Ventilatoren voor kleine ruimten





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# Small room fans. Premium design with maximum energy efficiency.



## MiniVent® M1 with ultraSilence® technology.

Watertight building envelopes and contaminating environmental influences make mechanical ventilation indispensable nowadays. The traditional ventilation of an apartment or workplace by opening the window is no longer an effective solution and it wastes valuable energy. The small room fans MiniVent M1 stand for the highest pressure performance, lowest noise levels and maximum energy efficiency.

Two performance levels, jet water protection IPX5 and high-quality long-life ball bearings are standard equipment features with clear added value. Equipped with Helios ultraSilence technology, MiniVent operates almost silently and consumes around a third less energy than conventional small room fans. The minimalist premium design stands out in any room with understated elegance. Fully developed and made in Germany, MiniVent guarantees compliance with the highest quality standards.





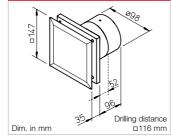


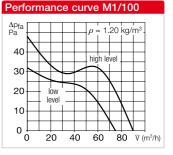






#### Dimensions M1/100







Premium class small room fans. The design and performance of the MiniVent M1/100 set new standards in the field of compact fans.

With its multi-award-winning design, the MiniVent M1/100 blends in harmoniously in all environments. The enclosed, well-designed facade completely prevents viewing of the fan clogging zone.

All M1/100 models come with 2 performance levels and tightclosing backdraught shutters as standard. The noise level is extremely low thanks to Helios ultraSilence technology.

Available with turn-off delay mode and interval mode or barrier-free automatic functions, such as the presence detector or humidity control function. The humidity control function responds to the rate of humidity increase with intelligent electronics and effectively prevents mould formation.

Universally applicable for the ventilation of bathrooms, WCs and other small rooms.

#### Features

- Extremely low power consumption of just 5 Watts at
   V = 75 m<sup>3</sup>/h.
- Ultra quiet thanks to ultraSilence technology; just 25 dB(A) at
   V = 75 m<sup>3</sup>/h.
- Pressure performance: 60 m<sup>3</sup>/h volume flow at 31 Pa resistance.
   90 m<sup>3</sup>/h free blowing, ΔP max.
   45 Pa.
- In case of restricted space conditions, the M1/100 guide wheel can be easily removed. This reduces the installation depth from 96 to just 52 mm.
- Compact dimensions for universal flush-mounted installation in walls, shafts and ceilings with NW 100.

- All parts are made of high-quality plastic, colour: white.
- Ball bearings and motor are designed for continuous loads, constant output and lifelong functional reliability.
- Motor with thermal overload protection, maintenance-free and radio interference-free.
- Applicable in wet room zone 1 according to DIN VDE 0100-701.
- Electrical supply line can be surface or flush-mounted.
- Practical quick installation due to screwless connection terminals.

Туре	M1/100	M1/100 N/C	M1/100 F	M1/100 P
Ref. no.	06171	06172	06175	06174
Version	Standard model with two speed levels	Like M1/100, with codeable turn-off delay & interval model <sup>1)</sup>	Like M1/100, with humidity control function <sup>1)4)</sup>	Like M1/100, with presence detector <sup>1)</sup>
Turn-off delay time, min. optional at high or low level	-	6, 10, 15, 21 adjustable	6, 12, 18, 24 adjustable <sup>3)</sup>	6
Interval mode, hours optional at high or low level	-	0, 8, 12, 24 adjustable	-	-
Start-up delay approx. sec.	_	0, 45, 90, 120	0 or 45 <sup>3)</sup>	—
Inner shutter, removable	Yes	Yes	Yes	Yes
Flow rate free blowing m3/h	90 / 75	90 / 75	90 / 75	90 / 75
Impeller Ø mm	92	92	92	92
Speed 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) at 3 m <sup>2)</sup>	30 / 25	30 / 25	30 / 25	30 / 25
Wiring diagram no.	915	917	919	918
Electrical supply line NYM-0 in mm <sup>2</sup>	3 x 1.5	4 x 1.5	4 x 1.5	3 x 1.5
Protection class II, protection category	IP45	IP45	IP45	IP45
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 adjustable	e at high or low performance level.	<sup>2)</sup> Free field conditions.	<sup>3)</sup> For manual operation. <sup>4)</sup> Limit	value 60, 70, 80, 90% adjustable.



#### Beautiful and clean

Air flows into the M1 from all sides. The front facade is completely closed and elegantly conceals the bothersome clogging zone in conventional compact fans.

The M1 blends in harmoniously in all environments. The smoothsurfaced front facade always remains easy to maintain and clean.

#### Intelligent humidity control function

The humidity control function of type M1/100 F automatically activates the fan depending on the humidity increase rate. The turn-off delay time depends on the room humidity reduction. In case of constantly high humidity, the fan will automatically switch to interval mode.

#### Rapid connection

The electrical connection is enormously facilitated by a generously dimensioned, circumferential cable storage space on the back of the unit, the full rotatability of the casing and screwless terminals. Long-life ball bearings for 40.000 operating hours allow installation in any position, even directly in the ceiling.

Flexible installation depth

shutters.

The removeable guide wheel re-

duces the installation depth from

96 to 52 mm. Installation possi-

ble with or without backdraught

Applicable in wet room zone 1 MiniVent M1/100 complies with jet water protection IPX5, insulation protection class II and may be used in zone 1 according to

DIN VDE 0100-701.



Wall mounting kit

mounted installation.

automatic shutter.

Two telescoping plastic ducts ser-

ve as the wall/feed duct; for flush-

External wall connection possible

a) Frame with three blades as an

b) Use of the frame with fixed gril-

Like WES, but without shutter and

Operating and speed switch

With functions On/Off, low and

Installation in standard flush-mounted box

MBR 90/160/300 Ref. no. 00281

Made of high-quality, impact-resistant plastic, colour: alpine white. Ideal for use in renovations. All M1/100 models can be easily

installed in existing, rectangular shaft openings with the mounting

The panel can be fully painted or wallpapered in order to hide it.

For installation depth reduction in

case of thin walls, narrow shafts

switch (accessories). If required, multiple MF 100 can be connected

and short bends. Also suitable for the installation of a drawcord

0-1-2 for standard model

le. All parts made of high-quality

Telescopic wall sleeve

WES 100

in two ways:

plastic.

grille.

**MVB** 

Voltage

panel.

MF 100

high speed.

Load capacity

Protection category

Mounting panel

Mounting flange

to each other.

Dimensions mm

Weight approx.

**TWH 100** 

Ref. no. 00717

Ref. no. 06352

Ref. no. 06091

230 V, 1~, 50/60 Hz

W 80 x H 80 x D 15

Ref. no. 06188

3 A (ind.)

IP 30

0.1 kg

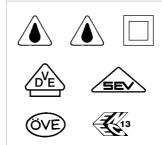










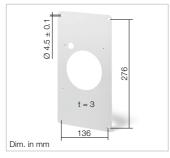


Dim. in mm Wall opening 120 mm











Accessory details	Page
Flexible ventilation ducts,	
roof outlets	
and ventilation grilles	561 ff.
Intake air elements	586 ff.





Premium class small room fans. The design and performance of the MiniVent M1/120 set new standards in the field of compact fans.

With its multi-award-winning design, the MiniVent M1/120 blends in harmoniously in all environments. The enclosed, well-designed facade completely prevents viewing of the fan clogging zone.

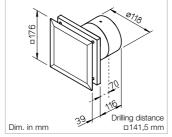
All M1/120 models come with 2 performance levels and tightclosing backdraught shutters as standard.

The noise level is extremely low thanks to Helios ultraSilence technology.

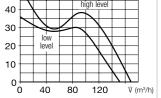
Available with turn-off delay mode and interval mode or barrier-free automatic functions, such as the presence detector or humidity control function. The humidity control function responds to the rate of humidity increase with intelligent electronics and effectively prevents mould formation.

Universally applicable for the ventilation of small to mediumsized rooms in private, commercial and industrial buildings.

#### Dimensions M1/120



#### Performance curve M1/120 ∆p<sub>fa</sub> Pa 1.20 kg/m<sup>3</sup> 50 high level



#### Features

- Extremely low power consumption of just 10 Watts at  $\dot{V} = 150 \text{ m}^3/\text{h}.$
- Ultra quiet thanks to ultraSilence technology; just 32 dB(A) at  $\dot{V} = 150 \text{ m}^3/\text{h}.$
- Pressure performance: 120 m<sup>3</sup>/h volume flow at 31 Pa resistance. 170 m<sup>3</sup>/h free blowing,  $\Delta P$  max. 53 Pa.
- □ In case of restricted space conditions, the M1/120 guide wheel can be easily removed. This reduces the installation depth from 116 to just 70 mm.
- Compact dimensions for universal flush-mounted installation in walls, shafts and ceilings with NW 120/125.

- □ All parts are made of high-quality plastic, colour: white.
- Ball bearings and motor are designed for continuous loads, constant output and lifelong functional reliability.
- Motor with thermal overload protection, maintenance-free and radio interference-free.
- Applicable in wet room zone 1 according to DIN VDE 0100-701.
- Electrical supply line can be surface or flush-mounted.
- Practical quick installation due to screwless connection terminals.

Туре	M1/120	M1/120 N/C	M1/120 F	M1/120 P
Ref. no.	06360	06361	06364	06363
Version	Standard model with two speed levels	Like M1/120, with codeable turn-off delay & interval model <sup>1)</sup>	Like M1/120, with humidity control function <sup>1) 4)</sup>	Like M1/120, with presence detector <sup>1)</sup>
Turn-off delay time, min. optional at high or low level	-	6, 10, 15, 21 adjustable	6, 12, 18, 24 adjustable <sup>3)</sup>	6
Interval mode, hours optional at high or low level	-	0, 8, 12, 24 adjustable	-	-
Start-up delay approx. sec.	—	0, 45, 90, 120	0 or 45 <sup>3)</sup>	—
Inner shutter, removable	Yes	Yes	Yes	Yes
Flow rate free blowing m3/h	170 / 150	170 / 150	170 / 150	170 / 150
Impeller Ø mm	111	111	111	111
Speed 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) at 3 m <sup>2)</sup>	36 / 32	36 / 32	36 / 32	36 / 32
Wiring diagram no.	915	917	919	918
Electrical supply line NYM-0 in mm <sup>2</sup>	3 x 1.5	4 x 1.5	4 x 1.5	3 x 1.5
Protection class II, protection category	IP45	IP45	IP45	IP45
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 adjustable	e at high or low performance level.	<sup>2)</sup> Free field conditions.	<sup>3)</sup> For manual operation.	

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



Wall opening 140 mm

#### Beautiful and clean

Air flows into the M1 from all sides. The front facade is completely closed and elegantly conceals the bothersome clogging zone in conventional compact fans

The M1 blends in harmoniously in all environments. The smoothsurfaced front facade always remains easy to maintain and clean.

#### Intelligent humidity control function

The humidity control function of type M1/120 F automatically activates the fan depending on the humidity increase rate. The turn-off delay time depends on the room humidity reduction. In case of constantly high humidity, the fan will automatically switch to interval mode.

#### Rapid connection

The electrical connection is enormously facilitated by a generously dimensioned, circumferential cable storage space on the back of the unit, the full rotatability of the casing and screwless terminals. Long-life ball bearings for 40.000 operating hours allow installation in any position, even directly in the ceiling.







#### Load capacity Voltage 230 V, 1~, 50/60 Hz Protection category IP 30 Installation in standard flush-mounted box Dimensions mm W 80 x H 80 x D 15 Weight approx. 0.1 kg

Wall mounting kit WES 120

Two telescoping plastic ducts

as an automatic shutter.

Telescopic wall sleeve

Like WES, but without shutter.

Operating and speed switch

With functions On/Off, low and

0-1-2 for standard model

TWH 120

**MVB** 

high speed.

serve as the wall/feed duct. The

external wall connection is carried

out by using the frame with blades

Ref. no. 00486

Ref. no. 06353

Ref. no. 06091

<u>{</u>/13

3 A (ind.)

Dim. in mm

Dim. in mm



Accessory details	Page
Flexible ventilation ducts,	
roof outlets	
and ventilation grilles	561 ff.
Intake air elements	586 ff.

Flexible installation depth The removeable guide wheel reduces the installation depth from 116 to 70 mm. Installation possible with or without backdraught shutters.

Applicable in wet room zone 1 MiniVent M1/120 complies with jet water protection IPX5, insulation protection class II and may be used in zone 1 according to DIN VDE 0100-701.









Premium class small room fans. The design and performance of the MiniVent M1/150 set new standards in the field of compact fans. With its multi-award-winning design, the M1/150 blends in harmoniously in all environments. The enclosed, well-designed facade completely prevents viewing of the fan clogging zone. All M1/150 models come with high efficiency EC drive technology, with 2 performance levels or continuously variable and tight-closing backdraught shutters as standard. The noise level is extremely low thanks to Helios ultraSilence technology. Available with turnoff delay mode and interval mode, continuously variable speed control or barrier-free automatic functions, such as the humidity control function. The humidity control function responds to the

rate of humidity increase with intelligent electronics and effectively prevents mould formation. Universally applicable for the ventilation of medium-sized rooms in private, commercial and industrial buildings.

#### Features

Extremely low power consumption of just 6 Watts at

 $\dot{V} = 220 \text{ m}^3/\text{h}.$ 

- Ultra quiet thanks to ultraSilence technology; just 35 dB(A) at  $\dot{V} = 220 \text{ m}^3/\text{h}.$
- Pressure performance: 180 m<sup>3</sup>/h volume flow at 31 Pa resistance. 260 m<sup>3</sup>/h free blowing,  $\Delta P$  max. 33 Pa.
- □ In case of restricted space conditions, the M1/150 guide wheel can be easily removed. This reduces the installation depth from 142 to just 76 mm.

Compact dimensions for universal flush-mounted installation in walls, shafts and ceilings with NW 150/160

Drilling distance

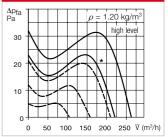
\_\_\_\_\_170 mm

Dimensions M1/150

Dim. in mm

- All parts are made of high-quality plastic, colour: white.
- Ball bearings and motor are designed for continuous loads, constant output and lifelong functional reliability.
- Motor with thermal overload protection, maintenance-free and radio interference-free.
- Applicable in wet room zone 1 according to DIN VDE 0100-701. Electrical supply line can be
- surface or flush-mounted.
- Practical quick installation due to screwless connection terminals.
- □ The 0-10 V type offers a wide range of applications in combination with CO2, VOC or temperature sensors. The min./max. speed is fully adjustable and

#### Performance curve M1/150



\* low level

Example performance levels of 0-10 V type with continuously variable control

potentiometer is also possible. Control takes place via three level switches or continuously variably via universal control systems or electronic differential pressure/temperature control-

> lers. A potential-free relay outlet is available as standard for the connection of an electrical shutter.

continuously variable control via

Туре	M1/150	M1/150 N/C	M1/150 F	M1/150 0-10 V
Ref. no.	06041	06042	06043	06044
Version	Standard model with two speed levels	Like M1/150, with codeable turn-off delay & interval model <sup>1)</sup>	Like M1/150, with humidity control function <sup>1)4)</sup>	Continuously variable control
Turn-off delay time, min., optional at high, low or both levels	-	6, 10, 15, 21 adjustable	6, 12, 18, 24 adjustable <sup>3)</sup>	6
Interval mode, hours, optional at high, low or both levels	-	0, 8, 12, 24 adjustable	-	-
Start-up delay approx. sec.	_	0, 45, 90, 120	0, 45, 90, 120 <sup>3)</sup>	
Inner shutter, removable	Yes	Yes	Yes	Yes
Flow rate free blowing m3/h	260 / 220	260 / 220	260 / 220	260-50
Impeller Ø mm	137	137	137	137
Speed min <sup>-1</sup>	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 / 0.035
Sound pressure level dB(A) at 3 m <sup>2)</sup>	39 / 35	39 / 35	39 / 35	max. 39
Wiring diagram no.	1080	1081	1082	1083
Electrical supply line NYM-0 in mm <sup>2</sup>	3 x 1.5	4 x 1.5	4 x 1.5	2 x 1.5 <sup>5)</sup>
Protection class II, protection category	IP45	IP45	IP45	IP45
Max. air flow temperature	+40 °C	+40 °C	+40 °C	+40 °C
Weight approx. kg	1.20	1.20	1.20	1.20
<sup>1)</sup> All codeable times and electronic functions	optionally adjustable at high, low or both	performance levels.	<sup>2)</sup> Free field conditions. <sup>3)</sup> For ma	nual operation.

<sup>4)</sup> Limit values from 40-90 % continuously variably adjustable. 5) Additional connection cable provided for relay output.



# Wall · REW · Ceiling Window · Heater

#### Beautiful and clean

Air flows into the M1 from all sides. The front facade is completely closed and elegantly conceals the bothersome clogging zone in conventional compact fans.

The M1 blends in harmoniously in all environments. The smoothsurfaced front facade always remains easy to maintain and clean.

#### Intelligent humidity control function

The humidity control function of type M1/150 F automatically activates the fan depending on the humidity increase rate. The turn-off delay time depends on the room humidity reduction. In case of constantly high humidity, the fan will automatically switch to interval mode.

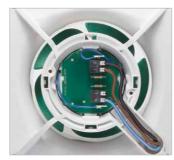
#### Rapid connection

The electrical connection is enormously facilitated by a generously dimensioned, circumferential cable storage space on the back of the unit, the full rotatability of the casing and screwless terminals. Long-life ball bearings for 40.000 operating hours allow installation in any position, even directly in the ceiling.













#### Wall mounting kit

WES 150 Ref. no. 00537 Two telescoping plastic ducts serve as the wall/feed duct; for flushmounted installation. External wall connection possible

in two ways:

a) Frame with three blades as an automatic shutter.

b) Use of the frame with fixed grille. All parts made of high-quality plastic.

#### Telescopic wall sleeve

TWH 150 Ref. no. 06354 Like WES, but without shutter and grille.

Operating and speed switch

With functions On/Off, low and

Installation in standard flush-mounted box

Ref. no. 06091

230 V, 1~, 50/60 Hz

W 80 x H 80 x D 15

Ref. no. 01306

W 80 x H 80 x D 15

Ref. no. 01734

Ref. no. 01735

Surface installation

W 80 x H 80 x D 65

W 80 x H 80 x D 21 protru.

3 A (ind.)

IP 30

0.1 kg

3 A (ind.) 230 V, 1~, 50/60 Hz

IP 30

0.1 kg

0-1-2 for standard model

**MVB** 

Voltage

high speed.

Load capacity

Protection category

Dimensions mm

Speed switch for

M1/150 N/C and M1/150 F

With functions On/Off. low and

Installation in standard flush-mounted box

Speed potentiometer for M1/150

With functions On/Off, continuous-

ly variable speed control.

For flush-mounted installation. Installation in standard flush-mounted box

For surface-mounted installation.

Weight approx.

DSEL 2

Voltage Protection category

0-10 V

PU 10

Dim. mm

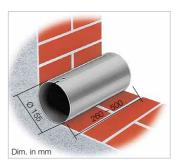
PA 10

Casing Dimensions mm

high speed. Load capacity

Dimensions mm Weight approx.











Accessory details	Page
Flexible ventilation ducts,	
roof outlets	
and ventilation grilles	561 ff.
Intake air elements	586 ff.
Universal control system,	
Speed potentiometer	613 ff.

#### • Flexible installation depth The removeable guide wheel reduces the installation depth from 142 to 76 mm. Installation possible with or without backdraught shutters.

Applicable in wet room zone 1 MiniVent M1/150 complies with jet water protection IPX5, insulation protection class II and may be used in zone 1 according to DIN VDE 0100-701.





High-quality mini fans with electrical inner shutter.

The shutter blades behind the facade open and close completely silently and automatically when the fan is activated/deactivated. This ensures a rattle-free intake air connection when the fan is at a standstill. The design with long-life ball bearings ensures maintenance-free operation, low-noise running and it allows installation in any position.

Designed to be unobtrusive, the HR 90 KE fits in any room environment. The upward facing blades prevent viewing of the fan clogging zone. Universally applicable for the ventilation of bathrooms, WCs and other small rooms.

#### Highlights

- Smooth running and functionally reliable, even in continuous operation.
- Maintenance, relubrication and cleaning are unnecessary. The ball bearings have a lubricant supply which is adequate for their entire service life of approx. 30.000 operating hours.
- The noise-tested long-life ball bearings guarantee lifelong smooth running without any disturbing squeaking, even under the most difficult operating conditions.
- The ball bearings and motor are designed for continuous loads, constant output and lifelong functional reliability.

- Applicable in wet room zone 1 according to DIN VDE 0100-701.
- Flush-mounted installation in Rohre und Schächte mit NW 100.
- Applicable practically anywhere due to short installation depth and small dimensions.
- Attractive softline design in pleasant white.
- All casing parts made of highquality plastic.
- Contact protection according to DIN EN ISO 13857.
- Motor with thermal overload protection, maintenance-free and radio interference-free, for continuous operation.

with safety extra-low voltage

upon request

Reference

- Electrical supply line can be surface or flush-mounted.
- Practical quick installation due to screwless terminals for electrical connection.
- Plug claw connection for insertion in ducts 100 mm or screw fastening in larger openings.

Туре	HR 90 KE	HR 90 KEZ
Ref. no.	00334	00335
Built-in turn-off delay switch <sup>1)</sup> , Turn-off delay time approx. 2-8 min.	_	Yes 2)
Electrical inner shutter	Yes	Yes
Flow rate free blowing m <sup>3</sup> /h <sup>3</sup>	95	95
Impeller Ø mm	93	93
Speed min-1	2550	2550
Voltage / Frequency 50/60 Hz	230 V	230 V
Power consumption W	17	20
Rated current A	0.12	0.14
Sound pressure level dB(A) at 1 m	44	44
Wiring diagram no.	483	484
Protection class II, protection category	IP45	IP45
Max. air flow temperature	+40 °C	+40 °C
Weight approx. kg	0.60	0.62

#### <sup>1)</sup> Initiates start-up delay of approx. 1 min.

<sup>2)</sup> NYM-0 3 x 1.5 mm<sup>2</sup> required.

#### ired. 3) Calculated with outlet side duct, length 2 x D.



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#### Mini fans HR 90 KE especially for ceiling installation

Ball bearing mounted fans are best suited for vertical installation in the ceiling. The mounting flange MF 90 (accessories) prevents the ingress of condensate into the fans from vertical pipes.

#### Screwless installation

HR 90 KE have screwless terminals for electrical connection. The facade can be quickly attached due to a snap-in mechanism. Side spring clips facilitate installation in ducts with NW 100.

Applicable in wet room zone 1 The HR 90 KE models comply with protection category IP X5 (jet water protection) and may be used in zone 1 according to DIN VDE 0100-701.

#### Installation in any position HR 90 KE is equipped with

electrical inner shutter and highquality long-life ball bearings as standard.

This allows wall and ceiling installation in any position - vertical, horizontal or diagonal.

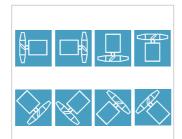
#### Test marks

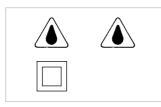






Installation possible in zone 1 (according to DIN VDE 0100-701).





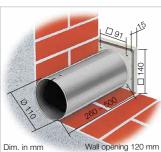
### Wall mounting kit

WES 90 Ref. no. 00717 Two telescoping plastic ducts serve as the wall/feed duct; for flush-mounted installation. External wall connection possible in two ways: a) Frame with three blades as an automatic shutter.

b) Use of the frame with fixed grille. All parts made of high-quality plastic.

#### Telescopic wall sleeve

**TWH 90** Ref. no. 06352 Like WES, but without shutter and grille.





#### Window mounting kit

**FES 90** Ref. no. 00462 For the installation of HR 90 KE models in single and double glazed windows, thin walls and panels. Possible pane / wall thickness 1 to 40 mm. External cover with flat rain-repellent grille just 29 mm thick. Drawcord operation. Protection category IP20.

## Mounting panel

MBR 90/160/300 Ref. no. 00281 Made of high-quality, impact-resistant plastic, colour: alpine white. Ideal for use in renovations. HR 90 KE models can be easily installed in existing, rectangular shaft openings with the mounting panel.

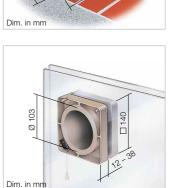
The panel can be fully painted or wallpapered in order to hide it.

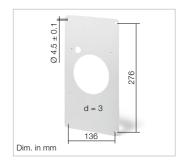
#### Mounting flange

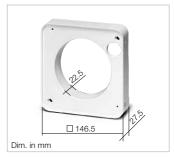
MF 90 Ref. no. 00819 Areas of application:

- 1. Required for ceiling installation. MF prevents the ingress of condensate into the fan from vertical extract air ducts.
- 2. For the simple installation of connection cables in case of an inconvenient wall outlet, because the fan is raised from the wall by 23 mm.
- 3. For the simple installation of the fan in narrow shafts. In case of 90° bend with a short duct connection, the MF reduces the installation depth of the fan.
- 4. In case of installation in thin walls, the installation depth of the fan can be reduced as follows: To 35 mm with 1 mounting flange.

To 7 mm with 2 mounting flanges. Colour: Alpine white.







Accessory details	Page
Flexible ventilation ducts,	
roof outlets	
and ventilation grilles	561 ff.
Intake air elements	586 ff.
Speed controllers, control	lers
& turn-off delay switches	599 ff.



 $\rho = 1.20 \text{ kg/m}^3$ 

300

₩ (m³/h)

Performance curve HVR 150

-150/2 R-

150/2

200

150/4

100

∆p<sub>fa</sub> Pa 40

20

10 8 6

2

1+ 0

0 145

ŝ



HelioVent wall and window fans are suitable for the ventilation of small to medium-sized rooms in private, commercial and industrial buildings.

- The standard equipment with ball bearings guarantees:
- Installation in any position.
   Smooth running and functional reliability in continuous operation.
- Quiet and maintenance-free operation over the entire service life.

#### Features

- Ventilation grille can be removed without tools and easily cleaned in a water bath.
- Low installation depth prevents potential installation problems.
- Versatile installation in walls, ceilings or shafts in any position.
- Flow rate adjustment through continuously variable, electronic speed control.
- Motor protection through integrated thermal contacts.

#### Description

The unit blends in harmoniously in all room environments. All parts, including the fan casing and impeller, made of high-quality plastic. Facade: white. Visual operation indicator through builtin indicator lights. High pressure and volume performance due to 8-bladed high performance impeller and an additional inlet guide wheel.

Enclosed motor with low-noise ball bearings for continuous operation. Installation possible in any position. Maintenance-free and radio interference-free. Contact protection according to DIN EN ISO 13857. Electrical supply line can be surface or flush-mounted.

#### Window mounting kit

Dimensions HVR 150

Dim. in mm

**FES 150** Ref. no. 00463 For the installation of all models, preferably types with electrical inner shutter. Installation in single and double glazed windows, thin walls and panels. Protection category IP20.

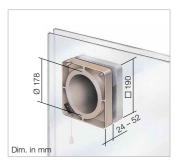
External cover with flat rain-repellent grille with fixed blades. Operation via supplied drawcord or remote on-site switch.

#### Wall mounting kit

WES 150 Ref. no. 00537 For flush-mounted wall installation; consisting of: Two wall telescoping plastic ducts and the external wall connection. This can be installed as an automatic shutter or with a rain-repellent grille for HVR E models. Both elements are included in delivery.

#### Telescopic wall sleeve

TWH 150 Ref. no. 06354 Like WES, but without shutter and grille.





Accessory details Page
Roof outlets
and ventilation grilles 561 ff.
Intake air elements 586 ff.
Speed controllers, controllers
& turn-off delay switches 599 ff.

Туре	HVR 150/4 E	HVR 150/2 E	HVR 150/2 RE
Ref. no.	00283	00285	00286
Electrical inner shutter	Yes	Yes	Yes
Reversible (supply and extract ventilation)	—	—	DSEL 21) Ref. no. 01306
Flow rate free blowing m3/h	180	260	360
Impeller Ø mm	140	140	140
Speed min <sup>-1</sup> ca.	1290	1800	2600
Voltage / Frequency	230 V~ / 50 Hz	230 V~ / 50 Hz	230 V~ / 50 Hz
Power consumption W	30	35	50
Rated current A	0.20	0.15	0.25
Sound pressure level dB(A) at 1 m	46	58	64
Wiring diagram no.	283	283	284.1
Protection class II, protection category	IP44	IP44	IP44
Max. air flow temperature	+40 °C	+40 °C	+40 °C
Weight approx. kg	1.2	1.4	1.5
1) NVM O 2 v 1 E mm <sup>2</sup> required for reverse en			

<sup>1)</sup> NYM-0 3 x 1.5 mm<sup>2</sup> required for reverse operation.



Wall · REW · Ceiling Window · Heater

#### HV 200 / HV 250



Drilling distance: HV 200 0239 mm / HV 250 0288 mm

HelioVent wall fans fit in every room atmosphere thanks to their timeless design: In living rooms and dining rooms, offices and conference rooms, restaurants or foyers.

Universally applicable. For supply and extract ventilation (reversible). Installation in walls or ceilings, even in an inclined position.

#### HelioVent at a glance

Compact, low-noise fan unit with clever design features:

- HelioVent fits in unobtrusively in all environments.
- No view of the contaminated fan openings.
- High performance and low air noise due to low flow resistances.
- Ideal for maintenance. Facade can be removed with one hand. Easy to clean in a water bath.

Installation – connection Installation is very easy and completed in minutes. The electrical connection is convenient. Reliable plug-in terminals and large cable storage space simplify the process. The supply line can be flush-mounted or surface-mounted.

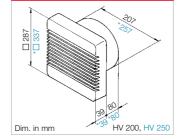
Speed control

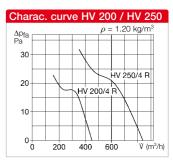
Possible in the range from 0–100 % using voltage reduction via electronic or transformer control units.

Accessory details	Page
Roof outlets	
and ventilation grilles	561 ff.
Intake air elements	586 ff.
Speed controllers, control	lers
& turn-off delay switches	599 ff.

Туре	HV 200/4 R	HV 250/4 R
Ref. no.	00957	00958
Reversible (supply and extract ventilation)	Yes	Yes
Flow rate free blowing m3/h	450	840
Impeller Ø mm	200	250
Speed min-1	1360	1380
Voltage / Frequency	230 V~ / 50 Hz	230 V~ / 50 Hz
Power consumption W	30	40
Rated current A	0.13	0.20
Sound pressure level dB(A) at 15 Pa at 1 m distance (free field conditions)	52	55
Sound power dB(A)	60	63
Wiring diagram no.	439	439
Protection category	IP54	IP54
Max. air flow temperature	+40 °C	+40 °C
Weight approx. kg	2.1	2.6

Dimensions HV 200 / HV 250





## Description

- Room-side facade and fan casing made from high-quality and impact-resistant plastic in alpine white.
- Powerful capacitor motor with high level of efficiency. Fully enclosed. Corrosion-proof in diecast aluminium casing, protected against dust and water (protection category IP54). Winding with humidity protection through bath impregnation in ISO class B.
- Protected against overloading by built-in thermal contact (automatically reactivating).
- Noise-tested ball bearings ensure quiet running.
- The large terminal box (protection category IP55) and huge cable storage space facilitate connection work.
- Profiled high-performance impeller with high efficiency ensures low-noise operation.
- Radio interference-free and maintenance-free.
- Contact protection according to DIN EN ISO 13857 guaranteed by room-side facade.
- Service and connection-friendly.

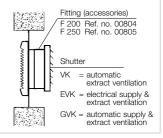
#### Accessories HV 200 HV 250 Fan type Description WER 250/225 **WER 200** Feed duct for Type Ref. no. flush-mounted wall installation 00368 00369 Shutter for VK 200 VK 250 Type extract air operation Ref. no 00758 00759 Shutter for supply and extract ventilation **GVK 200** 00370 Type Ref. no. GVK 250 00371 Reversing switch for supply and extract ventilation DSEL 2 1) **DSEL 2** <sup>1)</sup> Type Ref. no. 01306 01306 Reversing switch with speed controller continuously Type Ref. no. **BSX** 00240 BSX 00240 variable Speed controller flush-mounted Type Ref. no. ESU 1 ESU 1 00236 00236 ESA 1 ESA 1 Speed controller Type surface-mounted Ref. no 00238 00238

1) NYM-J 4 x 1.5 mm<sup>2</sup> required for reverse operation.

### Installation in wall or ceiling



#### Installation in thin panels





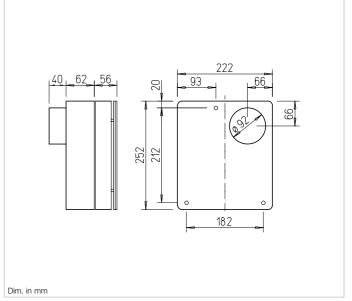
#### Dimensions DX 200



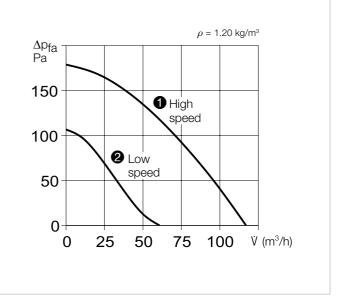
The universal series DX is characterised by attractive design and a hidden inlet opening. The unit is powerful, easy to install and suitable for the extract ventilation of small rooms in private, commercial and industrial buildings.

### Description

- The convenient function control for various operating modes allows individual adjustment to room conditions and user requirements.
- Easy wall installation; can also be flush-mounted by removing the rear casing frame.
- Air outlet connectors can be inserted into ducts NW 100.
- The facade is easily removeable without tools for cleaning and maintenance.
- With integrated backdraught shutter.
- Maintenance-free motor with thermal overload protection.



#### Performance curves DX 200



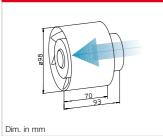
Technical data				
Туре	DX 200	DX 200		
Ref. no.	01703			
Operating mode	Continuously variable with electronic controller ESU 1 / ESA 1, Ref. no. 0 Two speed levels available using operating switch MVB, Ref. no.	Continuously variable with electronic controller ESU 1 / ESA 1, Ref. no. 00236 / 00238. Two speed levels available using operating switch MVB, Ref. no. 06091.		
Flow rate at level free blowing m <sup>3</sup> /h <sup>1</sup> )	• <b>2</b> 120 60			
Speed min <sup>-1</sup>	2660			
Voltage / Frequency	230 V~ / 50 Hz	230 V~ / 50 Hz		
Power consumption W	33	33		
Rated current A	0.24			
Sound pressure level dB(A) at 1 m <sup>1)</sup>	55 42			
Wiring diagram no.	693.1			
Protection category	IPX5	IPX5		
Max. air flow temperature	+40 °C			
Weight approx. kg	1.7			
Values refer to the different performance levels.				

Accessory details	Page
Flexible ventilation ducts,	
wall outlets	
and ventilation grilles	561 ff.
Intake air elements	586 ff.
Speed controllers, control	lers
& turn-off delay switches	599 ff.

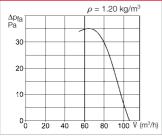




### Dimensions REW 90 K



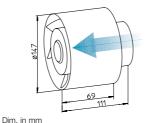
#### Performance curve REW 90 K



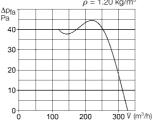
#### Description REW 90 K

Suitable for insertion in ducts with NW 100. Casing made of highquality, impact-resistant plastic with integrated guide apparatus. Profiled high-performance impeller with 5 blades made of plastic. Motor with thermal overload protection for continuous operation with maintenance-free, lifetime lubricated ball bearings. Terminal box at rear of the motor for electrical connection.





# Dim. in mm Dim. in $\rho = 1.20 \text{ kg/m}^3$



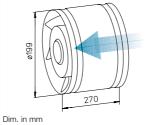
#### Description REW 150/2

Suitable for insertion in ducts with NW 150. Casing made of highquality, impact-resistant plastic with integrated guide apparatus. Profiled high-performance impeller with 8 blades made of plastic. Motor with thermal overload protection for continuous operation with maintenance-free, lifetime lubricated ball bearings, reversible, for continuous operation. Terminal box at rear of the motor for electrical connection.

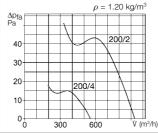


**REW 200** 

#### Dimensions REW 200



#### Performance curve REW 200



#### Description REW 200

Suitable for insertion in ducts with NW 200. Casing with two outward-facing reinforcing beads made of galvanised steel sheet. Profiled impeller with 7 blades made of plastic. Enclosed motor with thermal overload protection for continuous operation and diecast aluminium casing. Tropicalised winding with humidity protection. Ball bearing mounted, maintenance and radio interference-free; reversible. Term. box on motor.

#### Use options

Versatile axial fans for delivering small to medium volume flows against low resistances. Unit can be used for room ventilation, air circulation, cooling, drying, etc.

#### Installation

Unit can be installed in any position. The flow direction depends on the installation position. Suitable for insertion or interpositioning in pipes.

In this context, note possible pressure performance and resistances.

In case of higher resistances, use centrifugal inline fans. Electrical connection at rear of the motor. During installation makes sure that the fan remains accessible for inspection.

#### Accessories

Speed controller with reverser (for REW 150 and 200) BSX Ref. no. 00240

Accessory details	Page
Flexible ventilation ducts,	
roof outlets	
and ventilation grilles	561 ff.
Extract, supply, intake air	ele-
ments and disc valves	574 ff.
Speed controllers, control	llers
& turn-off delay switches	599 ff.

Туре	REW 90 K	REW 150/2	REW 200/4	REW 200/2
Ref. no.	00441	00440	07504	07505
Reversible (supply and extract ventilation)	No	DSEL 2 <sup>1</sup> ) No. 01306	DSEL 2 2) No. 01306	DSEL 2 2) No. 01306
Flow rate free blowing m3/h	105	330	550	930
Impeller Ø mm	93	140	200	200
Speed min <sup>-1</sup>	2320	2100	1350	2280
Voltage / Frequency	230 V~ / 50 Hz	230 V~ / 50 Hz	230 V~ / 50 Hz	230 V~ / 50 Hz
Power consumption W	15	29	30	60
Rated current A	0.10	0.13	0.13	0.26
Sound pressure level dB(A) at 1 m	45	56	43	56
Wiring diagram no.	479	478	439	439
Protection category	IP55	IP44	IP54	IP54
Max. air flow temperature	+40 °C	+40 °C	+40 °C	+40 °C
Weight approx. kg	0.5	1.5	2.0	2.5

<sup>1)</sup> NYM-0 3 x 1.5 mm<sup>2</sup> required for reverse operation. <sup>2)</sup> NYM-J 4 x 1.5 mm<sup>2</sup> required for reverse operation.



\$197

@ 147

20

173

155

Dimensions AV 150 / AV 200

130

360

330

360

AV 150, \*AV 200

Dim. in mm

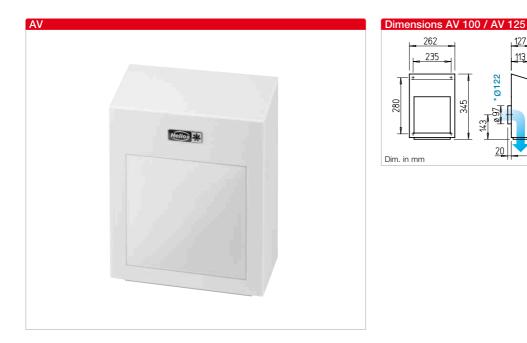
127

113

\*Ø122

<u>ø</u> 97

20



Designed for external wall installation for the ventilation of all small and medium-sized rooms. Suitable for a number of applications in residential, commercial and industrial buildings.

Powerful, efficient centrifugal fans allow the connection of duct systems and overcome resistances from filters and system components. The unit is the ideal solution for the extract ventilation of domestic kitchens because the annoying noises from extraction hoods are minimised. This also applies for other applications and the connection of duct systems because the fan noise moves outside. Ideal for retrofitting in renovations and conversions.

#### Special features

- No disturbing fan noises inside the rooms due to external wall installation.
- Easy and cost-effective installation through anchoring of the operational unit.
- Weatherproof casing. Tight-closing shutter blades with spring return.
- Connectors according to standard duct Ø for connection to wall duct or duct system.
- □ Solid base plate made of plastic also allows installation on uneven surfaces.
- Electrical supply line can be flush-mounted from behind or surface-mounted from the side.
- Casing
- UWaterproof cover hood made of galvanised steel sheet, powdercoated, alpine white.
- Outlet-side bird protection grille and two shutter blades with spring return.

#### Power control

262

235

280

All models come with three power levels as standard. Continuously variable with electronic controllers or 5 step transformers.

#### Drive

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

Motor protection

Motor protected by thermal overload protection in the winding.

#### Impeller

Energy-efficient centrifugal impeller with backward curved blading made of plastic, dynamically balanced.

#### Note

The fan may only be commissioned if impeller contact protection according to DIN EN ISO 13857 is provided.

#### Noise

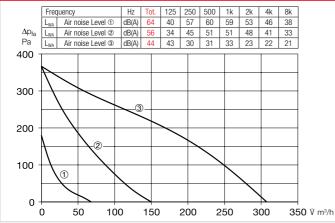
The total level and range for the sound power level are specified above the performance diagram. The sound pressure at 3 m (free field conditions) is also specified in the type table.

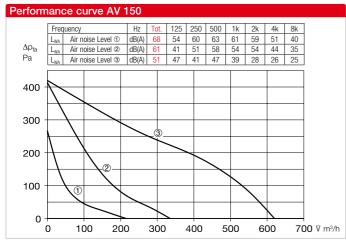
### Reference

Page Speed controllers, controllers & turn-off delay switches 599 ff.

Ref no Connec tion Ø Max Max Wiring Max Transformer Type Max Max Max Weight Voltage 50 Hz flow rate speed sound press. level power current diagrai air flow speed controller case-radiated consumption consumption temperature approx 5-step mm Ϋm³/h min<sup>-1</sup> dB(A) at 3 m Volt W No + °C kq Туре Ref. no. AV 100 02654 100 310/150/70 2710/2050/1190 46/38/26 230 55/28/13 0.24/0.13/0.05 1386 60 4.6 **TSW 1.5** 01495 AV 125 02655 125 360/170/80 2471/1510/930 45/38/25 230 54/26/13 0.24/0.12/0.06 1386 60 4.6 **TSW 1.5** 01495 AV 150 02656 150 620/330/210 2520/1520/1070 50/43/33 230 100/57/40 0.44/0.25/0.18 1386 55 8.3 **TSW 1.5** 01495 AV 200 680/350/240 2530/1970/1450 100/53/40 0.44/0.23/0.18 **TSW 1.5** 01495 02657 200 51/37/35 230 1386 55 8.3

## Performance curve AV 100





#### Accessories

### Transformer speed controller

TSW 1.5Ref. no. 01495Five-step, for surface installation.1~ alternating current, 230 V.Max. load1.5 AWiring diagram no.1494Dim. mmW 115 x H 205 x D 100

## Three-step speed and

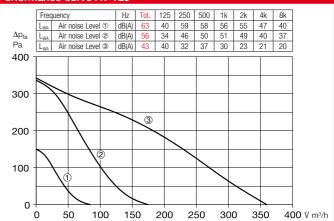
operating switch with 0 position DSZ Ref. no. 01598 Convenient flush-mounted speed switch for fans with three performance levels. Room light cannot be switched in parallel. Can be used with central ventilation box ZEB EC. Load capacity AC 3 / 2.2 kW, AC 15 / 6 A Protection category IP 20 Install. in flush-m. box w/ 55 mm depth Wiring diagram no. 735 Dimensions mm W 80 x H 80 x D 23

Electronic speed controller, contin. variable flush / surface-mounted		3-9	controller, step nounted
Туре	Ref. no.	Туре	Ref. no.
ESU 1/ESA 1	00236/00238	DSZ	01598
ESU 1/ESA 1	00236/00238	DSZ	01598
ESU 1/ESA 1	00236/00238	DSZ	01598
ESU 1/ESA 1	00236/00238	DSZ	01598

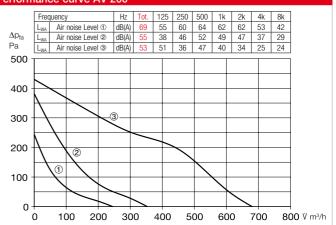




#### Performance curve AV 125



#### Performance curve AV 200



#### Electronic speed controller

Ref. no. 00236 ESU 1 For flush-mounted installation. Front and rotary knob made of white plastic. Installation in standard flush-mounted box. Operation indicator via light ring. Max. load 1 A. Minimum load 0.15 A IP30 Protection category (built-in) Wiring diagram no. 556.1 W 80 x H 80 x D 21 protr. Dim. mm

#### Electronic speed controller

ESA 1	Ref. no. 00238
For surface instal	lation.
White plastic cas	ing, operation in-
dicator via light ri	ng in rotary knob.
Max. load	1 A.
Minimum load	0.15 A
Protection category	IP40
Wiring diagram no.	556.1
Dimensions mm	W 80 x H 80 x D 65

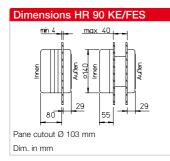






HR 90 KE/FES





# Elegant compact window fans with flow rates of $80-360 \text{ m}^3/\text{h}$ .

#### Area of application

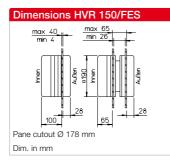
All rooms and windows in private buildings as well as small to medium-sized commercial spaces.

#### Special features and common features

Due doubt we way

Universal application Prepared for installation in panels, single glazed windows, double glazed windows and composite windows (HR 90 KE/ FES not for hinged composite window) as standard. Suitable for wall installation with anchoring using wall sleeve (accessories).





#### Electrical inner shutter

Tight-closing with silent operation; maintenance-free. Automatic operation with the fan circuit.

#### Casing

Casing made of high-quality, impact-resistant plastic. Fan casing and external grille in white.

#### Motor

Enclosed motor in splash-proof casing. Maintenance-free and radio interference-free. Maximum air flow temp. +40 °C.

#### Installation

The service-friendly and installation-friendly unit design allows quick installation with only a few steps.

#### Description HR 90 KE/FES

- Compact window fan for rooms of any kind. Upward facing blades prevent viewing of the fan clogging zone.
- Applicable in single and double glazed windowpanes with a thickness of 4–40 mm. The variable distance compensation is achieved by using or omitting the supplied spacer frames.
- External cover with flat rain-repellent grille.
- Operation via on-site On/Off switch or the built-in drawcord.
- Integrated operation indicator.

#### Description HVR 150/FES

- Powerful window fans for small to medium-sized private and commercial spaces.
- For installation in single and double glazed windows (composite window can be opened unhindered) as well as thin panels with a thickness of 4–40 mm. Variable distance compensation through installation or omission of the supplied spacer frames.
- External cover with flat rain-repellent grille.
- Operation via on-site On/Off switch or the built-in drawcord.
- Optical operation indicator.

ReferencePageSpeed controllers, controllers& turn-off delay switches599 ff.

HR 90 KE/FES	HVR 150/2 E / FES	HVR 150/2 RE / FES
00334 / 00462	00285 / 00463	00286 / 00463
Available	Available	Available
Extract ventilation	Extract ventilation	DSEL 2 2) Ref. no. 01306
103 mm	178 mm	178 mm
95	260	360
93 mm	140 mm	140 mm
17	35	50
0.12	0.15	0.25
2550	1800	2600
44/51	58/65	64/71
1.0	1.9	2.0
483	283	284
IP45	IP44	IP44
_	Available	Available
TWH 90	TWH 150	TWH 150
06352	06354	06354
_	ESU 1 / ESA 1	ESU 1 / ESA 1
_	00236 / 00238	00236 / 00238
_	_	BSX
_	_	00240
	00334 / 00462 Available Extract ventilation 103 mm 95 93 mm 17 0.12 2550 44/51 1.0 483 IP45  TWH 90 06352   	00334 / 00462         00285 / 00463           Available         Available           Extract ventilation         Extract ventilation           103 mm         178 mm           95         260           93 mm         140 mm           17         35           0.12         0.15           2550         1800           44/51         58/65           1.0         1.9           483         283           IP45         IP44           TWH 90         TWH 150           06352         06354            ESU 1 / ESA 1            00236 / 00238

<sup>1)</sup> Distance at 1 m free field conditions.

s. <sup>2)</sup> NYM-O 3 x 1.5 mm<sup>2</sup> required for reverse operation.



ging the wiring: Extract ventilation Supply ventilation or Reversing operation by means of external operating switch/ speed controller (accessories). Static ventilation possible (without fan operation) by locking

the shutter.

troller (accessories). Automatic shutter function with fan circuit.

Flat rain grille does not obstruct venetian blinds or roller shutters. Installation-friendly design, all

main parts can be removed for cleaning without tools.

Powerful fan in comfort class for

the supply and extract ventila-

Blends in harmoniously in all

environments and building fa-

Internal operating mode switch

allows the following without

Reversing operation by means

of external operating switch/

speed controller (accessories).

Control via on-site On/Off switch

or operating switch/speed con-

troller (accessories). Automatic

shutter function with fan circuit.

Static ventilation, installation and

room-side casing parts can be

Page

removed for cleaning without

Speed controllers, controllers

& turn-off delay switches 599 ff.

external cover see GX 225.

Installation-friendly design,

changing the wiring:

Extract ventilation

Supply ventilation or

tion of larger rooms in attractive

**Description GX 300** 

softline design.

cades

tools.

Reference

#### GX EC 150



#### Dimensions GX EC 150



Low-noise window fans for use in private, commercial and industrial buildings. The series GX offers smooth running and functional reliability in continuous operation. The fan and external grille come in pleasant white. Attractive design, integrates unobtrusively in all rooms and any building facade.

Area of application For the ventilation of medium and large rooms of any kind in the temperature range from -30 °C to +40 °C.

#### Special features

#### Universal application

Prepared for installation in single glazed windows, double glazed windows and panels as standard. Suitable accessories available for composite windows and wall installation.

#### Electrical connection

Concealed behind elegant inner facade. Tight-closing and silent function. The shutter has a lo-





cked position which allows permanent opening when the fan is deactivated (static ventilation in summer). The automatic shutter function is forced and time-delaved with the fan circuit.

#### Casing

Attractive design made of highquality, impact-resistant plastic. Colour: white. Inner facade can be removed with one hand and without tools for cleaning in a water bath (power supply is then automatically interrupted).

#### Motor

Enclosed, splash-proof motor (IP44) with thermal overload protection. GX EC 150 with energysaving EC motor. Maintenancefree and radio interference-free. Maximum air flow temperature +40 °C. Power can be controlled via speed controller (accessories) depending on type.

#### Installation

The service-friendly and installation-friendly unit design allows quick installation with only a few steps

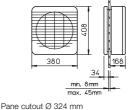
Product range				
Technical data	GX EC 150	GX 225	GX 300	
Ref. no.	09367	01484	01485	
Electrical inner shutter	Available	Available	Available	
Reversible (supply & extr. ventilation)	Not available	Available	Available	
Pane cutout Ø mm	184 mm	257 mm	324 mm	
Flow rate free blowing m3/h	230	670	1650	
Impeller Ø mm	150	225	300	
Power consumption Watts	10	45	125	
Voltage, 50 Hz (GX EC 150 - 50/60 Hz)	230 V	230 V	230 V	
Rated current A	0.06	0.3	0.7	
Speed min <sup>-1</sup>	1480	1250	1250	
Sound pressure <sup>1)</sup> /power dB(A)	44/52	54/61	61/68	
Weight approx. kg	1.4	4.0	7.0	
Wiring diagram no.	1385	538	538	

<sup>1)</sup> at 1 m free field conditions. <sup>2)</sup> with reversing switch. <sup>3)</sup> with two speeds and reversing switch.

#### GX 300



#### **Dimensions GX 300**



Dim. in mm

#### **Description GX EC 150**

- Sophisticated fan in a lower performance class for extract ventilation.
- Installation in single glazed and double glazed windows as well as fixed and hinged composite windows using accessories.
- Flat, external rain-repellent grille does not obstruct venetian blinds or roller shutters.
- Service-friendly and installationfriendly. Room-side casing parts can be removed for cleaning without tools.
- Shutter function can be switched to static ventilation (without fan operation).
- Energy-saving EC-Motor in protection category IP54 with maximum efficiency level.

#### **Description GX 225**

Fan in medium performance class offering high convenience and integrated function switch which enables the following

#### ssories Window fan

Accessories window fail					
Туре	CONTRACTOR	GX 225	GX 300		
Double glazed window mounting kit					
for closed panes	DR 1504)	DR 225 <sup>4)</sup>	DR 3004)		
Ref. no.	05114	05115	05116		
Wall installation					
with screw fastening, 50 cm long	SB 50/2	SB 50/3	SB 50/4		
Ref. no.	01385	01386	01387		
with feed duct	KR 150 <sup>5)</sup>	WER 225/2506)	WER 3007		
Ref. no.	05091	00369	00469		
Elec. speed controller flush/surface	_	ESU 1/ESA 1	ESU 1/ESA		
Ref. no.		00236/00238	00236/0023		
Elec. speed controller <sup>2)</sup> surface-m.	_	BSX	BSX		
Ref. no.		00240	00240		
Operating switch <sup>2)</sup> flush-mounted		DSEL 2	DSEL 2		
Ref. no.		01306	01306		
Operating switch <sup>3)</sup> surface-mounted	—	FR 22/30	FR 22/30		
Ref. no.	—	00998	00998		

<sup>4)</sup> Spacer rings for underpinning from 2-35 mm (1 set = 10 pcs).

<sup>7)</sup> 170 – 450 mm long. 5) 330 mm long. 6) 170 - 500 mm long.

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#### **DVW 140**



For cooling in summer and energy conservation during winter. For a wide range of applications, e.g. air circulation, cooling and energy conservation in medium and large rooms such as foyers and waiting halls, restaurants, clubs, boutiques and salesrooms, production halls, warehouses, tennis halls and sports halls as well as the acceleration of drying processes in industrial buildings.

Ceiling fans are traditionally used for cooling air in the summer. They also solve acute room air problems in sales rooms, restaurants and many other communal areas with conditions such as windowless room areas or high heat from lighting.

Decorative reproductions in the "Casablanca" design also make Helios ceiling fans an attractive design element for many rooms.

The energy-saving use of ceiling fans is recommended during heating periods.

Draught-free and even room heat distribution is achieved by slowly rotating ceiling fans in rooms with high ceilings such as sports halls, tennis halls, industrial halls and warehouses.

Accessories for DVW and DVA

#### Speed controller

**TSW 0.3** Ref. no. 03608 Five-step speed controller with On/ Off switch for surface installation.

# Energy-saving automatic control unit

**EDTW** Ref. no. 01613 For fully automated differential temperature-dependent speed control, especially for the winter operation of ceiling fans.

#### **DVAW 130**



#### **DVAM 130**



This results in an approx. 25% temperature increase at floor level without additional heating costs. In this respect, the energy expenditure for the ceiling fans is negligibly small. Pilot installations which have been running over a number of years achieved an average temperature increase of 4 K at floor level. Operating temperature range from -10 to +40 °C.

#### Ceiling fans series DVW

Robust metal version in classic design.

- Enclosed motor, maintenancefree and radio interference-free.
- Vibration-damping suspension for low-vibration running.
   Fall protection with arrester
- cable according to DIN EN 60335-2-80.
- assembled delivery. Only the impeller blades need to be screwed on.
- Variable suspension height through delivery of a short and a long pendent tube.
- Speed-controllable with 5-step speed controller TSW 0.3 (accessories).

Technical data – Order data

Reversible air flow direction. The flow direction can be set to the floor or to the ceiling by fixed connection or using a reversing switch (accessories DSEL 2). Minimum starting voltage of 100 V required for reverse operation (upward air flow direction).

#### Ceiling fan series DVA

Fan comes in typical "Casablanca" design for use for decorative purposes.

- Casing in antique brass or antique white finish. Five wooden blades with stained walnut or antique white cane work. Maintenance-free motor with covered cooling slots, ball bearing mounted, for continuous operation.
- Fall protection with arrester cable according to DIN EN 60335-2-80.
- □ Vibration-damping suspension for low-vibration running.
- Simple installation directly to the ceiling or short pendent tube (included in delivery).
- Pull switch for three performance levels and On/Off below the motor. A remote speed controller (accessories) can be connected.

#### Fan selection

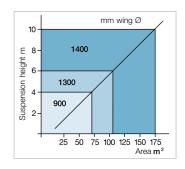
The impeller diameter, positioning and suspension height of the ceiling fans are the parameters for even and extensive air flow in the room.

The room height minus the pendent length provides the suspension height. Based on this height and the impeller Ø, the adjacent diagram shows the area affected by the air flow in m<sup>2</sup>.

The distance from the centre of the fan to the walls should be approx. 3 times the impeller  $\emptyset$ . The distance from the centre of a fan to the centre of another fan (when using multiple ceiling fans) should be approx. 6 times the impeller  $\emptyset$ . Operation at high speed is recommended in summer for cooling and operation at low speed is recommended in winter for energy conservation.

#### Important installation information

Accident prevention regulations (UVV) stipulate a minimum distance of 2.3 m from the floor to the lower wing edge.



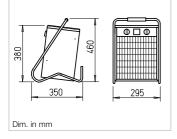
Туре	DVW 90	DVW 140	DVAW 130	DVAM 130
Ref. no.	08648	08649	08650	08651
Wing Ø mm	900	1400	1300	1300
Number of blades	3	3	5	5
Voltage / Frequency	1~, 230 V / 50 Hz			
Current consumption A	0.26	0.30	0.29	0.29
Power consumption W	50	75	66	66
Maximum speed min-1	340	270	220	220
Suspension height min./max. mm	440/565	460/585	220/360/510	220/360/510
Sound pressure dB(A) at 4 m	35	44	29	29
Protection category	IP20	IP20	IP20	IP20
Max. air flow temperature	40 °C	40 °C	40 °C	40 °C
Weight approx. kg	4.8	6.8	6.7	6.7



#### STH



#### **Dimensions STH 3**



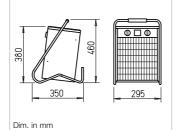
The compact, powerful STH heater fans are reliable, robust and convenient in terms of equipment. They are suitable for heating and drying. Use on construction sites, in production facilities, warehouses and workshops, churches, meeting rooms, etc.

- Series with heat output of 3 kW: 1~, 230 V as well as 5, 9 and 15 kW: 3~, 400 V.
- Practical operation due to compact dimensions.
- Attractive design.

Technical data

Easy to lift and transport due to ergonomically designed, solid transport hanger.

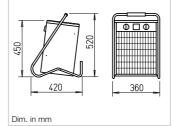
#### Dimensions STH 5



#### Quality in every detail

- Robust, hard-wearing and secure due to metal body. Suitable for use under hard conditions, even in wet rooms and for continuous operation.
- Corrosion-resistant casing, made entirely of galvanised steel sheet, powder-coated in pleasant white.
- Protective stand with powder coating in red.
- Robust front protection grille, powder-coated in hard-wearing grey.
- Clear control panel, protected against damage due to recessed mounting.
- □ Maintenance-free and radio

#### Dimensions STH 9 T



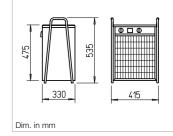
interference-free.

- All models in protection category IPX4. Applicable in wet rooms.
- Contact protection according to DIN EN 60335.
- Enclosed sheathed heating element made of stainless steel with low surface temperature.
- Easily accessible, externally resettable protection against overheating for types STH 9 T and STH 15 T. Automatically reactivating after cooling for STH 3 and STH 5.

#### Individual time setting

All types from 9 kW are equipped with a timer for preprogrammed activation for

#### **Dimensions STH 15 T**



up to 24 hours under specification of the room temperature as standard.

#### Control

Control via built-in operating switch.

- Heating for types with 3, 5 and 9 kW switchable in two levels; switchable in three levels for type with 15 kW.
- Heating operation can be controlled via built-in room air thermostat with setting range +5 °C to +35 °C. Fan remains in operation for better heat distribution in the room when the heating is deactivated.

Туре	STH 3	STH 5	STH 9 T	STH 15 T
Ref. no.	02520	02521	02522	02523
Heat output kW	3.0	5.0	9.0	15.0
Switchable heat output kW	0-1.5-3	0-2.5-5	0-4.5-9	0 -5-10-15
Max. temperature increase K	25	37	38	35
Max. ambient temperature °C	40	40	40	40
Flow rate m <sup>3</sup> /h	400	400	700	1300
Speed min <sup>-1</sup>	1300	1300	1300	1300
Sound pressure dB(A) at 4 m (free field cond.)	40	40	43	58
Voltage V, 50 Hz	1~, 230	3~, 400	3~, 400	3~, 400
Rated current A	13.5	7.5	13.5	21.7
Req. socket / CEE coupling	1)	16 A	16 A	32 A
Weight approx. kg	6.0	6.0	10.5	15.5
Timer function (pre-programming 24 h)	_	_	Yes	Yes
with approx 1.5 m long cable and Schuke plug				

<sup>1)</sup> with approx. 1.5 m long cable and Schuko plug