



The circular duct solutions

RSK

Backdraught shutter

Prevents entry of cold outside air when fan is switched off thus preventing draughts and reducing energy losses.

BM

Pipe clamp connector

To reduce vibration transmission between fan and ducting. Also suitable as mounting bracket for fan.

Centrifugal in-line fans RR and RRK

The popular centrifugal in-line fan range with a high pressure characteristic. Available in corrosion resistant galvanised steel or polymers.

LFBR

In-line air filter box

Filter mat easy to replace. Installation in any position.

High pressure in-line mixed-flow fans

HRF: for high air flows against lower resistances.
RADAX®-VAR: for high pressure at high air flows.

SB Silentbox

The new, virtually noiseless option. Powerful centrifugal fans with high pressure characteristics.

Heater batteries

for improved room comfort.

- ① WHR water heater
- ② EHR-R electric heater

WSG

External louvres

Weatherproof louvres of aluminium or polymer.

DDS Differential pressure switch

Complete kit to monitor pressure drop across filters or ventilation systems.

VK/EVK Shutters

Gravity, manually or electrically operated.

Standard ducting

Available from your stockist in all sizes to match the Helios components.

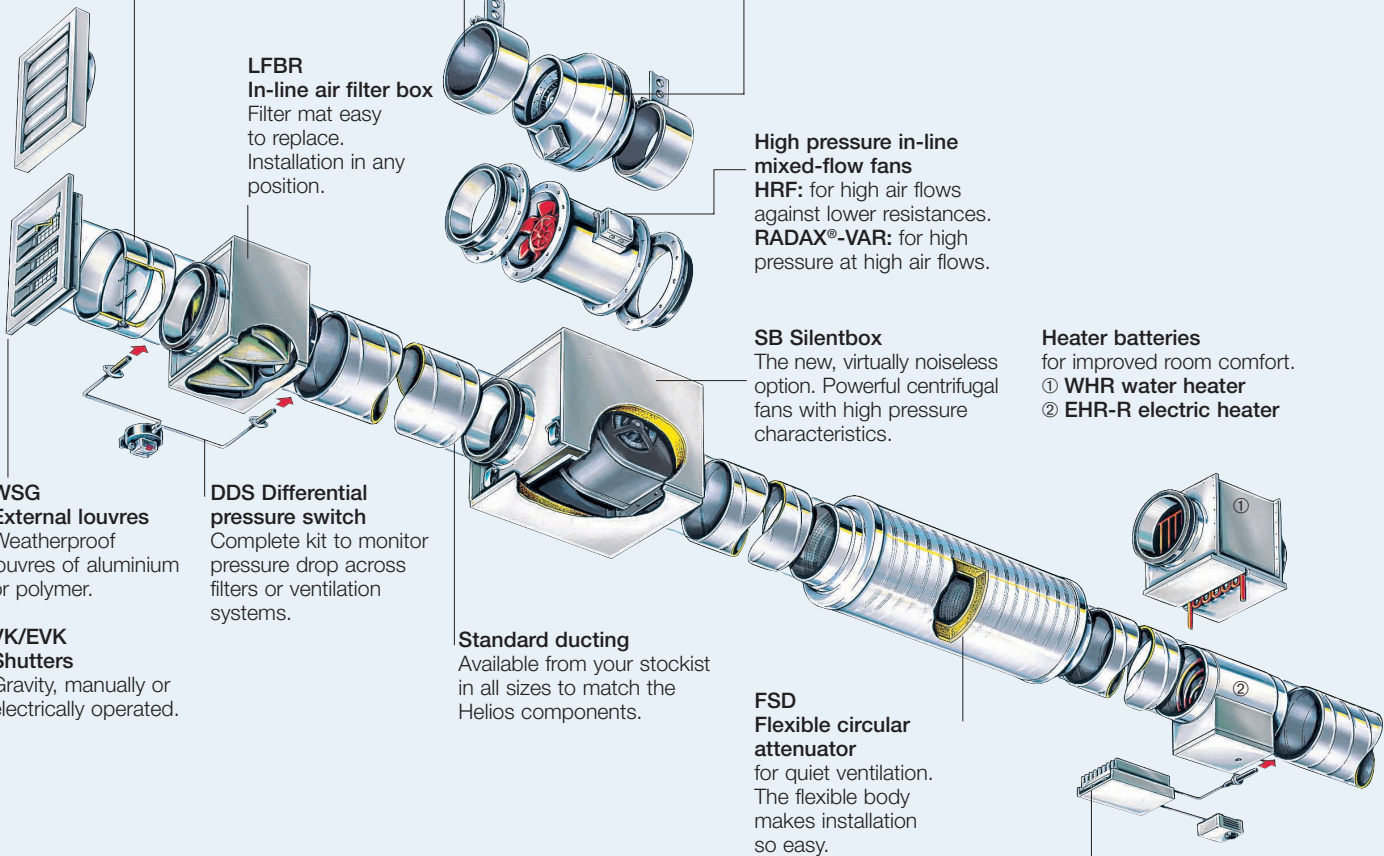
FSD

Flexible circular attenuator

for quiet ventilation. The flexible body makes installation so easy.

EHS Electronic temperature controller

for electric heater batteries. Controls heater output against required duct or room temperature.



■ Specification

The RADAX® rectangular and circular fans combine the advantages of axial fans of straight in-line air flow and therefore simple and cost effective installation with the high pressure characteristic of a centrifugal fan.

There are many advantages of this range:

- Very compact in design.
- Quick installation.
- Cost effective installation.
- Low noise levels.
- High pressure capability.
- Fully speed controllable.

■ Ranges – Overview

Circular ducted fans

□ Type RR..

A popular range which is cost effective. Centrifugal in-line fans for smaller and to medium performances in nominal diameters 100 – 315 mm. Robust casing made from galvanised steel.

□ Type RRK

Alternative range made from non corrosive, impact resistant polymers in nominal diameters 100 – 315 mm.

□ Type RRK Ex

Small explosion proof fan, 230 V for single phase supply. For ventilation of chemical, pharmaceutical laboratories, workshops and others. For in-line installation, approved for installation in zones 1, 2 and II according to VDE 0165. Further information for explosion proof fans see 'Design of ventilation systems - explosion proof'.

□ Type SB..

SILENTBOX®, the virtually noise free solution for high performance centrifugal fans with spigot diameters from 125 – 400 mm.

■ Further information about centrifugal in-line fans see 'General technical information' and the description on the product pages.

□ Installation, drainage holes

All models can be installed in any position. Models RR..have drainage holes on impeller and motor casing. If condensation occurs (e.g. intermittent operation, high humidity extract media or varying temperatures) the fan must be installed in a way that the condensation can drain off unhindered. Also the fan casing may collect condensation inside and require insulation.

□ **Noise/vibration transmission** from fan to ducting and building must be avoided. Therefore the fan should not be connected directly to the ducting. Suitable isolators are available as accessory (e.g. BM..).

Rectangular fans

□ Type KS..

Rectangular fan with SwingOut motor impeller unit. Backward curved centrifugal impeller with high efficiency and pressure characteristic.

□ Type KD../KW..

Centrifugal rectangular fans with forward curved impellers and low noise levels.

□ Type SKLD../SKLW..

Acoustically lined rectangular fan with low noise levels on case breakout and intake. SwingOut motor impeller unit. Backward curved centrifugal impeller with high efficiency.

■ Information about rectangular fans.

For complete information see the 'general technical information' and descriptions on the product pages.

□ Installation, drainage holes

All models can be installed in any position. Make sure that SwingOut areas and easy access for service and maintenance is provided.

If condensation might occur (e.g. intermittent operation, high humidity or varying temperatures) the fan must be installed in a way that the condensation can drain off unhindered.

If required additional holes may have to be drilled into the casing at the appropriate positions. Alternatively the duct system may have to be insulated to avoid condensation.

□ **Noise/vibration transmission** from fan to ducting and building must be avoided. Thus anti vibration mounts (accessories SDD/ SDZ) and flexible connector (accessory VS..) are recommended when fitting the fan to wall/ceiling and ducting.

□ Explosion proof models

With regards to regulations please refer to chapter 'Design of ventilation systems – explosion proof' at the front of the catalogue.

The motors of the KD..Ex range come with positive coefficient thermistors (PTC) as standard to monitor the temperature in the windings.

They are pre wired to the terminal board and must be connected to the MSA motor protection unit (accessory). This makes the KD..Ex fans suitable for speed control via transformer controller. The Helios range of TSD, TSSD or RDS should be used, outside the hazardous area.

Note: a minimum voltage of 95 must be maintained.

■ Information for circular and rectangular fans

□ Motor - Impeller

All models incorporate an external rotor motor protected to IP 44 or IP 54 within the air flow. It conforms to VDE 0530 and 0700 with an insulation class B or F, plus moisture protection. The ball bearings are greased for life. The motors are maintenance free, radio suppressed, speed controllable and suitable for continuous operation. The centrifugal impellers are pressed onto the rotating part of the motor body and dynamically balanced to class 6.3 VDI 2060 and DIN ISO 1940 as one unit.

□ Speed control

All InLineVent® fans are speed controllable via voltage reduction (stepless 0 – 100%). Therefore the performance can be adapted to the requirements almost without any losses. Our speed controllers are suitable to control various fans (one or more) up to their maximum nominal output. When selecting a controller not shown in 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 mounted accordingly. The direction of rotation and the direction of air flow are marked on the units and must be checked when installing.

□ Wrong direction of rotation

If the fan is operated in the wrong 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

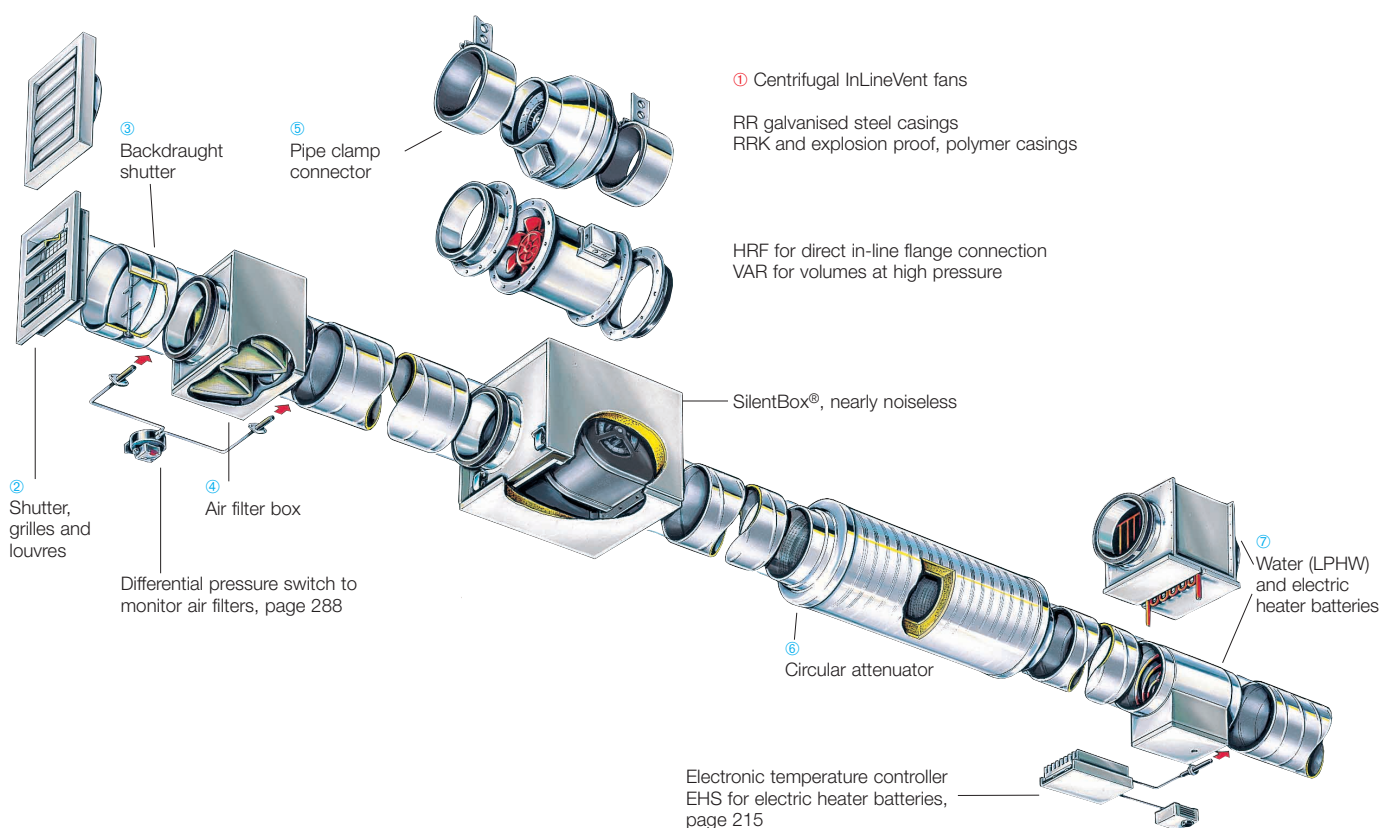
All models are suitable for ambients between –40 °C (models K.. Ex from –20 °C) to at least +40 °C. The maximum temperature varies between the models and can be found on the individual product page (table). If a fan is speed controlled by an electronic controller not shown in the table this figure must be reduced by approx. 10 °C.

Information	Pages
Design of systems, acoustic, explosion proof	12-16
General technical information, speed control	17-19

This table is designed for easy selection of circular and rectangular centrifugal in-line fans. Shown are static pressure $\Delta p_{stat.}$ and air flow

volumes, case breakout and intake sound levels as sound pressure levels at 1 m (freefield condition).

Type	Noise breakout	Sound press. lvl. - intake	Air flow volume V in m³/s against static pressure												
	L _{PA} dB(A)	L _{PA} dB(A)	($\Delta p_{stat.}$) in Pa												
	at 1 m	at 1 m	0	50	100	150	200	250	300	350	400	500	600	700	800
RR 100 A	38	50	0.047	0.039	0.033	0.025	0.017	0.008							
RR 100 C	47	60	0.064	0.058	0.050	0.039	0.031	0.019	0.006						
RR 125 C	49	60	0.097	0.081	0.067	0.053	0.036	0.022							
RR 160 B	49	58	0.136	0.117	0.097	0.078	0.061	0.036	0.003						
RR 160 C	55	63	0.194	0.175	0.153	0.128	0.106	0.083	0.061	0.014					
RR 200 A	50	65	0.228	0.208	0.186	0.158	0.131	0.097	0.061	0.022					
RR 200 B	52	66	0.264	0.244	0.231	0.208	0.186	0.161	0.136	0.114	0.092	0.044			
RR 250 A	48	65	0.244	0.217	0.192	0.167	0.142	0.114	0.075	0.008					
RR 250 C	55	66	0.306	0.278	0.253	0.228	0.206	0.181	0.161	0.139	0.117	0.061			
RR 315 B	49	65	0.392	0.367	0.339	0.308	0.278	0.244	0.208	0.167	0.125	0.036			
RR 315 C	61	69	0.486	0.458	0.433	0.406	0.378	0.344	0.311	0.278	0.242	0.175	0.108	0.042	
RRK 100	37	54	0.042	0.033	0.022										
RRK 125	49	63	0.092	0.081	0.072	0.061	0.047	0.031	0.008						
RRK 160	56	67	0.122	0.108	0.094	0.083	0.069	0.050	0.019						
RRK 200	51	64	0.214	0.194	0.172	0.150	0.122	0.094	0.058	0.022					
RRK 250	51	64	0.231	0.211	0.192	0.167	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	27	42	0.064	0.058	0.053	0.047	0.039	0.022							
SB 160 B	31	48		0.106	0.097	0.092	0.083	0.072	0.058	0.031					
SB 200 C	40	51		0.183	0.175	0.164	0.147	0.128	0.106	0.069	0.014				
SB 250 C	37	52				0.261	0.247	0.228	0.206	0.164	0.092				
SB 315 B	45	56					0.467	0.444	0.408	0.347	0.172				
SB 315 C	45	56			0.397	0.367	0.339	0.311	0.250	0.106					
SB 355 C	45	56				0.519	0.492	0.456	0.400	0.303	0.075				
SB 400 F	44	55				0.656	0.631	0.603	0.569	0.533	0.486	0.281			
KW 200/4/400/200	55	63	0.281	0.264	0.244	0.214	0.158								
KD 200/4/400/200	53	63	0.367	0.339	0.308	0.272	0.222	0.031							
KW 225/4/500/250	57	67	0.481	0.450	0.419	0.383	0.342	0.283							
KD 225/4/500/250	55	65	0.481	0.450	0.419	0.383	0.342	0.283							
KD 225/6/500/250	44	57	0.378	0.322	0.258	0.006									
KW 250/4/500/300	59	70			0.611	0.556	0.519	0.472	0.411	0.311					
KD 250/4/500/300	57	69			0.653	0.625	0.583	0.500	0.431	0.306	0.139				
KW 250/6/500/300	48	60	0.403	0.394	0.347	0.222									
KD 250/6/500/300	51	59	0.506	0.444	0.381	0.272									
KW 285/4/600/300	62	74	0.808	0.775	0.742	0.708	0.672	0.631	0.583	0.519	0.411				
KD 285/4/600/300	58	71	0.958	0.922	0.889	0.847	0.819	0.764	0.722	0.639	0.569				
KW 285/6/600/300	54	65	0.639	0.597	0.519	0.425	0.064								
KD 285/6/600/300	49	59			0.556	0.475	0.350								
KD 315/4/600/350	61	74					1.289	1.242	1.186	1.125	1.056	0.892	0.661		
KW 315/6/600/350	50	60	0.678	0.653	0.625	0.572	0.514	0.353							
KD 315/6/600/350	53	64	1.072	1.006	0.931	0.842	0.736	0.594	0.011						
KD 355/4/700/400	66	77							1.633	1.583	1.533	1.428	1.303	1.133	0.831
KD 355/6/700/400	57	66	1.431	1.389	1.314	1.231	1.142	1.044	0.933						
KD 355/8/700/400	50	62	1.269	1.128	0.967	0.781	0.011								
KD 400/6/800/500	60	50			2.056	1.969	1.878	1.775	1.656	1.522	1.350				
KD 400/8/800/500	59	62	1.511	1.428	1.317	1.181	1.008	0.136							
KD 450/6/1000/500	62	72						2.461	2.333	2.214	2.092	1.808	0.297		
KD 450/8/1000/500	57	66	2.292	2.178	2.058	1.933	1.786	1.611	1.356						
KSW 180/2/300/150	49	62	0.144	0.128	0.106	0.089	0.069	0.053	0.033	0.014					
KSW 225/2/400/200	52	65	0.231	0.203	0.172	0.150	0.131	0.114	0.094	0.072	0.025				
KSW 250/2/400/200	51	65	0.375	0.342	0.314	0.292	0.269	0.247	0.225	0.203	0.178	0.114	0.033		
KSW 315/4/500/250	47	62	0.408	0.364	0.314	0.264	0.208	0.139	0.025						
KSW 355/4/600/350	54	67	0.989	0.906	0.831	0.750	0.661	0.553	0.406	0.150					
KSW 400/4/600/350	61	72	1.181	1.106	1.022	0.933	0.842	0.750	0.653	0.542	0.389				
KSOD 450/4/700/400	59	71	1.578	1.447	1.344	1.242	1.125	0.956	0.828	0.697	0.594	0.181			
KSOD 500/4/800/500	65	76	2.778	2.667	2.556	2.444	2.333	2.222	2.111	1.944	1.806	1.528	1.139	0.556	0.111
KSOD 560/4/1000/500	67	77	3.750	3.639	3.556	3.333	3.250	3.083	2.833	2.722	2.528	2.222	1.722	1.111	0.417
SKLW 400/4/600/350	52	63	1.181	1.106	1.022	0.933	0.842	0.750	0.653	0.542	0.389				
SKLD 450/4/700/400	53	65	1.578	1.447	1.344	1.242	1.125	0.956	0.828	0.697	0.594	0.181			
SKLD 500/4/800/500	62	69	2.778	2.667	2.556	2.444	2.333	2.222	2.083	1.917	1.778	1.444	1.111	0.556	0.139
SKLD 560/4/1000/500	62	70	3.722	3.611	3.500	3.333	3.194	3.000	2.833	2.667	2.500	2.222	1.528	1.139	0.472



Duct diameter in mm	ø 100	ø 125	ø 160	ø 180	ø 200	ø 250	ø 315	ø 355	ø 400	Pages
1 Centrifugal in-line fan										
RR, galvanised steel	RR 100 A	RR 125 C	RR 160 B		RR 200 A	RR 250 A	RR 315 B			152-163
Ref. No.	5653	5655	5656		5658	5652	5661			
	Type	RR 100 C	RR 160 C		RR 200 B	RR 250 C	RR 315 C			152-163
Ref. No.	5654		5657		5659	5660	5920			
RRK from polymer	RRK 100	RRK 125	RRK 160		RRK 200	RRK 250	RRK 315			152-163
Ref. No.	5973	5974	5976		5977	5978	5979			
RRK Ex, explosion proof				RRK 180 Ex	RRK 200 Ex	RRK 250 Ex				151
Ref. No.				5889	5890	5891				
SilentBox®		SB 125 A	SB 160 B		SB 200 C	SB 250 C	SB 315 B / C	SB 355 C	SB 400 F	154-165
Ref. No.		9506	9508		9510	9512	9515 / 9514	9516	9517	
Accessories										
2 Air grilles										
Gravity operated shutter	VK 100	VK 125	VK 160	VK 200	VK 200	VK 250	VK 315	VK 355	VK 400	245-256
Ref. No.	0757	0857	0892	0758	0758	0759	0760	0761	0762	
Fixed grille	G 100	G 160	G 160	RAG 200	RAG 200	RAG 250	RAG 315	RAG 355	RAG 400	245-256
Ref. No.	0796	0893	0893	0750	0750	0751	0752	0753	0754	
3 Backdraught shutter										
Backdraught shutter	RSKK 100	RSKK 125	RSK 160	RSK 180	RSK 200	RSK 250	RSK 315	RSK 355	RSK 400	248
Ref. No.	5106	5107	5669	5662	5074	5673	5674	5650	5651	
4 Filters										
Air filter box	LFBR 100	LFBR 125	LFBR 160		LFBR 200	LFBR 250	LFBR 315	LFBR 355	LFBR 400	213
Ref. No.	8576	8577	8578		8579	8580	8581	8583	8582	
5 Clamps										
Pipe clamp connector	BM 100	BM 125	BM 160	FM 180 Ex	BM 200 ⁴⁾	BM 250 ⁴⁾	BM 315			152-163
Ref. No.	5075	5076	5077	1685	5078	5079	5080			
6 Attenuators										
Flexible circular attenuator	FSD 100	FSD 125	FSD 160		FSD 200	FSD 250	FSD 315	FSD 355	FSD 400	219
Ref. No.	0676	0677	0678		0679	0680	0681	0682	0683	
7 Heaters										
Electric heater battery ¹⁾	EHR-R 0.4/100	EHR-R 0.8/125	EHR-R 5/160		EHR-R 5/200	EHR-R 6/250	EHR-R 6/315	EHR-R 9/355	EHR-R 9/400	214
Ref. No.	8708	8709	8710		8711	8712	8713	8656	8657	
Water heater battery	WHR 100	WHR 125	WHR 160		WHR 200	WHR 250	WHR 315	WHR 355	WHR 400	217
Ref. No.	9479	9480	9481		9482	9483	9484	8790	9524	
Speed controllers										
Electronic controller ³⁾	ESA 1	ESA 1	ESA 1	²⁾	ESA 1 ²⁾	ESA.. ²⁾	ESA..			281
Ref. No.	0238	0238	0238	²⁾	0238					
Transformer controller ³⁾	TSW 0.3	TSW ..	TSW ..	²⁾	TSW 1.5 ²⁾	TSW 1.5 ²⁾	TSW..	TSW 3.0	TSW 5.0	282
Ref. No.	3608			²⁾	1495	1495		1496	1497	

¹⁾ Consider minimum air flow required

²⁾ Speed control is not permitted for explosion proof models

³⁾ In noise sensitive cases as well as with models SB.. transformer controllers are recommended

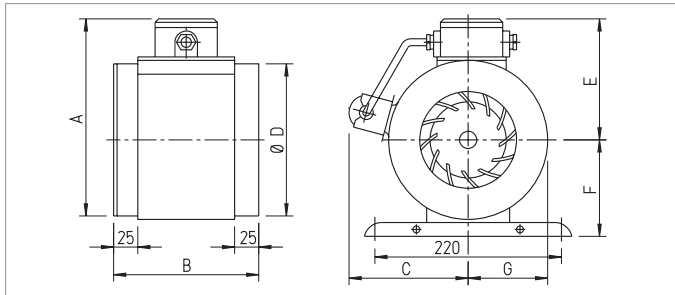
⁴⁾ Use FM..Ex with explosion proof models.

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 IEC 60079-10.

Specially designed for ventilating chemical and pharmaceutical laboratories, warehouses, dyeworks, batteryrooms etc.

Ex E Exe II



Type	RRK 180 Ex	200 Ex	250 Ex
Dimensions in mm			
A	227	280	306
B	161	270	208
C	140	145	150
D	Ø 175	Ø 198 ¹⁾	Ø 248
E	137	165	178
F	120	145	158
G	90	115	128

¹⁾ with reducers mounted on intake and exhaust

■ Social features

- Explosionproof E Exe II, increased safety to EN 50014/50019, VDE 0170/0171 and VDMA 24169. PTB certificates of conformity (Physical-Technical Bundesanstalt) and of the European Building Regulation approval to 94/9 EG are available.
- 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 10⁹Ω.
- **Motor** Totally enclosed, IP 54, suitable for continuous operation. Maintenance free ball bearing motor with tropical protection of windings and radio suppression.
- **Electrical connection** Explosion proof terminal box to IP 55 made from polymers and mounted on casing.
- **Installation** Installation in any position. Suitable for intake and extract.

■ Installation notes

The regulations of IEC 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 entering the fan which are bigger than 12 mm. Approved for operation mode. VDE 0530 = S1 (continuous operation). Speed control is not allowed.

■ Accessories for RRK 180 Ex and RRK 200 Ex

Reducers

RZ 180/125	Ref. No. 5876
RZ 180/100	Ref. No. 5877
RZ 200/150	Ref. No. 5718

■ Accessory for all models Mounting feet

MK 4	Ref. No. 5824
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Flexible sleeve

For installation between fan and ducting.

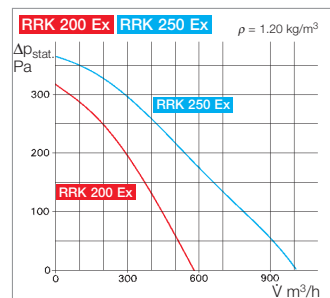
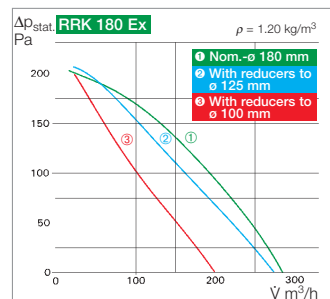
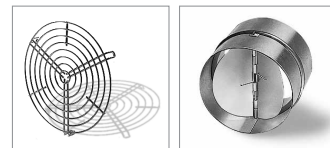
FM 180 Ex	Ref. No. 1685
FM 200 Ex	Ref. No. 1686
FM 250 Ex	Ref. No. 1688

Guards

SGR 180 Ex	Ref. No. 5051
SGR 200	Ref. No. 5066
SGR 250 Ex	Ref. No. 5052

Backdraught shutter

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



Information	Pages
Explosion proof regulations	16
- Gas classes,	
- Zones	

Technical information	Type	RRK 180 Ex	RRK 200 Ex	RRK 250 Ex
Ref. No.		5889	5890	5891
Air flow volume m³/h		290	580	1000
Impeller-Ø mm		170	215	240
Voltage/Frequency V/50 Hz		230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.
Power Watts		59	200	300
Current Amps		0.28	0.93	1.42
R.P.M.		2760	2850	2890
Sound power level L _{WA} dB(A)		64	74	80
Sound pressure level 1 m dB(A)		56	66	72
Temperature class		T1 - T4	T1 - T3	T1 - T3
Nominal weight in kg		2.0	5.0	6.5
Maximum air flow temperatur °C		+50	+50	+50
Wiring diagram No.		SS-453	SS-453	SS-453

Other accessories	Pages
Filter and attenuators	211-220
Flexible ductings, grilles, duct components and roof outlets	245-256
Valves	257-263



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

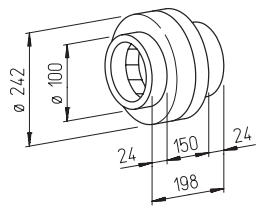
- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit standard duct sizes.
- 100% speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

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

Models RR

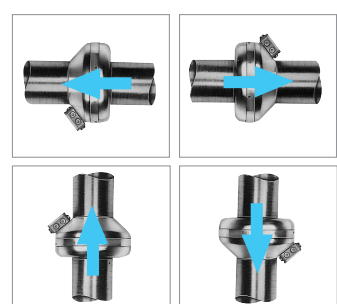
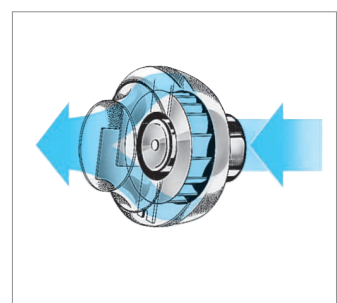
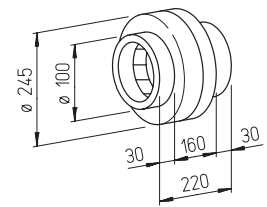
Market leading range offering an excellent value for money.



Dimensions in mm

Models RRK

Alternative version made from impact resistant polymers.



Specification RR

- Casing** Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- 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: Helios-red.
- 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** Splashproof to IP 44.

Installation

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

Technical information	Type	RR 100 A	RR 100 C	RRK 100
Ref. No.		5653	5654	5973
Connection spigot ø mm		100	100	100
Air flow volume (FID) in m³/h		175	240	215
R.P.M.		1900	2460	2050
Sound pressure level at 1 m				
– Case breakout dB(A)		38	47	45
– Air noise on intake dB(A)		50	60	54
Voltage: Volt/50 Hz		230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.
Power Watts		41	70	34
Current Amps		0.18	0.32	0.15
Nominal weight in kg		3.0	3.0	2.4
Maximum air flow temperature °C		75	60	60
Wiring diagram No.		SS-508	SS-508	SS-508

NEW!

RR 100 A

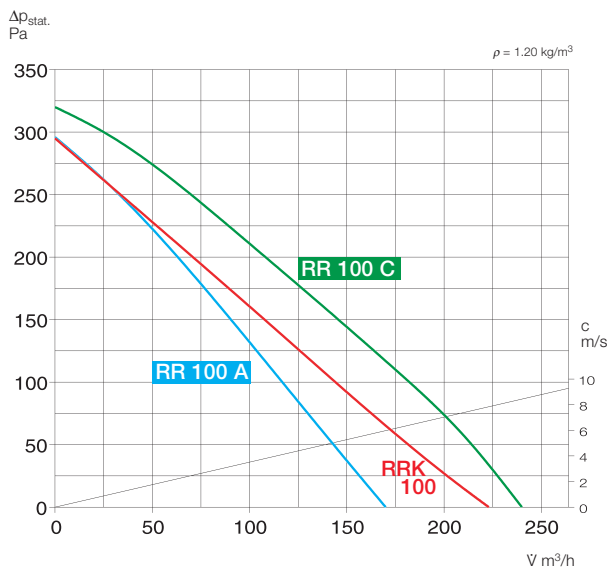
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k	
L _{WA} Case breakout		dB(A)	45	39	42	38	37	32	28	26
L _{WA} Intake		dB(A)	67	41	54	51	50	46	38	28

RR 100 C

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k	
L _{WA} Case breakout		dB(A)	54	40	51	48	48	42	40	35
L _{WA} Intake		dB(A)	67	45	64	61	60	56	50	40

RRK 100

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k	
L _{WA} Case breakout		dB(A)	52	37	45	45	48	46	36	28
L _{WA} Intake		dB(A)	61	39	51	58	55	53	48	38



- **Sound level** 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 (freefield conditions) in the technical data table (see facing page).

Information	Pages
Technical description	148
Selection chart	149
Design of systems	12-16
Modular comp. system	150

Information for ducting systems

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

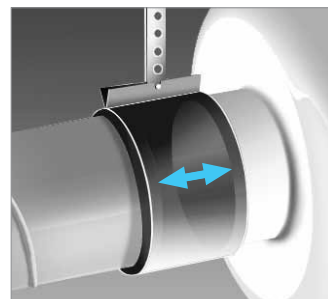
Other accessories	Pages
Filters and heater batteries	211-220
Flexible ducting, guards, duct components and roof outlets	245-256
Valves	257-263
Speed controllers and switches	275-290

■ Accessories for RR and RRK

Pipe clamp connectors

BM 100 Ref. No. 5075

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



Mounting foot for RR

MK 4 Ref. No. 5824

Mounting foot for RRK

MK 1 Ref. No. 5821

To fix fan on wall, floor or ceiling; made from galvanised steel.



Backdraught shutter

RSKK 100 Ref. No. 5106

Air stream operated, polymer.

Gravity shutter

VK 100 Ref. No. 0757

Air stream operated, polymer, light-grey.

Fixed grille

G 100 Ref. No. 0796

Polymer, light-grey.

Guard for spigot connection

SGR 100 Ref. No. 5063

For Intake and exhaust installation on fan, made from galvanised steel.

Flexible attenuator

FSD 100 Ref. No. 0676

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

Spigotted attenuators

SRSD 100/... see page 219

Spigotted attenuator with 50 mm insulation. Available in four lengths: 300/600/900/1200 mm.

In-line air filter box

LFBR 100 Ref. No. 8576

Air filter with big cross sectional area to be installed in-line with ducting. Spigots incorporate twin-seal rubber sealings to fit standard size ducting.

Electric heater battery

EHR-R 0.4/100 Ref. No. 8708

In duct casing made from galvanised sheet steel, for in-line installation.

Water heater battery – LPHW

WHR 100 Ref. No. 9479

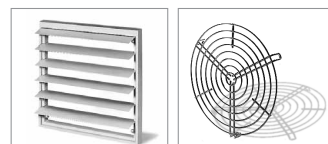
Compact unit for in-line installation.

Transformer speed controller

TSW 0.3 Ref. No. 3608

Electronic Speed controller

ESA 1 Ref. No. 0238





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 into standard duct sizes.
- 100% speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

- **Features of all models**
- **Motor** Low noise external rotor motor with ball bearings, impregnated windings insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- **Speed control** Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- **Installation** Installation in any position without restriction:
 - horizontally, vertically or pitched – suitable for intake or extract.
 - To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

Models RR

Market leading range offering an excellent value for money.

Dimensions in mm

- **Specification RR**
- **Casing** Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- **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.
- **Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- **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: Helios-red.
- **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.
- **Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- **Protection** Splashproof to IP 44.

SilentBox® SB Virtually noise free fan, with high air flow and pressure. Ideal for cleaning and maintenance.

- **Specification SilentBox®**
- **Casing** Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clasps permit easy access to motor scroll and impeller set. Swing out motor and impeller. Spigots on intake and exhaust with twin-seal rubber gaskets fit into standard ducts. All parts manufactured from galvanised sheet steel.
- **Electrical connection** Terminal box (IP 55) is supplied with a 60 cm long electric cable.
- **Impeller** Low noise forward curved centrifugal impeller, housed within an aerodynamically shaped scroll made from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.
- **Motor protection** Motors have thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off.
- **Protection** Splashproof to IP 44.

NEW!

Technical information	Type	RR 125 C	RRK 125	SilentBox® SB 125 A
Ref. No.		5655	5974	9506
Connection spigot ø mm		125	125	125
Air flow volume (FID) in m³/h		350	330	230
R.P.M.		2360	2420	1830
Sound pressure level at 1 m				
– Case breakout dB(A)		49	48	27
– Air noise on intake dB(A)		60	54	38
Voltage: Volt/50 Hz		230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.
Power Watts		72	68	61
Current Amps		0.33	0.30	0.27
Nominal weight in kg		3.0	2.7	12
Maximum air flow temperature °C		60	60	50
Wiring diagram No.		SS-508	SS-508	SS-508

RR 125 C

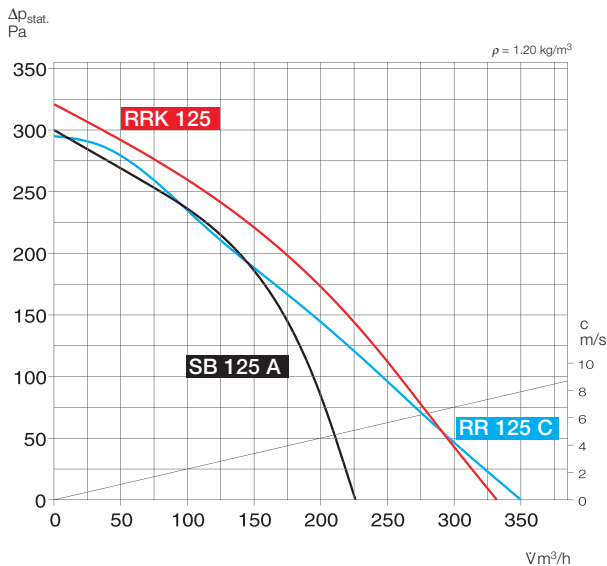
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k	
L _{WA} Case breakout		dB(A)	56	40	52	51	50	46	41	33
L _{WA} Intake		dB(A)	67	45	64	61	60	58	51	41

RRK 125

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k	
L _{WA} Case breakout		dB(A)	55	39	46	50	51	47	38	27
L _{WA} Intake		dB(A)	61	44	53	57	55	54	49	38

SB 125 A

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k	
L _{WA} Case breakout		dB(A)	35	28	28	27	27	25	26	27
L _{WA} Intake		dB(A)	45	41	38	35	33	26	23	12
L _{WA} Exhaust		dB(A)	55	45	47	48	51	46	39	30



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 (freefield conditions) in the technical data table (see facing page).

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

Information	Pages
Technical description	148
Selection chart	149
Design of systems	12-16
Modular comp. system	150

Information for ducting systems

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

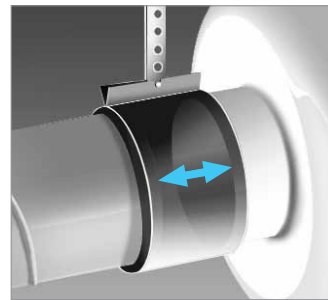
Other accessories	Pages
Filters and heater batteries	211-220
Flexible ducting, guards, duct components and roof outlets	245-256
Valves	257-263
Speed controllers and switches	275-290

Accessories for RR and RRK

Pipe clamp connectors

BM 125 Ref. No. 5076

A quick-fix method for connecting fans to ducting, reducing vibration transmission. 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

To fix fan on wall, floor or ceiling; made from galvanised steel.



Accessories for all models

Back draught shutter

RSKK 125 Ref. No. 5107

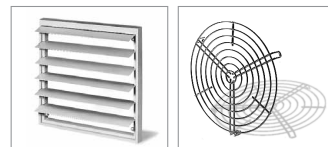
Air stream operated, polymer.



Gravity shutter

VK 125 Ref. No. 0857

Air stream operated, polymer, light-grey.



Fixed grille

G 160 Ref. No. 0893

Polymer, light-grey.



Guard for spigot connection

SGR 125 Ref. No. 5064

For intake and exhaust installation on fan, made from galvanised steel.



Flexible attenuator

FSD 125 Ref. No. 0677

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



Spigotted attenuators

SRSD 125/... see page 219

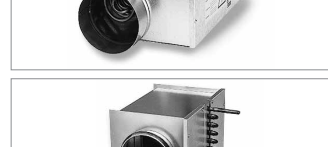
Spigotted attenuator with 50 mm insulation. Available in four lengths: 300/600/900/1200 mm.



In-line air filter box

LFBR 125 Ref. No. 8577

Air filter with big cross sectional area to be installed in-line with ducting. Spigots incorporate twin-seal rubber sealings to fit standard size ducting.



Electric heater battery

EHR-R 0.8/125 Ref. No. 8709

In duct casing made from galvanised sheet steel, for in-line installation.



Water heater battery – LPHW

WHR 125 Ref. No. 9480

Compact unit for in-line installation.

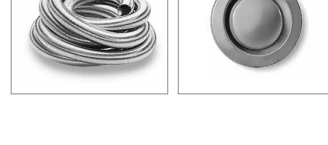


Transformer speed controller – for RRK and SB

TSW 0.3 Ref. No. 3608

– for RR

TSW 1.5 Ref. No. 1495



Electronic speed controller

ESA 1 Ref. No. 0238



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

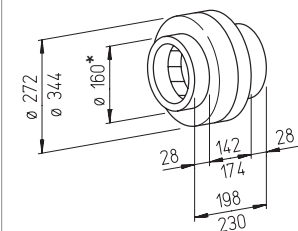
- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit into standard duct sizes.
- 100% speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

Features of all models

- Motor** Low noise external rotor motor with ball bearings, impregnated windings insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- Speed control** Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- Installation** Installation in any position without restriction: – horizontally, vertically or pitched – suitable for intake or extract. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

Models RR

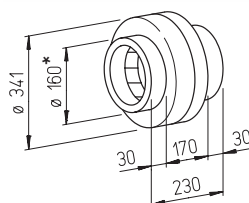
Market leading range offering an excellent value for money.



Dim. in mm *RR 150: 150 mm

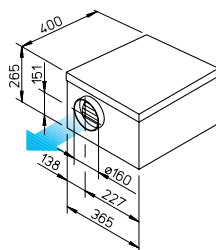
Models RRK

Alternative version made from impact resistant polymers.



*RRK 150: 150 mm

SilentBox® SB Virtually noise free fan, with high air flow and pressure. Ideal for cleaning and maintenance.



Specification RR

- Casing** Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- 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.
- Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- 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: Helios-red.
- 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.
- Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- Protection** Splashproof to IP 44.

Specification SilentBox®

- Casing** Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clasps permit easy access to motor scroll and impeller set. Swing out motor and impeller. Spigots on intake and exhaust with twin-seal rubber gaskets fit into standard ducts. All parts manufactured from galvanised sheet steel.
- Electrical connection** Terminal box (IP 55) is supplied with a 60 cm long electric cable.
- Impeller** Low noise forward curved centrifugal impeller, housed within an aerodynamically shaped scroll made from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.
- Motor protection** Motors have thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off.
- Protection** IP 44

NEW!

Technical information	Type	RR 150 B & RR 160 B	RR 150 C & RR 160 C	RRK 150 & RRK 160	SilentBox® SB 160 B
Ref. No.		7740 5656	7741 5657	5975 5976	9508
Connection spigot ø mm		150 160	150 160	150 160	160
Air flow volume (FID) in m³/h		490	700	430	380
R.P.M.		2410	2450	2520	1190
Sound pressure level at 1 m					
– Case breakout dB(A)		49	55	46	36
– Air noise on intake dB(A)		58	63	52	46
Voltage: Volt/50 Hz		230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.
Power Watts		69	100	70	110
Current Amps		0.32	0.4	0.31	0.48
Nominal weight in kg		3.2	4.3	3.1	13
Maximum air flow temperature °C		60	60	60	60
Wiring diagram No.		SS-508	SS-508	SS-508	SS-508

RR 160 B

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 56	33	50	51	50	50	43	35
L _{WA} Intake		dB(A) 65	48	61	59	57	58	49	41

RR 160 C

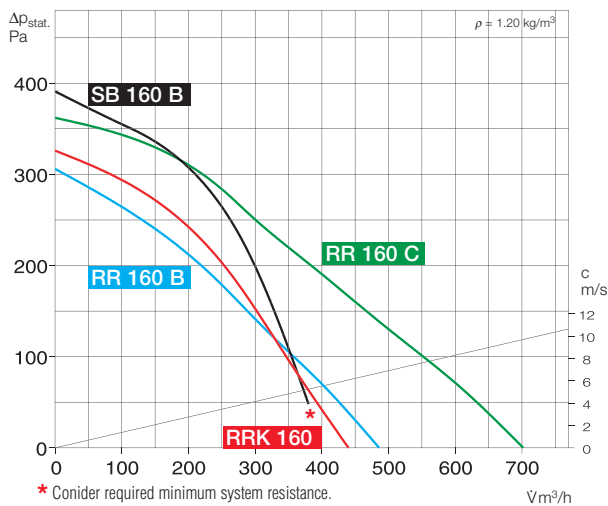
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 62	37	53	59	55	52	49	37
L _{WA} Intake		dB(A) 70	53	67	66	64	59	55	49

RRK 160

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 53	31	40	47	49	47	38	26
L _{WA} Intake		dB(A) 59	42	50	53	54	52	49	38

SB 160 B

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 43	40	39	34	32	28	27	27
L _{WA} Intake		dB(A) 53	49	46	45	42	34	35	29
L _{WA} Exhaust		dB(A) 62	55	54	54	57	53	50	43



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 (freefield conditions) in the technical data table (see facing page).

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

Information	Pages
Technical description	148
Selection chart	149
Design of systems	12-16
Modular comp. system	150

Information for ducting systems

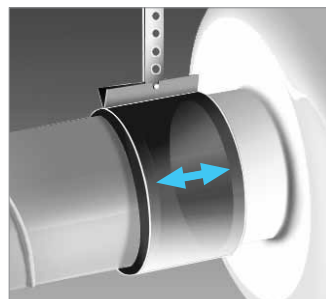
All Helios components fit standard nominal duct diameters. The ducting used may be rigid, flexible made from aluminium, galvanised steel or plastic. Observe fire protection regulations where applicable.

Other accessories	Pages
Filters and heater batteries	211-220
Flexible ducting, guards, duct components and roof outlets	245-256
Valves	257-263
Speed controllers and switches	275-290

Accessories for RR and RRK

Pipe clamp connectors

BM 160 Ref. No. 5077
A quick-fix method for connecting fans to ducting, reducing vibration transmission. 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 2 Ref. No. 5822
To fix fan on wall, floor or ceiling; made from galvanised steel.



Accessories for all models

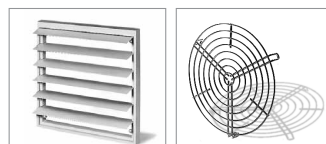
Backdraught shutter

RSK 160 Ref. No. 5669
Air stream operated, metal.



Gravity shutter

VK 160 Ref. No. 0892
Air stream operated, polymer, light-grey.



Fixed grille

G 160 Ref. No. 0893
Polymer, light-grey.



Guard for spigot connection

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



Flexible attenuator

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



Spigotted attenuators

SRSD 150+160/... see page 219
Spigotted attenuator with 50 mm insulation. Available in four lengths: 300/600/900/1200 mm.



In-line air filter box

LFBR 160 Ref. No. 8578
Air filter with big cross sectional area to be installed in-line with ducting. Spigots incorporate twin-seal rubber sealings to fit standard size ducting.



Electric heater battery

EHR-R 5/160 Ref. No. 8710
In duct casing made from galvanised sheet steel, for in-line installation.



Water heater battery – LPHW

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



Transformer speed controller – for RR 160 B and RRK

TSW 0.3 Ref. No. 3608
– for RR 160 C and SB
TSW 1.5 Ref. No. 1495

Electronic speed controller

ESA 1 Ref. No. 0238



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

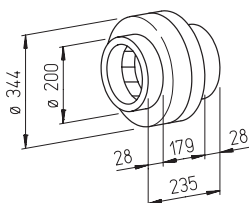
- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit into standard duct sizes.
- 100% speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

Features of all models

- Motor** Low noise external rotor motor with ball bearings, impregnated windings insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- Speed control** Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- Installation** Installation in any position without restriction: – horizontally, vertically or pitched – suitable for intake or extract. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

Models RR

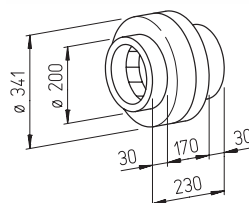
Market leading range offering an excellent value for money.



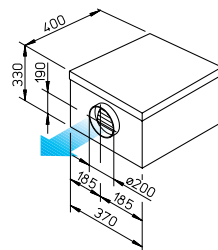
Dimensions in mm

Models RRK

Alternative version made from impact resistant polymers.



SilentBox® SB Virtually noise free fan, with high air flow and pressure. Ideal for cleaning and maintenance.



Specification RR

- Casing** Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- Electrical connection** Terminal box (IP 55) located on outer casing.
- Impeller** Backward curved centrifugal impeller made from polymers (model RR 200 B made from galvanised steel). Directly fitted on motor and dynamically balanced as a unit providing low sound levels and high efficiency.
- Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- 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: Helios-red.
- 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 sound levels and high efficiency.
- Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- Protection** Splashproof to IP 44.

Specification SilentBox®

- Casing** Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clasps permit easy access to motor scroll and impeller set. Pull out motor and impeller. Spigots on intake and exhaust with twin-seal rubber gaskets fit into standard ducts. All parts manufactured from galvanised sheet steel.
- Electrical connection** Terminal box (IP 55) is supplied with a 60 cm long electric cable.
- Impeller** Low noise forward curved centrifugal impeller, housed within an aerodynamically shaped scroll made from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.
- Motor protection** Motors have thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off.
- Protection** IP 44

NEW!

Technical information	Type	RR 200 A	RR 200 B	RRK 200	SilentBox® SB 200 C
Ref. No.		5658	5659	5977	9510
Connection spigot ø mm		200	200	200	200
Air flow volume (FID) in m³/h		820	960	780	680
R.P.M.		2580	2500	2550	1800
Sound pressure level at 1 m					
– Case breakout dB(A)		50	52	56	38
– Air noise on intake dB(A)		65	66	66	51
Voltage: Volt/50 Hz		230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.
Power Watts		115	158	125	188
Current Amps		0.5	0.69	0.52	0.83
Nominal weight in kg		4.6	5.0	3.6	15
Maximum air flow temperature °C		60	60	45	55
Wiring diagram No.		SS-508	SS-508	SS-508	SS-508

RR 200 A

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 57	35	41	50	53	50	47	39
L _{WA} Intake		dB(A) 72	50	68	67	66	65	58	51

RR 200 B

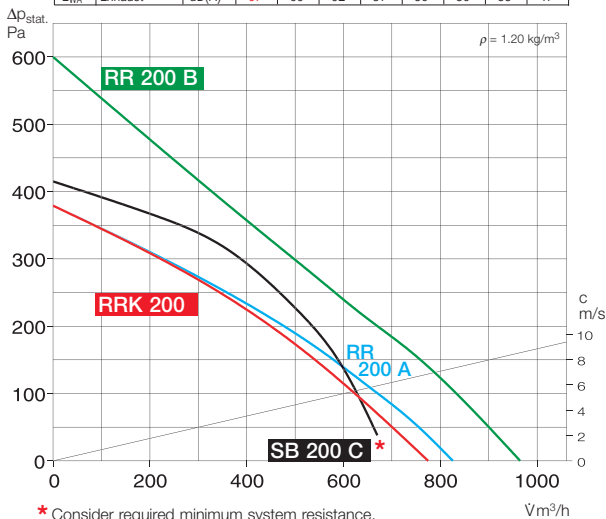
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 59	36	44	52	55	52	49	49
L _{WA} Intake		dB(A) 73	62	69	67	66	66	63	59

RRK 200

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

SB 200 C

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 45	42	39	40	34	32	30	27
L _{WA} Intake		dB(A) 58	53	51	50	46	47	41	34
L _{WA} Exhaust		dB(A) 67	60	62	57	59	59	55	47



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 (freefield conditions) in the technical data table (see facing page).

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

Information	Pages
Technical description	148
Selection chart	149
Design of systems	12-16
Modular comp. system	150

Information for ducting systems

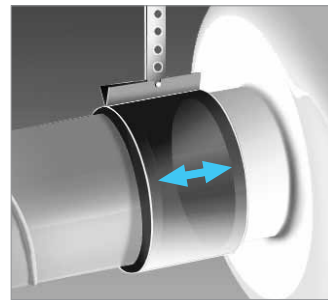
All Helios components fit standard nominal duct diameters. The ducting used may be rigid or flexible and made from aluminium, galvanised steel or plastic. Observe fire protection regulations where applicable.

Other accessories	Pages
Filters and heater batteries	211-220
Flexible ducting, guards, duct components and roof outlets	245-256
Valves	257-263
Speed controllers and switches	275-290

Accessories for RR and RRK

Pipe clamp connectors

BM 200 Ref. No. 5078
A quick-fix method for connecting fans to ducting, reducing vibration transmission. 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 2 Ref. No. 5822
To fix fan on wall, floor or ceiling; made from galvanised steel.



Accessories for all models

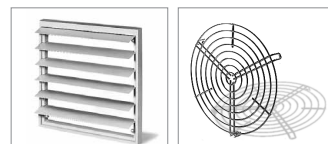
Backdraught shutter

RSK 200 Ref. No. 5074
Air stream operated, metal.



Gravity shutter

VK 200 Ref. No. 0758
Air stream operated, polymer, light-grey.



Rain repellent grille

RAG 200 Ref. No. 0750
From polymers, light-grey.



Guard for spigot connection

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



Flexible attenuator

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



Spigotted attenuators

SRSD 200/... see page 219
Spigotted attenuator with 50 mm insulation. Available in four lengths: 300/600/900/1200 mm.



In-line air filter box

LFBR 200 Ref. No. 8579
Air filter with big cross sectional area to be installed in-line with ducting. Spigots incorporate twin-seal rubber sealings to fit standard size ducting.



Electric heater battery

EHR-R 5/200 Ref. No. 8711
In duct casing made from galvanised sheet steel, for in-line installation.



Water heater battery – LPHW

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

Transformer speed controller

TSW 1.5 Ref. No. 1495

Electronic speed controller

ESA 1 Ref. No. 0238



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

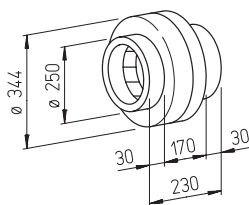
- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit into standard duct sizes.
- 100% speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

Features of all models

- Motor** Low noise external rotor motor with ball bearings, impregnated windings insulation class B, designed for continuous operation, maintenance free and radio suppressed.
- Speed control** Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- Installation** Installation in any position without restriction: – horizontally, vertically or pitched – suitable for intake or extract. To keep sound levels inside the ventilated rooms as low as possible we recommend the fan is installed as remote as possible.

Models RR

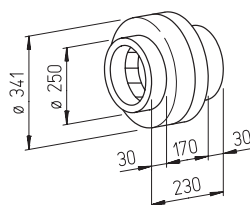
Market leading range offering an excellent value for money.



Dimensions in mm

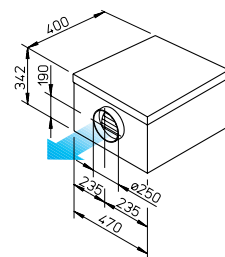
Models RRK

Alternative version made from impact resistant polymers.



Dimensions in mm

SilentBox® SB Virtually noise free fan, with high air flow and pressure. Ideal for cleaning and maintenance.



Specification RR

- Casing** Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- Electrical connection** Terminal box (IP 55) located on outer casing.
- Impeller** Backward curved centrifugal impeller made from galvanised steel. Directly fitted on motor and dynamically balanced as a unit providing low sound levels and high efficiency.
- Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- 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: Helios-red.
- 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.
- Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- Protection** Splashproof to IP 44.

Specification SilentBox®

- Casing** Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clasps permit easy access to motor scroll and impeller set. Pull out motor and impeller. Spigots on intake and exhaust with twin-seal rubber gaskets fit into standard ducts. All parts manufactured from galvanised sheet steel.
- Electrical connection** Terminal box (IP 55) is supplied with a 60 cm long electric cable.
- Impeller** Low noise forward curved centrifugal impeller, housed within an aerodynamically shaped scroll made from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.
- Motor protection** Motors have thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off.
- Protection** IP 44

NEW!

NEW!

Technical information	Type	RR 250 A	RR 250 C	RRK 250	SilentBox® SB 250 C
Ref. No.		5652	5660	5978	9512
Connection spigot ø mm		250	250	250	250
Air flow volume (FID) in m³/h		880	1100	840	980
R.P.M.		2580	2420	2550	2120
Sound pressure level at 1 m					
– Case breakout dB(A)		48	55	53	37
– Air noise on intake dB(A)		65	66	61	52
Voltage: Volt/50 Hz		230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.
Power Watts		115	185	125	255
Current Amps		0.50	0.81	0.52	1.13
Nominal weight in kg		4.6	5.0	3.6	18
Maximum air flow temperature °C		60	55	45	35
Wiring diagram No.		SS-508	SS-508	SS-508	SS-508

RR 250 A

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 65	35	42	45	50	48	46	33
L _{WA} Intake		dB(A) 72	62	67	67	67	64	62	47

RR 250 C

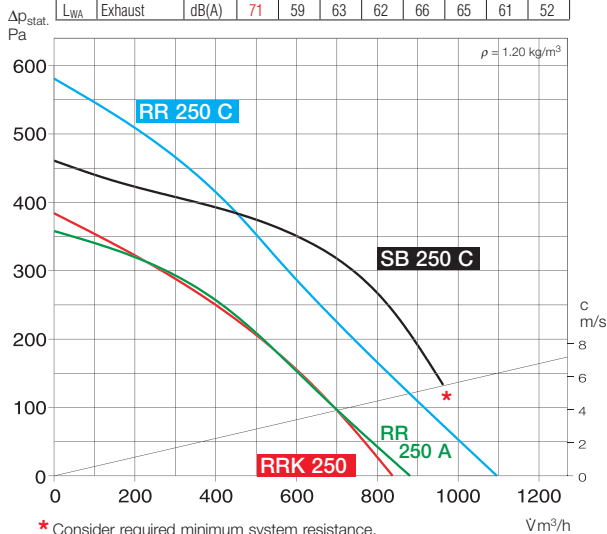
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 62	40	42	52	58	58	52	50
L _{WA} Intake		dB(A) 73	52	66	67	68	65	64	60

RRK 250

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 60	46	49	52	56	55	51	41
L _{WA} Intake		dB(A) 68	53	56	64	61	60	57	47

SB 250 C

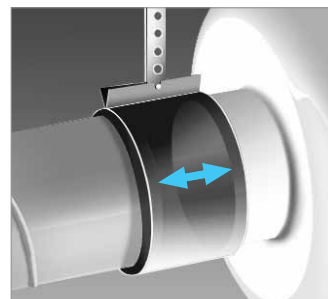
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 44	34	35	40	38	34	29	22
L _{WA} Intake		dB(A) 59	52	56	51	43	39	39	29
L _{WA} Exhaust		dB(A) 71	59	63	62	66	65	61	52



Accessories for RR and RRK

Pipe clamp connectors

BM 250 Ref. No. 5079
A quick-fix method for connecting fans to ducting, reducing vibration transmission. 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 2 Ref. No. 5822
To fix fan on wall, floor or ceiling; made from galvanised steel.



Accessories for all models

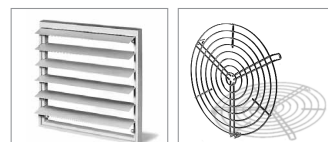
Backdraught shutter

RSK 250 Ref. No. 5673
Air stream operated, metal.



Gravity shutter

VK 250 Ref. No. 0759
Air stream operated, polymer, light-grey.



Rain repellent grille

RAG 250 Ref. No. 0751
From polymer, light-grey.



Guard for spigot connection

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



Flexible attenuator

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



Spigotted attenuators

SRSD 250/... see page 219
Spigotted attenuator with 50 mm insulation. Available in four lengths: 300/600/900/1200 mm.



In-line air filter box

LFBR 250 Ref. No. 8580
Air filter with big cross sectional area to be installed in-line with ducting. Spigots incorporate twin-seal rubber sealings to fit standard size ducting.



Electric heater battery

EHR-R 6/250 Ref. No. 8712
In duct casing made from galvanised sheet steel, for in-line installation.



Water heater battery – LPHW

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



Transformer speed controller

TSW 1.5 Ref. No. 1495



Electronic speed controller

– for RR and RRK
ESA 1 Ref. No. 0238
– for SB
ESA 3 Ref. No. 0239

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 (freefield conditions) in the technical data table (see facing page).

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

Information	Pages
Technical description	148
Selection chart	149
Design of systems	12-16
Modular comp. system	150

Information for ducting systems

All Helios components fit standard nominal duct diameters. The ducting used may be rigid, flexible made from aluminium, galvanised steel or plastic. Observe fire protection regulations where applicable.

Other accessories	Pages
Filters and heater batteries	211-220
Flexible ducting, guards, duct components and roof outlets	245-256
Valves	257-263
Speed controllers and switches	275-290

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

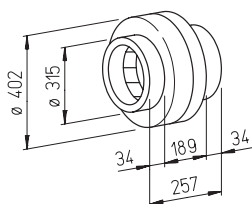
- Compact design to minimise space and cost using in-line installation.
- Intake and exhaust spigot fit into standard duct sizes.
- 100% speed controllable to achieve any required duty.
- Installation in any position.
- Extensive accessory range.
- Optimised aerodynamic casing design.

Features of all models

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

Models RR

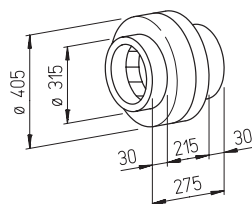
Market leading range offering an excellent value for money.



Dimensions in mm

Models RRK

Alternative version made from impact resistant polymers.



Specification RR

- **Casing** Made from robust galvanised steel for harsh working conditions. Spigots on intake and exhaust fit standard ducts.
- **Electrical connection** Terminal box (IP 55) located on outer casing.
- **Speed control** Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- **Impeller** Backward curved centrifugal impeller made from galvanised steel. Directly fitted on motor and dynamically balanced as a unit providing low sound levels and high efficiency.
- **Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- **Protection class** When installed in ducting the fan is rated IP 44.

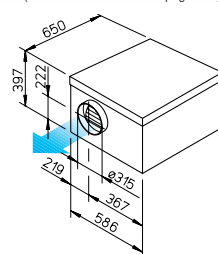
Specification RRK

- **Casing** All components are made from corrosion and impact resistant polymers. Six guide vanes increase the fan's efficiency. Colour: Helios-red.
- **Electrical connection** Terminal box (IP 55) located on outer casing.
- **Speed control** Stepless 0 – 100 % by use of electronic controller or 5 stepped by low noise transformer.
- **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.
- **Motor protection** Motors have thermal contacts wired in series with the windings which automatically reset.
- **Protection** Splashproof to IP 44.

SilentBox® SB Virtually noise free fan, with high air flow and pressure. Ideal for cleaning and maintenance.



(Picture of SB 315 B see page 156)



Specification SilentBox®

- **Casing Casing** Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clasps permit easy access to pull out motor scroll and impeller set. All parts manufactured from galvanised sheet steel. Model SB 315 B with swinging out motor and impeller. Model SB 315 C with two parallel wired, double inlet centrifugal fan units. Spigots on intake and exhaust with twin-seal rubber gaskets fit into standard ducts. All parts manufactured from galvanised sheet steel.
- **Electrical connection** Terminal box (IP 55) is supplied with a 60 cm long electric cable.
- **Speed control** Speed controllable with a transformer speed controller.
- **Impeller** Low noise forward curved centrifugal impeller, housed within an aerodynamically shaped scroll made from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

NEW!

NEW!

Technical information	Type	RR 315 B	RR 315 C	RRK 315	SilentBox® SB 315 B	SilentBox® SB 315 C
Ref. No.		5661	5920	5979	9515	9514
Connection spigot ø mm		315	315	315	315	315
Air flow volume (FID) in m³/h		1410	1705	1280	1670	1500
R.P.M.		2465	2400	2450	1400	1800
Sound pressure level at 1 m						
– Case breakout dB(A)		49	61	57	45	37
– Air noise on intake dB(A)		65	69	66	56	56
Voltage: Volt/50 Hz		230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.	230 V / 1 ph.
Power Watts		190	285	220	620	385
Current Amps		0.84	1.25	0.98	3.0	1.7
Nominal weight in kg		6.1	6.0	5.0	41	36
Maximum air flow temperature °C		50	50	45	40	55
Wiring diagram No.		SS-508	SS-508	SS-508	SS-536.1	SS-508

RR 315 B

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 56	38	39	44	49	52	47	37
L _{WA} Intake		dB(A) 72	59	61	65	64	68	64	54

RR 315 C

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 68	43	47	62	60	63	59	56
L _{WA} Intake		dB(A) 76	57	67	70	70	69	66	67

RRK 315

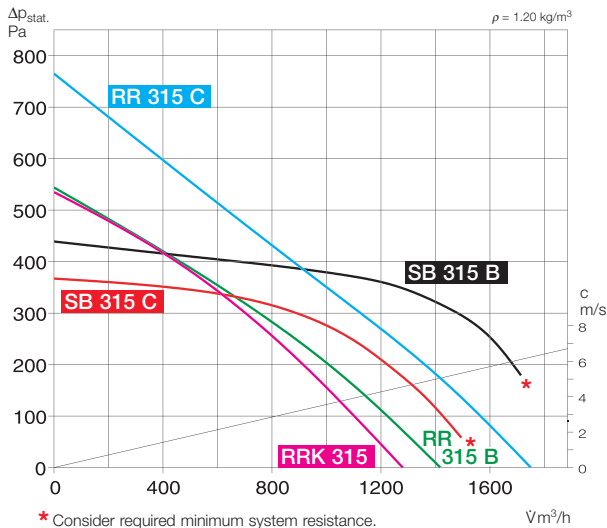
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 64	43	52	60	55	57	52	43
L _{WA} Intake		dB(A) 73	45	59	65	67	68	66	61

SB 315 B

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 52	47	45	46	41	45	39	27
L _{WA} Intake		dB(A) 63	59	59	52	49	45	43	35
L _{WA} Exhaust		dB(A) 76	61	67	72	72	66	64	54

SB 315 C

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout		dB(A) 44	36	37	41	35	31	29	26
L _{WA} Intake		dB(A) 63	56	55	54	54	55	52	44
L _{WA} Exhaust		dB(A) 72	58	59	61	65	69	64	57



Motor protection Models SB 315 B with thermal contacts wired to the terminal block and must be connected to a motor protection unit (Accessory: MW, Ref. No. 1579). Models SB 315 C with thermal contacts wired in series with the windings. After responding reset by switching mains supply off and on.

Protection IP 44

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 (freefield conditions) in the technical data table (see facing page).

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

Information	Pages
Technical description	148
Selection chart	149
Design of systems	12-16
Modular comp. system	150

Information for ducting systems

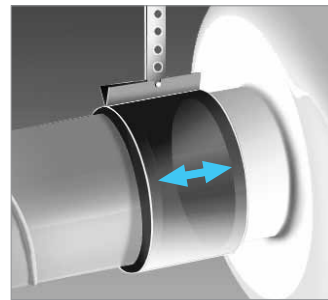
All Helios components fit standard nominal duct diameters. The ducting used may be rigid or flexible and made from aluminium, galvanised steel or plastic. Observe fire protection regulations where applicable.

Other accessories	Pages
Filters and heater batteries	211-220
Flexible ducting, guards, duct components and roof outlets	245-256
Valves	257-263
Speed controllers and switches	275-290

Accessories for RR and RRK

Pipe clamp connectors

BM 315 Ref. No. 5080
A quick-fix method for connecting fans to ducting, reducing vibration transmission. 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 3 Ref. No. 5823

To fix fan on wall, floor or ceiling; made from galvanised steel.



Accessories for all models

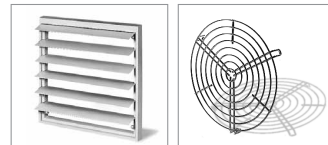
Backdraught shutter

RSK 315 Ref. No. 5674
Air stream operated, metal.



Gravity shutter

VK 315 Ref. No. 0760
Air stream operated, polymer, light-grey.



Rain repellent grille

RAG 315 Ref. No. 0752
From polymer, light-grey.



Guard for spigot connection

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



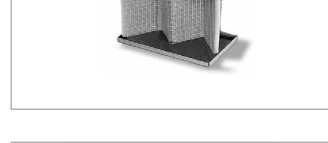
Flexible attenuator

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



Spigotted attenuators

SRSD 315/... see page 219



In-line air filter box

LFBR 315 Ref. No. 8581
Air filter with big cross sectional area to be installed in-line with ducting. Spigots incorporate twin-seal rubber sealings to fit standard size ducting.



Electric heater battery

EHR-R 6/315 Ref. No. 8713
In duct casing made from galvanised sheet steel, for in-line installation.



Water heater battery – LPHW

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



Electronic speed controller

– for RR 315 C and RRK
ESA 3 Ref. No. 0239
– for RR 315 B
ESA 1 Ref. No. 0238



Full motor prot. unit for SB 315 B

MW Ref. No. 1579

Transformer controller for RR and RRK

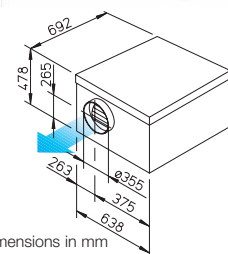
TSW 1.5 Ref. No. 1495
TSW 5.0 Ref. No. 1497
TSW 3.0 Ref. No. 1496



Acoustically insulated fans for medium air flow volumes against high resistances.

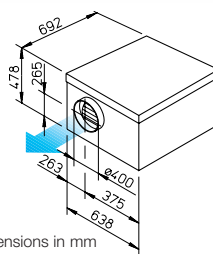
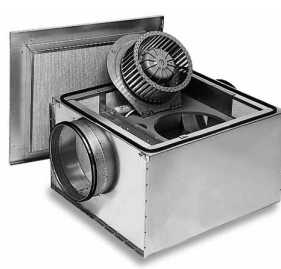
Specially designed to be installed in-line in circular ducting. High pressure characteristic to overcome resistances of bends, filters etc. Universal in application for domestic, commercial and industrial purposes.

SilentBox® SB 355 Virtually noise free fan, with high air flow and pressure. Ideal for cleaning and maintenance.



Dimensions in mm

SilentBox® SB 400 Virtually noise free fan, with high air flow and pressure. Ideal for cleaning and maintenance.



Dimensions in mm

Special features

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

Features of both models

- Casing** Like an internal attenuator. Acoustically lined with abrasive resistant 50 mm thick mineral fibreboard. Four quick release clasps permit easy access to motor scroll and impeller set. Pull out motor and impeller, SB 400 F swinging out. Models SB 355 C with two parallel wired, double inlet centrifugal fan units. Spigots on intake and exhaust with twin-seal rubber gaskets fit into standard ducts. All parts manufactured from galvanised sheet steel.
- Impeller** Low noise forward curved centrifugal impeller, housed within an aerodynamically shaped scroll made from galvanised steel. Bell mouth shaped inlet ring to achieve optimum air flow.

- 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** Model SB 355 C with thermal contacts wired in series with the windings. To reset the thermal contacts the main supply must be switched off. Models SB 400 F have thermal contacts wired to the terminal block and must be connected to a motor protection unit (accessory MW, Ref. No. 1579).
- Speed control** Speed controllable with a transformer speed controller.
- Electrical connection** Terminal box (IP 55) is supplied with a 60 cm long electric cable.

- 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.
- Protection** Splashproof to IP 44.

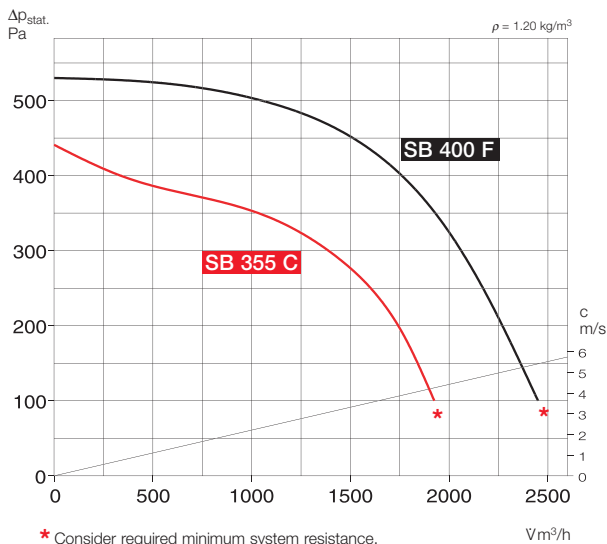
Technical information	Type	SilentBox® SB 355 C	SilentBox® SB 400 F
Ref. No.		9516	9517
Connection spigot ø mm		355	400
Air flow volume (FID) in m³/h		1925	2400
R.P.M.		2200	1290
Sound pressure level at 1 meter			
– Case breakout dB(A)		39	44
– Air noise intake dB(A)		60	55
Voltage: Volts/50 Hz		230 V / 1 ph.	230 V / 1 ph.
Power Watts		500	990
Current Amps		2.1	4.5
Nominal weight in kg		40	55
Maximum air flow temperature °C		40	40
Wiring diagram No. SS		SS-508	SS-536.1

SB 355 C

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout	dB(A)	46	37	38	42	39	34	33	27
L _{WA} Intake	dB(A)	67	61	61	57	55	58	54	48
L _{WA} Exhaust	dB(A)	76	64	63	65	69	73	68	60

SB 400 F

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} Case breakout	dB(A)	51	44	44	41	46	38	39	25
L _{WA} Intake	dB(A)	62	59	58	51	49	46	44	35
L _{WA} Exhaust	dB(A)	77	60	67	72	73	68	65	55



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 (freefield conditions) in the technical data table (see facing page).

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

Information	Pages
Technical description	148
Selection chart	149
Design of systems	12-16
Modular comp. system	150

Information for ducting systems

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

Other accessories	Pages
Filters and heater batteries	211-220
Flexible ducting, guards, duct components and roof outlets	245-256
Valves	257-263
Speed controllers and switches	275-290

Accessories

Backdraught shutter

RSK 355 Ref. No. 5650
RSK 400 Ref. No. 5651
 Air stream operated, metal.

Gravity shutter

VK 355 Ref. No. 0761
VK 400 Ref. No. 0762
 Air stream operated, polymer, light-grey.

Rain repellent grille

RAG 355 Ref. No. 0753
RAG 400 Ref. No. 0754
 To cover intake or extract openings in walls, polymer, light-grey.

Flexible attenuator

FSD 355 Ref. No. 0682
FSD 400 Ref. No. 0683
 Spigotted aluminium attenuator with 50 mm insulation. Length: 1 m.

Spigotted attenuators

SRSD 400/... see page 219
 Spigotted attenuator with 50 mm insulation. Available in four lengths: 300/600/900/1200 mm.

In-line air filter box

LFBR 355 Ref. No. 8583
LFBR 400 Ref. No. 8582
 Air filter with big cross sectional area to be installed in-line with ducting. Spigots incorporate twin-seal rubber sealings to fit standard size ducting.

Electric heater battery

EHR-R 9/355 Ref. No. 8656
EHR-R 9/400 Ref. No. 8657
 In duct casing made from galvanised sheet steel, for in-line installation.

Water heater battery – LPHW

WHR 355 Ref. No. 8790
WHR 400 Ref. No. 9524
 Compact unit for in-line installation.

Transformer speed controller

Compact controller for low noise 5 speed operation.
– for SB 355 C
TSW 3.0 Ref. No. 1496
– for SB 400 F
TSW 5.0 Ref. No. 1497

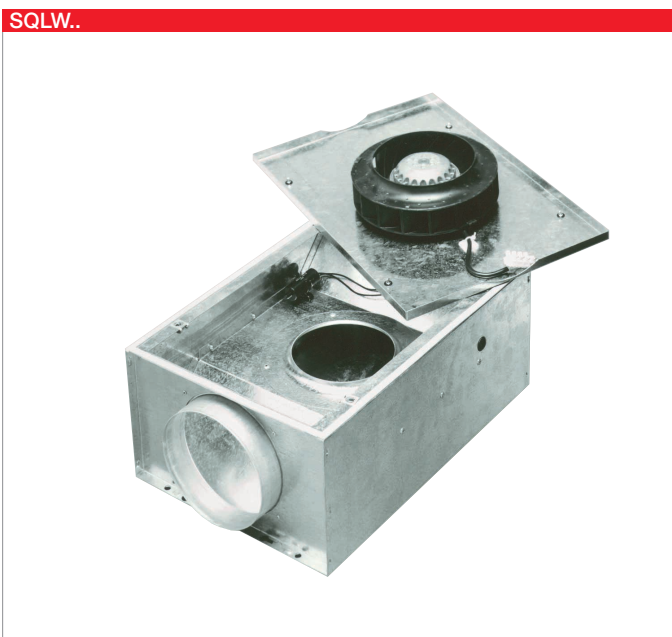
Full motor protection unit for SB 400 F

MW Ref. No. 1579

Flexible ducting

ALF 355 Ref. No. 5758
ALF 400 Ref. No. 5759
 Two flexible layers of aluminium foil with incorporated steel helix support. Forming almost any bend. A carton of 60 cm length incorporates 10 m of ducting.





■ Applications / use

- For medium airflow volumes against high resistances.
- Specially designed to be installed in circular ducting.
- Minimum height for tight spaces like ceiling voids in commercial and industrial applications.

■ Features

- The SquareLine centrifugal in-line fan range offers an excellent performance in nominal diameters 100 mm – 315 mm.
- Compact design to minimise space and cost.
 - Key hole fixing points offer fast and effective installation.
 - Quick fixing plate supplied with the unit assist in faster installation.
 - 100 % speed controllable.
 - Matching range of silencers to suit offering the same space saving height as the fans.
 - Extensive range of accessories including speed controllers, pipe clamps, anti vibration mountings.
 - Twin fan applications can be met with two fans in series clamped together offering 100 % standby.
 - Units can be mounted for top or bottom access.

- Simple electrical connection via a choice of knockouts in the casing.
- Robust corrosion resistant casing with spigots for duct connection.

■ Specification

■ Fans

All units are fitted with a backward curved centrifugal impeller powered by a direct driven motor.

■ Motor

All motors are fitted with maintenance free, sealed for life ball bearings. Protection to IP 44 with class F windings.

■ Motor protection

All models are fitted with automatically resetting thermal contacts wired in series with the motor windings.

■ Casing

Standard units of galvanised sheet steel with access panel & spigot connections. Knockouts for electrical connection and fixing holes are provided in the casing.

■ Impeller

All units are fitted with backward curved centrifugal impellers of either galvanised steel or plastic.

■ Speed control

All models are fully speed controllable. Suitable controllers are available as accessories.

■ Electrical connection

The connection of the electrical supply must be carried out in accordance with all relevant regulations.

■ Installation

Installation at any angle.

■ Safety notice

A protection against accidental contact to DIN EN 294 must be provided by the installer.

■ Noise levels

The technical data table shows the sound pressure level (air noise) in dB(A) at 1 metre under freefield conditions. Installation conditions and/or obstructed airflow into the unit may lead to substantial increase in noise levels.

■ Performances

All performances are related to an air density of 1.20 kg/m³.

■ Twin Fan arrangement

By connecting two squareline fans of the same model together in series an effective compact twin fan design can be achieved. Two units can easily be connected together using the standard Helios pipe clamps type BM (available as an accessory).

■ Twin fan performance

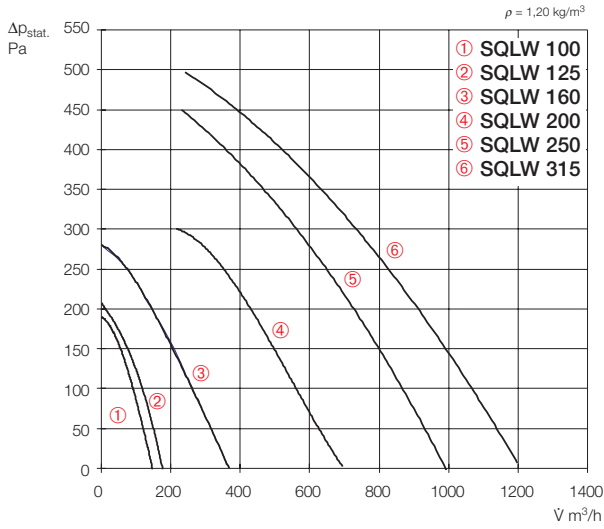
There is a loss in performance using these fans connected in series as a twin fan application the actual performance is shown on the page opposite.

■ Twin fan operation

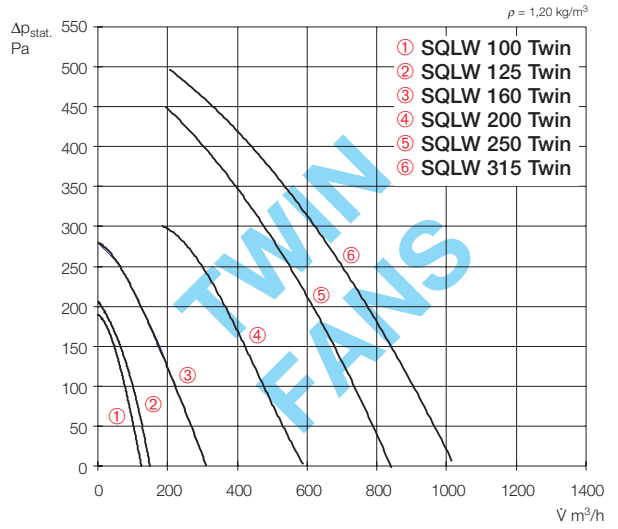
To achieve an effective run and stand by combination the twin fan set should be controlled with an auto changeover panel ACOP 1 or ACSW 1 (available as an ancillary, see page 290).

Type	Ref. No.	R.P.M.	Air flow volume FID	Sound power level at 1 m	Power	Max. air flow temp.	Current Amps	Wiring diagram	Nominal Weight	Electronic variable speed controller	
		min ⁻¹	m ³ /h	dB(A)	Watts	+°C	FLC	No.	kg	Type	Ref. No.
Single phase, 230 V / 1 ph. / 50 Hz, capacitor start motor, protection to IP 55											
SQLW 100	7810	2500	120	60	65	60	0.29	SS-721	6.0	ESA 1	0238
SQLW 125	7811	2500	150	60	65	60	0.29	SS-721	6.5	ESA 1	0238
SQLW 150	7812	2500	320	61	65	60	0.29	SS-721	6.5	ESA 1	0238
SQLW 200	7813	2465	930	72	96	60	0.45	SS-721	7.5	ESA 1	0238
SQLW 250	7814	2590	930	70	154	60	0.41	SS-721	7.5	ESA 1	0238
SQLW 315	7815	2650	1130	80	165	50	0.72	SS-721	9.0	ESA 1	0238

SquareLine performance ø 100 – 315 mm



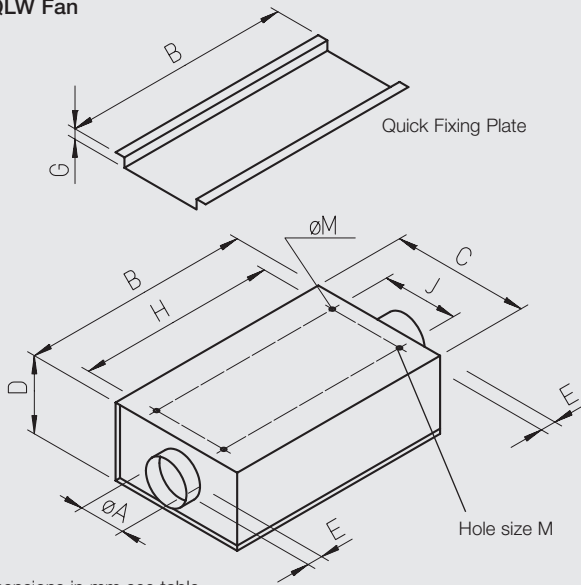
SquareLine Twin fan performance ø 100 – 315 mm



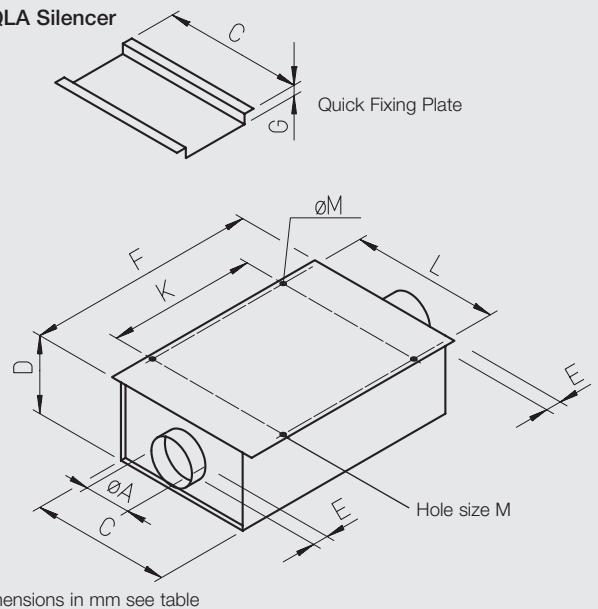
Performance details (single fan) Volume flow in m³/h against static pressure in Pa.

Unit Size	0	50	100	150	200	250	300	350	400	450	500
SQLW 100	0.041	0.033	0.026	0.016							
SQLW 125	0.049	0.041	0.034	0.020	0.005						
SQLW 150	0.102	0.088	0.072	0.058	0.040	0.021					
SQLW 200	0.193	0.175	0.157	0.136	0.119	0.100	0.060				
SQLW 250	0.276	0.258	0.240	0.222	0.204	0.180	0.156	0.120	0.100	0.064	
SQLW 315	0.333	0.315	0.299	0.279	0.255	0.229	0.200	0.177	0.142	0.108	0.067

SQLW Fan



SQLA Silencer



Unit dimensions in mm

Type	ø A	B	C	D	E	F	G	H	J	K	L	ø M
SQLW 100	100	440	300	158	35	625	12	416	200	500	310	8
SQLW 125	125	440	300	158	20	600	12	416	200	500	310	8
SQLW 150	150	440	300	183	20	600	12	416	200	500	310	8
SQLW 200	200	440	350	234	40	600	12	416	200	500	358	8
SQLW 250	250	440	350	284	40	600	12	416	200	500	358	8
SQLW 315	315	440	376	384	40	600	12	416	200	500	384	8



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

Type	Ref. No.
BM 100	5075
BM 125	5076
BM 150	6164
BM 200	5078
BM 250	5079
BM 315	5080



Spigoted rectangular attenuator SQLA
Robust galvanised steel casing, inner perforated steel liner retaining mineral wool filling. Fits nominal size ducting with pipe clamp connectors. Space saving height complete with easy fix plate.

Type	Ref. No.
SQLA 100	8906
SQLA 125	8910
SQLA 150	8914
SQLA 200	8918
SQLA 250	8922
SQLA 315	8926



Air stream operated shutter VK
A compact design to cover exhaust openings in walls. Automatic function; opens and closes when fan is switched on or off. Max. airflow speed of 10 m/s. Larger sizes are available.

Type	Ref. No.
VK 100	0757
VK 125	0587
VK 150/160	0892
VK 200	0758
VK 250	0759
VK 315	0760



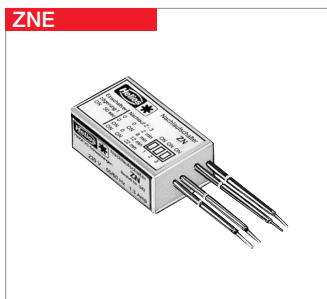
Flexible ducting ALF
For universal use in the most industrial, commercial and domestic applications. Forming almost any bend, and super flexible, it can be repeatedly bent with no fatigue of material or leakages.

Type	Ref. No.
ALF 100	5712
ALF 125	5713
ALF 150	5714
ALF 200	5715
ALF 250	5716
ALF 315	5717



Electronic speed controller ESA 1 for surface mounting
Casing of white polymers, illuminated control knob.

Type	Ref. No.
ESA 1	0238
Voltage	220/240 V, 1 ph.
Frequency	50 Hz
Protection	IP 40
Current	Max 1 Amp
Dim. mm	W 80 x H 80 x D 65
Weight	0.15 kg
Wiring Diagram No.	SS-556.1



Electronic overrun timer ZNE with adjustable run on time
Operated via on/off switch e.g. in combination with light switch. Compact design allows easy installation.

Type	Ref. No.
ZNE	0342
Adjustable run on times	3, 6, 9, 12 Min.
Optional delayed start	(45 secs)
Voltage	230 V/ 1 ph., 50/60 Hz.
Current	min. 0.05 A max. 1.25 A (ind.)
Protection	IP 40
Dim. in mm	W 17 x H 37 x D 13
Installation:	In gang box behind switch
Wiring Diagram No.	SS-477
– for two room/switch connection	SS-174.3



Filter box with filter LFBR
For in-line installation with circular ducting. Spigots on both ends are fitted with double lip rubber seals, fitting nominal sized ducting. **Casing** made from galvanised steel. Access panel fitted with clasps for easy filter change. **Filter mat** washable plastic fibre filter, class G 4. Temperature resistant up to +100 °C. Fire resistant to DIN 53438: F1, self extinguishing, 93.8 % particle separation, dust storage capacity: 122 g/m².

Type	Ref. No.
LFBR 100	8576
LFBR 125	8577
LFBR 160	8578
LFBR 200	8579
LFBR 250	8580
LFBR 315	8581



Electric heater battery EHR-R for circular ducting
Low surface temperature steel heating elements enclosed in a galvanised steel casing fitting nominal duct sizes for in-line installation.

Elements are individually wired to the outer terminal box to allow various heat outputs. A built-in thermal cutout opens at +90 °C and resets after cooling down.

Type	Ref. No.
EHR-R 0.4/100	1 ph. 8708
EHR-R 0.8/125	1 ph. 8709
EHR-R 5/160	3 ph. 8710
EHR-R 5/200	3 ph. 8711
EHR-R 6/250	3 ph. 8712
EHR-R 6/315	3 ph. 8713

Other models are available on request.