

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 interference-free.

■ Motor protection

Thermal overload protection fitted in the winding as standard.

■ Sound levels

See explanations on page 307.

MV – Single-stage Swing-out in-line fan for space-saving installation in ducting.

Specification MV

☐ Impeller

Dim. in mm

Optimised for high pressure and volumetric performance, made from high grade polymer.

MV 100 B, *MV 100 A

□ Electrical connection

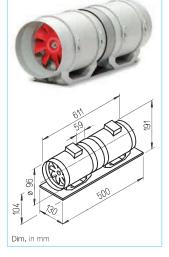
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.

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

MVZ - Two-stage

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



Specification MVZ

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

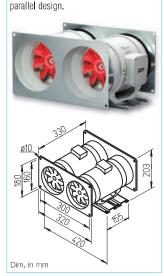
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using <u>one</u> operation switch MVB (accessory) or <u>one</u> change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed 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



Specification MVP

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.

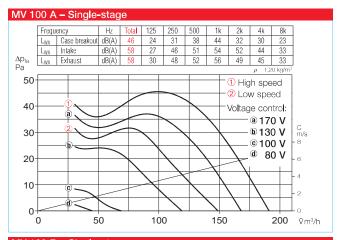
□ Speed control / Connection

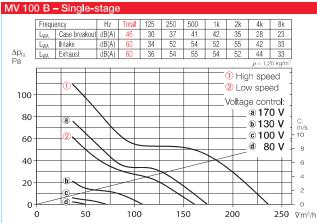
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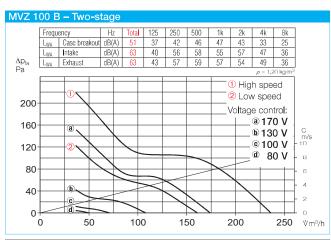
When using a speed controller, the high speed amps have to be allowed for.

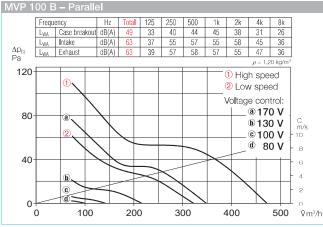
Туре	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressucase breakout	re level in 1 m air noise min./max.	Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transformer-speed controller 5-step		Electronic* speed controller, stepl flush/surface	
		mm	V m³/h	min ⁻¹	dB (A)	dB (A)	W	А	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.
Single-stag	ge in-line far	ı, 230 V, 50 H	lz, capacitor	motor, IP 44	1										
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
Two-stage	in-line fan, i	230 V , 50 Hz,	capacitor m	otor, IP 44											
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
Parallel-tw	Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44														
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.









Accessories for MV and MVZ

Flexible connector

Type 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.



Type VK 100 Ref. no. 0757 Wall mounted, automatic pressure control shutter for the air outlet. Made of white polymer.



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



Type MVS 100 Ref. no. 6071 For intake and exhaust installation on the ventilation unit.

Spigotted attenuator
Type FSD 100 Ref. no. 0676

Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.

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

Type WHR 100 Ref. no. 9479

For in-duct installation.

Accessories for all types

Back draught shutter
Type RSKK 100 Ref. no. 5106
Automatic, made of polymer. For in-duct installation.

Operating switch 0-1-2

Type MVB Ref. no. 6091 With on/off, low and high speed functions.

Transformer speed controller
Type TSW see table
Five-step, for surface mounting.

Electronic speed controller

Type ESU/ESA see table

For flush-/surface mounting.

Electronic run-on switch
Type ZNE Ref. no. 0342
With continuously adjustable follow-up time.

























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- 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.

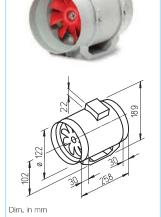
■ Motor

Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.

■ Motor protection

Thermal overload protection fitted in the winding as standard.

MV – Single-stage Swing-out in-line fan for space-saving installation in ducting.



Specification MVImpeller

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☐ Electrical connection

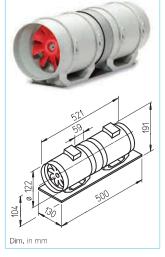
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Installation

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MVZ - Two-stage

For higher pressure performance: Two in-line fans mounted in series



Specification MVZ

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

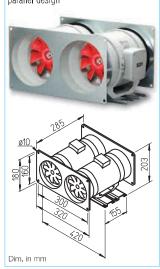
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☐ Installation

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

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.

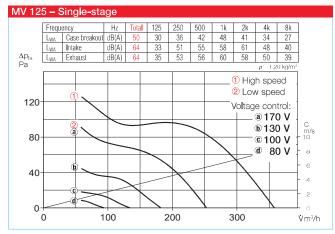
□ Speed control / Connection

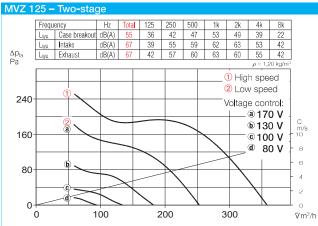
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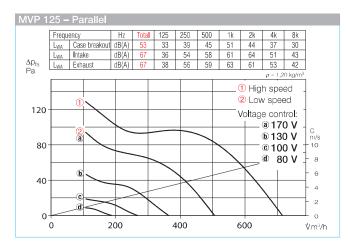
When using a speed controller, the high speed amps have to be allowed for.

Туре	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressu case breakout	re level in 1 m air noise min./max.	Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transformer-speed controller 5-step		Electronic* speed controller, step flush/surface	
		mm	V m³/h	min ⁻¹	dB (A)	dB (A)	W	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.
Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44															
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
Two-stage	Two-stage ventilation unit, 230 V, 50 Hz, capacitor motor, IP 44														
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
Parallel-tw	in-unit, 230	V, 50 Hz, cap	acitor moto	r, IP 44											
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.







■ Sound levels

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

- Sound level case breakout
- Sound level 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.

Accessory details Page Filters, heater batteries

rillers, neater patteries
and attenuators
421 on
Temperature controllers
for heater batteries
427, 431
Flexible ventilation ducting,
grilles, adaptors,
roof terminations
487 on
Poppet valves
508 on

525 on

Speed controllers

and switches

Accessories for MV and MVZ

Flexible connector

Type 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.



Type VK 125 Ref. no. 0857 Wall mounted, automatic pressure control shutter for the air outlet.

External wall grille

Made of white polymer.

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

Guard

Type MVS 125 Ref. no. 6072 For intake and exhaust installation on the ventilation unit.

Spigotted attenuator Type FSD 125

Type FSD 125 Ref. no. 0677 Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.

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
Type WHR 125 Ref. no. 9480
For in-duct installation.

■ Accessories for all types

Back draught shutter
Type RSKK 125 Ref. no. 5107
Automatic, made of polymer. For in-duct installation.

Operating switch 0-1-2

Type MVB Ref. no. 6091 With on/off, low and high speed functions.

Transformer speed controller Type TSW see table Five-step, for surface mounting.

Electronic speed controller
Type ESU/ESA see table
For flush-/surface mounting.

Electronic run-on switch

Type ZNE Ref. no. 0342

Type ZNE Ref. no. 0342 With continuously adjustable follow-up time,





























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- □ 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.

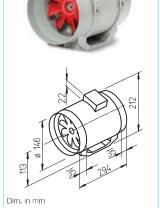
■ Motor

Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.

■ Motor protection

Thermal overload protection fitted in the winding as standard.

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



Specification MV

Impeller

Optimised for high pressure and volumetric performance, made from high grade polymer.

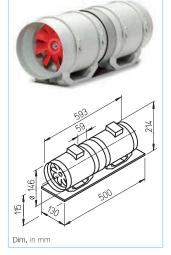
□ Electrical connection

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

For higher pressure performance: Two in-line fans mounted in series



Specification MVZ

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.

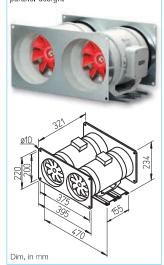
■ Electrical connection

Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one 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

For higher volume output in a compact parallel design.



Specification MVP

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.

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As described on the left.

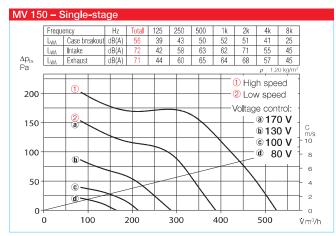
□ Speed control / Connection

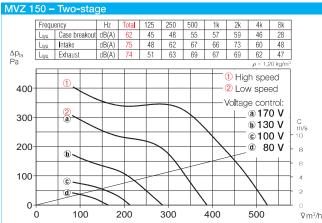
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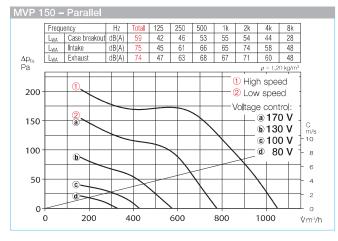
When using a speed controller, the high speed amps have to be allowed for.

Туре	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressu case breakout	re level in 1 m air noise min./max.	Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transform contro 5-st	oller	Electronic* speed controller, step flush/surface	
		mm	V m³/h	min ⁻¹	dB (A)	dB (A)	W	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.
Single-stag	Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44														
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
Two-stage	Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44														
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
Parallel-tw	in-unit, 230	V, 50 Hz, ca _l	pacitor moto	r, IP 44											
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

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Accessory details Page

Filters, heater batteries	
and attenuators	421 on
Temperature controllers	3
for heater batteries	427, 431
Flexible ventilation duct	ing,
grilles, adaptors,	
roof terminations	487 on
Poppet valves	508 on
Speed controllers	
and switches	525 on

Accessories for MV and MVZ

Flexible connector

Type 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.



Type VK 160 Ref. no. 0892 Wall mounted, automatic pressure control shutter for the air outlet. Made of white polymer.



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



Type MVS 150 Ref. no. 6073 For intake and exhaust installation on the ventilation unit.

Spigotted attenuator
Type FSD 160 1) Ref. no. 0678

Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.

Air filter box

galvanised steel.

LFBR 160 G4¹⁾ Ref. no. 8578 With a large cross section area, for in-duct installation.

Electric heater batteries EHR-R 1,2/160 ¹⁾ 1,2 kW No. 9434 In circular casing, made of

Warm-water heater batteries
Type WHR 160 1 Ref. no. 9481

Accessories for all types

For in-duct installation.

Back draught shutter
Type RSK 150 Ref. no. 5073
Automatic, made of metal. For in-duct installation.

Operating switch 0-1-2

Type MVB Ref. no. 6091 With on/off, low and high speed functions.

Transformer speed controller
Type TSW see table
Five-step, for surface mounting.

Electronic speed controller

Type ESU/ESA see table

For flush-/surface mounting.

Electronic run-on switch
Type ZNE Ref. no. 0342

With continuously adjustable follow-up time.

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





























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□ Speed control

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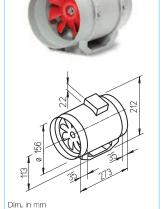
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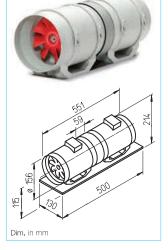
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As described on the left.

■ Electrical connection

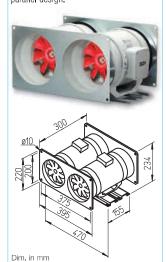
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using <u>one</u> operation switch MVB (accessory) or <u>one</u> change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed 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

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.

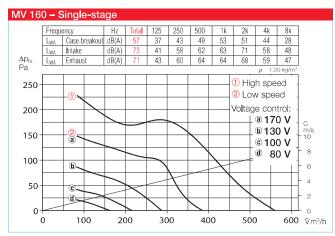
□ Speed control / Connection

Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using <u>one</u> operation switch MVB (accessory) or <u>one</u> change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram.

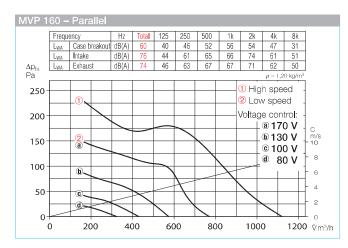
When using a speed controller, the high speed amps have to be allowed for.

Туре	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressu case breakout	re level in 1 m air noise min./max.	Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transform contro 5-st	oller	Electro speed control flush/su	ler, stepless
		mm	V m³/h	min ⁻¹	dB (A)	dB (A)	W	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.
Single-stag	Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44														
MV 160	6054	160	390/550	1520/2290	41/49	57/65	40/58	0.18/0.26	844.1	60	2.3	TSW 0,3	3608	ESU 1/ESA 1	0236/0238
Two-stage	Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44														
MVZ 160	6061	160	390/550	1520/2290	47/55	59/67	80/116	0.36/0.52	845.1	60	5.8	TSW 1,5	1495	ESU 1/ESA 1	0236/0238
Parallel-tw	in-unit, 230	V, 50 Hz, ca _l	pacitor moto	r, IP 44											
MVP 160	6068	_	780/1100	1520/2290	44/52	60/68	80/116	0.36/0.52	845.1	60	7.7	TSW 1,5	1495	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.



60 -	Two-sta	ane									
											,
Frequ	ency	Hz	Total	125	250	500	1k	2k	4k	8k	
L _{WA}	Case breakou	ıt dB(A)	63	44	49	54	58	59	48	30	
L _{WA}	Intake	dB(A)	75	47	62	66	66	73	62	50	
L _{WA}	Exhaust	dB(A)	74	49	64	67	68	70	64	50	
									ρ = 1,	20 kg/m	
								① Hia	h spe	ed	
	(1).										
											1
		_						Voltag	e cor	ntrol:	1
		\rightarrow		_				\rightarrow	@17	0 V	c
	2								b 13	0 V	m/s
	a \										10
						$\overline{}$			_		- 8
	(6)	_	_	$\overline{}$				_	* 0	U V	
	(0)			'			\prec				- 6
		$\uparrow \sim$			+		1	\setminus			- 4
	©		\sim					$\overline{}$			1
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_		_ \	<u> </u>						_		Lo
0	100	20	00	30	00	40	0	500)	600) Vm
	Frequipment Lwa Lwa Lwa Lwa	Frequency LWA Case breakor LWA Intake LWA Exhaust	Lwa	Frequency Hz Total LwA Case breakout dB(A) 63 LwA Intake dB(A) 75 LwA Exhaust dB(A) 74	Frequency	Frequency Hz Total 125 250 LwA Case breakoul dB(A) 63 44 49 LwA Intake dB(A) 75 47 62 LwA Exhaust dB(A) 74 49 64	Frequency	Frequency Hz Total 125 250 500 1k LwA Case breakoul dB(A) 63 44 49 54 58 LwA Intake dB(A) 75 47 62 66 66 LwA Exhaust dB(A) 74 49 64 67 68	Frequency Hz Total 125 250 500 1k 2k LwA Case breakoul dB(A) 63 44 49 54 58 59 LwA Intake dB(A) 75 47 62 66 66 73 LwA Exhaust dB(A) 74 49 64 67 68 70 1 Hig 2 Lov Voltag	Frequency	Frequency



Sound levels

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

- Sound level case breakout
- Sound level 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.

Accessory details Page

Filters, heater batteries and attenuators 421 on Temperature controllers for heater batteries 427, 431 Flexible ventilation ducting, grilles, adaptors, 487 on roof terminations Poppet valves 508 on Speed controllers 525 on and switches

Accessories for MV and MVZ

Flexible connector

Type 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.



Type VK 160 Ref. no. 0892 Wall mounted, automatic pressure control shutter for the air outlet. Made of white polymer.



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



Type MVS 160 Ref. no. 6074 For intake and exhaust installation on the ventilation unit.

Spigotted attenuator Type FSD 160 Ref. no. 0678

Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.

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 **Type WHR 160** Ref. no. 9481 For in-duct installation.

Accessories for all types

Back draught shutter Ref. no. 5669 Type RSK 160 Automatic, made of metal. For

Operating switch 0-1-2

in-duct installation.

Type MVB Ref. no. 6091 With on/off, low and high speed functions.

Transformer speed controller Type TSW Five-step, for surface mounting.

Electronic speed controller Type ESU/ESA

For flush-/surface mounting.

follow-up time.

Electronic run-on switch Ref. no. 0342 Type ZNE With continuously adjustable



























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
- 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.

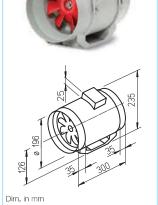
■ Motor

Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.

■ Motor protection

Thermal overload protection fitted in the winding as standard.

MV – Single-stage Swing-out in-line fan for space-saving installation in ducting.



■ Specification MV □ Impeller

Optimised for high pressure and volumetric performance, made from high grade polymer.

☐ Electrical connection

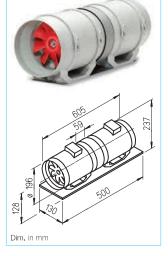
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.

☐ 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

MVZ - Two-stage

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



Specification MVZ

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

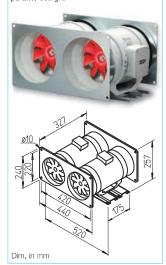
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using <u>one</u> operation switch MVB (accessory) or <u>one</u> change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed 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

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.

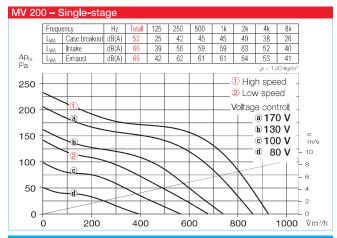
□ Speed control / Connection

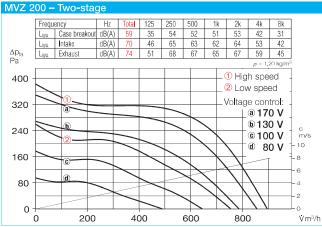
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using <u>one</u> operation switch MVB (accessory) or <u>one</u> change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram.

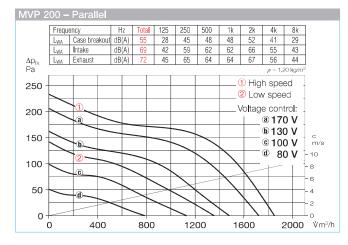
When using a speed controller, the high speed amps have to be allowed for.

Туре	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressu case breakout		Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transform contr 5-st	oller	Electro speed controll flush/su	ler, stepless
		mm	V m³/h	min ⁻¹	dB (A)	dB (A)	W	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.
Single-stag	Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44														
MV 200	6055	200	680/930	1780/2740	36/44	50/58	45/75	0.22/0.37	844.1	60	3.7	TSW 1,5	1495	ESU 1/ESA 1	0236/0238
Two-stage	Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44														
MVZ 200	6062	200	755/900	1780/2740	44/51	55/62	90/150	0.44/0.74	845.1	60	8.5	TSW 1,5	1495	ESU 1/ESA 1	0236/0238
Parallel-tw	Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44														
MVP 200	6069	_	1360/1860	1780/2740	39/47	53/61	90/150	0.44/0.74	845.1	60	11.2	TSW 1,5	1495	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.







Sound levels

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

- Sound level case breakout
- Sound level 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.

Accessory details Page Filters, heater batteries

and attenuators 421 on Temperature controllers for heater batteries 427, 431 Flexible ventilation ducting, grilles, adaptors, 487 on roof terminations Poppet valves 508 on Speed controllers 525 on and switches

Accessories for MV and MVZ

Flexible connector

Type 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.



Type VK 200 Ref. no. 0758 Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer. Colour: Light



Ref. no. 0750 Type RAG 200 To position in front of air inlets and outlets in facades. Made of polymer; colour: Light grey.

Guard

Type MVS 200 Ref. no. 6075 For intake and exhaust installation on the ventilation unit.

Spigotted attenuator Type FSD 200

Ref. no. 0679 Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.

Air filter box

galvanised steel.

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

Warm-water heater batteries **Type WHR 200** Ref. no. 9482 For in-duct installation.

Accessories for all types

Back draught shutter Ref. no. 5074 Type RSK 200 Automatic, made of metal. For in-duct installation.

Operating switch 0-1-2

Type MVB Ref. no. 6091 With on/off, low and high speed functions.

Transformer speed controller Type TSW Five-step, for surface mounting.

Electronic speed controller Type ESU/ESA see table

Electronic run-on switch

- for MV

Type ZNE Ref. no. 0342 for MVZ and MVP

Ref. no. 1277 Type ZT



























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
- □ 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

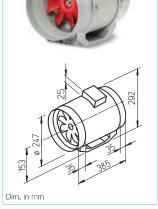
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.

■ 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

installation in ducting.



Specification MV

Impeller

Optimised for high pressure and volumetric performance, made from high grade polymer.

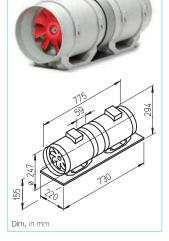
□ Electrical connection

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

For higher pressure performance: Two in-line fans mounted in series



Specification MVZ

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.

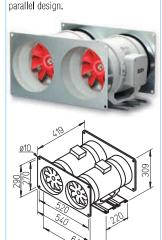
■ Electrical connection

Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one 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

For higher volume output in a compact



Specification MVP

Dim. in mm

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.

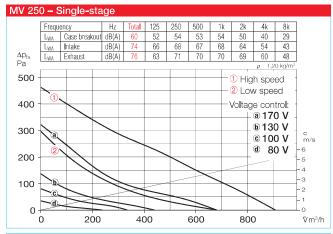
□ Speed control / Connection

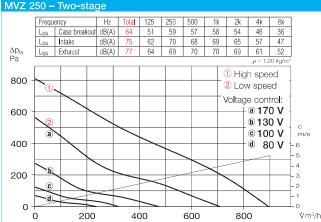
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram.

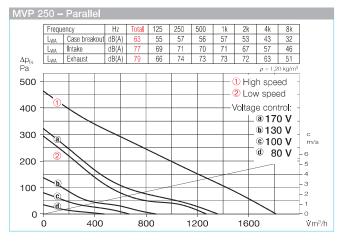
When using a speed controller, the high speed amps have to be allowed for.

Туре	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressu case breakout	re level in 1 m air noise min./max.	Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transform contro 5-st	oller	Electronic* speed controller, step flush/surface	
		mm	V m³/h	min ⁻¹	dB (A)	dB (A)	W	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.
Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44															
MV 250	6056	250	680/910	1850/2550	40/52	53/66	85/110	0.40/0.50	844.1	60	7.0	TSW 1,5	1495	ESU 1/ESA 1	0236/0238
Two-stage	Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44														
MVZ 250	6063	250	710/900	1850/2550	46/56	57/67	170/220	0.80/1.00	845.1	60	17.6	TSW 1,5	1495	ESU 3/ESA 3	0237/0239
Parallel-tw	in-unit, 230	V, 50 Hz, ca _l	pacitor moto	r, IP 44											
MVP 250	6070	_	1280/1820	1850/2550	43/55	56/69	170/220	0.80/1.00	845.1	60	18.7	TSW 1,5	1495	ESU 3/ESA 3	0237/0239

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







Sound levels

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

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Accessory details Page

Filters, heater batteries and attenuators 421 on Temperature controllers for heater batteries 427, 431 Flexible ventilation ducting, grilles, adaptors, 487 on roof terminations Poppet valves 508 on Speed controllers 525 on and switches

Accessories for MV and MVZ

Flexible connector

Type 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.



Type VK 250 Ref. no. 0759 Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer. Colour: Light

External wall grille

Ref. no. 0751 Type RAG 250 To position in front of air inlets and outlets in facades. Made of polymer; colour: Light grey.

Guard

Type MVS 250 Ref. no. 6076 For intake and exhaust installation on the ventilation unit.

Spigotted attenuator Type FSD 250 Ref. no. 0680

Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.

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 **Type WHR 250** Ref. no. 9483 For in-duct installation.

Accessories for all types

Back draught shutter Ref. no. 5673 Type RSK 250 Automatic, made of metal. For in-duct installation.

Operating switch 0-1-2

Type MVB Ref. no. 6091 With on/off, low and high speed functions.

Transformer speed controller Type TSW Five-step, for surface mounting.

Type ESU/ESA For flush-/surface mounting.

Thermoelectr. run-on switch Ref. no. 1277 Type ZT With variable run-on time.

























Electronic speed controller