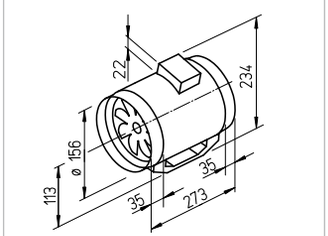
MV 160 – Single level

MVZ 160 – Two level

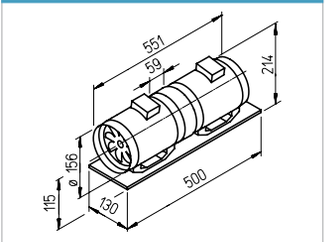
MVP 160 – Parallel

Dimensions MV 160



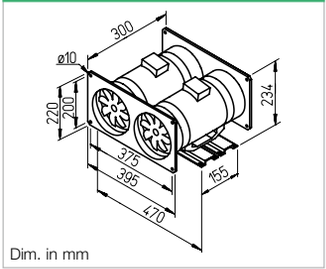
Dim. in mm

Dimensions MVZ 160



Dim. in mm

Dimensions MVP 160



Dim. in mm

High pressure performance and high volume output with space-saving dimensions.
Specifically designed for direct insertion in duct systems. Various applications in commercial, industrial and residential areas.

Special features

- Low space requirement and minimal installation costs due to linear throughflow.
- No need for elaborate deflectors.
- Connectors on inlet and outlet side correspond to standard duct Ø.
- Comes with two performance levels; 100% speed-controllable as standard.
- Can be used in any position.
- Long-life ball bearings, designed for 30000 operating hours.
- Problem-free maintenance and cleaning without dismantling the duct system due to the removable fan unit.
- Fan unit with terminal box can be rotated into any position.
- Integrated mounting bracket for easy installation to walls and ceilings.

Common features

Casing
The fan unit can be removed from the duct casing with integrated mounting bracket by loosening the clamp. All components are made of impact-resistant and corrosion-resistant plastic. Colour: Light grey.

Power control
With two performance levels as standard using an external operating switch MVB (accessories). Also with continuously variable control through electronic controller or five-step transformer.

Motor
Enclosed, ball bearing mounted motor with humidity protection, insulation class F, for continuous operation, maintenance-free and radio interference-free.

Motor protection
Through thermal overload protection in the winding.

Noise
See right page.

Description MV

Impeller
Optimised for high pressure performance and volume output, made of high-quality plastic.

Electrical connection
Spacious terminal box (IP44) on outside of casing; can be rotated into any position.

Installation
No restrictions in any position (horizontal, vertical, diagonal) through corresponding installation for supply or extract ventilation. Installation in duct system, preferably away from the room to be ventilated for less noise.

Description MVZ

Two MV fans arranged in series, connected by a sleeve and mounted on a shared base plate. Delivered as a ready-to-install kit.
The pressure performance is approximately doubled through series operation.

Impeller
As described on the left.

Electrical connection
Each fan is equipped with its own terminal box on the outside of the casing.
A coupling relay must be provided according to the wiring diagram for controlling the two fans at two performance levels via one operating switch MVB (accessories) or one on-site changeover switch.
The high performance level must be connected when using speed controllers.

Installation
No restrictions in any position (horizontal, vertical, diagonal) through corresponding installation for supply or extract ventilation. Installation in duct system, preferably away from the room to be ventilated for less noise.

Description MVP

Two MV fans arranged in parallel are connected together by inlet and outlet side-mounted rectangular duct connection plates and screwed to mounting rails. Delivered as a ready-to-install kit.
The volume output doubles during parallel operation (joint control).

Impeller
As described on the left.

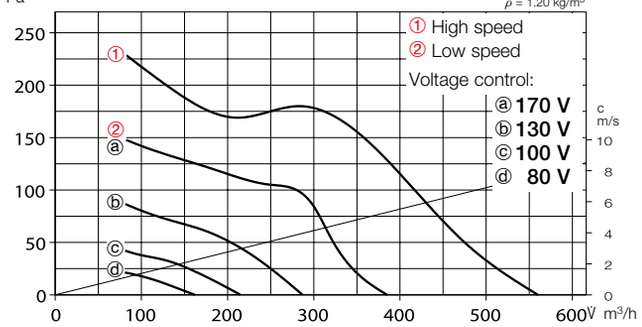
Power control/Connection
Each fan is equipped with its own terminal box on the outside of the casing.
A coupling relay must be provided according to the wiring diagram for controlling the two fans at two performance levels via one operating switch MVB (accessories) or one on-site changeover switch.
The high performance level must be connected when using speed controllers.
Each fan can also be individually controlled and connected to the second fan if necessary. In order to prevent backflow in this case, two duct shutters (type RSK, accessories) must be provided on the outlet side.

Type	Ref. no.	Connection Ø	Flow rate min./max.	Speed min./max.	Sound pres. lev at 1m: Case radiation	Sound pres. lev at 1m: Air noise min./max.	Power consum. min/max.	Current consum. min/max.	Wiring diagram	Max. air flow temp.	Wgt net aprx.	Transformer speed controller 5-step: Type	Transformer speed controller 5-step: Ref. no.	Electronic* speed controller, cont. variable flush/ surf-mount.: Type	Electronic* speed controller, cont. variable flush/ surf-mount.: Ref. no.
		mm	V̇ m³/h	min⁻¹	dB (A)	dB (A)	W	A	No.	+ °C	kg				
Single level round duct fan, 230 V, 50 Hz, Capacitor motor, IP44															
MV 160	06054	160	390/550	1520/2290	41/49	57/65	40/58	0.18/0.26	844.1	60	2.3	**TSW 0.3**	03608	**ESU1/ESA1**	00236/00238
Double pressure **Two level fan unit, 230 V, 50 Hz, Capacitor motor, IP44**															
MVZ 160	06061	160	390/550	1520/2290	47/55	59/67	80/116	0.36/0.52	845.1	60	5.8	**TSW 1.5**	01495	**ESU1/ESA1**	00236/00238
Double volume **Parallel twin unit, 230 V, 50 Hz, Capacitor motor, IP44**															
MVP 160	06068	–	780/110	1520/2290	44/52	60/68	80/116	0.36/0.52	845.1	60	7.7	**TSW 1.5**	01495	**ESU1/ESA1**	00236/00238

* Transformer control units must be provided in noise-relevant cases. Electronic phase angle control can cause disturbing magnetisation humming.

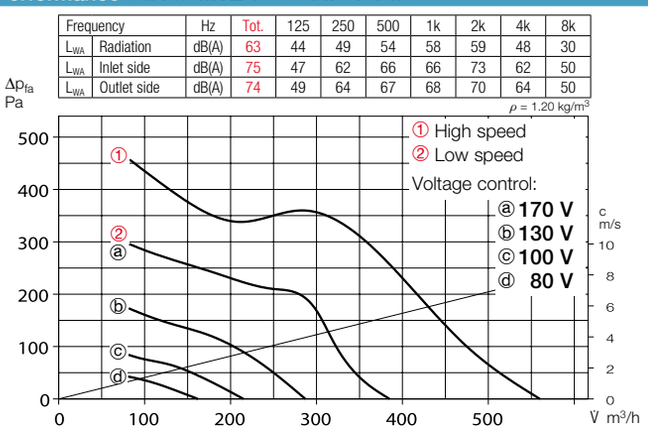
Performance curves MV 160 – Single level

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	57	37	43	49	53	51	44	28
L_{WA}	Inlet side	dB(A)	73	41	58	62	63	71	58	48
L_{WA}	Outlet side	dB(A)	71	43	60	64	64	68	59	47



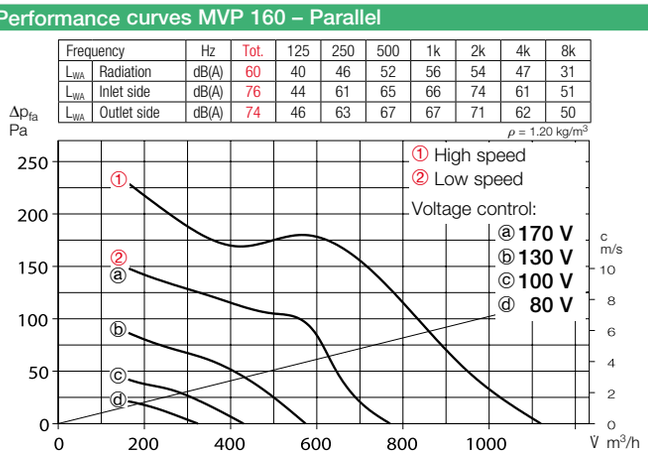
Performance curves MVZ 160 – Two level

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	63	44	49	54	58	59	48	30
L_{WA}	Inlet side	dB(A)	75	47	62	66	66	73	62	50
L_{WA}	Outlet side	dB(A)	74	49	64	67	68	70	64	50



Performance curves MVP 160 – Parallel

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	60	40	46	52	56	54	47	31
L_{WA}	Inlet side	dB(A)	76	44	61	65	66	74	61	51
L_{WA}	Outlet side	dB(A)	74	46	63	67	67	71	62	50



Noise

The total level and range are specified above the performance diagram for

- ☐ case-radiated sound power.
- ☐ Inlet/outlet side sound power in dB(A).
- ☐ The case-radiated noise and inlet/outlet side air noise as sound pressure at 1 m (free field conditions) are also specified in the type table.

Accessory details — Page

Accessories for MV and MVZ

Flexible connecting sleeve
FM 160 Ref. no. 01684
Includes 2 hose clamps; for installation between fan and duct system. Prevents structure-borne noise transmission and bridges installation tolerances.
2 pcs required for inlet and outlet side application.

External wall shutter
VK 160 Ref. no. 00892
Automatic overpressure shutter for external wall connection of air outlet opening. Made of white plastic.

External wall cover grille
G 160 Ref. no. 00893
For covering and insertion in round ventilation openings. Made of break-resistant, white plastic.

Protection grille
MVS 160 Ref. no. 06074
For inlet and outlet side installation on fan.

Flexible cross talk silencer
FSD 160 Ref. no. 00678
Made of aluminium pipe with double-sided plug-in connectors. Sound insulation lining 50 mm thick, installation length 1 m.

Air filter box
LFBR 160 Coarse 70%* 08578
Large-surface, installation in round duct system.

Electric heating element
EHR-R 1.2/160 1.2 kW No. 09434
In duct casing made of galvanised steel sheet.

Warm water heating element
WHR 160 Ref. no. 09481
For installation in duct system.

Accessories for all types

Duct shutter
RSK 160 Ref. no. 05669
Automatic, made of metal.
For installation in pipeline.

Operating switch 0-1-2
MVB Ref. no. 06091
With functions On/Off, Low and high speed.

Transformer speed controller
TSW See type table
Five-step, for surface installation.

Electronic speed controller
ESU/ESA See type table
For flush/surface installation.

Electronic turn-off delay switch
ZNE Ref. no. 00342
With continuously variable turn-off delay periods.

* See product page for detailed description