaust twin-seal rubber gaskets fit standard ducts. All parts manufactured from galvanised sheet steel.

**Impeller**

Low noise forward curved centrifugal impeller, housed within an aero dynamically shaped scroll from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

**Specification SB 250 E**

**Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clamps permit easy access to motor scroll and impeller set. Swing out motor and impeller unit. Spigots on intake and exhaust twin-seal rubber gaskets fit standard ducts. All parts manufactured from galvanised sheet steel.

**Impeller**

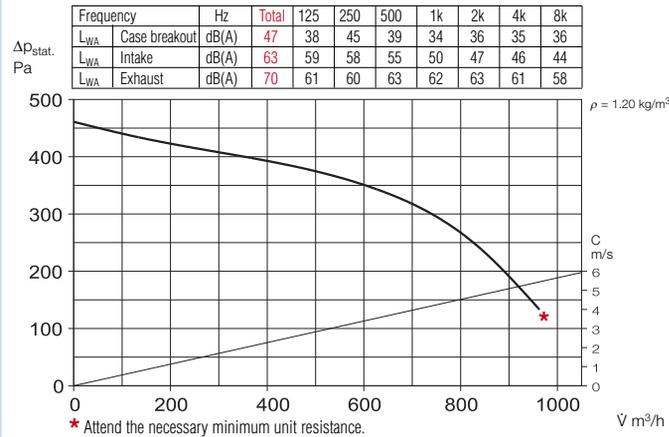
Low noise forward curved centrifugal impeller, housed within an aero dynamically shaped scroll from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

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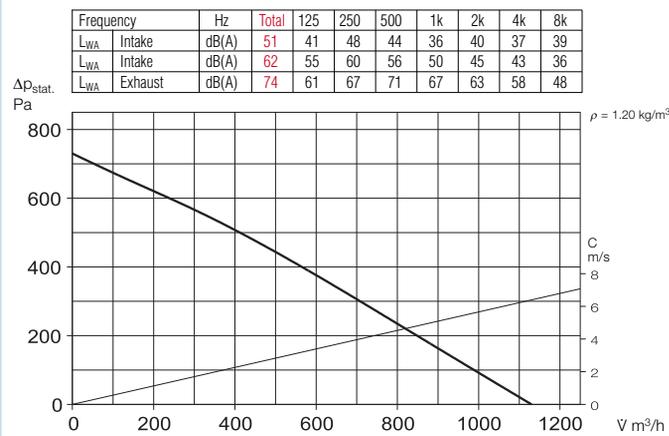
Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperatur	Nominal weight in	5 step transformer controller		Electronical* speed controller, stepless	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	∇ m³/h	min⁻¹	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type SilentBox® SB..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SB 250 C	9512	250	960	2120	43	56	255	1.13	508	50	18.0	TSW 1.5	1495	ESU 3/ESA 3	0237/0239
SB 250 E	9565	250	1130	2420	44	55	201	0.89	508	50	27.0	TSW 1.5	1495	ESU 3/ESA 3	0237/0239

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

### SB 250 C



### SB 250 E



### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for

- case breakout
- intake and exhaust

in the tables above the performances curves.

In addition the case breakout figure and air noise on intake are given as a sound pressure level at 1 m (freefield conditions) in the technical data table.

Note: The sound level on intake is lower than on exhaust.

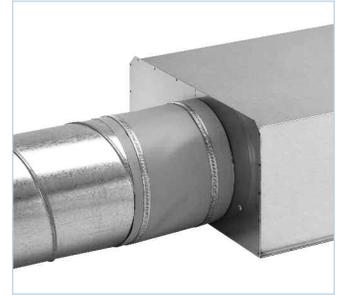
### Other accessories Page

Filters, heater batteries, attenuators	305 on
Temperature control for heater batteries	311, 316
Flexible ducting, guards, duct components and roof outlets	361 on
Valves	380 on
Speed controllers and switches	397 on

### Accessories

#### Flexible sleeve

**FM 250** Ref. No. 1672  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission to ducting and corrects small site misalignments. For intake or extract two sleeves are needed for complete isolation.



#### Louvre shutter

**VK 250** Ref. No. 0759  
Wall mounted air stream operated shutter for the outlet. Made from white polymer.



#### Rain repellent grille

**RAG 250** Ref. No. 0751  
Made from polymer, light-grey.



#### Guard

**SGR 250** Ref. No. 5067  
For intake and extract installation. Made from powder-coated steel wire.



#### Back draught shutter

**RSK 250** Ref. No. 5673  
Air stream operated, made from polymer. For in-duct installation.



#### Flexible circular attenuator

**FSD 250** Ref. No. 0680  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 250/...** see page 319  
Spigotted attenuator from galvanized steel with 50 mm insulation. Length 300 – 1200 mm.

#### Air filter box

**LFBR 250 G4** Ref. No. 8580  
**LFBR 250 F7** Ref. No. 8534  
Air filter with large surface filter area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 6/250** 6.0 kW No. 8712  
– with integrated temp. controller  
**CV 25-60-3** 6.0 kW No. 5296  
Room and/or duct sensor (TFK/TFR, accessories) necessary.



#### Temperature control system for electric heater battery EHR-R..

**EHS** Ref. No. 5002



#### Water heater battery

**WHR 250** Ref. No. 9483  
Compact unit for in-line installation.



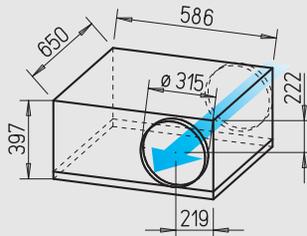
#### Temperature control system for water heater battery

**WHS 1100** Ref. No. 8815

SilentBox® SB 315 B



Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.

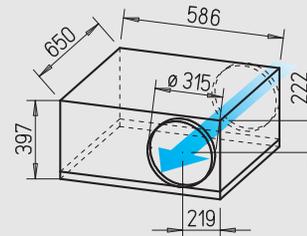


Dim. in mm

SilentBox® SB 315 C



Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.



Dim. in mm

■ **Similarities**  
SB 315 B and C

□ **Installation**

Installation in any position without restriction – horizontally, vertically or pitched – suitable for intake or extract.

□ **Motor**

Totally enclosed external rotor motor with ball bearings, impregnated windings insulation class F, designed for continuous operation, maintenance free and radio suppressed.

□ **Electrical connection**

Terminal box (IP 55) is supplied with a 60 cm long electric cable.

□ **Speed control**

Speed controllable with transformer speed controller.

□ **Impeller**

Low noise forward curved centrifugal impeller, housed within an aero dynamically shaped scroll from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

□ **Protection**  
IP 44

■ **Specification SB 315 B**

□ **Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. For quick release clamps permit easy access to motor scroll and impeller set. Extractable motor and impeller unit. Spigots on intake and exhaust twin-seal rubber gaskets fit standard ducts. All parts manufactured from galvanised sheet steel.

□ **Motor protection**

With thermal contacts wired to the terminal block and must be connected to a motor protection unit (see type table).

■ **Specification SB 315 C**

□ **Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clamps permit easy access to motor scroll and impeller set. Extractable motor and impeller unit. Equipped with two parallel wired, double inlet centrifugal fan units. Spigots on intake and exhaust twin-seal rubber gaskets fit standard ducts. All parts manufactured from galvanised sheet steel.

□ **Motor protection**

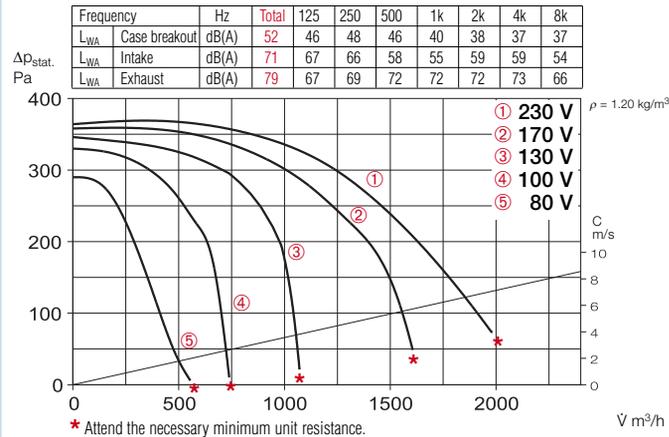
With thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off and on.

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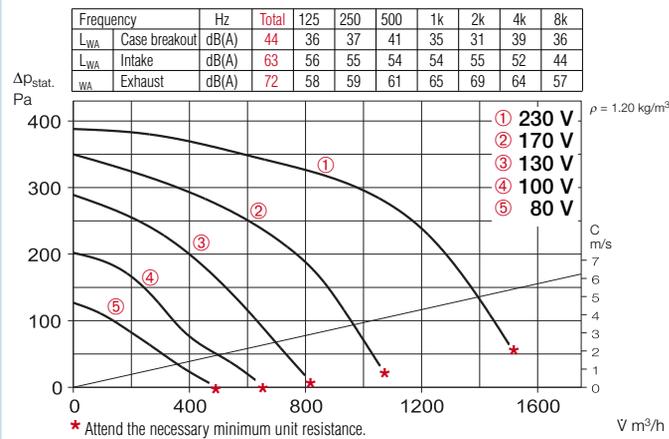
Type	Ref. No.	Connection spigot Ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperature	Nominal weight in	5 step transformer controller		Motor protection unit* for connection with built-in thermal contacts	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	V m³/h	min⁻¹	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type SilentBox® SB..., 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SB 315 B	9515	315	1970	1350	45	64	620	3.0	536.1	50	40.0	TSW 5.0	1497	MW	1579
SB 315 C	9514	315	1460	1450	37	56	390	1.7	508	55	30.0	TSW 3.0	1496	—	—

\* In noise relevant cases transformer controller must be provided. An electronic controller can trigger a distracting magnetisation noise.

### SB 315 B



### SB 315 C



### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for

- case breakout
- intake and exhaust

in the tables above the performances curves.

In addition the case breakout figure and air noise on intake are given as a sound pressure level at 1 m (freefield conditions) in the technical data table.

Note: The sound level on intake is lower than on exhaust.

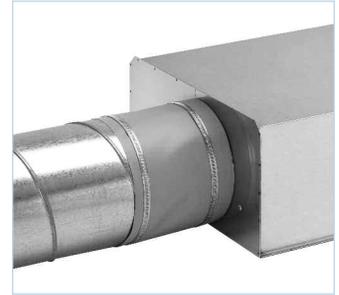
### Other accessories Page

Filters, heater batteries, attenuators	305 on
Temperature control for heater batteries	311, 316
Flexible ducting, guards, duct components and roof outlets	361 on
Valves	380 on
Speed controllers and switches	397 on

### Accessories

#### Flexible sleeve

**FM 315** Ref. No. 1674  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission to ducting and corrects small site misalignments. For intake or extract two sleeves are needed for complete isolation.



#### Louvre shutter

**VK 315** Ref. No. 0760  
Wall mounted air stream operated shutter for the outlet. Made from white polymer.



#### Rain repellent grille

**RAG 315** Ref. No. 0752  
Made from polymer, light-grey.



#### Guard

**SGR 315** Ref. No. 5068  
For intake and extract installation. Made from powder-coated steel wire.



#### Back draught shutter

**RSK 315** Ref. No. 5674  
Air stream operated, made from polymer. For in-duct installation.



#### Flexible circular attenuator

**FSD 315** Ref. No. 0681  
Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 315/...** see page 319  
Spigotted attenuator from galvanized steel with 50 mm insulation. Length 300 – 1200 mm.

#### Air filter box

**LFBR 315 G4** Ref. No. 8581  
**LFBR 315 F7** Ref. No. 8535  
Air filter with large surface filter area to be installed in-line with ducting.



#### Electric heater battery

**EHR-R 6/315** 6.0 kW No. 8713  
– with integrated temp. controller  
**CV 31-60-3** 6.0 kW No. S589  
Room and/or duct sensor (TFK/TFR, accessories) necessary.



#### Temperature control system for electric heater battery EHR-R..

**EHS** Ref. No. 5002



#### Water heater battery

**WHR 315** Ref. No. 9484  
Compact unit for in-line installation.



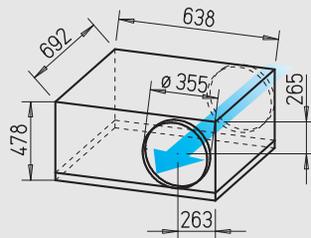
#### Temperature control system for water heater battery

**WHS 1100** Ref. No. 8815

SilentBox® SB 355 C



Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.

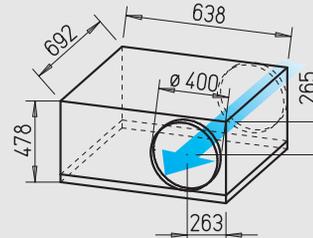


Dim. in mm

SilentBox® SB 400 F



Virtually noise free with high air flow volumes against high resistances. Ideal for maintenance and cleaning.



Dim. in mm

■ **Similarities**  
SB 355 C and SB 400 F

□ **Installation**

Installation in any position without restriction – horizontally, vertically or pitched – suitable for intake or extract. Make sure that there is free accessibility to the cover. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

□ **Motor**

Totally enclosed external rotor motor with ball bearings, impregnated windings insulation class F, designed for continuous operation, maintenance free and radio suppressed.

□ **Electrical connection**

Terminal box (IP 55) is supplied with a 60 cm long electric cable.

□ **Speed control**

Speed controllable with transformer speed controller.

□ **Impeller**

Low noise forward curved centrifugal impeller, housed within an aero dynamically shaped scroll from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

□ **Protection**

IP 44

■ **Specification SB 355 C**

□ **Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. For quick release clamps permit easy access to motor scroll and impeller set. Extractable motor and impeller unit. Spigots on intake and exhaust twin-seal rubber gaskets

fit standard ducts. All parts manufactured from galvanised sheet steel.

□ **Motor protection**

With thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off and on.

■ **Specification SB 400 F**

□ **Casing**

Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clamps permit easy access to motor scroll and impeller set. Extractable motor and impeller unit. Spigots on intake and exhaust twin-seal rubber gaskets fit standard ducts. All parts manufactured from galvanised sheet steel.

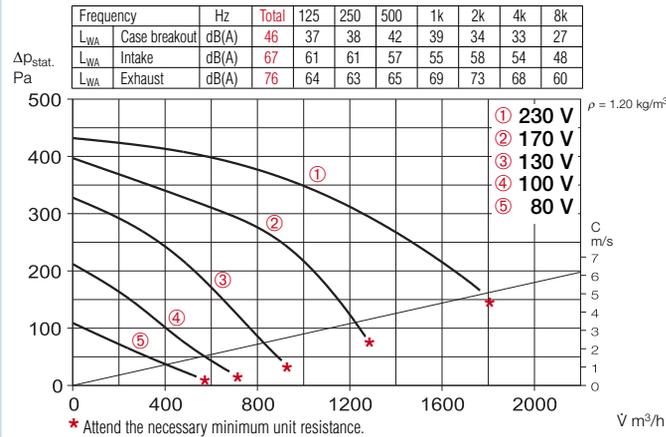
□ **Motor protection**

With thermal contacts wired to the terminal block and must be connected to a motor protection unit (see type table).

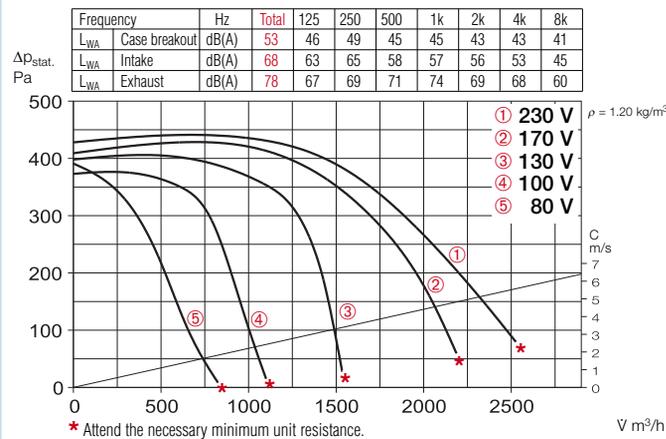
Information		Page
Technical description		216
Selection chart		217
Design of systems		12 on
Modular comp. system		214

Type	Ref. No.	Connection spigot ø	Air flow volume (FID)	R.P.M.	Sound pressure level at 1 m		Power Watts	Current Amps	Wiring diagram	Maximum air flow temperatur	Nominal weight in	5 step transformer controller		Motor protection unit for connection with built-in thermal contacts	
					Case - breakout	Air noise on intake						Type	Ref. No.	Type	Ref. No.
		mm	∑ m³/h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. No.	Type	Ref. No.
<b>Type SilentBox® SB... 1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, IP 44</b>															
SB 355 C	9516	355	1780	1850	39	60	540	2.3	508	45	31.0	TSW 3.0	1496	—	—
SB 400 F	9517	400	2650	1200	46	61	1000	4.7	536.1	70	50.0	TSW 7.5	1596	MW	1579

### SB 355 C



### SB 400 F



### Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for case breakout intake and exhaust in the tables above the performances curves. In addition the case breakout figure and air noise on intake are given as a sound pressure level at 1 m (freefield conditions) in the technical data table. Note: The sound level on intake is lower than on exhaust.

### Other accessories Page

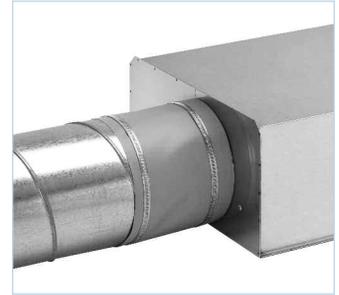
Filters, heater batteries, attenuators	305 on
Temperature control for heater batteries	311, 316
Flexible ducting, guards, duct components and roof outlets	361 on
Valves	380 on
Speed controllers and switches	397 on

### Accessories

#### Flexible sleeve

<b>FM 355</b>	Ref. No. 1675
<b>FM 400</b>	Ref. No. 1676

Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission to ducting and corrects small site misalignments. For intake or extract two sleeves are needed for complete isolation.



#### Louvre shutter

<b>VK 355</b>	Ref. No. 0761
<b>VK 400</b>	Ref. No. 0762

Wall mounted air steam operated shutter for the outlet. Made from white polymer.



#### Rain repellent grille

<b>RAG 355</b>	Ref. No. 0753
<b>RAG 400</b>	Ref. No. 0754

Made from polymer, light-grey.



#### Back draught shutter

<b>RSK 355</b>	Ref. No. 5650
<b>RSK 400</b>	Ref. No. 5651

Air stream operated, made from polymer. For in-duct installation.



#### Flexible circular attenuator

<b>FSD 355</b>	Ref. No. 0682
<b>FSD 400</b>	Ref. No. 0683

Spigotted aluminium attenuator with 50 mm insulation. Length 1 m.



#### Spigotted circular attenuator

**SRSD 400/...** see page 319  
Spigotted attenuator from galvanised steel with 50 mm insulation. Length 300 – 1200 mm.



#### Air filter box

<b>LFBR 355 G4</b>	Ref. No. 8583
<b>LFBR 355 F7</b>	Ref. No. 8536
<b>LFBR 400 G4</b>	Ref. No. 8582
<b>LFBR 400 F7</b>	Ref. No. 8537

Air filter with large surface filter area to be installed in-line with ducting.



#### Electric heater battery

<b>EHR-R 9/355</b>	9.0 kW	No. 8656
<b>EHR-R 9/400</b>	9.0 kW	No. 8657
<b>– with integrated temp. controller</b>		
<b>CV 35-90-3</b>	9.0 kW	No. 5297
<b>CV 40-120-3</b>	9.0 kW	No. S591

Room and/or duct sensor (TFK/TFR, accessories) necessary.



#### Temperature control system for electric heater battery EHR-R..

<b>EHSD 16</b>	Ref. No. 5003
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#### Water heater battery

<b>WHR 355</b>	Ref. No. 8790
<b>WHR 400</b>	Ref. No. 9524



#### Temperature control system for water heater battery

<b>WHS 1100</b>	Ref. No. 8815
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**AVAILABLE IN  
THE UK ONLY!**

For commercial buildings with internal toilets or toilets that have no opening windows it is recommended that continuous ventilation is provided. In addition to ensure that the continuous ventilation maintained even in the event of a fan failure that a standby fan takes over automatically.

The Helios Twin duct and roof fans have been specifically designed to meet the needs of this application. All units in the range have two direct drive centrifugal fans with an individual back draught shutter and separate electrical connections to the terminal box. Each centrifugal fan will achieve the specified unit performance when running, thus ensuring 100% standby. The casings of the duct fans TFD.. & TFDA.. are manufactured in galvanised steel with an easy access cover. For noise sensitive applications the

acoustically lined units TFDA.. provide the ideal solution. The casing of the roof fans TFR.. & TFRA.. are aluminium with a spigot or louvre outlet and an easy access cover. For noise sensitive applications the acoustically lined units TFRA.. provide the ideal solution. The automatic changeover panel ACSW 2 provides immediate switching from one fan to the other in the event of one fan failing. The panel also provides over current protection and duty share. Fan failure options are current monitoring or flow sensing.

Type	Air flow volume in m <sup>3</sup> /s against static pressure ( $\Delta P_{static}$ ) in Pa								
	0	50	100	150	200	250	300	350	400
TF.. 125	0.08	0.077	0.067	0.057	0.037				
TF.. 150/160	0.16	0.132	0.083						
TF.. 200	0.269	0.26	0.245	0.19	0.035				
TF.. 250	0.38	0.375	0.37	0.36	0.335	0.275	0.15		
TF.. 315	0.48	0.47	0.46	0.438	0.40	0.33	0.22	0.08	
TF.. 355 A	1)	0.419	0.41	0.395	0.37	0.32	0.20		
TF.. 355 B	1)	1)	0.55	0.534	0.50	0.45	0.40		
TF.. 355 C	1)	0.65	0.62	0.60	0.56	0.50	0.32		
TF.. 400 A	1)	1)	0.73	0.696	0.65	0.60	0.52	0.40	
TF.. 400 B	1)	1)	0.787	0.772	0.73	0.66	0.40		
TF.. 450	1)	1)	0.956	0.93	0.875	0.80	0.70	0.40	
TF.. 500	1)	1)	1.101	1.09	1.07	1.04	1.00	0.93	0.80

1) No free air figure available as fan needs a minimum resistance.



## Twin duct fans and roof fans TFD & TFDA / TFR & TFRA

**AVAILABLE IN  
THE UK ONLY!**

**Duct mounted fans TFD...**

The duct mounted models TFD.. are designed for internal mounting in the building with easy access via the removable lid. The access can be either from above or below the unit, depending on the mounting arrangement. The acoustically lined units offer lower sound levels and case break-out levels, for noise sensitive areas.

Page 266

**Roof mounted fans TFR...**

The roof mounted models TFR.. offer a weather protected unit with outlet louvres and a rear mounted inlet spigot for circular ducting. The acoustically lined units offer lower sound levels and case break-out levels, for noise sensitive areas.

Page 268

To monitor and change over the fans the Helios automatic change over panels are available to match the fans. There is a choice of models including manual duty sharing with a variable change over time.

- High pressure capabilities.
- 100% stand-by.
- Top or bottom access on duct mounted units.
- Duties up to 1.1 m<sup>3</sup>/s.
- Pressure up to 400 Pa.
- Matching range of ancillaries.
- Speed controllable with auto change over.
- Automatic change over via Helios panel (accessory).

*In-line duct fans TFD & TFDA  
Robust corrosion resistant casing in galvanised steel. Access panel offers either top or bottom access on duct mounted units.*



*Roof fans TFR & TFRA  
Fully weatherproof units in robust, corrosion resistant casings. Inlet spigot in the rear or bottom inlet (state when ordering).*

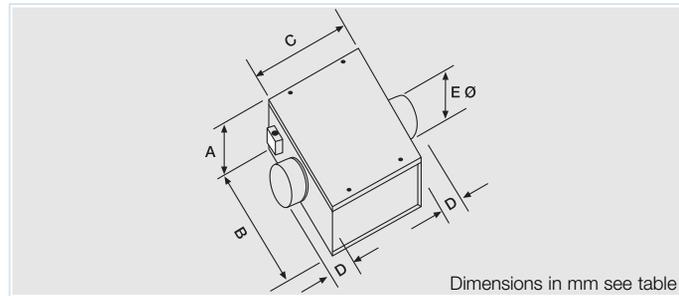
Where ventilation has to be maintained continuously, run and 100% stand-by fans are required. With two powerful centrifugal fans in a single casing the Helios units TFD

and TFR offer single inlet and outlet connections.

Both lines are speed controllable using the automatic change over panel ACSW 2

and industrial speed controller. Furthermore, factory fitted acoustic linings (TFDA and TFRA) are available as an option.

**TFD(A)**



Dimensions in mm						
Type	Nom. size	A	B	C	D	ø E
TFD(A)	125	238	575	400	55	125
TFD(A)	150/160	275	800	450	55	150/160
TFD(A)	200	360	800	550	55	200
TFD(A)	250/315	425	1000	650	55	250/315
TFD(A)	355/400 A	475	1050	650	55	355/400
TFD(A)	400 B/450	475	1150	650	55	400/450
TFD(A)	500	525	1250	700	55	500

**Features**

- Run and 100% stand-by.
- Robust corrosion resistant casing in galvanised steel.
- Access panel offers either top or bottom access on duct mounted units.
- Standard change over panels including duty sharing option.
- Simple wiring from a common terminal box and change over panel.
- Acoustically lined option for quiet operation and reduced breakout.
- Speed controllable using the Helios ACSW 2 change over panel and industrial speed controller.
- Suitable for vertical extract. This must be stated when ordering.
- Terminal box**  
IP 55 terminal box fitted to casing providing connection to both fans.

**Specification**

- Fans**  
All units are fitted with two independent forward curved centrifugal fans, powered by direct driven motors. Each fan has a non-return damper on its outlet, within a common plenum.
- Speed controls**  
Stepless speed control 20% to 100% when using the Helios electronic controller.
- Change over panels**  
Standard change over panels with manual and timed duty sharing and fan failure indicator light are suitable for use with electronic speed control. Options include automatic timed duty sharing, audible alarms and Building Management System (B.M.S.) interface.
- Noise levels**  
Sound levels in dB(A). Spectrum and totals shown opposite.

**In-line duct fans TFD & TFDA**

- Casings**  
Standard units of galvanised sheet steel with access panel and spigot connections. Fixing holes provided in the casing.
- Access**  
Standard access is from above. The unit can easily be converted on site to bottom access.
- Acoustic lining**  
Factory fitted acoustic lining is available as an option. Lining is fire retardant, class "O", 25 mm material.
- Spigots**  
Twin fans are fitted with circular inlet and outlet spigots as standard. Other options are available on request.

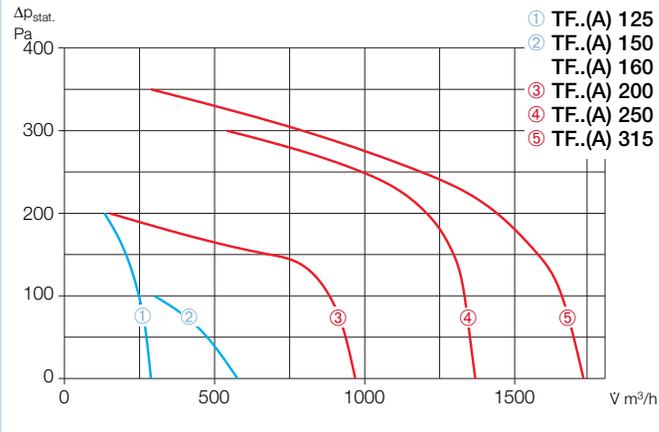
**Information ducting system**

All Helios components fit standard nominal duct diameters. The ducting used may be rigid or flexible and made from aluminium, galvanised steel or plastic.

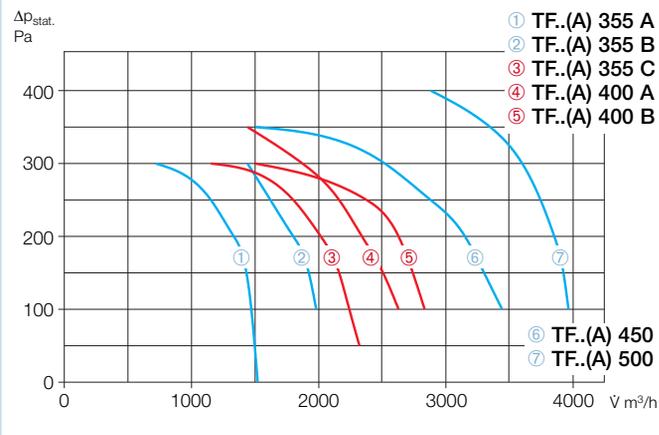
Type	Ref. No.	Type	Ref. No.	R.P.M.	Air flow volume (FID)	Motor power	Voltage	Current		Max. air flow temp.	Nominal weight (net)	Auto change over panel with duty sharing		Electronic speed controller		
								F.L.C.	S.T.C.			Type	Ref. No.	Type	Ref. No.	
				min <sup>-1</sup>	m <sup>3</sup> /h	kW	Volt	Amps.	Amps.	+°C	kg					
<b>In-line duct fans TFD &amp; TFD(A)</b>																
TFD 125	7690	TFD(A) 125	7712	2800	288	0.015	230	0.75	2.63	40	20	ACSW 2	7750	ESA 3 I	7806	
TFD 150	7681	TFD(A) 150	7732	1400	576	0.022	230	0.64	2.24	40	20	ACSW 2	7750	ESA 3 I	7806	
TFD 160	7691	TFD(A) 160	7713	1400	576	0.022	230	0.64	2.24	40	20	ACSW 2	7750	ESA 3 I	7806	
TFD 200	7692	TFD(A) 200	7715	1400	936	0.073	230	1.82	6.37	40	22	ACSW 2	7750	ESA 3 I	7806	
TFD 250	7694	TFD(A) 250	7716	1400	1368	0.150	230	1.50	5.25	40	40	ACSW 2	7750	ESA 3 I	7806	
TFD 315	7696	TFD(A) 315	7718	1400	1728	0.150	230	2.00	7.00	40	46	ACSW 2	7750	ESA 3 I	7806	
TFD 355 A	7697	TFD(A) 355 A	7719	1200	<sup>1)</sup>	0.373	230	2.00	7.00	40	70	ACSW 2	7750	ESA 3 I	7806	
TFD 355 B	7698	TFD(A) 355 B	7720	1300	<sup>1)</sup>	0.373	230	2.85	9.98	40	70	ACSW 2	7750	ESA 3 I	7806	
TFD 355 C	7699	TFD(A) 355 C	7721	1400	<sup>1)</sup>	0.373	230	3.85	13.48	40	70	ACSW 2	7750	ESA 6 I	7807	
TFD 400 A	7700	TFD(A) 400 A	7722	1310	<sup>1)</sup>	0.550	230	3.00	10.50	40	72	ACSW 2	7750	ESA 3 I	7806	
TFD 400 B	7701	TFD(A) 400 B	7723	1400	<sup>1)</sup>	0.550	230	3.80	13.30	40	72	ACSW 2	7750	ESA 6 I	7807	
TFD 450	7703	TFD(A) 450	7725	1400	<sup>1)</sup>	0.550	230	4.90	17.15	40	78	ACSW 2	7750	ESA 6 I	7807	
TFD 500	7709	TFD(A) 500	7731	1400	<sup>1)</sup>	0.550	230	6.80	23.80	40	85	ACSW 2	7750	ESA 10 I	7808	

<sup>1)</sup> No free air figure available as fan requires minimum resistance, see performance table.

**TF..(A) 125 – 315**



**TF..(A) 355 A – 500**



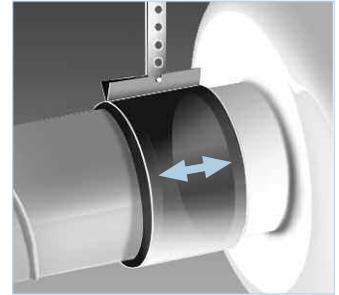
Model	Sound level on intake dB(A) 4 m	Inlet-induct sound power level spectrum							
		63	125	250	500	1K	2K	4K	8K
TFD 125	42	44	52	56	54	56	48	46	38
TFD 150/160	38	43	48	49	53	53	45	42	32
TFD 200	45	49	55	53	55	61	55	52	43
TFD 250	53	51	59	60	64	67	67	65	54
TFD 315	54	51	59	62	64	70	67	64	57
TFD 355 A	61	34	58	71	74	77	75	70	61
TFD 355 B	62	41	59	72	75	78	76	71	62
TFD 355 C	65	44	62	75	78	81	79	74	65
TFD 400 A	59	38	56	69	72	75	73	68	59
TFD 400 B	60	39	57	70	73	76	74	69	60
TFD 450	66	45	63	76	79	82	80	75	66
TFD 500	67	46	64	77	80	83	81	76	77
TFDA 125	36	44	52	53	44	39	36	33	25
TFDA 150/160	35	43	53	46	43	36	66	29	19
TFDA 200	38	49	55	50	45	43	43	39	30
TFDA 250	44	51	59	57	54	50	55	52	41
TFDA 315	44	51	59	59	54	53	55	51	44
TFDA 355 A	51	34	58	68	64	60	62	57	48
TFDA 355 B	52	41	59	69	65	61	63	58	49
TFDA 355 C	55	44	62	72	68	64	66	61	52
TFDA 400 A	49	38	56	66	62	58	60	55	46
TFDA 400 B	50	39	57	67	63	59	61	56	47
TFDA 450	56	45	63	73	69	65	67	62	53
TFDA 500	57	46	64	74	70	66	68	63	64

**Accessories**

**Pipe clamp connectors**

- BM 125 Ref. No. 5076
- BM 150 Ref. No. 6164
- BM 160 Ref. No. 5077
- BM 200 Ref. No. 5078
- BM 250 Ref. No. 5079
- BM 315 Ref. No. 5080

A quick-fix method for connecting fans to ducting, reducing vibration transmission. When installing leave a small gap between fan spigot and ducting. Supplied in pairs.



**Spigotted attenuators**

- SRSD 125/600 Ref. No. 8906
- SRSD 150/600 Ref. No. 8910
- SRSD 160/600 Ref. No. 8914
- SRSD 200/600 Ref. No. 8918
- SRSD 250/600 Ref. No. 8922
- SRSD 315/600 Ref. No. 8926
- SRSD 355/600 Ref. No. 8928
- SRSD 400/600 Ref. No. 8930

Spigotted attenuator with 50 mm insulation.

Fits nominal size ducting or to be fixed with pipe clamp connectors. Various sizes see page 319.



**Automatic changeover panel**

- ACSW 2 Ref. No. 7750

For automatic change over of twin fans using current sensing or via a flow switch. Duty sharing (8 selections from 3 to 24 hours), manual selection, variable overloads, visual and audible alarm and alarm output for BMS.

Protection IP 40  
Current Max. 8 Amps  
Dim. mm W 180 x H 120 x D 60



**Electronic speed controller**

- ESA.. IND for surface mounting

Voltage 220/240 V, 1 ph.  
Frequency 50/60 Hz  
Protection IP 65  
Wiring Diagram No. SS-710

- ESA 3 IND Ref. No. 7806

Current Max. 3 Amps  
Dim. mm W 111 x H 99 x D 54

- ESA 6 IND Ref. No. 7807

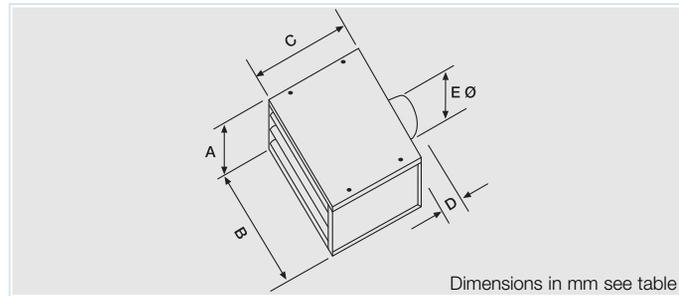
Current Max. 6 Amps  
Dim. mm W 145 x H 97 x D 64

- ESA 10 IND Ref. No. 7808

Current Max. 10 Amps  
Dim. mm W 104 x H 146 x D 83



**TFR(A)**



Dimensions in mm						
Type	Nom. size	A	B	C	D	ø E
TFR(A)	125-200	375	750	450	55	125/160/200
TFR(A)	250-315	425	950	550	55	250/315
TFR(A)	355 A/B/C	475	1050	600	55	355
TFR(A)	400 A-450	475	1050	600	55	400/450
TFR(A)	500	525	1200	850	55	500

**■ Features**

- Run and 100% stand-by.
- Robust corrosion resistant casing.
- Inlet spigot in the rear or bottom inlet (state when ordering) of the casing.
- Roof mounted units are fully weatherproof.
- Standard change over panels include duty sharing and over current setting.
- Simple wiring from a common terminal box and change over panel.
- Acoustically lined option for quiet operation and reduced breakout.
- Speed controllable using the Helios ACSW 2 change over panel and industrial speed controller.
- Terminal box**  
IP 55 terminal box fitted internally on the fan plate providing connection to both fans.

**■ Specification**

- Fans**  
All units are fitted with two independent forward curved centrifugal fans, powered by direct driven motors. Each fan has a non-return damper on its outlet, within a common plenum.
- Speed controls**  
Stepless speed control 20% to 100% when using the Helios electronic controller.
- Change over panels**  
Standard change over panels with manual and timed duty sharing and fan failure indicator light are suitable for use with electronic speed control. Options include automatic timed duty sharing, audible alarms and Building Management System (B.M.S.) interface.
- Noise levels**  
Sound levels in dB(A). Spectrum and totals shown opposite.

**■ Roof fans TFR & TFRA**

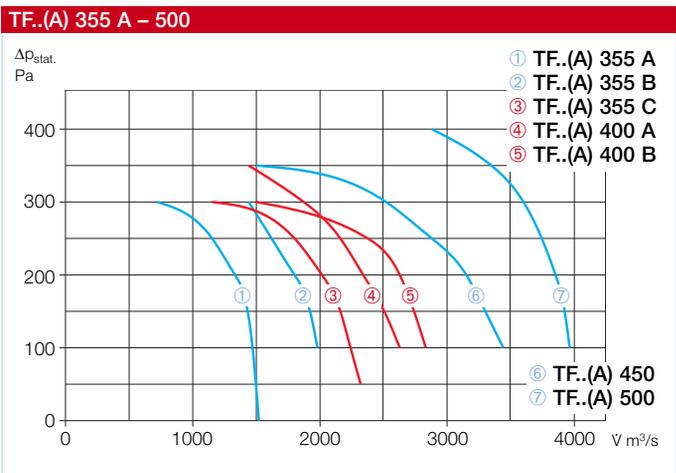
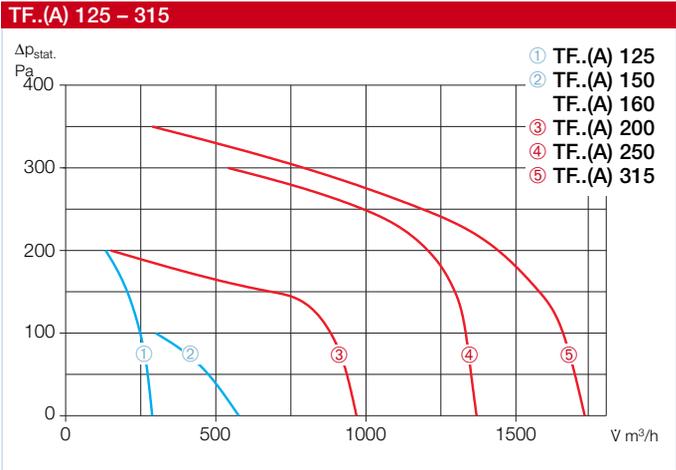
- Casings**  
Standard units of sheet aluminium with top access panel, spigot inlet connection and louvered outlet.
- Access**  
Standard access is from above.
- Acoustic lining**  
Factory fitted acoustic lining is available as an option. Lining is fire retardent, class "O", 25 mm material.
- Spigots**  
Twin roof fans are fitted with circular inlet on the rear of the casing and a louvered grille on the outlet. Alternative bottom inlet and other spigots are available on request.

**■ Information ducting system**

All Helios components fit standard nominal duct diameters. The ducting used may be rigid or flexible and made from aluminium, galvanised steel or plastic.

Type	Ref. No.	Type	Ref. No.	R.P.M.	Air flow volume (FID)	Motor power	Voltage	Current		Max. air flow temp.	Nominal weight (net)	Auto change over panel with duty sharing		Electronic speed controller	
								F.L.C.	S.T.C.			Type	Ref. No.	Type	Ref. No.
				min <sup>-1</sup>	m <sup>3</sup> /h	kW	Volt	Amps.	Amps.	+°C	kg	Type	Ref. No.	Type	Ref. No.
<b>Roof fans TFR &amp; TFR(A)</b>															
TFR 125	7757	TFR(A) 125	7769	2800	288	0.015	230	0.75	2.63	40	21	ACSW 2	7750	ESA 3 I	7806
TFR 150	7733	TFR(A) 150	7805	1400	576	0.022	230	0.64	2.24	40	21	ACSW 2	7750	ESA 3 I	7806
TFR 160	7758	TFR(A) 160	7770	1400	576	0.022	230	0.64	2.24	40	21	ACSW 2	7750	ESA 3 I	7806
TFR 200	7759	TFR(A) 200	7771	1400	936	0.073	230	1.82	6.87	40	23	ACSW 2	7750	ESA 3 I	7806
TFR 250	7760	TFR(A) 250	7772	1400	1368	0.150	230	1.50	5.25	40	41	ACSW 2	7750	ESA 3 I	7806
TFR 315	7761	TFR(A) 315	7773	1400	1728	0.150	230	2.00	7.00	40	47	ACSW 2	7750	ESA 3 I	7806
TFR 355 A	7762	TFR(A) 355 A	7774	1200	<sup>1)</sup>	0.373	230	2.00	7.00	40	71	ACSW 2	7750	ESA 3 I	7806
TFR 355 B	7763	TFR(A) 355 B	7775	1300	<sup>1)</sup>	0.373	230	2.85	9.98	40	71	ACSW 2	7750	ESA 3 I	7806
TFR 355 C	7764	TFR(A) 355 C	7776	1400	<sup>1)</sup>	0.373	230	3.85	13.48	40	71	ACSW 2	7750	ESA 6 I	7807
TFR 400 A	7765	TFR(A) 400 A	7777	1310	<sup>1)</sup>	0.550	230	3.00	10.80	40	73	ACSW 2	7750	ESA 3 I	7806
TFR 400 B	7766	TFR(A) 400 B	7778	1400	<sup>1)</sup>	0.550	230	3.80	13.80	40	73	ACSW 2	7750	ESA 6 I	7807
TFR 450	7767	TFR(A) 450	7779	1400	<sup>1)</sup>	0.550	230	4.90	17.15	40	77	ACSW 2	7750	ESA 6 I	7807
TFR 500	7768	TFR(A) 500	7780	1400	<sup>1)</sup>	0.550	230	6.80	23.80	40	86	ACSW 2	7750	ESA 10 I	7808

<sup>1)</sup> No free air figure available as fan requires minimum resistance, see performance table.



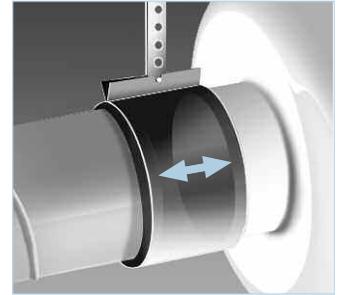
Model	Sound level on intake dB(A) 4 m	Roof mounted sound pressure level spectrum							
		63	125	250	500	1K	2K	4K	8K
TFR 125	40	41	49	53	54	56	48	46	38
TFR 150/160	37	40	45	46	53	53	45	42	32
TFR 200	44	46	52	50	55	61	55	52	43
TFR 250	52	48	56	57	64	67	67	65	54
TFR 315	53	48	56	59	64	70	67	64	57
TFR 355 A	61	31	56	68	74	77	75	70	61
TFR 355 B	62	38	56	69	75	78	76	71	62
TFR 355 C	65	41	59	72	78	81	79	74	65
TFR 400 A	59	35	53	66	72	75	73	68	59
TFR 400 B	60	36	54	67	73	76	74	69	60
TFR 450	66	42	60	73	79	82	80	75	66
TFR 500	67	43	61	74	80	83	81	76	77

**Accessories**

**Pipe clamp connectors**

- BM 125 Ref. No. 5076
- BM 150 Ref. No. 6164
- BM 160 Ref. No. 5077
- BM 200 Ref. No. 5078
- BM 250 Ref. No. 5079
- BM 315 Ref. No. 5080

A quick-fix method for connecting fans to ducting, reducing vibration transmission. When installing leave a small gap between fan spigot and ducting. Supplied in pairs.



**Spigotted attenuators**

- SRSD 125/600 Ref. No. 8906
- SRSD 150/600 Ref. No. 8910
- SRSD 160/600 Ref. No. 8914
- SRSD 200/600 Ref. No. 8918
- SRSD 250/600 Ref. No. 8922
- SRSD 315/600 Ref. No. 8926
- SRSD 355/600 Ref. No. 8928
- SRSD 400/600 Ref. No. 8930

Spigotted attenuator with 50 mm insulation.

Fits nominal size ducting or to be fixed with pipe clamp connectors. Various sizes see page 319.



**Automatic changeover panel**

- ACSW 2 Ref. No. 7750

For automatic change over of twin fans using current sensing or via a flow switch. Duty sharing (8 selections from 3 to 24 hours), manual selection, variable overloads, visual and audible alarm and alarm output for BMS.

Protection IP 40  
Current Max. 8 Amps  
Dim. mm W 180 x H 120 x D 60



**Electronic speed controller**

- ESA...IND for surface mounting
- Voltage 220/240 V, 1 ph.
- Frequency 50/60 Hz
- Protection IP 65
- Wiring Diagram No. SS-710

- ESA 3 IND Ref. No. 7806

Current Max. 3 Amps  
Dim. mm W 111 x H 99 x D 54

- ESA 6 IND Ref. No. 7807

Current Max. 6 Amps  
Dim. mm W 145 x H 97 x D 64

- ESA 10 IND Ref. No. 7808

Current Max. 10 Amps  
Dim. mm W 104 x H 146 x D 83



Duct fans