

Duplexvent DV96SE

Professional Line Top Entry - Up to 345 m³/hr air volume



Key Features

- For use in medium sized dwellings up to 175 m²*
- Extract up to 320 m³/hr at 100 Pa
- Galvanised steel, double skin casing
- Triple filter design with F7 pollen filter
- Over 90% thermal efficiency and low SFP
- New smart frost protection
- Built-in electric post-heater
- Automatic, 100% summer bypass
- Auto cut-out switch for extra safety
- Eight speed digital control with LCD display and BMS (LON / KNX) connection
- SAP Appendix Q eligible and PASSIVE HOUSE Institute certified
- Complies with Building Regulations
- 5 year warranty*

Duplexvent DV96SE

The Duplexvent DV96SE is a highly efficient mechanical supply and extract ventilation unit with heat recovery for an air capacity of up to 345 m³/hr. It is a wall mounted unit and is delivered complete with a wall mounting plate and condensate drain.

The unit is made of a galvanised steel double-skin casing which is powder coated both internally and externally to meet hygiene requirements.

Moreover, the 20mm thick insulation in the casing avoids any thermal bridging and significantly reduces noise levels.

The DV96SE includes an easily removable, plastic heat exchanger which transfers warmth from the outgoing waste airstream into the incoming fresh air where its thermal efficiency up to 90%. At no point do the airstreams mix.



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SAP Appendix Q

Tested by the BRE (Building Research Establishment) and eligible for the SAP Appendix Q

DV96SE	SFP	Efficiency
K+1 Wet room	0.99 W/l/s	87%
K+2 Wet rooms	0.92 W/l/s	87%
K+3 Wet rooms	0.99 W/l/s	87%
K+4 Wet rooms	1.12 W/l/s	86%
K+5 Wet rooms	1.26 W/l/s	86%



Technical Data

Specification	Duplexvent DV96SE R	Duplexvent DV96SE L
Air flow m ³ /hr / l/sec @ 100 Pa	324 / 90	324 / 90
Thermal efficiency	Up to 90%	Up to 90%
Heat exchanger	Counterflow (Plastic)	Counterflow (Plastic)
Fans	EC	EC
Summer bypass damper	100% automatic	100% automatic
Frost protection	Frost heater	Frost heater
Controls	8-Speed - Digital	8-Speed - Digital
Connection to BMS	LON / KNX (optional)	LON / KNX (optional)
Mounting	Wall	Wall
Sound level @ 3m (dB(A))	24 - 45	24 - 45
Duct diameter (mm)	4 x 125	4 x 125
Condensate discharge (mm)	12	12
Electrical supply	230v / 1ph / 50Hz	230v / 1ph / 50Hz
Max. power consumption	224w	224w
Filter class	2 x G4 / 1 x F7	2 x G4 / 1 x F7
Electric frost/post-heater	900w	900w
Protection class	IP34	IP34
Casing insulation (mm)	20	20
Weight (kg)	53	53
Dimensions (L x D x H) mm	600 x 430 x 543	600 x 430 x 543
Part No.	90000393	90000394

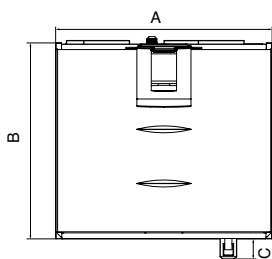
Passive House Certification

The Duplexvent DV96SE is tested and certified by the Passive House Institute based on the following criteria:

- Thermal comfort
- Effective heat recovery
- Electric power consumption
- Air tightness
- Balancing adjustability
- Sound insulation
- Indoor air quality
- Frost protection



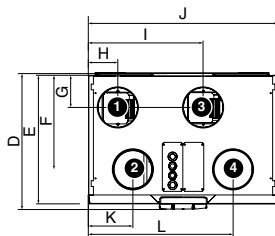
Dimensions



Duct outlets, model R

Inner diameter of female outlet collar ø 125 mm

1. Supply air to dwelling
2. Extract air from dwelling to unit
3. Exhaust air out
4. Outdoor air to unit



Duct outlets, model L

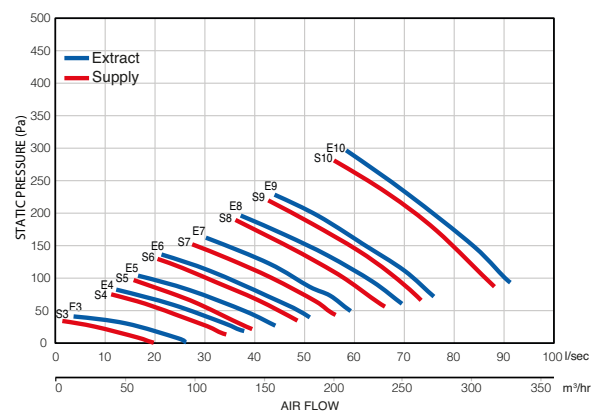
Inner diameter of female outlet collar ø125mm

1. Exhaust air out
2. Outdoor air to unit
3. Supply air to dwelling
4. Extract air from dwelling to unit

+ excludes motors. Motor warranty one year from date of purchase.

Model	A	B	C	D	E	F	G	H	I	J	K	L
DV96SE	600	545	55	430	407	298	102	93	363	600	141	459

Performance



* Guidance only. Dependant upon system pressure.

Accessories

See switches/accessories for more details.

Fitted with an additional electric post-heater, the unit keeps the indoor air temperature at the required temperature level at all times hence maintains indoor air comfort whilst saving energy during the winter period.

The DV96SE is designed with a unique triple filter facility including a F7 pollen filter which provides additional protection against invisible, harmful particles and creates an ultra hygienic environment, particularly relevant for those suffering from asthma or other respiratory conditions.

The unit includes a digital controller with LCD display which incorporates 8-speed air flow control, weekly ventilation programming, filter maintenance indicator, separate fan control for easy commissioning and the brand new smart frost protection facility which significantly reduces the

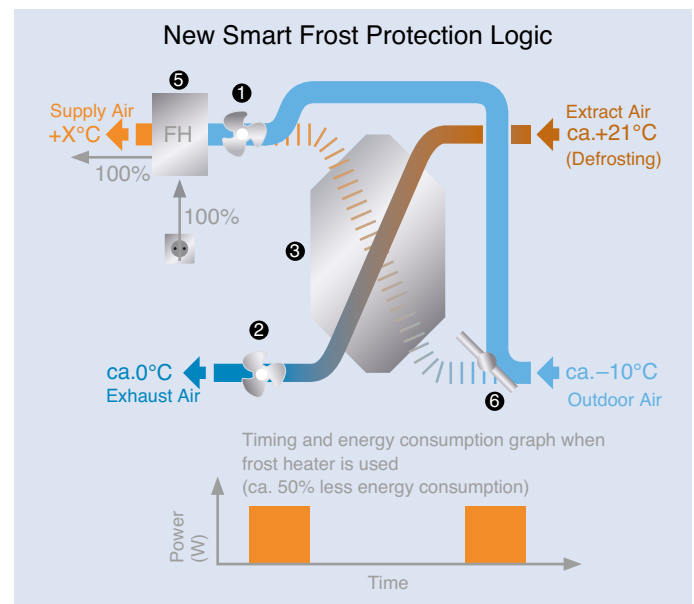
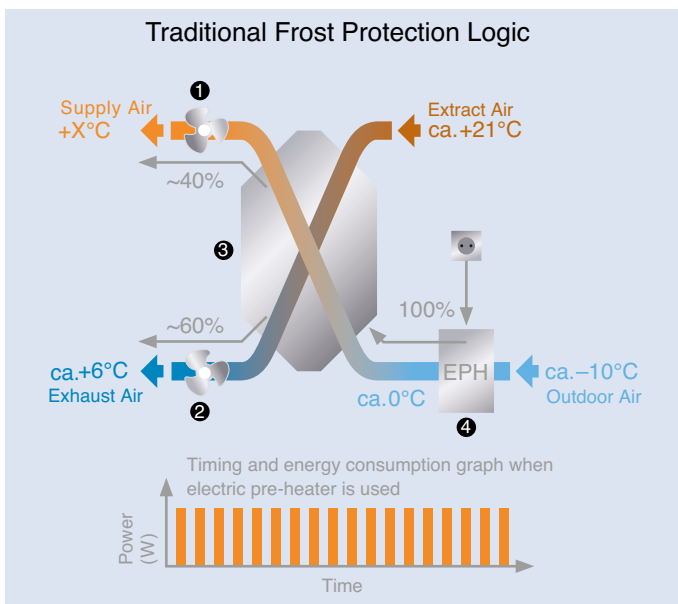
energy consumed to protect the heat exchanger from freezing (see below for more information).

On-demand ventilation can be achieved by using humidity and CO₂ sensors which boost the air volume gradually based on the moisture and occupancy levels in the dwelling. It is also possible to integrate the unit into a Building Management System via the corresponding BUS converter (LON or KNX) to monitor and control unit's functions by a central control system.

Having the latest, low energy EC fan technology, the DV96SE complies with the ErP 2015 standards.

The unit comes with an outstanding 5 year warranty*, is SAP Appendix Q eligible, tested by TUV laboratories and also certified by the Passive House Institute.

New Smart Frost Protection



On the traditional frost protection method, the outdoor air is pre-heated before passing through the heat exchanger. This way the unit could still provide balanced ventilation even when the frost protection was on. However, the electric heater kicks in intermittently hence consumes more energy than needed.

The new Smart Frost Protection method works in a more energy efficient manner which constantly monitors the heat exchanger conditions and uses the frost heater only when necessary. This significantly reduces the energy consumption and provides more heat recovery throughout the winter season.

- ① Supply air fan
- ② Exhaust air fan
- ③ Heat exchanger
- ④ Electric pre-heater
- ⑤ Frost heater
- ⑥ Electric bypass damper

Triple Filter Design

The majority of the MVHR units in the U.K incorporate G3 or G4 coarse filters on the extract / supply air side. These filters catch only coarse particles such as insects and leaves to protect the heat exchanger.

F7 fine filters on the other hand are highly efficient, catch invisible particles such as pollen, spore, bacterium and **dust entering the lungs**.

Duplexvent Professional Line units are the only MVHR units which incorporate triple filter design combining G4 course filters with the F7 fine filter. This significantly improves the indoor air quality and lowers your maintenance costs.



100% Automatic Bypass

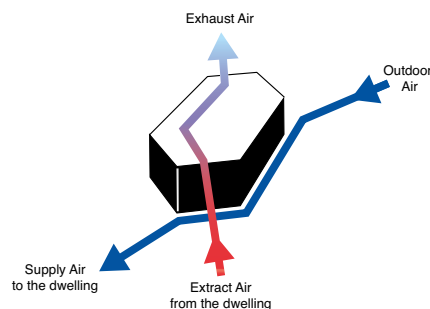
The unit is equipped with an automatic, 100% bypass which totally isolates the heat exchanger so that no air passes through it. This provides effective cooling in the summer season.

Controls

Ideal indoor air quality is achieved by automatically adjusted ventilation

Duplexvent DV96SE is controlled via a 8 speed digital control providing the following features:

- **8 speed control** where all speeds are 100% adjustable
- **Automatic boost function** with delay timer
- **Filter maintenance reminder** via counter clock (standard) / via pressure sensor (optional)
- **Heater control** for post-heater
- **Connection to BMS** via LON or KNX
- **Self diagnostic** via fault signal relay
- **On-demand control** via humidity and CO₂ sensors
- **Separate fan control** for ease of commissioning
- **Weekly ventilation programming** allows users to pre-set the ventilation levels scheduled for different days
- **Indoor temperature control** based on extract air temperature or supply air temperature
- **Internet connection** available



Call: 01494 560800

Visit: airflow.com



Airflow Developments Limited
Aidelle House, Lancaster Road,
Cressex Business Park,
High Wycombe, Buckinghamshire,
United Kingdom, HP12 3QP

E-mail: info@airflow.com
Telephone: +44 (0) 1494 525252

airflow.com

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