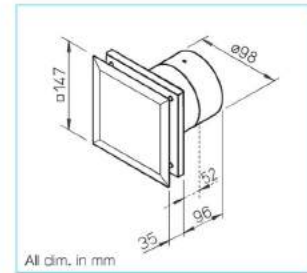
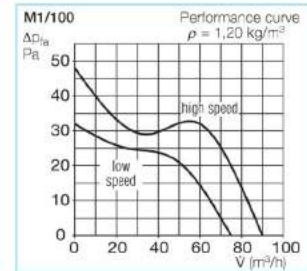


M1/100



All dim. in mm



■ Mini fans of highest quality. Design and performance of the MiniVent® M1/100 sets the standard for the mini fans range.

The excellent design of the MiniVent® M1/100 blends in everywhere beautifully. The compact and attractively designed fascia shields the view of the fan interior completely.

All M1/100 models are supplied with 2 speeds and with airtight back draught shutter as standard.

The noise level is extremely low due to Helios ultraSilence® technology.

Available with interval function, overrun timer or automatic function like motion sensor or humidity controlled operation. This responds with intelligent electronics and prevents development of mildew effectively.

Suitable for all ventilation applications in bathrooms, toilets and other small rooms.

■ Features

- Lowest power consumption of only 5 Watt at vol. = 75 m³/h.
- Extremely quiet due to the ultraSilence® technology; just 25 dB(A)* at vol. = 75 m³/h.
- Pressure capacity: 60 m³/h air flow rate at 31 Pa resistance, 90 m³/h free discharge, ΔP max. 45 Pa.
- Where space is limited the guide vane of M1/100 can be simply removed. Thus reducing the installation depth to 52 from 96 mm.
- Compact dimensions for flush mounted installation in walls, shafts or ceilings with nominal dia. 100 mm.
- All components made from high quality white polymers.
- The motor design and ball bearings are selected for long-term durability, steady performance and lifelong operational reliability.
- Motor supplied with thermal overload protection, providing maintenance and trouble-free, continuous operation.
- Suitable for use in zone 1 of bathrooms according to DIN VDE 0100-701.
- The electrical supply cables to the unit may be recessed or surface mounted.
- Practical quick assembly using the push on cable connectors for the electrical connection.

Type	M1/100	M1/100 N/C	M1/100 F	M1/100 P
Ref. no.	6171	6172	6175	6174
Model	Standard model equipped with two speeds	As M1/100, with adjustable overrun and interval timer ¹⁾	As M1/100, with automatic humidity control ^{1) 4)}	As M1/100, with PIR motion sensor ¹⁾
Run on time, min. optionally on high or low speed	—	6, 10 15, 21 adjustable	6, 12 18, 24 adjustable ³⁾	6
Interval operation, hrs. optionally on high or low speed	—	0, 8, 12, 24 adjustable	—	—
Delayed start, approx. sec.	—	0, 45, 90, 120	0 or 45 ³⁾	—
Back draught shutter, mech., remov.	Yes	Yes	Yes	Yes
Air flow volume (FID) m³/h	90 / 75	90 / 75	90 / 75	90 / 75
Impeller Ø mm	92	92	92	92
R.P.M. min ⁻¹	2650 / 2250	2650 / 2250	2650 / 2250	2650 / 2250
Voltage/Frequency 50 Hz	230 V	230 V	230 V	230 V
Power consumption W	9 / 5	9 / 5	9 / 5	9 / 5
Rated current A	0.06 / 0.04	0.06 / 0.04	0.06 / 0.04	0.06 / 0.04
Sound pressure level dB(A) in 3 m ²⁾	30 / 25	30 / 25	30 / 25	30 / 25
Wiring diagram no.	915	917	919	918
Electrical power supply NYM-O in mm ²	3 x 1,5	4 x 1,5	4 x 1,5	3 x 1,5
Protection cat. II, protection	IP 45	IP 45	IP 45	IP 45
Max. air flow temperature	+40 °C	+40 °C	+40 °C	+40 °C
Weight approx. kg	0.80	0.80	0.80	0.80

¹⁾ All electronic functions optionally on high or low speed - adjustable.

²⁾ Freefield conditions.

³⁾ With manual operation.

⁴⁾ Limit value 60, 70, 80, 90% adjustable.



Nice and clean

Since every fan gets dirty sooner or later, the M1 fascia was designed in a way that air flows in on all sides. The design of the fascia elegantly avoids the internal view of the fan opening, even when dirty. M1 blends harmoniously into any environment. The smooth-surfaced facade always remains easy to maintain and clean.



Intelligent humidity control

The humidity control of the M1/100 F starts the fan automatically with increase of humidity. The fan operates until the humidity is reduced below the set point. With constantly high humidity the fan changes into a defined interval operation.



Connected at lightning speed

A generously dimensioned, circular cable storage space, the simple rotatability of the casing and the push on cable connectors assist the electrical connection enormously. Ball bearings (approx. 40 000 hours running) allow the installation in any position, also directly in the ceiling.



Flexible installation depth

Removable guide vane reduces installation depth from 96 to 52 mm. Can be installed with or without back draught shutter.



Suitable for use in zone 1

MiniVent® M1/100 provides protection to IP 45, insulation class II and may be used in accordance with DIN VDE 0100-701 in zone 1 bathrooms.



Installation in zone 1 allowed (according to DIN VDE 0100-701).

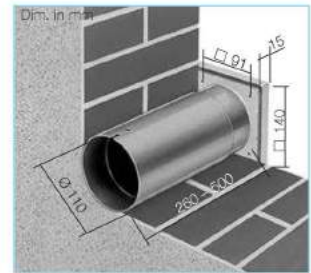
Wall mounting kit

Type WES 100 Ref. no. 0717

Two telescopic polymer sleeves guide the air through cavity walls and serve as wall liners.

Outside wall termination possible in two ways:

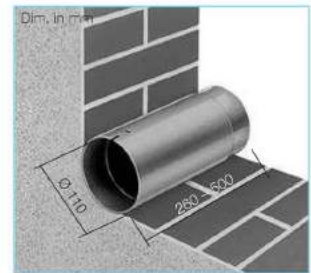
- Three bladed automatic back draught louvre shutter.
- Fixed grille. All parts made of high quality polymer.



Telescopic wall sleeve

Type TWH 100 Ref. no. 6352

As WES, however without back draught louvre shutter and grille.



Operation switch 0-1-2 for standard model

Type MVB Ref. no. 6091

Two speed and on/off switch.

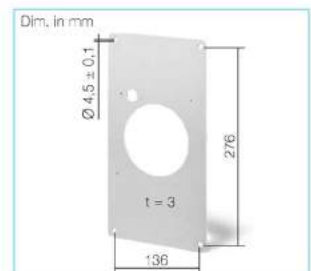
Current 3 A (ind.)
Voltage 230 V, 1-, 50/60 Hz
Protection to IP 30
Installation in standard gang boxes
Dimensions mm W 80 x H 80 x D 15
Weight approx. 0.1 kg



Mounting plate

MBR 90/160/300 Ref. no. 0281

Made from high quality, impact resistant polymer. Colour: white. Ideal for refurbishment of old housing. Easy installation of all M1-models in existing rectangular shaft openings. To make the plate almost invisible it can be painted or wallpapered.



Spacer frame

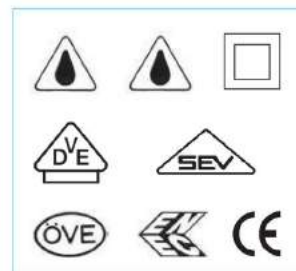
Type MF 100 Ref. no. 6188

To reduce the installation depth in thin walls, narrow duct and tight 90° bends. Also suitable for the assembly of a pull cord switch (accessories). More MF 100 can be put on top of each other, if necessary.

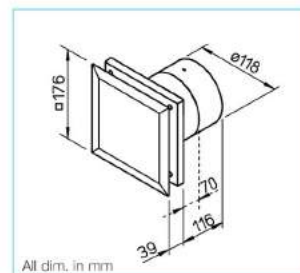


Accessory details Page

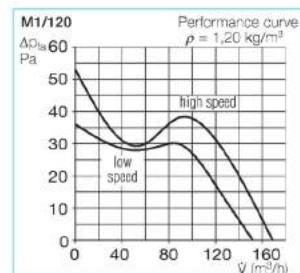
Flexible ducting, roof outlets and grilles	487 on
Air intakes	512 on



M1/120



All dim. in mm



■ Mini fans of highest quality. Design and performance of the MiniVent® M1/120 sets the standard for the mini fans range.

The excellent design of the MiniVent® M1/120 blends in everywhere beautifully. The compact and attractively designed fascia shields the view of the fan interior completely.

All M1/120 models are supplied with 2 speeds and with airtight back draught shutter as standard.

The noise level is extremely low due to Helios ultraSilence® technology.

Available with interval function, overrun timer or automatic function like motion sensor or humidity controlled operation. This responds with intelligent electronics and prevents development of mildew effectively.

Suitable for the ventilation of small to medium-sized rooms in private, commercial and industrial areas.

■ Features

- Lowest power consumption of only 10 Watt at vol. = 150 m³/h.
- Extremely quiet due to the ultraSilence® technology; just 32 dB(A)* at vol. = 150 m³/h.
- Pressure capacity: 120 m³/h air flow rate at 31 Pa resistance, 170 m³/h free discharge, ΔP max. 53 Pa.
- Where space is limited the guide vane of M1/120 can be simply removed. Thus reducing the installation depth to 116 from 70 mm.
- Compact dimensions for flush mounted installation in walls, shafts or ceilings with nominal dia. 120/125 mm.
- All components made from high quality white polymers.
- The motor design and ball bearings are selected for long-term durability, steady performance and lifelong operational reliability.
- Motor supplied with thermal overload protection, providing maintenance and trouble-free, continuous operation.
- Suitable for use in zone 1 of bathrooms according to DIN VDE 0100-701.
- The electrical supply cables to the unit may be recessed or surface mounted.
- Practical quick assembly using the push on cable connectors for the electrical connection.

Type	M1/120	M1/120 N/C	M1/120 F	M1/120 P
Ref. no.	6360	6361	6364	6363
Model	Standard model equipped with two speeds	As M1/120, with adjustable overrun and interval timer ¹⁾	As M1/120, with automatic humidity control ¹⁾⁴⁾	As M1/120, with PIR motion sensor ¹⁾
Run on time, min. optionally on high or low speed	—	6, 10, 15, 21 adjustable	6, 12, 18, 24 adjustable ³⁾	6
Interval operation, hrs. optionally on high or low speed	—	0, 8, 12, 24 adjustable	—	—
Delayed start, approx. sec.	—	0, 45, 90, 120	0 or 45 ³⁾	—
Back draught shutter, mech., remov.	Yes	Yes	Yes	Yes
Air flow volume (FID) m³/h	170 / 150	170 / 150	170 / 150	170 / 150
Impeller Ø mm	111	111	111	111
R.P.M. min ⁻¹	2350 / 2050	2350 / 2050	2350 / 2050	2350 / 2050
Voltage/Frequency 50 Hz	230 V	230 V	230 V	230 V
Power consumption W	13 / 10	13 / 10	13 / 10	13 / 10
Rated current A	0,09 / 0,08	0,09 / 0,08	0,09 / 0,08	0,09 / 0,08
Sound pressure level dB(A) in 3 m ²⁾	36 / 32	36 / 32	36 / 32	36 / 32
Wiring diagram no.	915	917	919	918
Electrical power supply NYM-O in mm ²	3 x 1,5	4 x 1,5	4 x 1,5	3 x 1,5
Protection cat. II, protection	IP 45	IP 45	IP 45	IP 45
Max. air flow temperature	+40 °C	+40 °C	+40 °C	+40 °C
Weight approx. kg	1,05	1,05	1,05	1,05

¹⁾ All electronic functions optionally on high or low speed - adjustable.

²⁾ Freefield conditions.

³⁾ With manual operation.

⁴⁾ Limit value 60, 70, 80, 90% adjustable.



■ **Nice and clean**

Since every fan gets dirty sooner or later, the M1 fascia was designed in a way that air flows in on all sides. The design of the fascia elegantly avoids the internal view of the fan opening, even when dirty.

M1 blends harmoniously into any environment. The smooth-surfaced facade always remains easy to maintain and clean.



■ **Intelligent humidity control**

The humidity control of the M1/120 F starts the fan automatically with increase of humidity. The fan operates until the humidity is reduced below the set point. With constantly high humidity the fan changes into a defined interval operation.



■ **Connected at lightning speed**

A generously dimensioned, circular cable storage space, the simple rotatability of the casing and the push on cable connectors assist the electrical connection enormously.

Ball bearings (approx. 40 000 hours running) allow the installation in any position, also directly in the ceiling.



■ **Flexible installation depth**

Removable guide vane reduces installation depth from 116 to 70 mm. Can be installed with or without back draught shutter.



■ **Suitable for use in zone 1**

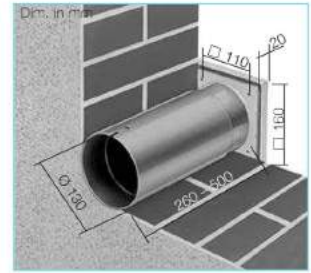
MiniVent® M1/120 provides protection to IP 45, insulation class II and may be used in accordance with DIN VDE 0100-701 in zone 1 bathrooms.



Wall mounting kit

Type WES 120 Ref. no. 0486

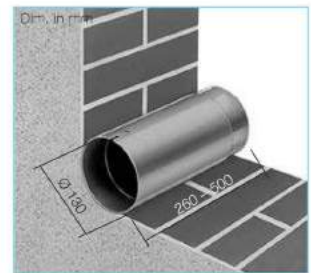
Two telescopic polymer sleeves guide the air through cavity walls and serve as wall liners. Outside wall termination is carried out by application of three bladed automatic back draught louvre shutter.



Telescopic wall sleeve

Type TWH 120 Ref. no. 6353

As WES, however without back draught louvre shutter.

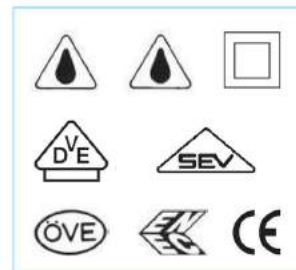


Operation switch 0-1-2 for standard model

Type MVB Ref. no. 6091

Two speed and on/off switch.

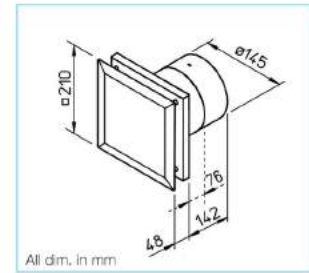
Current 3 A (ind.)
Voltage 230 V, 1~, 50/60 Hz
Protection to IP 30
Installation in standard gang boxes
Dimensions mm W 80 x H 80 x D 15
Weight approx. 0.1 kg



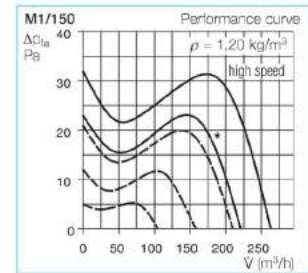
Accessory details	Page
Flexible ducting, roof outlets and grilles	487 on
Air intakes	512 on



M1/150



All dim. in mm



* low speed
--- Example speeds 0-10 V
Type for stepless regulation

■ Mini fans of highest quality. Design and performance of the MiniVent® M1/120 sets the standard for the mini fans range.

The excellent design of the MiniVent® M1/120 blends in everywhere beautifully. The compact and attractively designed fascia shields the view of the fan interior completely.

All M1/150 models are supplied with highly efficient EC motor technology, with 2 speeds and with airtight back draught shutter as standard.

The noise level is extremely low due to Helios ultraSilence® technology.

stepless speed regulation. This responds with intelligent electronics and prevents development of mildew effectively. Suitable for the ventilation of small to medium-sized rooms in private, commercial and industrial areas.

■ Features

- Lowest power consumption of only 6 Watt at vol. = 220 m³/h.
- Extremely quiet due to the ultraSilence® technology; just 35 dB(A)* at vol. = 220 m³/h.
- Pressure capacity: 180 m³/h air flow rate at 31 Pa resistance, 260 m³/h free discharge, ΔP max. 33 Pa.
- Where space is limited the guide vane of M1/150 can be simply removed. Thus reducing the installation depth to 142 from 76 mm.
- Compact dimensions for flush mounted installation in walls, shafts or ceilings with nominal dia. 150/160 mm.
- All components made from high quality white polymers.
- The motor design and ball bearings are selected for long-term durability, steady performance and lifelong operational reliability.
- Motor supplied with thermal overload protection, providing maintenance and trouble-free, continuous operation.
- Suitable for use in zone 1 of bathrooms according to DIN VDE 0100-701.
- The electrical supply cables to the unit may be recessed or surface mounted.
- Practical quick assembly using the push on cable connectors for the electrical connection.

- The 0-10 V Type has various applications due to the combination with CO₂, VOC or temperature sensors. Furthermore, the min./max. speed is fully adjustable and stepless regulation is possible with a potentiometer. The unit can also be controlled with the three-step switch or steplessly via universal control systems or electronic differential pressure / temperature controllers. A potential-free relay output is available as standard for the connection of an electrical cover flap.

Type	M1/150	M1/150 N/C	M1/150 F	M1/150 0-10 V
Ref. no.	6041	6042	6043	6044
Model	Standard model equipped with two speeds	As M1/150, with adjustable overrun and Interval timer ¹⁾	As M1/150, with automatic humidity control ^{1) 4)}	Stepless control
Run on time, min. optionally on high, low or both speeds	—	6, 10, 15, 21 adjustable	6, 10, 15, 21 adjustable ³⁾	6
Interval operation, hrs. optionally on high, low or both speeds	—	0, 8, 12, 24 adjustable	—	—
Delayed start, approx. sec.	—	0, 45, 90, 120	0, 45, 90, 120 ³⁾	—
Internal shutter, removable	Yes	Yes	Yes	Yes
Air flow volume m³/h free discharge	260 / 220	260 / 220	260 / 220	260-50
Impeller Ø mm	137	137	137	137
R.P.M. min ⁻¹	1900 / 1600	1900 / 1600	1900 / 1600	1900-980
Voltage / Frequency 50 Hz	230 V	230 V	230 V	230 V
Power consumption W	8 / 4.5	8 / 5	9 / 6	9 / min. 3.5
Rated current A	0,08 / 0,06	0,10 / 0,09	0,08 / 0,06	0,08 / min. 0,035
Sound pressure level dB(A) in 3 m ²⁾	39 / 35	39 / 35	39 / 35	max. 39
Wiring diagram no.	1080	1081	1082	1083
Electrical power supply NYM-D in mm ²⁾	3 x 1.5	4 x 1.5	4 x 1.5	2 x 1.5 ³⁾
Elec. power supply (control) LiYY in mm ²⁾	—	—	—	3 x 0.34
Protection cat. II, protection class	IP 45	IP 45	IP 45	IP 45
Max. air flow temperature	+40 °C	+40 °C	+40 °C	+40 °C
Weight approx. kg	1.20	1.20	1.20	1.20

¹⁾ All adjustable times and electronic functions optionally on high, low or both speeds - adjustable.
²⁾ Free field conditions.
³⁾ With manual operation. ⁴⁾ Limit value from 40-90 % steplessly adjustable. ⁵⁾ Additional connection cable provided for relay output.



Nice and clean

Since every fan gets dirty sooner or later, the M1 fascia was designed in a way that air flows in on all sides. The design of the fascia elegantly avoids the internal view of the fan opening, even when dirty. M1 blends harmoniously into any environment. The smooth-surfaced facade always remains easy to maintain and clean.



Intelligent humidity control

The humidity control of the M1/150 F starts the fan automatically with increase of humidity. The fan operates until the humidity is reduced below the set point. With constantly high humidity the fan changes into a defined interval operation.



Connected at lightning speed

A generously dimensioned, circular cable storage space, the simple rotatability of the casing and the push on cable connectors assist the electrical connection enormously. Ball bearings (approx. 40 000 hours running) allow the installation in any position, also directly in the ceiling.



Flexible installation depth

Removable guide vane reduces installation depth from 142 to 76 mm. Can be installed with or without back draught shutter.



Suitable for use in zone 1

MiniVent® M1/150 provides protection to IP 45, insulation class II and may be used in accordance with DIN VDE 0100-701 in zone 1 bathrooms.



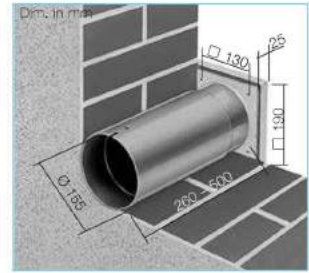
Wall mounting kit

Type WES 150 Ref. no. 0537

Two telescopic polymer sleeves guide the air through cavity walls and serve as wall liners.

Outside wall termination possible in two ways:

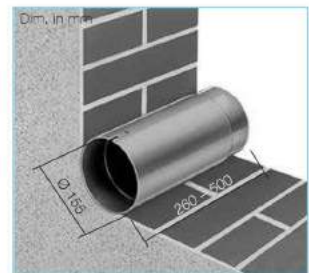
- a) Three bladed automatic back draught louvre shutter.
- b) Fixed grille. All parts made of high quality polymer.



Telescopic wall sleeve

Type TWH 150 Ref. no. 6354

As WES, however without back draught louvre shutter and grille.



Operation switch 0-1-2 for standard model

Type MVB Ref. no. 6091

Two speed and on/off switch.

Current	3 A (ind.)
Voltage	230 V, 1~, 50/60 Hz
Protection to	IP 30
Installation	in standard gang boxes
Dimensions mm	W 80 x H 80 x D 15
Weight approx.	0,1 kg



Operation switch for M1/150 N/C and M1/150 F

Type DSEL 2 Ref. no. 1306

Two speed and on/off switch.

Current	3 A (ind.)
Voltage	230 V, 1~, 50/60 Hz
Protection to	IP 30
Installation	in standard gang boxes
Dimensions mm	W 80 x H 80 x D 15
Weight approx.	0,1 kg



Speed-potentiometer for M1/150 0-10 V

On/off switch, stepless speed control.

Type PU 10 Ref. no. 1734

For flush mounting.

Installation in Standard UP-Dose

Dim. mm W 80 x H 80 x D 21 protr.

Type PA 10 Ref. no. 1735

For surface mounting.

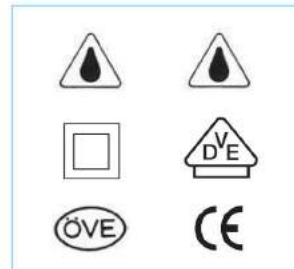
Casing Surface installation

Dim. mm W 80 x H 80 x D 65

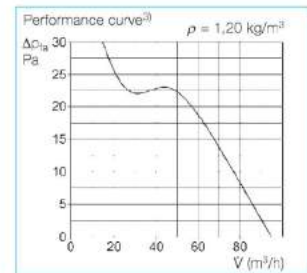
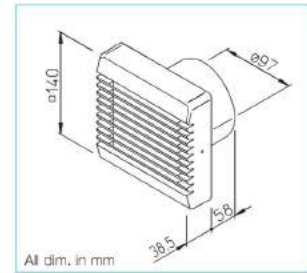


Accessory details Page

Flexible ducting, roof outlets and grilles	487 on
Air intakes	512 on
Universal control system, speed-potentiometer	539 on



HR 90 KE



■ **High-quality mini fan with electric shutter.**
The shutter blades behind the facade open and close noiselessly and automatically when the fan is switched on/off. This ensures the vibration-free connection for outside air when the ventilator is at a standstill. The long-life ball bearings ensure maintenance-free, silent operation and allow installation in any position.

Unobtrusive, HR 90 KE blends into every room ambience. The upward-facing blades shield the view of the fan interior. Suitable for all ventilation applications in bathrooms, toilets and other small rooms.

■ **Advantages of ball bearings**

- Quiet and reliable performance under continuous operation.
- Acoustically tested long life ball bearings are greased for life (approx. 30 000 hours running). Maintenance, re-greasing and cleaning of bearings are not required, saving time and money.
- Even under harshest conditions, longlife ball bearings ensure that the fans will perform quietly for life.
- Ball bearings and motor are designed for long-term durability, constant performance and life-long operational safety.
- Suitable for use in zone 1 of bathrooms according to DIN VDE 0100-701.
- Flush mounting in Ø 100 mm ducting or shafts.
- Can be used practically anywhere due to small installation depth and small dimensions.
- Attractive Soft-Line Design in pleasant white.
- All components made from impact resistant polymers.
- Contact safety to DIN EN ISO 13857.
- Motor protected by automatically resetting thermal contact. Maintenance-free and interference-free. Suitable for continuous operation.
- Cable entry can be flush or on the surface.
- Easy electrical connection through screwless clamps.
- Spring clips for fixing into Ø 100 mm ducting or screw fixing in larger openings.

Type	HR 90 KE	HR 90 KEZ
Ref. no.	0334	0335
Built-in overrun timer ¹⁾ , Overrun timer approx. 2-8 min.		ja ²⁾
Electric shutter	ja	ja
Air flow volume (FID) m³/h ³⁾	95	95
Impeller Ø mm	93	93
R.P.M. min ⁻¹	2550	2550
Voltage/Frequency 50/60 Hz	230 V	230 V
Power consumption W	17	20
Current A	0,12	0,14
Sound pressure level dB(A) in 1 m	44	44
Wiring diagram no.	483	484
Protection class II, protection	IP 45	IP 45
Max. air flow temperature	+40 °C	+40 °C
Weight approx. kg	0.60	0.62

■ **Note**
HR 90 K 12 V –
with safety extra-low voltage
upon request

¹⁾ delayed start of approximately 1 minute
³⁾ determined with extract duct, Length 2 x D

²⁾ NYM-Q 3 x 1.5 mm² required



- Mini fan HR 90 KE for ceiling installation**
 Fans with ball bearings are ideally suited for ceiling installation. Spacer frame MF 90 (accessory) prevents condensation from ducting entering the fan.



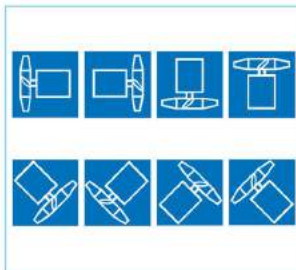
- Screwless installation**
 HR 90 KE fans have screwless clamps for electrical connection. The fascia is fixed quickly and easily through a click in mechanism. Spring clips on the sides simplify installation into Ø 100 mm ductings.



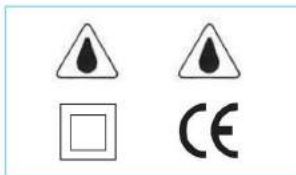
- Suitable for use in zone 1**
 HR 90 KE models provide protection to IP X5 and may be used in accordance with DIN VDE 0100-701 in zone 1 of bathrooms.



- Installation in any position**
 HR 90 KE is equipped with electric shutter and high quality long life ball bearings. This ensures a wall and ceiling installation in any position – vertical, horizontal or any position in between.



- Approvals**



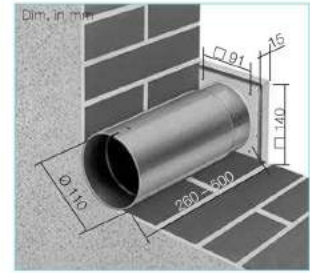
Wall mounting kit

Type WES 90 Ref. no. 0717

Two telescopic sleeves guide air through cavity walls and serve as wall liners; for flush mounted installation.

There are two possibilities for wall termination:

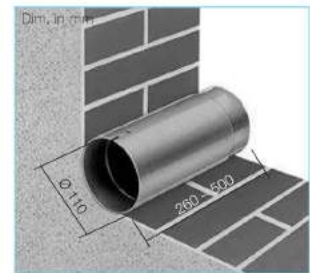
- Three bladed automatic backdraught shutter.
- Fixed grille. All parts from high-quality polymer.



Telescopic wall sleeve

Type TWH 90 Ref. no. 6352

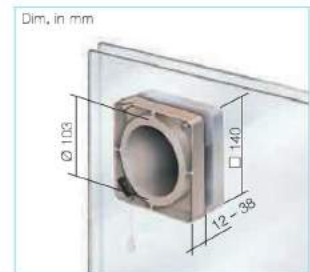
As WES, however without back draught louvre shutter and grille.



Window kit

Type FES 90 Ref. no. 0462

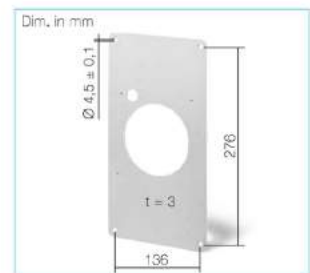
For installation of HR 90 KE models are suitable for single and double glazed windows as well as panels from 1 mm up to 40 mm thick. Outside cover only 29 mm through flat rain repellent grille. Pull cord operation.



Mounting plate

MBR 90/160/300 Ref. no. 0281

From high quality, impact resistant polymer. Colour: white. Ideal for refurbishment of old housing. Easy installation of HR 90 KE models in existing rectangular shaft openings. To make the plate invisible it can be painted or wall-papered.



Spacer frame

Type MF 90 Ref. no. 0819

Areas of application:

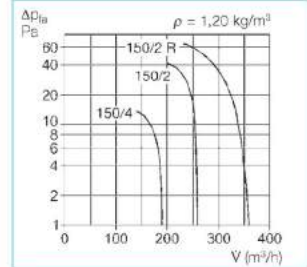
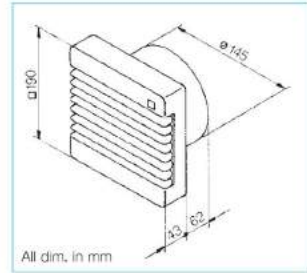
- Required for ceiling installation. MF prevents condensation entering the fan from vertical ductings.
- For easy installation of awkwardly placed electrical cables, because the fan will be lifted about 23 mm from the wall.
- For easy installation of the fan in tight shafts. MF reduces fan spigot protrusion e.g. tight 90° bends.
- For installation in thin walls the fan spigot protrusion can be reduced as follows:
 With 1 spacer frame to 35 mm.
 With 2 spacer frames to 7 mm.
 Colour: alpine white.



Accessory details Page

Flexible ducting, roof outlets and grilles	487 on
Air intakes	512 on
Speed controllers, switches and overrun timer	525 on

HVR 150



■ The HelioVent® fans are designed to ventilate smaller to mid-sized domestic, commercial and industrial rooms.

- The fan with ball bearings as standard guarantees
 - Installation in any position.
 - Quiet and reliable performance under continuous operation.
 - Silent and maintenance free for life.

■ **Features**

- Front grille can be removed and easily cleaned in soapy water.
- Small depth avoids possible installation difficulties.
- Suitable for wall, window and ceiling installation in any position.
- Adjustment of flow volume through stepless, electronic speed control.
- Motor protection through built-in thermal contacts.

■ **Specification**

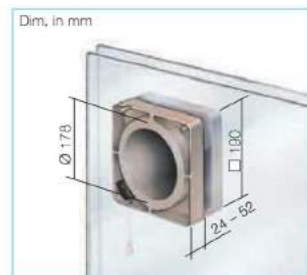
The traditional design blends well in any room. All parts, including fan casing and impeller are made from high quality polymer. White facia. Built-in neon light indicates operation. High volume and pressure characteristic using a 8 bladed impeller and guide vanes. Totally enclosed, maintenance free running low noise ball bearing motor, sealed for life, interference-free, suitable for continuous operation. Installation in any position. Contact safety to DIN EN ISO 13857. The electrical supply cables to the unit may be recessed or surface mounted.

Accessory details	Page
Roof outlets and grilles	487 on
Air intake	512 on
Speed controllers, switches and overrun timer	525 on

Window mounting kit

Type FES 150 Ref. no. 0463

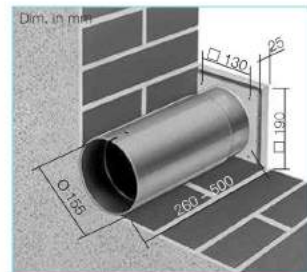
For installation with all models, preferably models with electrical internal shutter. Suitable for single and double glazed windows as well as thin walls and panels. Wall termination through flat rain repellent grille with fixed blades. Controllable with pull cord supplied, or by a remote switch, to be installed on site.



Wall mounting kit

Type WES 150 Ref. no. 0537

For flush mounted wall installation; contents: Two telescopic polymer sleeves adjustable on wall thickness and wall termination that can either be mounted with a gravity shutter or on the HVR E models with a rain repellent grille. Supplied with both elements as standard.



Telescopic wall sleeve

Type TWH 150 Ref. no. 6354

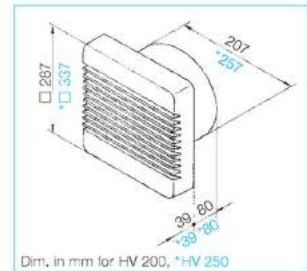
As WES, however without back draught louvre shutter and grille.

Type	HVR 150/4 E	HVR 150/2 E	HVR 150/2 RE
Ref. no.	0283	0285	0286
Built-in electric shutter	Yes	Yes	Yes
Air flow reversible	—	—	DSEL 2¹⁾ Ref. no. 1306
Air flow volume (FID) m ³ /h	180	260	360
Impeller Ø mm	140	140	140
R.P.M. min ⁻¹ ca.	1300	1800	2600
Voltage/Frequency	230 V~ / 50 Hz	230 V~ / 50 Hz	230 V~ / 50 Hz
Power consumption W	30	35	50
Current A	0.20	0.15	0.25
Sound pressure level dB(A) in 1 m	46	58	64
Wiring diagram no.	283	283	284.1
Protection class II, protection to	IP 44	IP 44	IP 44
Max. air flow temperature	+40 °C	+40 °C	+40 °C
Weight approx. kg	1.2	1.4	1.5

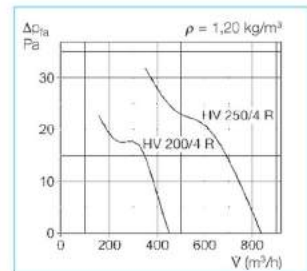
¹⁾ NYM-D 3 x 1.5 mm² cable required for reverse operation



HV 200 and HV 250



Dim. in mm for HV 200, *HV 250



- **HelioVent®.** The traditional design blends well in any stylish room: In living and dining room, in offices and conference rooms, restaurants or foyers. Universal in operation. Reversible for ventilation and extraction. Installation in wall, ceiling or any angle.

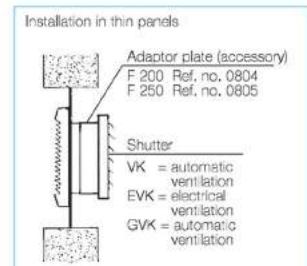
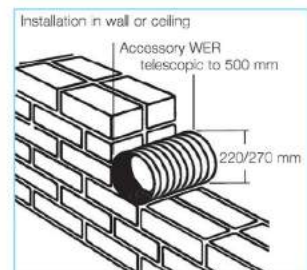
- **HelioVent® at a glance**
Compact, quiet fan unit with clever design features:
 - HelioVent® matches every location inconspicuously.
 - No view of the fan interior if it gets dirty.
 - High air flow and low air noise through low resistances.
 - Easy to care for. Facia is removable with one hand to be cleaned easily in soapy water.

- **Installation – Connection**
The installation is simple and done within minutes. Easy electrical connection through well-tried screwless clamps and large cable storage reduce effort to a minimum. Cable can be inserted flush or on the surface.

- **Speed control**
Speed controllable from 0 – 100% through voltage reduction with an electronic or transformer controller.

Accessory details	Page
Roof outlets and grilles	487 on
Air intakes	512 on
Speed controllers, switches and overrun timer	525 on

- **Specification**
 - Facia and fan casing from high quality, impact resistant alpine white polymer.
 - Totally enclosed, powerful motor with high efficiency. Corrosion-resistant in an aluminium diecast casing, protected against dust and water (protection to IP 54). With tropical protection of windings and insulation to ISO class B.
 - Overload protection through built-in thermal contacts (self resetting).
 - Noise resistant ball bearings ensure quiet operation.
 - Large terminals (protection to IP 55) and extra cable storage make installation easier
 - Impeller specifically designed for high performance with high efficiency and quiet operation.
 - Maintenance free and interference-free.
 - Contact safety to DIN EN ISO 13857 through facia.
 - Easy installation and service.



Type	HV 200/4 R	HV 250/4 R
Ref. no.	0957	0958
Air flow reversible	Yes	Yes
Air flow volume (FID) m³/h	450	840
Impeller Ø mm	200	250
R.P.M. min⁻¹	1360	1380
Voltage/Frequency	230 V- / 50 Hz	230 V- / 50 Hz
Power consumption W	30	40
Current A	0.13	0.20
Sound pressure level dB(A) bei 15 Pa in 1 m (freefield conditions)	52	55
Sound power dB(A)	60	63
Wiring diagram no.	439	439
Protection to	IP 54	IP 54
Max. air flow temperature	+40 °C	+40 °C
Weight approx. kg	2.1	2.6

Accessories	Fan type	HV 200	HV 250
Wall sleeve for flush mounted wall installation	Type Ref. no.	WER 200 0368	WER 250/225 0369
Air stream operated shutter for extraction only	Type Ref. no.	VK 200 0758	VK 250 0759
Twin swing shutter ventilation and extraction	Type Ref. no.	GVK 200 0370	GVK 250 0371
Reversing switch ventilation and extraction	Type Ref. no.	DSEL 2 ¹⁾ 1306	DSEL 2 ¹⁾ 1306
Reversing speed controller for stepless variable speed	Type Ref. no.	BSX 0240	BSX 0240
Electronic speed controller Flush mounting	Type Ref. no.	ESU 1 0236	ESU 1 0236
Electronic speed controller Surface mounting	Type Ref. no.	ESA 1 0238	ESA 1 0238

¹⁾ NYM-J 4 x 1.5 mm² required for reverse operation

