Ventilation with Heat Recovery
Commercial applications
Ventilation with Heat Recovery

Commercial

Duplexvent Commercial Heat Recovery units are designed for saving energy and also improving indoor air quality. These units provide ventilation with heat recovery for commercial and industrial areas by using highly efficient polypropylene exchangers, recovering heat from air to air. The heat is effectively transferred from warm to cold air by the exchangers with high conductivity and performance.

Using these heat recovery units also helps the building to be assessed for the BREEAM (BRE Environmental Assessment Method) standard that is the leading and most widely used environmental assessment method for new buildings. Setting the standard for best practice in sustainable design it has become the de facto measure used to describe a building’s environmental performance.

Duplexvent Flexi Line

Available in four sizes, Duplexvent Flexi Line units meet the ventilation requirements of modern and energy saving buildings as they achieve the highest thermal efficiency (up to 95%) and are the first Passive House Institute certified Commercial MVHR units in the U.K.

Extra benefits include low energy, low noise EC fans, internet connection with smart phone application, BMS connection (ModBus TCP/IP), automatic frost protection and 100% bypass facility.

Unique to the Duplexvent Flexi Line is the ability to install the same unit either on the floor or under the ceiling which provides exceptional flexibility for designers in the specification phase. Similarly HVAC distributors benefit from a range of "off the shelf" air handling units which can be quickly adapted to fit on-site.

Duplexvent Multi / Multi-N Line

Duplexvent Multi and Multi-N Line heat recovery units are used for comfort ventilation, as well as warm-air heating and cooling of small office areas, shops, retail facilities, school buildings, restaurants, sport centres, industrial halls and swimming pools.

Available in 72 different mounting versions and indoor/outdoor installation options, all units are fully customised according to the project specification and incorporate a highly efficient counter-cross flow plate heat exchanger achieving a thermal efficiency of 95%.

Extra benefits include low energy, low noise EC fans, internet connection with smart phone application, BMS connection (ModBus, KNX, BACnet), automatic frost protection, built-in heating/cooling coils, air circulation and 100% bypass facility.

Despite the full customisation Multi / Multi-N Line units can be delivered in a period of 4 weeks or earlier to meet tight project deadlines.
The indoor climate is of the utmost importance as most of us spend the greater part of our lives indoors. To ensure comfort and a sense of well-being, the air we breathe must be clean, and also be at the right temperature and humidity level. To most people, this is so self-evident that they do not give it a second thought.

Whatever the situation, Mechanical Ventilation with Heat Recovery (MVHR) solutions from Airflow can play a significant role because they help create a healthier living and working environment, while contributing to the reduction of a building’s carbon emissions and energy usage.

Unique to the Duplexvent Flexi Line is the ability to position the unit on the floor or in a ceiling suspended position. Also this universal design allows the unit to be installed as either a left or right hand version. This provides exceptional flexibility for designers in the specification phase and gives contractors the opportunity to locate the unit in the optimum position. Similarly HVAC distributors benefit from a range of “off the shelf” air handling units which can be quickly adapted to fit on-site. No more bespoke orders with long lead times!

Whole life cost savings

Building Operators and Asset Managers will appreciate the Flexi Line’s innovative built-in internet connection with User and Service interface which allows service technicians to connect to the unit from a remote location. By continuously checking the operating status, diagnosing any faults and instructing the user what to do immediately, results in saving onsite call outs, preventive service and down-time to both technician and client. This unique feature minimises the service process as well as creating a secondary control display for the user.

Upgrade Packs

1. Passive House Pack
   - Electric pre-heater to warm the incoming air to protect the heat exchangers from freezing

2. Constant Pressure Pack
   - Differential pressure and flow measurement for energy optimisation

3. Hygiene Pack
   - Inclined tube manometers to maintain the certified

Optional water / DX heating and cooling coils help maintain optimum indoor conditions

Versatile unit positioning enables right or left hand configuration on the same unit

Interchangeable spigot design allows the spigot connections to be changed on-site (DV1600)
Key Components

- **Interchangeable Spigot Connections**
  - simplify on-site installation

- **MS / F7 High Grade Filters**
  - provide ultra hygienic indoor climate
  - and protect heat exchangers from getting dirty

- **Smooth Internal Casing**
  - with 30mm insulation avoids thermal bridging
  - absorbs noise
  - and meets sanitary standards

- **Cross-Counter Flow Heat Exchangers**
  - up to 95% thermal efficiency
  - reduce heating bills significantly
  - and guarantee a quick return on investment

- **100% Summer Bypass Facility**
  - provides a flow of cool, fresh and filtered air into the property

- **Digital Control Box**
  - with internet and BMS connections

- **Safety Switch**
  - to shut off the power in case of emergency

- **Condensate Drain**
  - for floor standing installations

- **Condensate Drain**
  - for ceiling-suspended installations

- **Low energy, Maintenance Free EC Fan Technology**
  - ensures long term savings on operating costs

- **Pressure Sensors**
  - for filter monitoring

- **Temperature Sensors**
  - for fully automatic operation of the summer bypass
  - frost protection and heater / cooler facilities

- **Lockable Large Access Doors**
  - simplify and accelerate the maintenance process

- **Remote control via smart phone or laptop ensures control flexibility and reduces service costs**

* DV1600 only
**Key Features**

- Extract up to 1000 m³/hr @ 200 Pa
- Excellent heat recovery efficiency, up to 95%
- Versatile unit positioning with floor and ceiling suspended mounting options
- Low SFP with energy saving EC fans
- Low noise, refer to NR35 and BB93 standards
- 10 speed digital control with Internet and BMS
- Compliant to BREEAM, Passive House and ErP 2013 / 2015 regulations

**Performance**

<table>
<thead>
<tr>
<th>Component</th>
<th>Supply Air</th>
<th>Extract Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound Power Level Lw (dB)</td>
<td>47 68 57 47 40 35 28 25</td>
<td>47 68 57 47 40 35 28 25</td>
</tr>
<tr>
<td>Max current</td>
<td>66 80 74 68 62 60 55 49 47</td>
<td>66 80 74 68 62 60 55 49 47</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>230 230</td>
<td>230 230</td>
</tr>
<tr>
<td>Voltage (at operation point)*</td>
<td>230 230</td>
<td>230 230</td>
</tr>
<tr>
<td>Nominal Power (at operation point)*</td>
<td>53 87</td>
<td>53 87</td>
</tr>
<tr>
<td>Max connection power</td>
<td>385 385</td>
<td>385 385</td>
</tr>
<tr>
<td>Max current</td>
<td>2.5 2.5</td>
<td>2.5 2.5</td>
</tr>
<tr>
<td>Filters</td>
<td>FT, M1</td>
<td>FT, M1</td>
</tr>
<tr>
<td>Fan Type</td>
<td>EC, EC</td>
<td>EC, EC</td>
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</table>

**Sound Pressure Level**

Sound pressure level is measured at 3m distance

**Ventilation**

<table>
<thead>
<tr>
<th>Maximum air volume @ 200 Pa</th>
<th>m³/hr</th>
<th>m³/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Air</td>
<td>1000</td>
<td>278</td>
</tr>
<tr>
<td>Extract Air</td>
<td>1000</td>
<td>278</td>
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</table>

**Heat Recovery**

<table>
<thead>
<tr>
<th>Maximum air volume @ 200 Pa</th>
<th>m³/hr</th>
<th>m³/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Air</td>
<td>1000</td>
<td>278</td>
</tr>
<tr>
<td>Extract Air</td>
<td>1000</td>
<td>278</td>
</tr>
</tbody>
</table>

**Performance**

- **Heat Recovery**
  - Extract up to 1000 m³/hr @ 200 Pa
  - Excellent heat recovery efficiency, up to 95%
  - Versatile unit positioning with floor and ceiling suspended mounting options
  - Low SFP with energy saving EC fans
  - Low noise, refer to NR35 and BB93 standards
  - 10 speed digital control with Internet and BMS
  - Compliant to BREEAM, Passive House and ErP 2013 / 2015 regulations

**Dimensions**

**Accessories**

See Duplexvent accessories pages 30-32 for more details.
Duplexvent FLEXI DV1600
Flexi Line Side Entry - Up to 1800 m³/hr air volume

Key Features
- Extract up to 1600 m³/hr @ 200 Pa
- Excellent heat recovery efficiency, up to 95%
- Versatile unit positioning with floor and ceiling suspended mounting options
- Low SFP with energy saving EC fans
- Low noise, refer to NR35 and BB93 standards
- 10 speed digital control with internet and BMS
- Unique interchangeable spigot connections
- Compliant to BREEAM, Passive House and ErP 2013 / 2015 regulations

Performance

<table>
<thead>
<tr>
<th>Component</th>
<th>Supply Air</th>
<th>Extract Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airflow</td>
<td>1600 / 444</td>
<td>1600 / 444</td>
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<tr>
<td>Voltage</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>Ø 315 mm</td>
<td>Ø 315 mm</td>
</tr>
</tbody>
</table>

Sound pressure level is measured at 3m distance

Temperature at outlet:
- Extract air i1: 23°C
- Supply air e2: 23°C

Humidity at inlet:
- Extract air i1: 40%
- Supply air e2: 40%

Weight:
- Extract Air: 226 kg
- Supply Air: 187 kg

Energy Efficiency

- Compliant to BREEAM, Passive House and ErP 2013 / 2015 regulations

Dimensions

Accessories

See Duplexvent accessories pages 30-32 for more details.

Notes:
- The figures above have been measured at 800 m and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.
### Key Features

- Extract up to 2600 m³/hr @ 200 Pa
- Excellent heat recovery efficiency, up to 95%
- Versatile unit positioning with floor and ceiling suspended mounting options
- Low SFP with energy saving EC fans
- Low noise, refer to NR35 and BB93 standards
- 10 speed digital control with internet and BMS
- Compliant to BREEAM, Passive House and ErP 2013 / 2015 regulations

### Performance

**Sound Pressure Level**

- **Supply air**
  - 45 dB (A) @ 63 Hz
  - 42 dB (A) @ 125 Hz
  - 39 dB (A) @ 250 Hz
  - 37 dB (A) @ 500 Hz
  - 35 dB (A) @ 1 kHz
  - 33 dB (A) @ 2 kHz
  - 31 dB (A) @ 4 kHz

- **Extract air**
  - 45 dB (A) @ 63 Hz
  - 42 dB (A) @ 125 Hz
  - 39 dB (A) @ 250 Hz
  - 37 dB (A) @ 500 Hz
  - 35 dB (A) @ 1 kHz
  - 33 dB (A) @ 2 kHz
  - 31 dB (A) @ 4 kHz

**Sound Power Level**

- **Supply air**
  - 0.27 kW @ 63 Hz
  - 0.27 kW @ 125 Hz
  - 0.27 kW @ 250 Hz
  - 0.27 kW @ 500 Hz
  - 0.27 kW @ 1 kHz
  - 0.27 kW @ 2 kHz
  - 0.27 kW @ 4 kHz

- **Extract air**
  - 0.27 kW @ 63 Hz
  - 0.27 kW @ 125 Hz
  - 0.27 kW @ 250 Hz
  - 0.27 kW @ 500 Hz
  - 0.27 kW @ 1 kHz
  - 0.27 kW @ 2 kHz
  - 0.27 kW @ 4 kHz

### Dimensions

- **Extract**
  - 2600 m³/hr at 200 Pa
  - 230 V / 50 Hz
  - Max. current: 4.5 A

- **Supply**
  - 2600 m³/hr at 200 Pa
  - 230 V / 50 Hz
  - Max. current: 4.5 A

### Accessories

- **Outdoor Air**
  - 300 x 250 mm
  - Flexible Connector
- **Supply Air**
  - 300 x 250 mm
  - Flexible Connector
- **Extract Air**
  - 300 x 250 mm
  - Flexible Connector
- **Condensate Outlet**
  - Ø 21 mm
  - Condensate Trap

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**Note:** The figures above are example performance measurements. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.
Duplexvent FLEXI DV3600
Flexi Line Side Entry - Up to 4000 m³/hr air volume

Key Features
- Extract up to 3600 m³/hr @ 200 Pa
- Excellent heat recovery efficiency, up to 95%
- Versatile unit positioning with floor and ceiling suspended mounting options
- Low SFP with energy saving EC fans
- Low noise, refer to NR35 and BB93 standards
- 10 speed digital control with internet and BMS
- Compliant to BREEAM, Passive House and ErP 2013 / 2015 regulations

Performance

Sound Power Level (dB) 63 125 250 500 1000
Supply air e2 70 71 83 72 61 54 48 53
Extract air i1 50 66 65 46 34 28 25 25
Exhaust air i2 69 69 82 71 61 59 53 47 53

Sound Pressure Level (dB) 63 125 250 500 1000
Supply air e2 69 69 82 71 61 59 53 47 53
Extract air i1 50 66 65 46 34 28 25 25
Exhaust air i2 69 69 82 71 61 59 53 47 53

Performance

Heat Recovery
- Supply Air (SUP) i1 - Extract Air (ETA)
- Exhaust Air (EHA) i2 - Outdoor Air (ODA)

Sound Power Level (dB) 63 125 250 500 1000
Supply air e2 70 71 83 72 61 54 48 53
Extract air i1 50 66 65 46 34 28 25 25
Exhaust air i2 69 69 82 71 61 59 53 47 53

Sound Pressure Level (dB) 63 125 250 500 1000
Supply air e2 69 69 82 71 61 59 53 47 53
Extract air i1 50 66 65 46 34 28 25 25
Exhaust air i2 69 69 82 71 61 59 53 47 53

Summer Operation:
- e1 - outdoor air (ODA)
- e2 - supply air (SUP)
- i1 - extract air (ETA)
- i2 - exhaust air (EHA)

Winter Operation:
- e1 - outdoor air (ODA)
- e2 - supply air (SUP)
- i1 - extract air (ETA)
- i2 - exhaust air (EHA)

Dimensions

Accessories

See Duplexvent accessories pages 30-32 for more details.

AirflowDevelopments Ltd
AirflowD airflow.com
Customer Services 01494 560800 airflow.com
Duplexvent MULTI
Heat Recovery Ventilation

Key Features

- Heat recovery ventilation
- 100% customisation
- 95% thermal efficiency
- Low energy EC fans
- Automatic circulation and 100% bypass
- Built-in heating / cooling coils
- 10 speed digital control
- Internet connection with BMS
- Outdoor versions available

As a ventilation specialist we aim to provide ventilation solutions for commercial applications thanks to our broad range of Commercial Heat Recovery units in excess of 25,000 m³/hr air volume with the availability of indoor and outdoor versions.

To accomplish this goal, our Passive House approved, ex-stock Flexi Line units provide the highest thermal efficiency with immediate delivery whilst our customised Multi Line units match your specification in terms of installation flexibility, performance and quality by meeting the high air volume requirements for commercial and large industrial spaces.

Multi Line Unit Configurations

- Horizontal (Maintenance access from the side)
- Vertical (Maintenance access from the side)
- Ceiling suspended (Maintenance access from the bottom)
- Floor standing (Maintenance access from the top)

100% customisation and short delivery time

Multi Line MVHR units follow the business philosophy of multiple variability. Designers can easily modify unit positions, spigot connections, filters, integral heating / cooling coils, bypass and circulation dampers using the selection software which accelerates the specification process and helps meet stringent project requirements.

Despite the full customisation Multi Line units are delivered in a period of 4 weeks or earlier to meet tight project deadlines.

100% Bypass facility delivers cool, fresh and filtered air
Circulation damper helps regulate indoor temperature / humidity conditions
Built-in water / DX coils extra heating / cooling

Duplexvent Multi Size Range

Customer Services 01494 560800

AirflowDevelopments Ltd airflow.com
Duplexvent MULTI
Heat Recovery Ventilation

**Key Components**

- **Lockable Large Access Doors** simplify and accelerate the maintenance process.
- **Digital Control Box** with internet and BMS connections.
- **Built-in Heaters / Coolers** provide space saving solution.
- **G4 / M5 / F7 High Grade Filters** provide ultra hygienic indoor climate and protect heat exchangers from getting dirty.
- **Smooth Internal Casing** with 30mm insulation (class T2) avoids thermal bridging (class TB1), absorbs noise and meets sanitary standards.
- **Condensate Drain** for floor standing installations.
- **Cross-Counter Flow Heat Exchanger** up to 95% thermal efficiency reduce heating bills significantly and guarantee a quick return on investment.
- **Low Energy, Maintenance Free EC Fan Technology** ensures long term savings on operating costs.
- **Pressure Sensors** for filter monitoring.
- **Temperature Sensors** for fully automatic operation of the summer bypass, frost protection and heater / cooler facilities.
- **Circulation Damper** for indoor temperature / humidity control.
- **100% Summer Bypass Facility** provides a flow of cool, fresh and filtered air into the property.
- **Cross-Counter Flow Heat Exchanger** up to 95% thermal efficiency reduce heating bills significantly and guarantee a quick return on investment.
Duplexvent MULTI

Multi Line Customised Indoor - Up to 9600 m³/hr air volume

Key Features

- Fully customised commercial units in 8 different sizes up to 9000 m³/hr at 200 Pa
- Excellent heat recovery efficiency, up to 95%
- Low SFP with energy saving EC fans
- Low noise, refer to NR35 and BB93 standards
- 10 speed digital control with internet and BMS
- Excellent thermal insulation (class T2, TB1)
- Optional circulation and bypass dampers
- BREEAM, EPDB and ErP 2013 / 2015 compliant
- Meets Building Regulations Part L2A and L2B

Performance

<table>
<thead>
<tr>
<th>Duplexvent Multi</th>
<th>DV500</th>
<th>DV1000</th>
<th>DV1500</th>
<th>DV2500</th>
<th>DV3500</th>
<th>DV5000</th>
<th>DV6500</th>
<th>DV8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply air - max.</td>
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<td></td>
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<td></td>
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<tr>
<td>m³/hr</td>
<td>660</td>
<td>1200</td>
<td>2200</td>
<td>3400</td>
<td>4000</td>
<td>5750</td>
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<td>Extraction air - max.</td>
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<tr>
<td>m³/hr</td>
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<td>1150</td>
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<td>EC (backward curved impeller)</td>
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<td>95-130</td>
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<td>Voltage V</td>
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<td>RPM - max.</td>
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<td>mm</td>
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<tr>
<td>Heating output T - max. kW</td>
<td>5</td>
<td>14</td>
<td>22</td>
<td>30</td>
<td>42</td>
<td>51</td>
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<td>Cooling output CHW - max. kW</td>
<td>4</td>
<td>8</td>
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<td>42</td>
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<td>Costing output CHF - max. kW</td>
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<td>6</td>
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</tr>
</tbody>
</table>

Dimensions

FLOOR STANDING (front view) Multi DV500 to DV8000

UNDERCEILING (drop view) Multi DV500 to DV8000

FLOOR STANDING FLAT (top view) Multi DV500 to DV8000

Acoustic power Lw and Acoustic pressure Ld

<table>
<thead>
<tr>
<th>Type</th>
<th>Working point</th>
<th>Acoustic power Lw dB(A)</th>
<th>Acoustic pressure Ld dB(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplexvent Multi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DV500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DV1000</td>
<td></td>
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<tr>
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<td>DV3500</td>
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<td>DV5000</td>
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<td>DV6500</td>
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</tr>
<tr>
<td>DV8000</td>
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<tr>
<td>Dimension H</td>
<td>mm</td>
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<td>795</td>
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<td>Dimension B</td>
<td>mm</td>
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<td>Dimension L</td>
<td>mm</td>
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<tr>
<td>Condensate drain K</td>
<td>mm</td>
<td>e22</td>
<td>e22</td>
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</tbody>
</table>

Connecting Ports

- Circular diameter D
- Dimension X1 x Y1 (standard k, L1)
- Dimension X2 x Y2 (atypical k, L2)
- Dimension X3 x Y3 (atypical k, L3)
- Dimension X4 x Y4 (atypical k, L4)

Airflow Developments Ltd

Customer Services 01494 560800
Duplexvent MULTI-N
Heat Recovery Ventilation

Lift into Place
Ready for crane transport – special suspension points are included as standard for easy connection to a crane.

Easy Maintenance
Multi-N outdoor units are designed with continuous emphasis on service comfort. The units can be maintained via side access doors, without the need to open the unit doors.

Effective Installation
Duplexvent Multi-N outdoor units can be ducted through the roof which is an excellent solution that saves material and labour costs in ducting and also significantly reduces the energy loss.

Compact Size
One of the biggest Duplexvent Multi-N advantages is its compact size. Having an exceptionally low height, all units up to 5000 m³/hr are less than 1m high.

Duplexvent Multi-N Outdoor Size Range

The height dimension is for units only (without the 400mm optional base frame)

- Base frame with 50 mm thick PIR insulation.
- Air ducts with no energy loss - duct and installation cost savings.
- Easy filter side changing to ensure maximum service comfort.
- Riser duct for condensate drainage.
- Riser duct for control system and heating / cooling pipes.
- Side access doors for quick and easy maintenance.
Duplexvent MULTI-N
Multi-N Line Customised Outdoor - Up to 8900 m³/hr air volume

Key Features
- Fully customised commercial units in 6 different sizes up to 8500 m³/hr at 200 Pa
- Excellent heat recovery efficiency, up to 95%
- Low SFP with energy saving EC fans
- Ready for crane support
- Insulated base frame reduces heat loss and duct runs
- Side doors for filter change and maintenance
- 10 speed digital control with Internet and BMS
- Optional circulation and bypass dampers
- BREEAM, EPBD and ErP 2013 / 2015 compliant
- Meets Building Regulations Part L2A and L2B

### Performance

<table>
<thead>
<tr>
<th>Duplexvent Multi-N</th>
<th>DY1500</th>
<th>DY2500</th>
<th>DY3500</th>
<th>DY5000</th>
<th>DY6500</th>
<th>DY8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply air - max.</td>
<td>m³/hr</td>
<td>2500</td>
<td>3500</td>
<td>4700</td>
<td>5500</td>
<td>7200</td>
</tr>
<tr>
<td>Extraction air - max.</td>
<td>m³/hr</td>
<td>2300</td>
<td>3500</td>
<td>4600</td>
<td>5500</td>
<td>7100</td>
</tr>
<tr>
<td>Fan type</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Weight</td>
<td>kg</td>
<td>290-350</td>
<td>390-480</td>
<td>405-480</td>
<td>460-540</td>
<td>530-630</td>
</tr>
<tr>
<td>Max. power input</td>
<td>kW</td>
<td>1.5</td>
<td>2.5</td>
<td>4.4</td>
<td>4.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Frequency</td>
<td>Hz</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RPM - max.</td>
<td>rev/min</td>
<td>2820</td>
<td>3000</td>
<td>3080</td>
<td>3280</td>
<td>3280</td>
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<tr>
<td>Heating output T - max.</td>
<td>kW</td>
<td>9</td>
<td>12</td>
<td>22</td>
<td>30</td>
<td>39</td>
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<tr>
<td>Cooling output CHW - max.</td>
<td>kW</td>
<td>10</td>
<td>13</td>
<td>25</td>
<td>37</td>
<td>41</td>
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<td>Part No.</td>
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<td>9041534</td>
<td>9041535</td>
<td>9041536</td>
<td>9041532</td>
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</table>

### Dimensions

<table>
<thead>
<tr>
<th>Duplexvent Multi-N</th>
<th>DY1500</th>
<th>DY2500</th>
<th>DY3500</th>
<th>DY5000</th>
<th>DY6500</th>
<th>DY8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td></td>
<td></td>
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<tr>
<td>Dimension B</td>
<td>mm</td>
<td>505</td>
<td>685</td>
<td>770</td>
<td>960</td>
<td>1170</td>
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<td>Dimension D</td>
<td>mm</td>
<td>2550</td>
<td>2560</td>
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<td>Dimension H</td>
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<td>105</td>
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<tr>
<td>Dimension P</td>
<td>mm</td>
<td>135</td>
<td>105</td>
<td>105</td>
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<td>Dimension J</td>
<td>mm</td>
<td>100</td>
<td>125</td>
<td>185</td>
<td>220</td>
<td>315</td>
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<tr>
<td>Dimension M</td>
<td>mm</td>
<td>110</td>
<td>160</td>
<td>205</td>
<td>225</td>
<td>355</td>
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<tr>
<td>Condensate drain</td>
<td>mm</td>
<td>ø32</td>
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</table>

### Acoustic power Lₐ and Acoustic pressure Lₐ0

<table>
<thead>
<tr>
<th>Type</th>
<th>Working point</th>
<th>Acoustic power Lₐ[dB(A)]</th>
<th>Acoustic pressure Lₐ0[dB] at 1 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duplexvent Multi-N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DY1500</td>
<td>Low</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>High</td>
<td>58</td>
<td>58</td>
<td>62</td>
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<tr>
<td>DY2500</td>
<td>Low</td>
<td>57</td>
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<tr>
<td>High</td>
<td>58</td>
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<td>62</td>
</tr>
<tr>
<td>DY3500</td>
<td>Low</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>High</td>
<td>59</td>
<td>59</td>
<td>67</td>
</tr>
<tr>
<td>DY5000</td>
<td>Low</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>High</td>
<td>61</td>
<td>61</td>
<td>69</td>
</tr>
<tr>
<td>DY6500</td>
<td>Low</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>High</td>
<td>64</td>
<td>64</td>
<td>73</td>
</tr>
<tr>
<td>DY8000</td>
<td>Low</td>
<td>67</td>
<td>67</td>
</tr>
</tbody>
</table>

Airflow Developments Ltd 24 AirflowD airflow.com Customer Services 01494 560800 25 airflow.com
Duplexvent - Advanced Functionality and Control

- Advanced control with digital display
- 10 speed EC fan control
- Automatic 100% bypass control for free cooling
- Daily / Weekly programme setting
- Filter monitoring via pressure sensors
- BMS connection (Modbus, Konnex, BACnet)
- Internet connection with user and service interfaces
- Frost protection facility (heater assisted)
- Outputs for electric / water heater and DX / water cooler
- Zonal ventilation control (winter / summer)
- Constant flow / pressure control
- Temperature control (based on extract or supply air) via 5 built-in temperature sensors
- On-demand ventilation via CO₂, humidity and air quality sensors

Duplexvent Commercial Heat Recovery units are delivered with a choice of control options which enables complete functionality of the Flexi and Multi units.

Motion-Blue Control System

Duplexvent - Selection Software

Our advanced and user friendly Duplexvent Selection Software makes it possible to select the most suitable product in just a few simple steps.

This freely available online software* gives a quick survey of the right choice of product and easy access to relevant technical information.

After having chosen the unit and accessories you can select exactly what specification is needed for your project.

Technical specifications, air flow performance graphs, energy calculations, sound data and dimension drawings are all produced using the software.

Quick and Easy Selection

Operation:
- Input of technical parameters such as air volume, static pressure, temperature etc.
- Input of unit functions such as heating, cooling, air circulation, bypass etc.
- Automatic selection of the suitable ventilation unit

Software Outputs:
- Complete technical documentation including air path and HX diagrams
- Specification of the selected units and components with part numbers and prices
- Electrical wiring diagram with detailed information about supply voltage, rated current of the fans, fuses, cable connections etc.
- Data can be exported as doc, pdf or dxf (Autocad) format
- Product catalogue pages

Unit Construction:
- Selection of unit configuration and spigot positions for the specified installation
- Detailed dimensions of the ventilation unit including the spigot size and maintenance space

Visit: airflow.com/selectionsoftware

*The updated version of the selection software, which is updated every 6 months, can be found on our website airflow.com

Internet Connection

Duplexvent commercial units incorporate an Internet server that uses Modbus TCP/IP protocol to provide a connection between the ventilation unit and the internet via a standard plug and play ethernet cable.

This allows you to monitor and control the unit from a laptop via the internet or a local area network. The unit can also be monitored remotely by technical service which saves time and cost on service processes.
Duplexvent - Versatile Solutions

**Typical Applications**

- Nursery
- Large Residential Properties
- Schools and Colleges
- Industrial Plants

- Offices
- Restaurants
- Retail
- Public Areas

**Typical Installations**

- MULTI DV1500
- MULTI-N DV1500
- MULTI-N DV5000
- MULTI-N DV6500
- MULTI DV8000
- MULTI-N DV3500
- FLEXI DV2600
- FLEXI DV3600
- FLEXI DV8000
## Duplexvent Commercial Accessories

### Flexi Line Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Product Image</th>
<th>DV1100</th>
<th>DV1600</th>
<th>DV2600</th>
<th>DV3600</th>
</tr>
</thead>
<tbody>
<tr>
<td>90000174</td>
<td>M5 filter</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>90000083</td>
<td>M5 filter</td>
<td></td>
<td>-</td>
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</tr>
<tr>
<td>90000085</td>
<td>M5 filter</td>
<td></td>
<td>-</td>
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</tr>
<tr>
<td>90000139</td>
<td>M5 filter</td>
<td></td>
<td>-</td>
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<tr>
<td>900010175</td>
<td>F7 filter</td>
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<tr>
<td>90000084</td>
<td>F7 filter</td>
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<tr>
<td>90000086</td>
<td>F7 filter</td>
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<td>-</td>
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</tr>
<tr>
<td>90000140</td>
<td>F7 filter</td>
<td></td>
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<td>-</td>
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</tbody>
</table>

### Supply Air Filter

- 90000095 500 x 250mm connection
- 90000096 500 x 300mm connection

### Shut-off Damper with Spring Return

- 90000172 250mm connection
- 90000099 315mm connection
- 90000100 500 x 250mm connection
- 90000137 600 x 300mm connection

### Shut-off Damper without Spring Return

- 90000097 250mm connection
- 90000098 315mm connection
- 90000099 500 x 250mm connection
- 90000138 600 x 300mm connection

### Electric Duct Heater

- 900000173 3.3kW, 250mm connection
- 90000091 6.0kW, 315mm connection
- 90000092 10.5kW, 500 x 250mm connection
- 90000138 13.5kW, 600 x 300mm connection

### Water Heating Coil + Duct Temp. Sensor (Floor Standing Position)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Product Image</th>
<th>DV1100</th>
<th>DV1600</th>
<th>DV2600</th>
<th>DV3600</th>
</tr>
</thead>
<tbody>
<tr>
<td>90000200</td>
<td>5.4kW at 60/40°C</td>
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<tr>
<td>90000201</td>
<td>7.8kW at 60/40°C</td>
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<td>-</td>
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<tr>
<td>90000202</td>
<td>12.0kW at 60/40°C</td>
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<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>90000203</td>
<td>16.0kW at 60/40°C</td>
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<td>-</td>
<td>-</td>
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<td>-</td>
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</tbody>
</table>

### Duplexvent Commercial Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Product Image</th>
<th>DV1100</th>
<th>DV1600</th>
<th>DV2600</th>
<th>DV3600</th>
</tr>
</thead>
<tbody>
<tr>
<td>90000201</td>
<td>Water heating coil + duct temp. sensor</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>90000202</td>
<td>(ceiling suspended)</td>
<td></td>
<td>-</td>
<td>-</td>
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<tr>
<td>90000203</td>
<td>RD-IO circuit board + free chamber</td>
<td></td>
<td>-</td>
<td>-</td>
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<tr>
<td>90001015</td>
<td>Hydraulic kit for water heater</td>
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<td>-</td>
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<tr>
<td>90001016</td>
<td>Water cooling coil + duct temp. sensor +</td>
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<tr>
<td>90001017</td>
<td>RD-IO circuit board + free chamber</td>
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<td>-</td>
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<tr>
<td>90001018</td>
<td>Hydraulic kit for water cooler</td>
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<tr>
<td>90001019</td>
<td>Water heating/cooling coils + duct temp. sensor</td>
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<td>90001023</td>
<td>DX coil (ceiling suspended position)</td>
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</tr>
</tbody>
</table>

---

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Air Flow Solutions

LOOVENT

Reliable Ventilation for Social Landlords since 1969...
...the original Aidelle Loovent, now known as Loovent eco

- Quiet, reliable, filterless
- An updated, direct replacement of older Aidelle and Loovent versions
- Centrifugal technology, suitable for torturous ducting
- Quick to install, portrait, landscape, surface or recessed mounting
- Low energy, economical to run and long life
- Five year warranty
- Helps eliminate condensation and mould in toilets, bathrooms, utilities and kitchens (adjacent to hob)
- Timer, humidity, motion sensor, trickle flow (dMEV) and SELV models
- Complies with Building Regulations

Duplexvent Commercial Accessories

Flexi Line Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Product Image</th>
<th>DV1100</th>
<th>DV1600</th>
<th>DV2600</th>
<th>DV3600</th>
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</thead>
<tbody>
<tr>
<td>90000179</td>
<td>DX coil (ceiling suspended position)</td>
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<td>90000150</td>
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<td>90000152</td>
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<td>Free chamber for water / DX cooling coils</td>
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<td>Free chamber for water / DX cooling coils</td>
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<td>Free chamber for water / DX cooling coils</td>
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<tr>
<td>90000093</td>
<td>Constant flow kit (including two pressure sensors)</td>
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<tr>
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<td>90000089</td>
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<td>90000320</td>
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<td>90000313</td>
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<td>90000166</td>
<td>Room CO\textsubscript{2} sensor</td>
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<td>90000165</td>
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<tr>
<td>90000321</td>
<td>Room air quality sensor</td>
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</tr>
</tbody>
</table>

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Always Innovating

Our constant search for new and better ways to save energy, improve the indoor environment and provide you with high quality, reliable and easy to use products that contribute to a low carbon future continues.

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