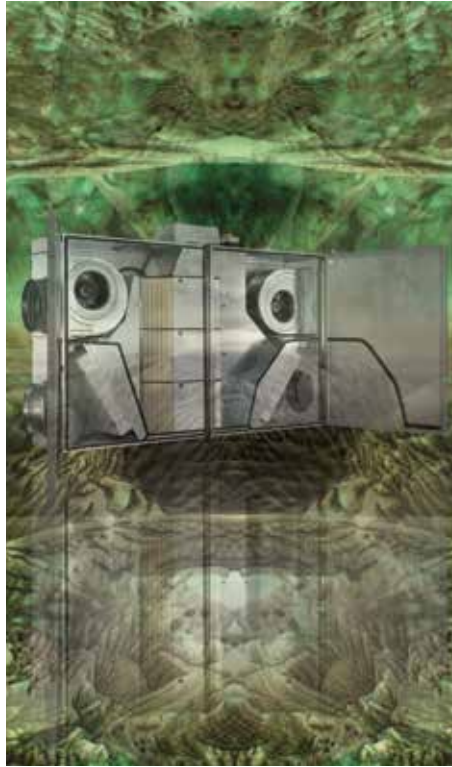


Air Flow Solutions



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.

Duplexvent Flexi

Heat Recovery Ventilation



Key Features

- Heat recovery ventilation
- 95% thermal efficiency
- Low energy EC fans
- Versatile unit positioning
- Automatic, 100% bypass
- 10 speed digital control
- Internet connection
- Off the shelf delivery
- Passive House Institute certified



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.



Ceiling Suspended



Floor Standing



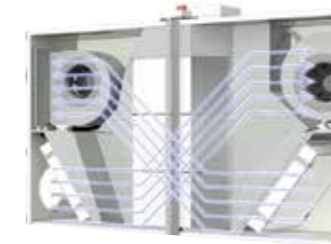
1 Base Unit (FLEXI DV1100 / 1600 / 2600 / 3600)

16 Installation Configurations

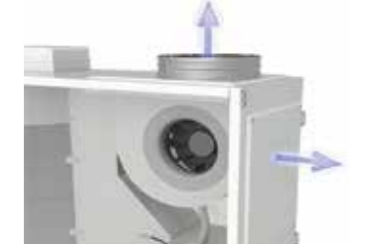
+ 3 Upgrade Packs



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)

Upgrade Packs

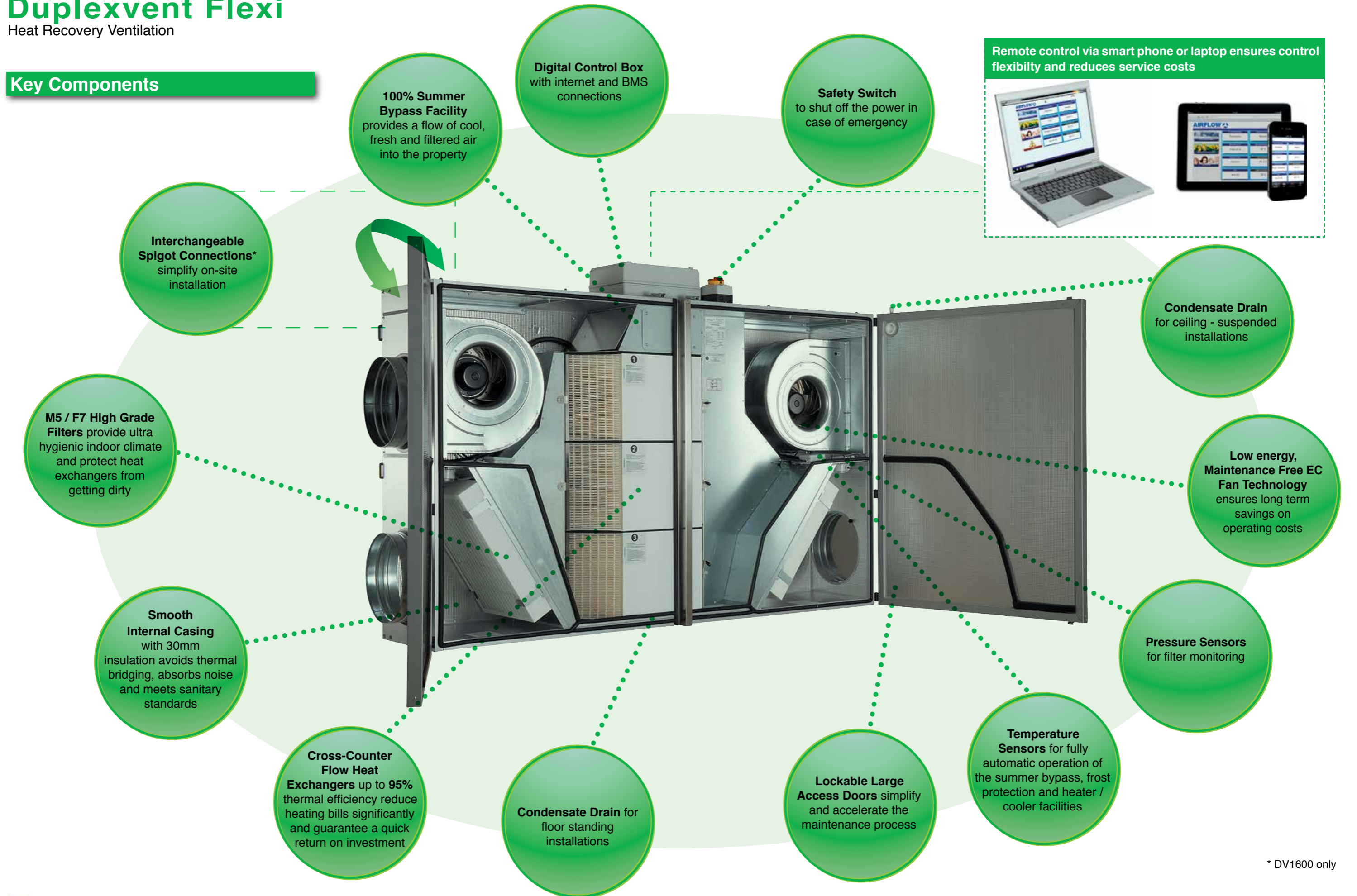
1. **Passive House Pack**
 - Electric pre-heater to warm the incoming air to protect the heat exchangers from freezing
2. **Constant Pressure Pack**
 - Differential pressure and flow measurement for energy optimisation
3. **Hygiene Pack**
 - Inclined tube manometers to maintain the certified



Duplexvent Flexi

Heat Recovery Ventilation

Key Components



* DV1600 only

Duplexvent FLEXI DV1100

Flexi Line Side Entry - Up to 1200 m³/hr air volume



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

Sound Power Level Lw (dB)	dB (A)	63	125	250	500	1 k	2 k	4 k	8 k
Outdoor air e1	47	68	57	47	42	35	28	<25	<25
Supply air e2	66	80	74	69	62	60	55	49	47
Extract air i1	45	67	55	46	40	33	26	<25	<25
Exhaust air i2	65	80	7	68	60	58	53	47	44
Breakout noise	51	70	55	57	44	40	33	27	25
Sound Pressure Level Ld	dB (A)	63	125	250	500	1 k	2 k	4 k	8 k
To the surrounding	21	49	35	37	<25	<25	<25	<25	<25

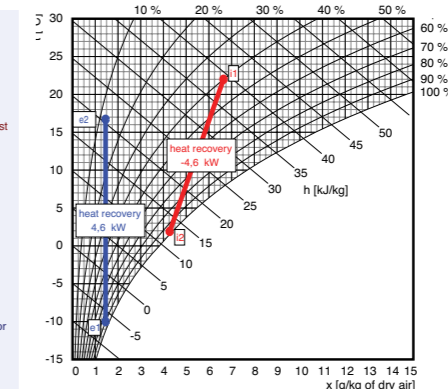
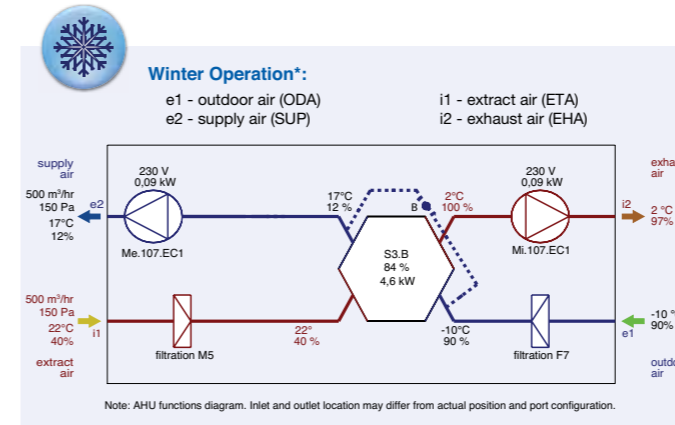
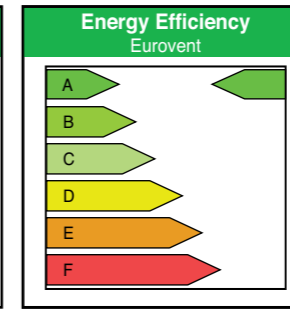
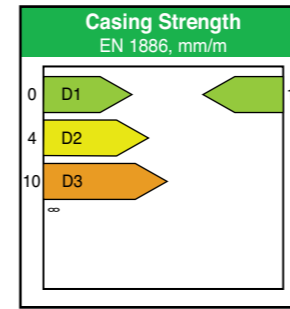
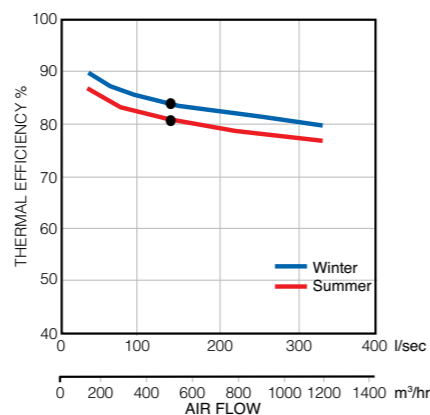
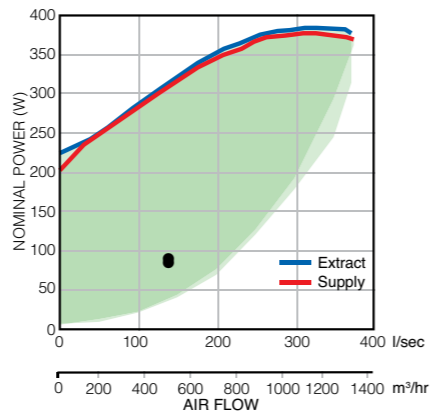
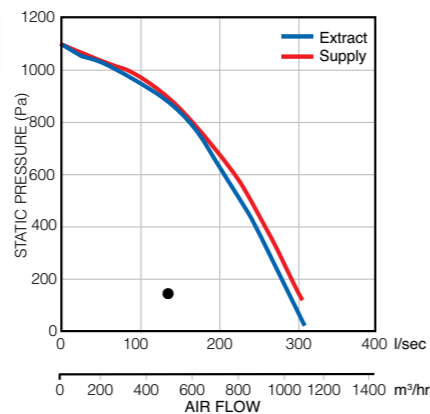
Sound pressure level is measured at 3m distance

Ventilation	Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec 1000 / 278	1000 / 278
Air volume @ 150 Pa*	m ³ /hr / l/sec 500 / 139	500 / 139
Nominal voltage	V 230	230
Voltage (at operation point)*	V 230	230
Nominal Power (at operation point)*	W 93	87
Max connection power	W 385	385
Max current	A 2.5	2.5
Filters	F7	M5
Fan Type	EC	EC

* Note: The figures above have been measured at 500 m³/hr and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

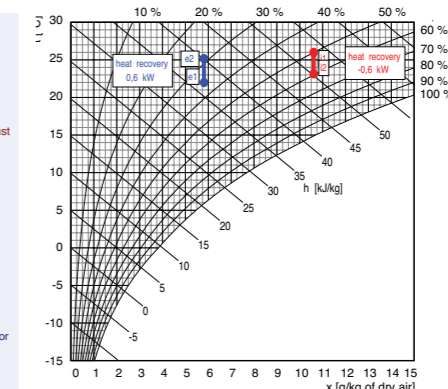
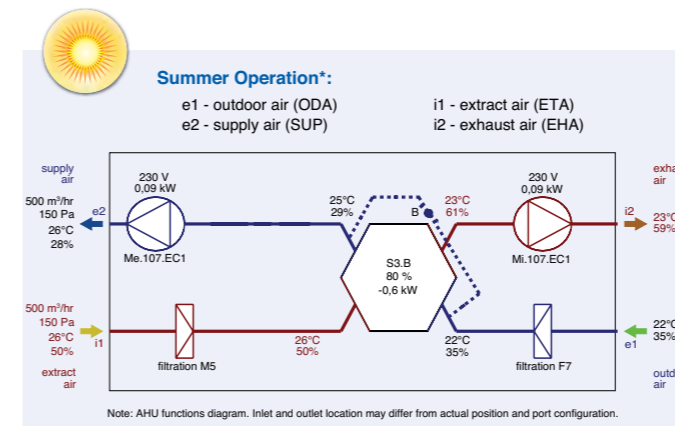
Heat Recovery	Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec 1000 / 278	1000 / 278
Air volume @ 150 Pa*	m ³ /hr / l/sec 500 / 139	500 / 139
Temperature at inlet*	°C -10	22
Temperature at outlet*	°C 17	2
Humidity at inlet*	%rh 90	40
Humidity at outlet*	%rh 12	100
Thermal efficiency in winter / summer	% 84 / 80	
Performance in winter / summer	kW 4.6 / -0.6	
Condensation	l/h 1.5	
Type of heat exchanger	Counter Flow, Plastic	
Part No.	90000183	

* Note: The figures above have been measured at 500 m³/hr and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



Supply	Description	t [°C]	rh [%]
e1	Outdoor Air	-10.0	90
e2	Supply Air	17.0	12

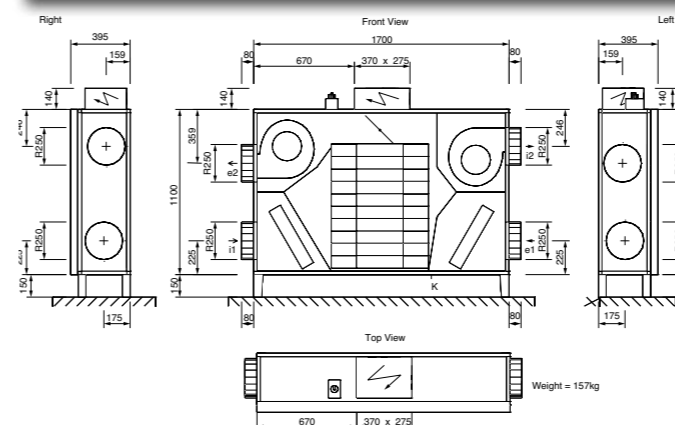
Exhaust	Description	t [°C]	rh [%]
i1	Extract Air	22.0	40
i2	Exhaust Air	2.0	100



Supply	Description	t [°C]	rh [%]
e1	Outdoor Air	22.0	35
e2	Supply Air	25.0	29

Exhaust	Description	t [°C]	rh [%]
i1	Extract Air	26.0	50
i2	Exhaust Air	23.0	61

Dimensions



* The above figures are example

Connections	Type	Diameter	Accessories
e1	Outdoor Air	Ø 250 mm	Shut-off Damper, Flexible Connector
e2	Supply Air	Ø 250 mm	Flexible Connector
i1	Extract Air	Ø 250 mm	Flexible Connector
i2	Exhaust Air	Ø 250 mm	Flexible Connector
K	Condensate Outlet	Ø 21 mm	Condensate Trap

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

Sound Power Level L _w (dB)	dB (A)	63	125	250	500	1 k	2 k	4 k	8 k
Outdoor air e1	46	61	54	49	42	38	31	<25	<25
Supply air e2	68	74	75	70	66	62	58	51	45
Extract air i1	45	61	54	48	42	37	31	<25	<25
Exhaust air i2	68	74	75	70	65	61	58	50	44
Breakout noise	55	59	61	59	51	50	44	32	<25
Sound Pressure Level L _d	dB (A)	63	125	250	500	1 k	2 k	4 k	8 k
To the surrounding	35	38	41	39	30	29	<25	<25	<25

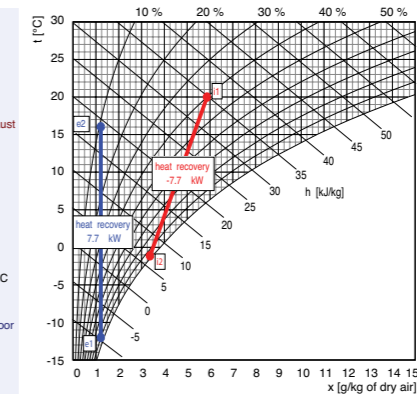
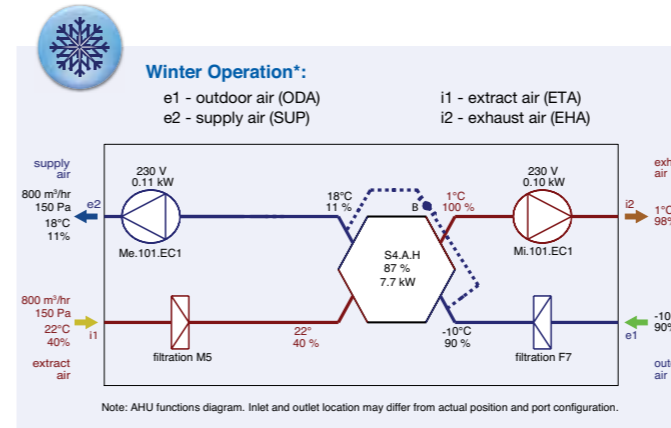
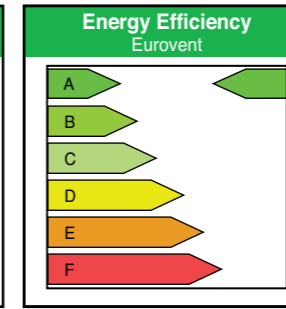
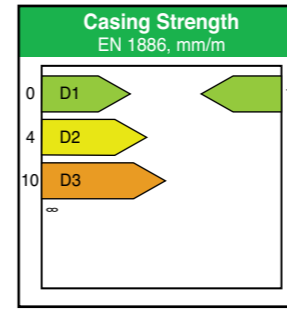
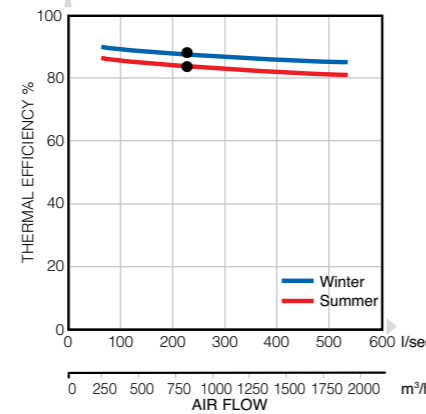
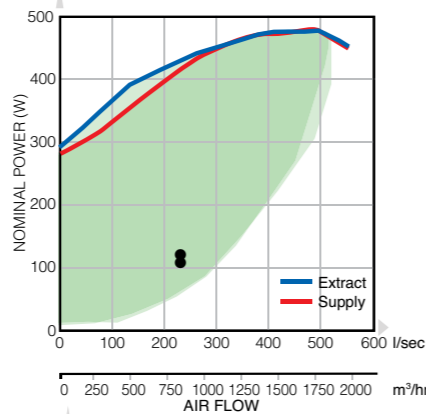
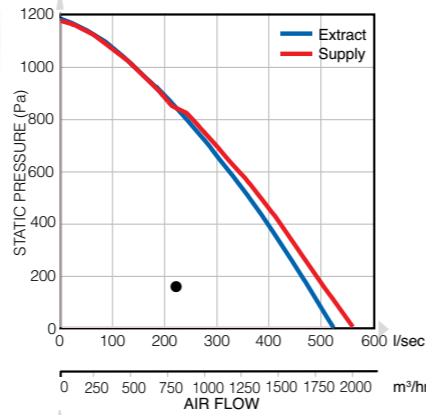
Sound pressure level is measured at 3m distance

Ventilation	Supply Air	Extract Air
Maximum Air Volume @ 200 Pa	m ³ /hr / l/sec 1600 / 444	1600 / 444
Air volume @ 150 Pa*	m ³ /hr / l/sec 800 / 222	800 / 222
Nominal voltage	V 230	230
Voltage (at operation point)*	V 230	230
Nominal power (at operation point)*	W 114	105
Max connection power	W 490	490
Max current	A 2.9	2.9
Filters	F7	M5
Fan type	EC	EC

* Note: The figures above have been measured at 800 m³/hr and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

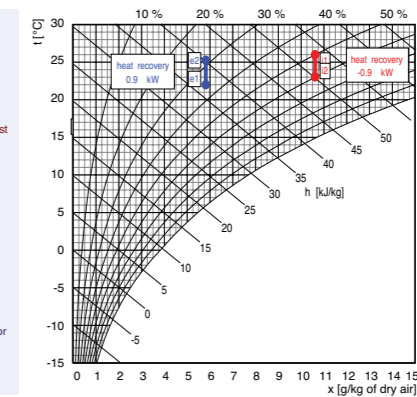
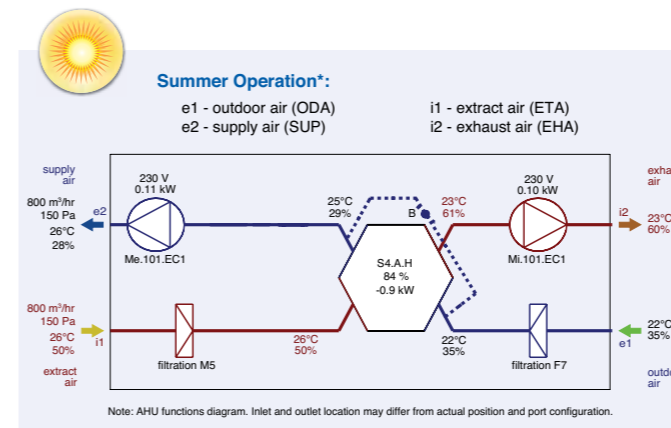
Heat Recovery	Supply Air	Extract Air
Maximum Air Volume @ 200 Pa	m ³ /hr / l/sec 1600 / 444	1600 / 444
Air volume @ 150 Pa*	m ³ /hr / l/sec 800 / 222	800 / 222
Temperature at inlet*	°C -10	22
Temperature at outlet*	°C 18	1
Humidity at inlet*	%rh 90	40
Humidity at outlet*	%rh 11	100
Thermal efficiency in winter / summer	% 87 / 84	
Performance in winter / summer	kW 7.7 / -0.9	
Condensation	l/h 2.5	
Type of heat exchanger	Counter Flow, Plastic	
Part No.	90000068	

* Note: The figures above have been measured at 800 m³/hr and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



Supply	Description	t [°C]	rh [%]
e1	Outdoor Air	-10.0	90
e2	Supply Air	18.0	11

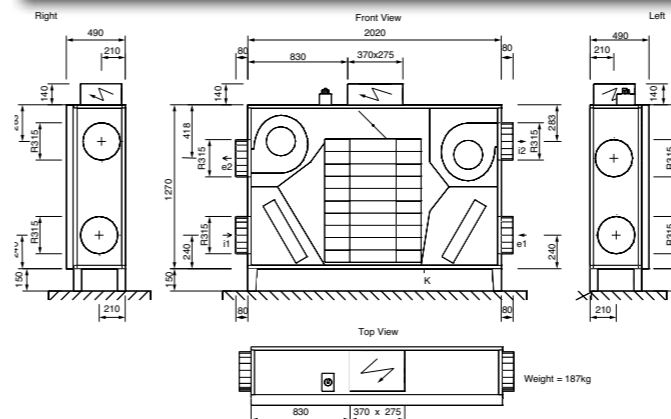
Exhaust	Description	t [°C]	rh [%]
i1	Extract Air	22.0	40
i2	Exhaust Air	1.0	100



Supply	Description	t [°C]	rh [%]
e1	Outdoor Air	22.0	35
e2	Supply Air	25.0	29

Exhaust	Description	t [°C]	rh [%]
i1	Extract Air	26.0	50
i2	Exhaust Air	23.0	61

Dimensions



* The above figures are example

Connections	Type	Diameter	Accessories
e1	Outdoor Air	Ø 315 mm	Shut-off Damper, Flexible Connector
e2	Supply Air	Ø 315 mm	Flexible Connector
i1	Extract Air	Ø 315 mm	Flexible Connector
i2	Exhaust Air	Ø 315 mm	Flexible Connector
K	Condensate Outlet	Ø 21 mm	Condensate Trap

Accessories

See Duplexvent accessories pages 30-32 for more details.

Duplexvent FLEXI DV2600

Flexi Line Side Entry - Up to 3100 m³/hr air volume

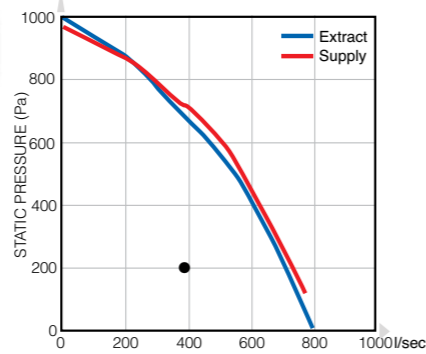
Key Features

- 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

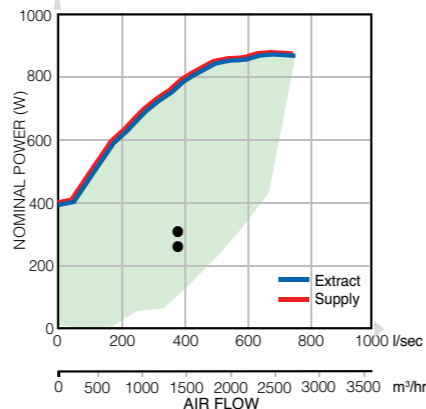
Sound Power Level Lw (dB)	dB (A)	63	125	250	500	1 k	2 k	4 k	8 k
Outdoor air e1	45	60	58	46	36	33	29	<25	<25
Supply air e2	68	81	77	72	61	60	56	51	48
Extract air i1	44	59	58	45	35	32	28	<25	<25
Exhaust air i2	67	81	77	71	60	59	55	50	47
Breakout noise	64	66	73	70	55	52	48	41	33
Sound Pressure Level Ld	dB (A)	63	125	250	500	1 k	2 k	4 k	8 k
To the surrounding	43	45	53	49	34	32	28	<25	<25



Sound pressure level is measured at 3m distance

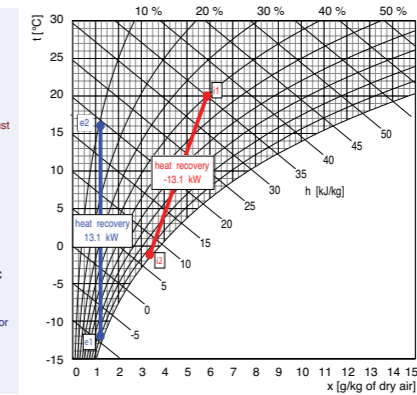
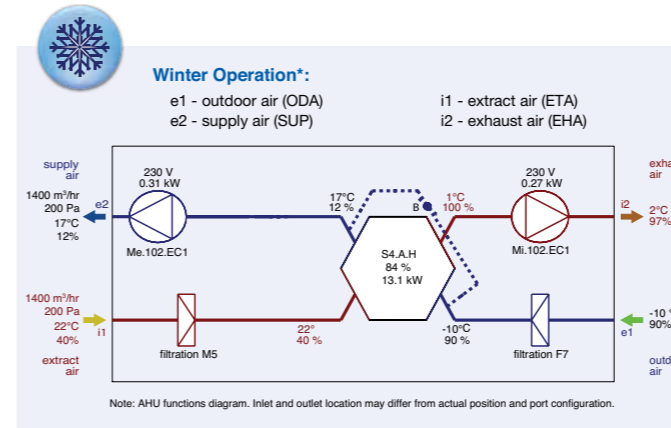
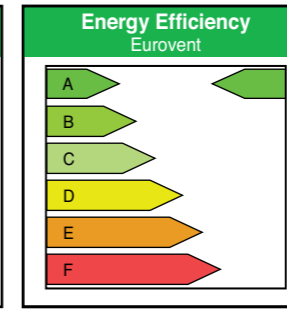
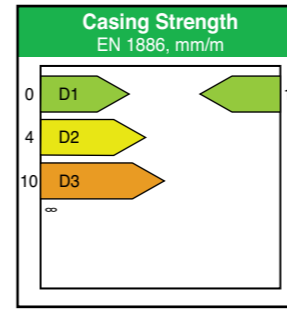
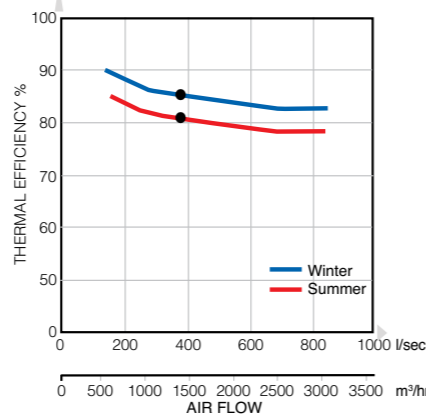
Ventilation	Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec 2600 / 722	2600 / 722
Air volume @ 200 Pa*	m ³ /hr / l/sec 1400 / 389	1400 / 389
Nominal voltage	V 230	230
Voltage (at operation point)*	V 230	230
Nominal power (at operation point)*	W 305	271
Max connection power	W 870	870
Max current	A 4.5	4.5
Filters	F7	M5
Fan type	EC	EC

* Note: The figures above have been measured at 1400 m³/hr and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



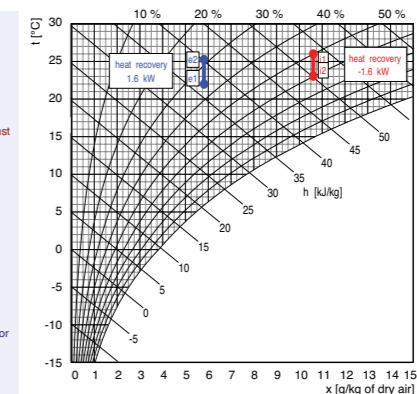
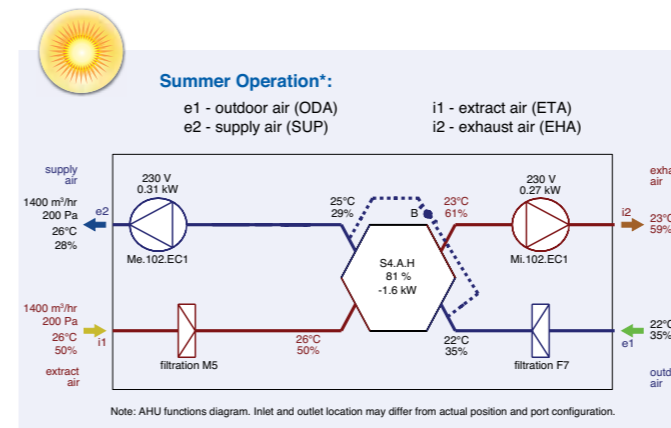
Heat Recovery	Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec 2600 / 722	2600 / 722
Air volume @ 200 Pa*	m ³ /hr / l/sec 1400 / 389	1400 / 389
Temperature at inlet*	°C -10	22
Temperature at outlet*	°C 17	1
Humidity at inlet*	%rh 90	40
Humidity at outlet*	%rh 12	100
Thermal efficiency in winter / summer	% 84 / 81	
Performance in winter / summer	kW 13.1 / -1.6	
Condensation	l/h 4.2	
Type of heat exchanger	Counter Flow, Plastic	
Part No.	90000069	

* Note: The figures above have been measured at 1400 m³/hr and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



Supply	Description	t [°C]	rh [%]
e1	Outdoor Air	-10.0	90
e2	Supply Air	17.0	12

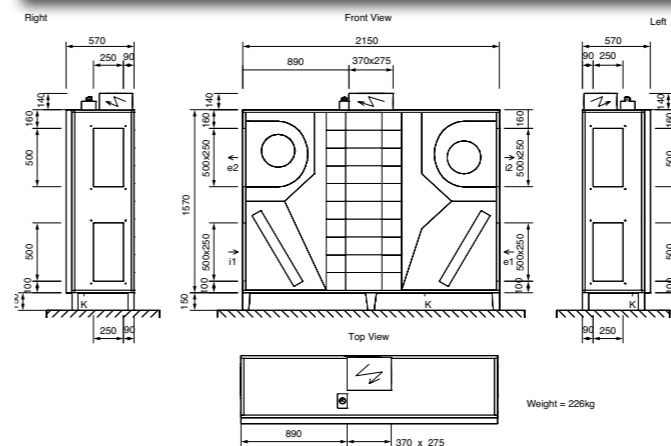
Exhaust	Description	t [°C]	rh [%]
i1	Extract Air	22.0	40
i2	Exhaust Air	1.0	100



Supply	Description	t [°C]	rh [%]
e1	Outdoor Air	22.0	35
e2	Supply Air	25.0	29

Exhaust	Description	t [°C]	rh [%]
i1	Extract Air	26.0	50
i2	Exhaust Air	23.0	61

Dimensions



* The above figures are example

Connections	Type	Diameter	Accessories
e1	Outdoor Air	500 x 250 mm	Shut-off Damper, Flexible Connector
e2	Supply Air	500 x 250 mm	Flexible Connector
i1	Extract Air	500 x 250 mm	Flexible Connector
i2	Exhaust Air	500 x 250 mm	Flexible Connector
K	Condensate Outlet	Ø 21 mm	Condensate Trap

Accessories

See Duplexvent accessories pages 30-32 for more details.

Duplexvent FLEXI DV3600

Flexi Line Side Entry - Up to 4000 m³/hr air volume

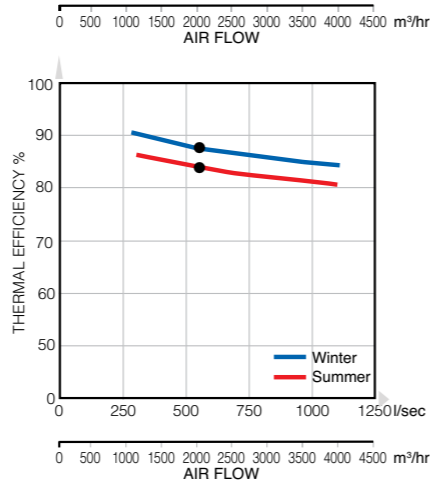
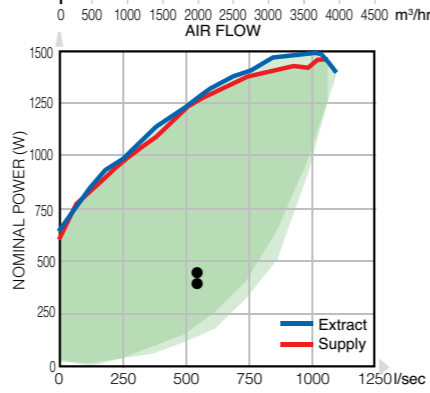
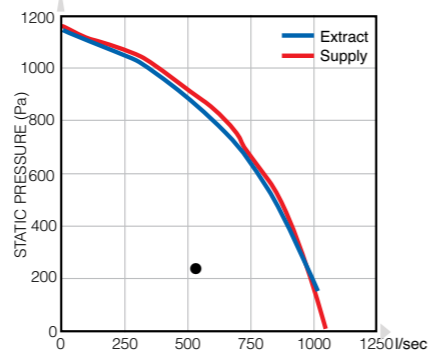
Key Features

- 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 Lw (dB)	dB (A)	63	125	250	500	1 k	2 k	4 k	8 k
Outdoor air e1	50	67	65	46	36	35	28	<25	<25
Supply air e2	70	71	83	72	62	61	54	48	53
Extract air i1	50	66	65	45	38	34	28	<25	<25
Exhaust air i2	69	69	82	71	61	59	53	47	52
Breakout noise	54	56	67	56	49	44	35	<25	<25
Sound Pressure Level Ld	dB (A)	63	125	250	500	1 k	2 k	4 k	8 k
To the surrounding	33	36	46	36	28	<25	<25	<25	<25



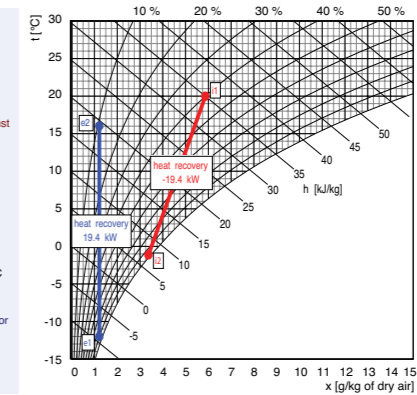
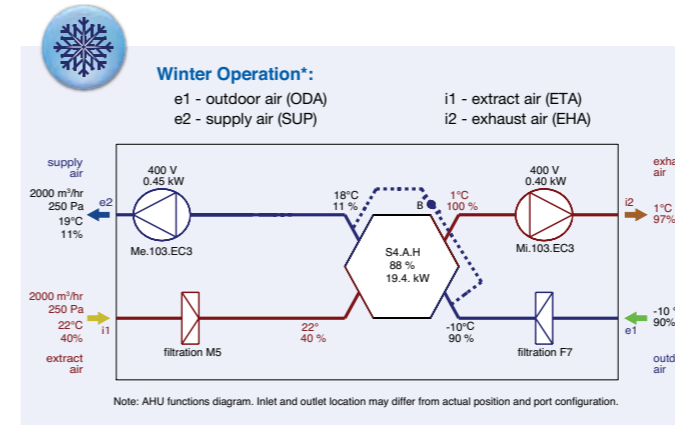
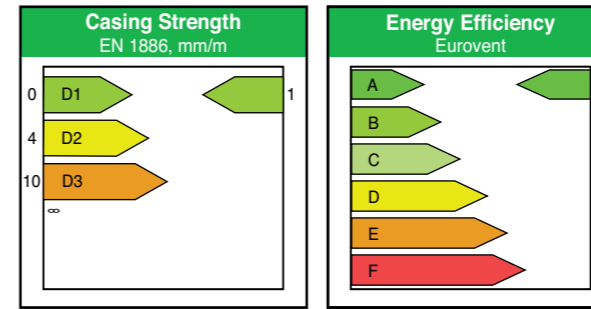
Sound pressure level is measured at 3m distance

Ventilation	Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec 3600 / 1000	3600 / 1000
Air volume @ 250 Pa*	m ³ /hr / l/sec 2000 / 556	2000 / 556
Nominal voltage	V 400	400
Voltage (at operation point)*	V 400	400
Nominal Power (at operation point)*	W 446	397
Max connection power	W 1480	1480
Max current	A 2.4	2.4
Filters	F7	M5
Fan type	EC	EC

* Note: ● The figures above have been measured at 2000 m³/hr and 250 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

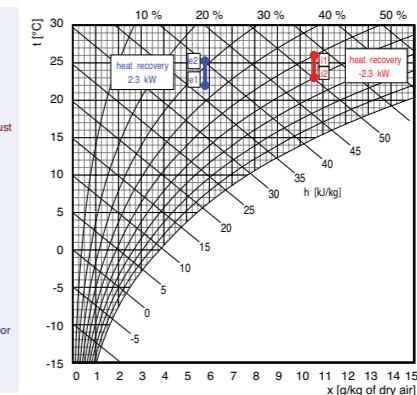
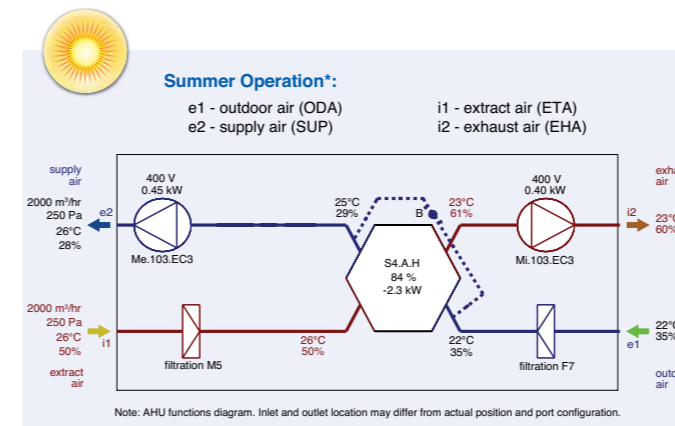
Heat Recovery	Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec 3600 / 1000	3600 / 1000
Air volume @ 250 Pa*	m ³ /hr / l/sec 2000 / 556	2000 / 556
Temperature at inlet*	°C -10	22
Temperature at outlet*	°C 18	1
Humidity at inlet*	%rh 90	40
Humidity at outlet*	%rh 11	100
Thermal efficiency in winter / summer	% 88 / 84	
Performance in winter / summer	kW 19.4 / -2.3	
Condensation	l/h 6.5	
Type of heat exchanger	Counter Flow, Plastic	
Part No.	90000070	

* Note: ● The figures above have been measured at 2000 m³/hr and 250 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



Supply	Description	t [°C]	rh [%]
e1	Outdoor Air	-10.0	90
e2	Supply Air	18.0	11

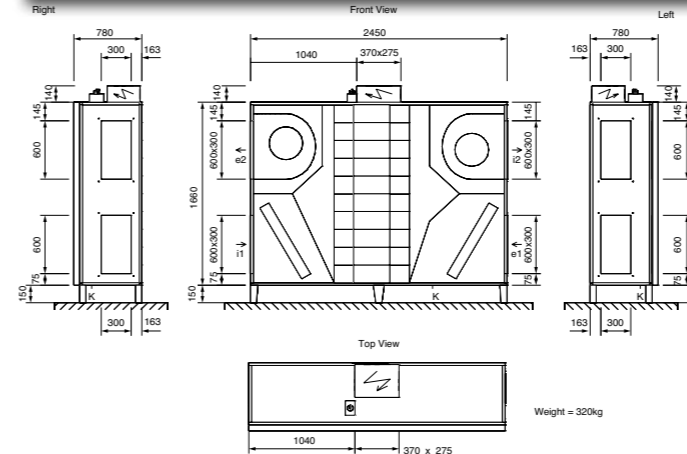
Exhaust	Description	t [°C]	rh [%]
i1	Extract Air	22.0	40
i2	Exhaust Air	1.0	100



Supply	Description	t [°C]	rh [%]
e1	Outdoor Air	22.0	35
e2	Supply Air	25.0	29

Exhaust	Description	t [°C]	rh [%]
i1	Extract Air	26.0	50
i2	Exhaust Air	23.0	61

Dimensions



* The above figures are example

Connections	Type	Diameter	Accessories
e1	Outdoor Air	600 x 300 mm	Shut-off Damper, Flexible Connector
e2	Supply Air	600 x 300 mm	Flexible Connector
i1	Extract Air	600 x 300 mm	Flexible Connector
i2	Exhaust Air	600 x 300 mm	Flexible Connector
K	Condensate Outlet	Ø 21 mm	Condensate Trap

Accessories

See Duplexvent accessories pages 30-32 for more details.

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.

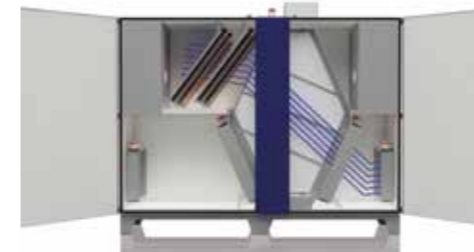
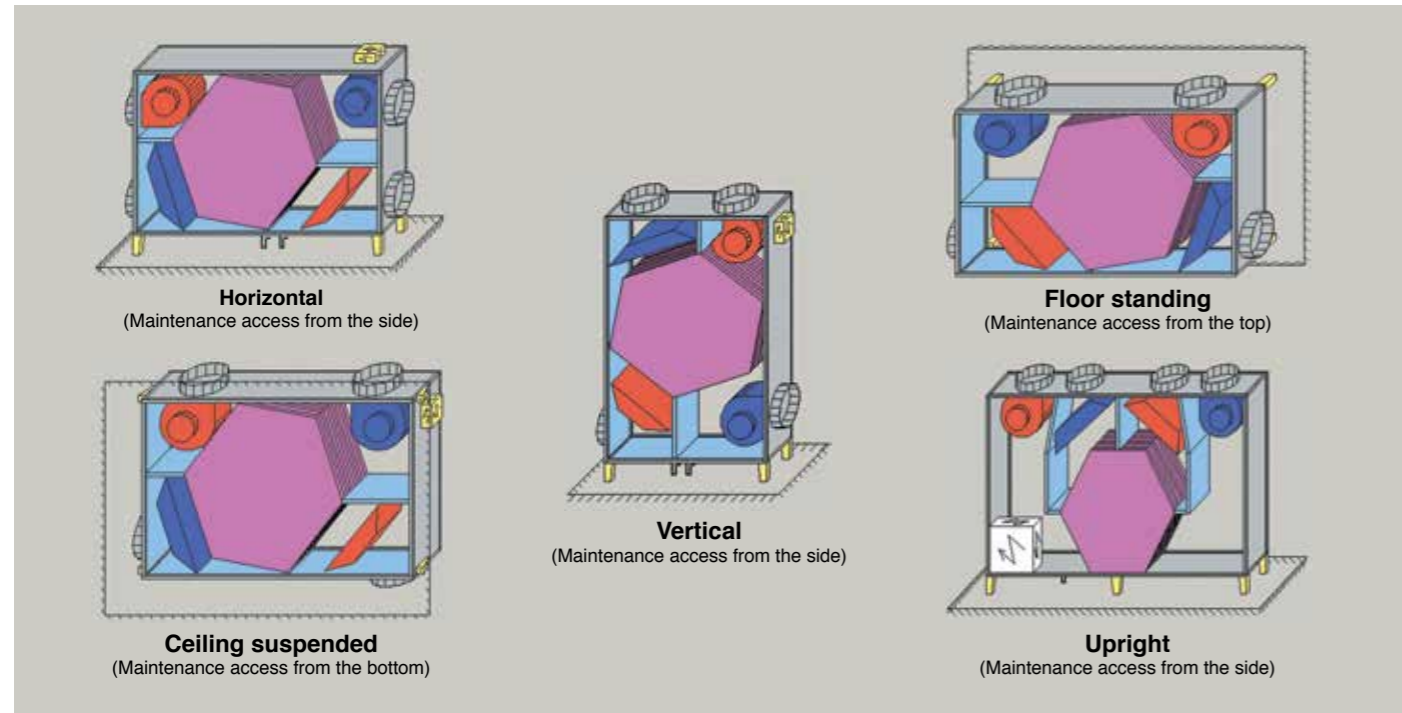


100% customisation and short delivery time

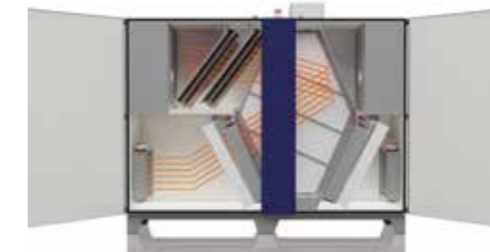
Multi Line MVHR units follow the business philosophy of multiple variability. Designers can easily modify unit positions, spigot connections, filters, integral heating / cooling coils, bypass and circulation dampers using the selection software which accelerates the specification process and helps meet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

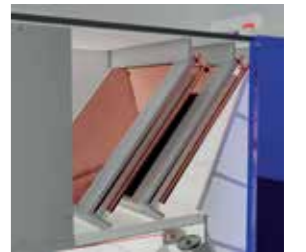
Multi Line Unit Configurations



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

1600 mm	384 mm	1800 mm	384 mm
765 mm	DUPLEXVENT Multi DV500	970 mm	DUPLEXVENT Multi DV1000
2300 mm	455 mm	2300 mm	580 mm
1600 mm	DUPLEXVENT Multi DV1500	1600 mm	DUPLEXVENT Multi DV2500
2300 mm	665 mm	2500 mm	885 mm
1600 mm	DUPLEXVENT Multi DV3500	1600 mm	DUPLEXVENT Multi DV5000
2500 mm	1 065 mm	2500 mm	1290 mm
1600 mm	DUPLEXVENT Multi DV6500	1600 mm	DUPLEXVENT Multi DV8000



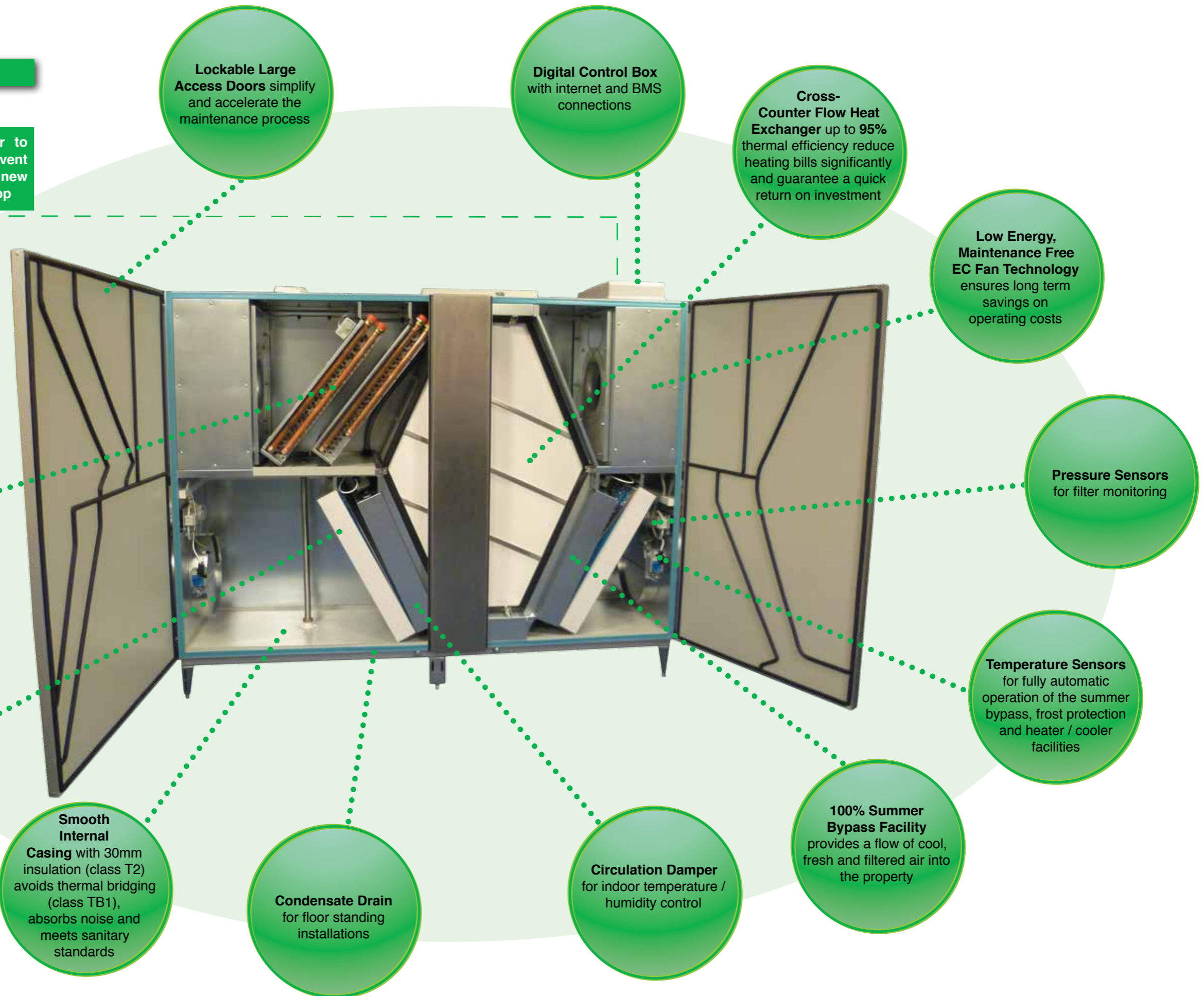
Duplexvent MULTI

Heat Recovery Ventilation

Key Components



Now its easier to control Duplexvent units using our new smart phone app



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

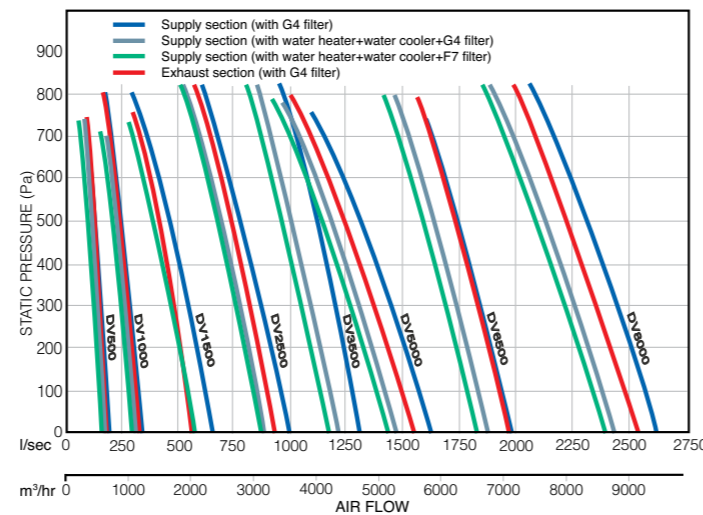
Performance

Duplexvent Multi		DV500	DV1000	DV1500	DV2500	DV3500	DV5000	DV6500	DV8000
Supply air - max. ¹	m ³ /hr	660	1200	2200	3400	4600	5750	7100	9600
Extraction air - max. ¹	m ³ /hr	670	1150	1800	3200	4200	5500	7050	9100
Heat recovery efficiency ²	%	up to 95%							
Fan type		EC (backward curved impeller)							
Weight ³	kg	80-110	95-130	200-280	290-370	320-390	370-450	480-560	580-670
Max power input	kW	0.3	0.7	1.2	2.6	4.5	4.6	7.3	9.3
Voltage	V	230	230	230	400	400	400	400	400
Frequency	Hz	50							
RPM - max.	min ⁻¹	4300	3350	2920	3000	2980	2400	2820	2560
Heating output T - max. ⁴	kW	5	14	22	30	42	51	71	88
Cooling output CHW - max. ⁴	kW	4	8	16	22	30	42	56	62
Cooling output CHF - max. ⁴	kW	3	6	10	13	25	32	41	50
Part No.		9041571	9041572	9041573	9041521	9041522	9041523	9041524	9041525

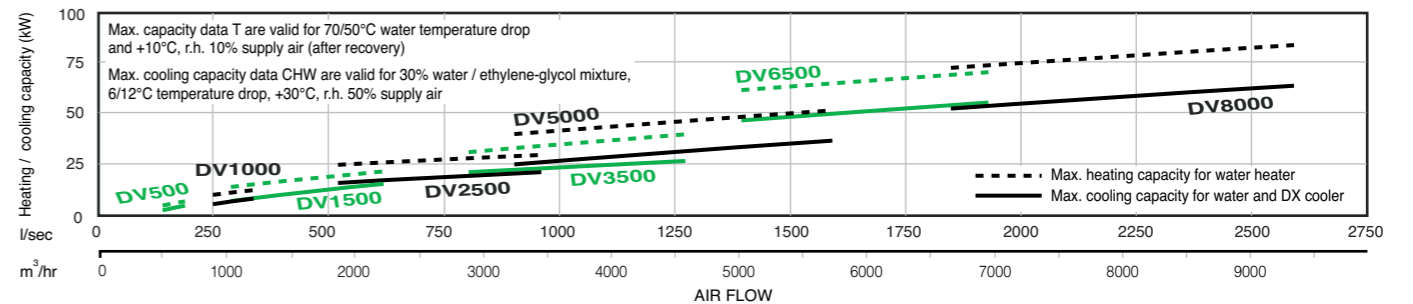
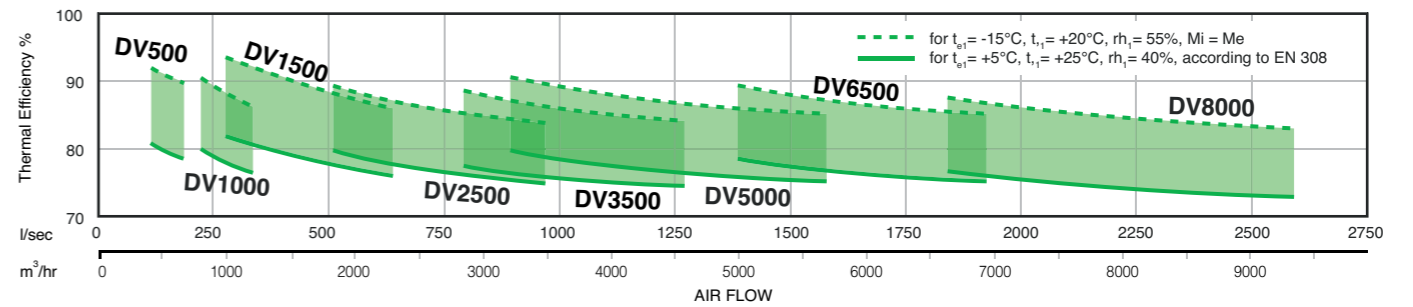
1. Maximum flow rate at zero external pressure
 2. According to air volume
 3. Depending on equipment
 4. Depending on register type, liquid and flow rates
- T - Water heating coil
CHW - Water cooling coil
CHF - DX (direct evaporator) coil

Acoustic power L_w and Acoustic pressure L_p

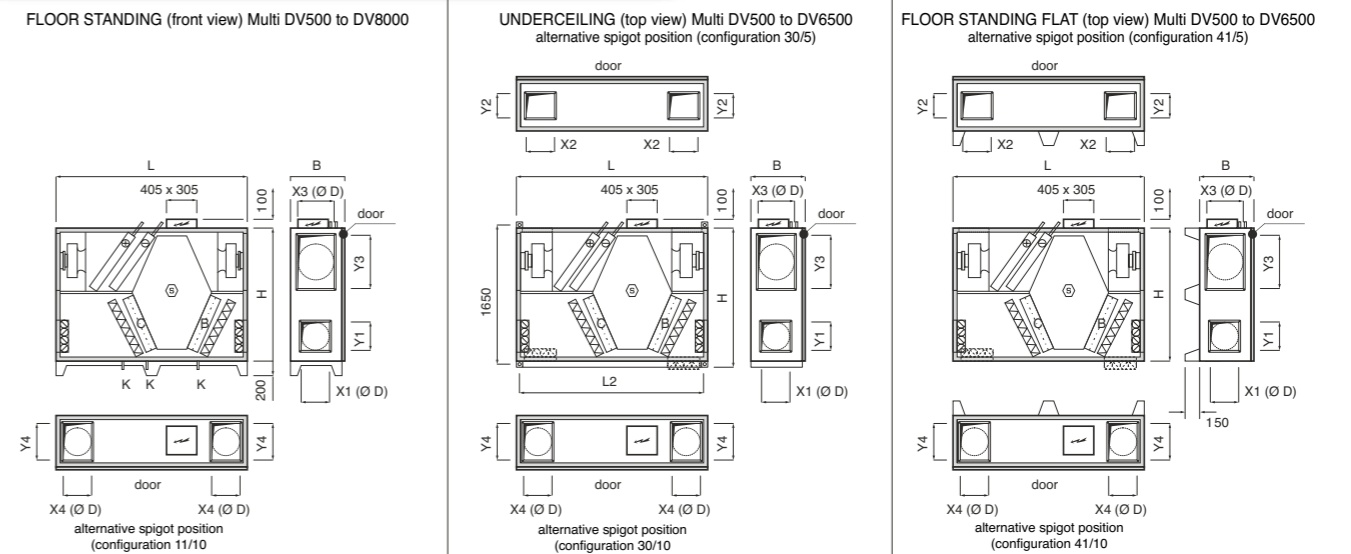
Type	Working point	Acoustic power L _w [dB(A)]					Acoustic pressure L _p [dB(A)] at 1 m
		inlet e ₁	inlet i ₁	inlet e ₂	inlet i ₂	unit	
Duplexvent Multi DV500	500m ³ /hr (200Pa)	53	67	80	82	59	48
Duplexvent Multi DV1000	1000m ³ /hr (200Pa)	66	65	86	86	63	52
Duplexvent Multi DV1500	1500m ³ /hr (200Pa)	58	60	83	83	64	53
Duplexvent Multi DV2500	2500m ³ /hr (200Pa)	59	55	80	79	70	59
Duplexvent Multi DV3500	3500m ³ /hr (200Pa)	61	60	92	89	70	59
Duplexvent Multi DV5000	5000m ³ /hr (200Pa)	64	65	88	88	73	62
Duplexvent Multi DV6500	6500m ³ /hr (200Pa)	70	72	96	95	76	65
Duplexvent Multi DV8000	8000m ³ /hr (200Pa)	76	75	99	96	70	59



Performance



Dimensions



Duplexvent Multi		DV500	DV1000	DV1500	DV2500	DV3500	DV5000	DV6500	DV8000
Dimension H	mm	765	970	1600	1600	1600	1600	1600	1600
Dimension B	mm	384	384	455	580	665	885	1065	1290
Dimension L	mm	1600	1800	2300	2300	2300	2500	2500	2500
Dimension L2	mm	1652	1852	2270	2270	2270	2470	2470	2470
Condensate drain K	mm	ø22				ø32			
Connecting Ports									
Circular diameter D ¹	mm	200	250	315	-	-	-	-	-
Dimension X1 x Y1 (standard e ₁ , i ₁)	mm	-	-	-	300 x 400	400 x 400	500 x 500	500 x 500	700 x 500
Dimension X2 x Y2 (atypical e ₁ , i ₁)	mm	200 ²	250 ²	400 x 200	300 x 400	400 x 400	500 x 500	500 x 500	-
Dimension X3 x Y3 (standard e ₂ , i ₂)	mm	-	-	-	450 x 710	500 x 710	710 x 710	900 x 710	900 x 710
Dimension X4 x Y4 (atypical e ₂ , i ₂)	mm	-	-	-	250 x 355	250 x 400	355 x 630	355 x 800	355 x 900

1. For Duplexvent Multi DV500, DV1000, DV1500 2. For Duplexvent Multi DV500 and DV1000 only in ceiling - suspended version

Duplexvent MULTI-N

Heat Recovery Ventilation

Lift into Place

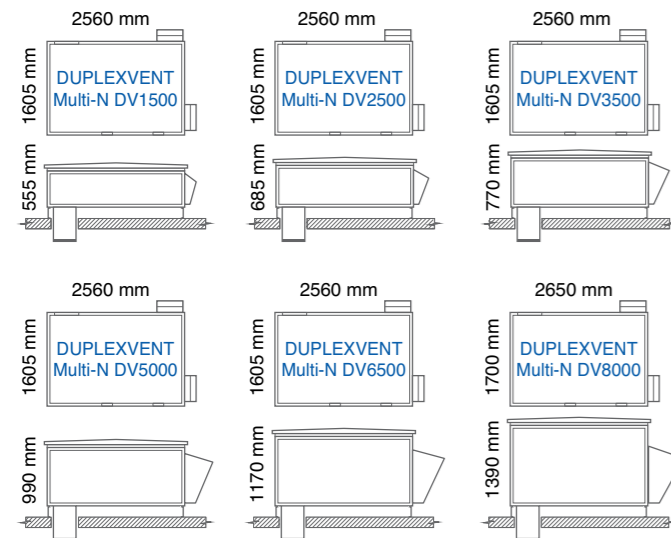
Ready for crane transport – special suspension points are included as standard for easy connection to a crane.

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.



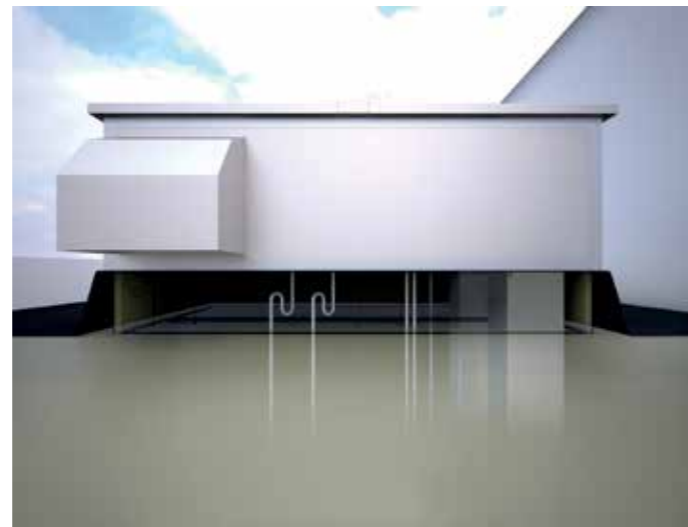
Duplexvent Multi-N Outdoor Size Range



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

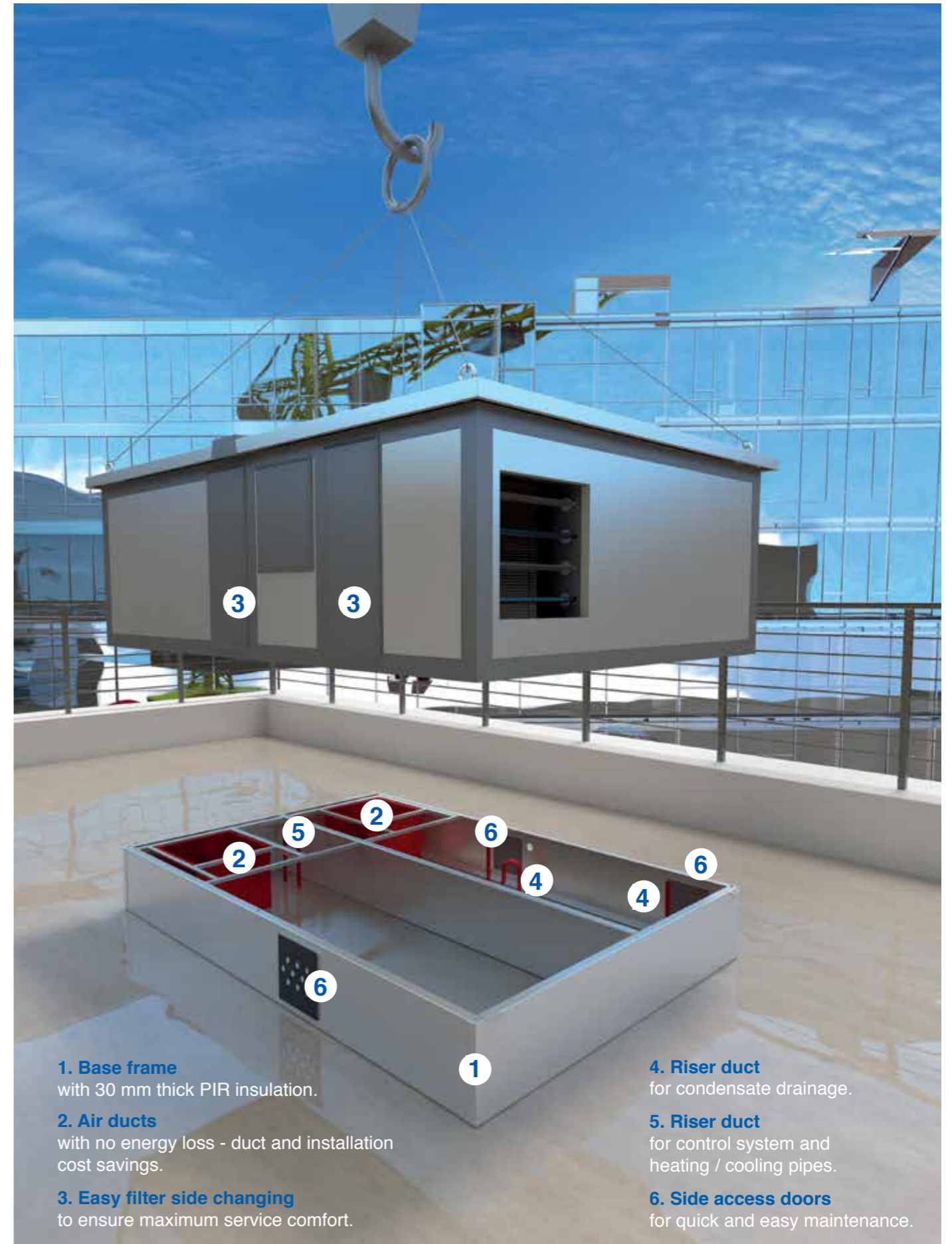
Effective Installation

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.



1. Base frame with 30 mm thick PIR insulation.

2. Air ducts with no energy loss - duct and installation cost savings.

3. Easy filter side changing to ensure maximum service comfort.

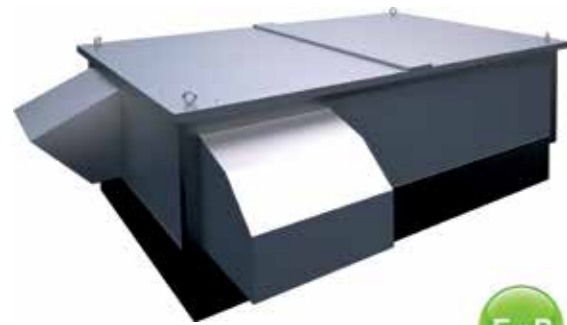
4. Riser duct for condensate drainage.

5. Riser duct for control system and heating / cooling pipes.

6. 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
- BREEM, EPDB and ErP 2013 / 2015 compliant
- Meets Building Regulations Part L2A and L2B

Performance

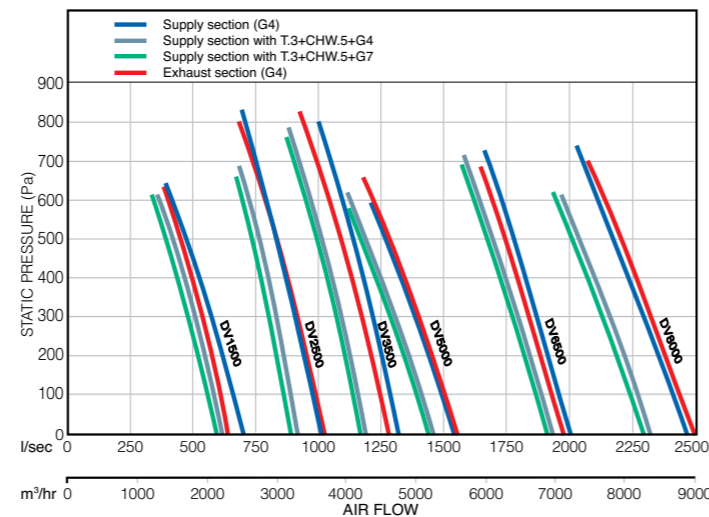
Duplexvent Multi-N		DV1500	DV2500	DV3500	DV5000	DV6500	DV8000
Supply air - max. ¹	m ³ /hr	2500	3600	4700	5500	7200	8800
Extraction air - max. ¹	m ³ /hr	2300	3650	4600	5550	7100	8900
Heat recovery efficiency ²	%	to 95%					
Fan type		EC (backward curve impeller)					
Weight ³	kg	290-350	350-480	405-480	460-560	520-630	630-750
Max power input	kW	1,5	2,5	4,4	4,1	6,7	8,9
Voltage	V	230	400	400	400	400	400
Frequency	Hz	50					
RPM - max.	min ⁻¹	2920	3000	2980	2420	2820	2570
Heating output T - max. ⁴	kW	18	27	36	46	67	75
Cooling output CHW - max. ⁴	kW	9	12	22	30	39	46
Cooling output CHF - max. ⁴	kW	10	13	25	37	41	50
Part No.		9041533	9041534	9041535	9041536	9041520	9041532

1. Maximum flow rate at zero external pressure
 2. According to air volume
 3. Depending on equipment
 4. Depending on register type, liquid and flow rates

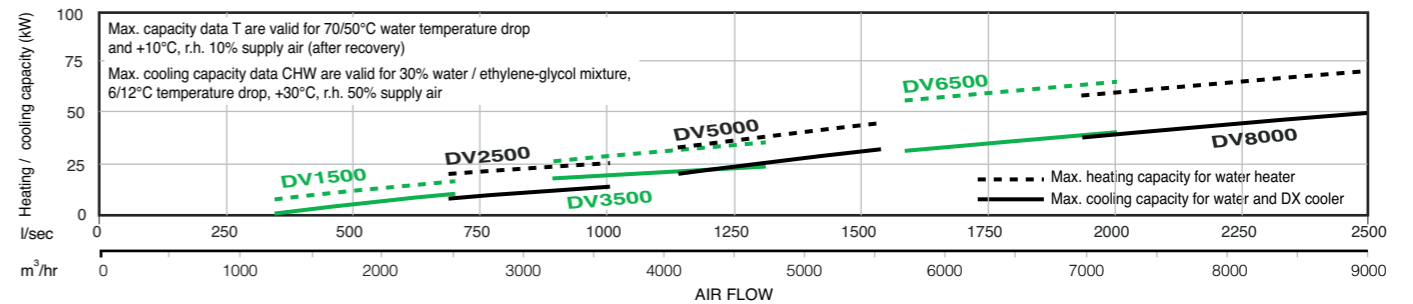
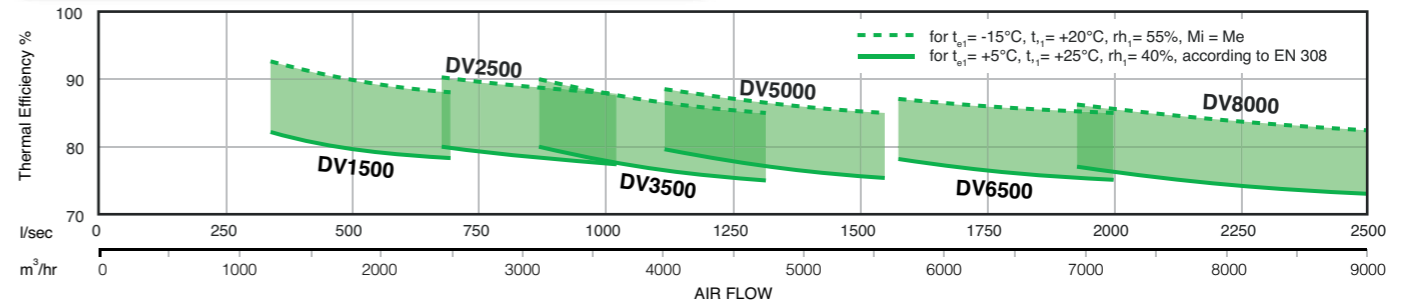
T - Water heating coil
 CHW - Water cooling coil
 CHF - DX (direct evaporator) coil

Acoustic power L_w and Acoustic pressure L_{p1}

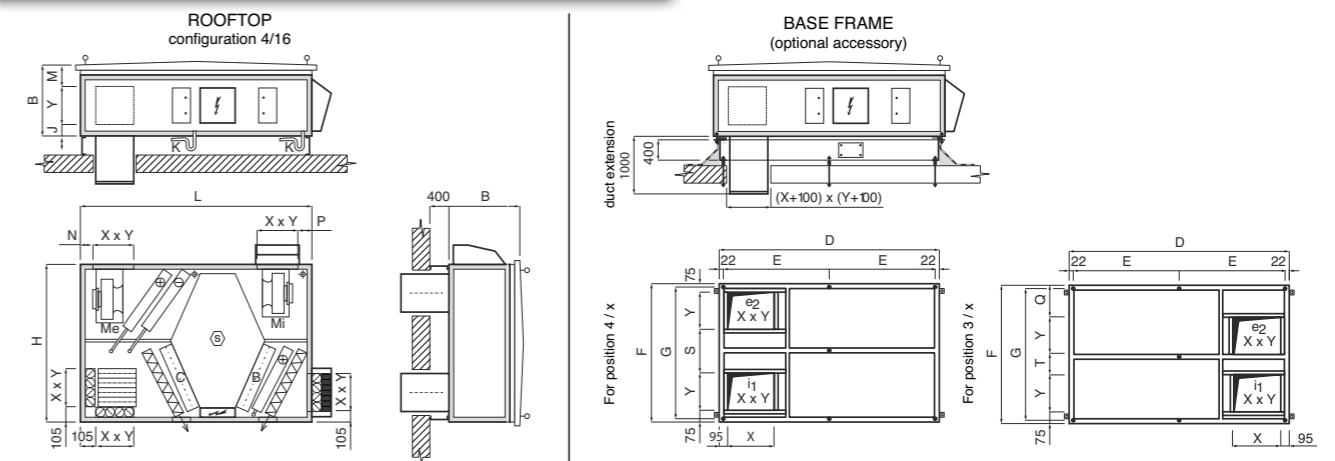
Type	Working point	Acoustic power L _w [dB(A)]					Acoustic pressure L _{p1} [dB(A)] at 1 m
		inlet e ₁	inlet i ₁	inlet e ₂	inlet i ₂	unit	
Duplexvent Multi-N DV1500	1500m ³ /hr (200Pa)	57	57	87	88	61	50
Duplexvent Multi-N DV2500	2500m ³ /hr (200Pa)	58	58	82	82	61	50
Duplexvent Multi-N DV3500	3500m ³ /hr (200Pa)	59	59	87	88	59	48
Duplexvent Multi-N DV5000	5000m ³ /hr (200Pa)	69	69	89	89	63	52
Duplexvent Multi-N DV6500	6500m ³ /hr (200Pa)	73	73	95	95	66	55
Duplexvent Multi-N DV8000	8000m ³ /hr (200Pa)	67	67	80	80	71	60



Performance



Dimensions



Duplexvent Multi-N		DV1500	DV2500	DV3500	DV5000	DV6500	DV8000
Dimension H	mm	1605	1605	1605	1605	1605	1700
Dimension B	mm	555	685	770	990	1170	1390
Dimension L	mm	2560	2560	2560	2560	2560	2650
Dimension N	mm	130	105	105	105	105	105
Dimension P	mm	135	105	105	105	105	105
Dimension J	mm	100	125	165	225	315	340
Dimension M	mm	155	160	205	265	355	350
Condensate drain	mm	ø32					
Connecting Ports							
Dimension X x Y	mm	300 x 300	400 x 400	400 x 400	500 x 500	500 x 500	700 x 500
Base Frame							
Dimension D	mm	2500	2500	2500	2500	2500	2590
Dimension F	mm	1545	1545	1545	1545	1545	1640
Dimension E	mm	1228	1228	1228	1228	1228	1273
Dimension G (between anchoring holes)	mm	1505	1505	1505	1505	1505	1600
Dimension S	mm	795	595	595	395	395	490
Dimension Q	mm	400	300	300	200	200	278
Dimension T	mm	470	370	370	270	270	287

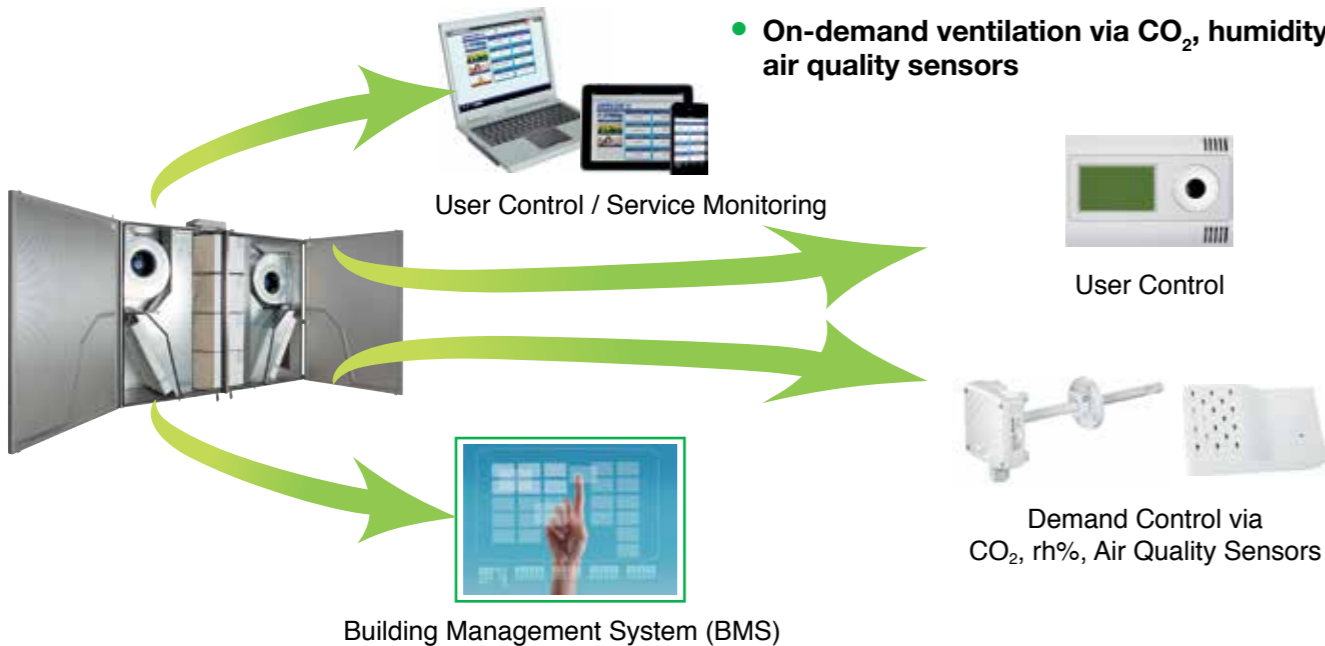
Duplexvent - Advanced Functionality and Control

Motion-Blue Control System

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



- 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



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 - Selection Software



AHUs Selection Software



Visit: airflow.com/selecionsoftware

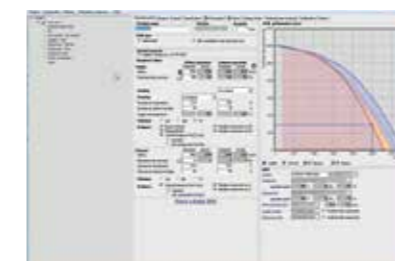
Our advanced and user friendly Duplexvent Selection Software makes it possible to select the most suitable product in just a few simple steps.

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



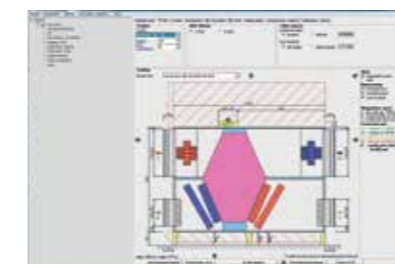
Operation:

- 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



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



- 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

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

Duplexvent - Versatile Solutions

Typical Applications

Nursery



Offices



Large Residential Properties



Restaurants



Schools and Colleges



Retail



Industrial Plants



Public Areas



Duplexvent - Versatile Solutions

Typical Installations

MULTI DV1500



FLEXI DV2600



MULTI-N DV1500



FLEXI DV3600



MULTI-N DV5000



MULTI-N DV3500



MULTI-N DV6500




MULTI DV8000

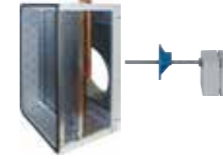

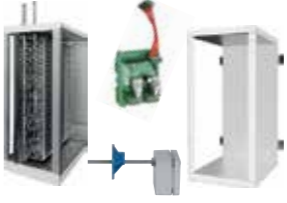








Duplexvent Commercial Accessories

Flexi Line Accessories












Part No.	Description	Product Image	DV1100	DV1600	DV2600	DV3600
Extract air filter						
90000174	M5 filter		⊙	-	-	-
90000083	M5 filter		-	⊙	-	-
90000085	M5 filter		-	-	⊙	-
90000139	M5 filter		-	-	-	⊙
Supply air filter						
90000175	F7 filter		⊙	-	-	-
90000084	F7 filter		-	⊙	-	-
90000086	F7 filter		-	-	⊙	-
90000140	F7 filter		-	-	-	⊙
Flexible connector						
90000169	250mm connection		⊙	-	-	-
90000095	315mm connection		-	⊙	-	-
90000096	500 x 250mm connection		-	-	⊙	-
90000134	600 x 300mm connection		-	-	-	⊙
Shut-off damper with spring return						
90000172	250mm connection		⊙	-	-	-
90000098	315mm connection		-	⊙	-	-
90000100	500 x 250mm connection		-	-	⊙	-
90000137	600 x 300mm connection		-	-	-	⊙
Shut-off damper without spring return						
90000181	250mm connection		⊙	-	-	-
90000097	315mm connection		-	⊙	-	-
90000099	500 x 250mm connection		-	-	⊙	-
90000182	600 x 300mm connection		-	-	-	⊙
Electric duct heater						
90000173	3.0kW, 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)						
90000200	5.4kW at 60/40°C		⊙	-	-	-
90000202	7.8kW at 60/40°C		-	⊙	-	-
90000204	12.0kW at 60/40°C		-	-	⊙	-
90000206	16.0kW at 60/40°C		-	-	-	⊙

Duplexvent Commercial Accessories

Part No.	Description	Product Image	DV1100	DV1600	DV2600	DV3600
Water heating coil + duct temp. sensor (ceiling suspended position)						
90000201	5.4kW at 60/40°C		⊙	-	-	-
90000203	7.8kW at 60/40°C		-	⊙	-	-
90000205	12.0kW at 60/40°C		-	-	⊙	-
90000207	16.0kW at 60/40°C		-	-	-	⊙
Hydraulic kit (water heater) including 4-way valve with mixing pump and actuator						
90000105	Hydraulic kit for water heater		⊙	⊙	⊙	⊙
Water cooling coil + duct temp. sensor + RD-IO circuit board + free chamber (floor standing position)						
90000192	3.4kW at 6/12°C		⊙	-	-	-
90000194	4.8kW at 6/12°C		-	⊙	-	-
90000196	7.5kW at 6/12°C		-	-	⊙	-
90000198	11.0kW at 6/12°C		-	-	-	⊙
Water cooling coil + duct temp. sensor + RD-IO circuit board + free chamber (ceiling suspended position)						
90000193	3.4kW at 6/12°C		⊙	-	-	-
90000195	4.8kW at 6/12°C		-	⊙	-	-
90000197	7.5kW at 6/12°C		-	-	⊙	-
90000199	11.0kW at 6/12°C		-	-	-	⊙
Hydraulic kit (water cooler) including 3-way valve and actuator						
90000161	Hydraulic kit for water cooler		⊙	⊙	⊙	⊙
Water heating/cooling coils + duct temp. sensor + RD-IO circuit board (floor standing position)						
90000184	5.4kW at 60/40°C, 3.4kW at 6/12°C		⊙	-	-	-
90000186	7.8kW at 60/40°C, 4.8kW at 6/12°C		-	⊙	-	-
90000188	12.0kW at 60/40°C, 7.5kW at 6/12°C		-	-	⊙	-
90000190	16.0kW at 60/40°C, 11.0kW at 6/12°C		-	-	-	⊙
Water heating/cooling coils + duct temp. sensor + RD-IO circuit board (ceiling suspended position)						
90000185	5.4kW at 60/40°C, 3.4kW at 6/12°C		⊙	-	-	-
90000187	7.8kW at 60/40°C, 4.8kW at 6/12°C		-	⊙	-	-
90000189	12.0kW at 60/40°C, 7.5kW at 6/12°C		-	-	⊙	-
90000191	16.0kW at 60/40°C, 11.0kW at 6/12°C		-	-	-	⊙
RD-IO circuit board						
90000094	Additional PCB (all units)		⊙	⊙	⊙	⊙
DX coil (floor standing position)						
90000178	DX (direct expansion) coil		⊙	-	-	-
90000147	DX (direct expansion) coil		-	⊙	-	-
90000149	DX (direct expansion) coil		-	-	⊙	-
90000151	DX (direct expansion) coil		-	-	-	⊙

Duplexvent Commercial Accessories

Flexi Line Accessories

Part No.	Description	Product Image	DV1100	DV1600	DV2600	DV3600
DX coil (ceiling suspended position)						
90000179	DX (direct expansion) coil		⊙	-	-	-
90000148	DX (direct expansion) coil		-	⊙	-	-
90000150	DX (direct expansion) coil		-	-	⊙	-
90000152	DX (direct expansion) coil		-	-	-	⊙
Free chamber for water / DX cooling coils						
90000180	Free chamber		⊙	-	-	-
90000153	Free chamber		-	⊙	-	-
90000154	Free chamber		-	-	⊙	-
90000155	Free chamber		-	-	-	⊙
Constant flow kit (including two pressure sensors)						
90000093	Constant flow kit		⊙	⊙	⊙	-
90000167	Constant flow kit		-	-	-	⊙
Constant pressure box						
90000208	Constant pressure box		⊙	⊙	⊙	⊙
VDI 6022 hygiene pack with inclined tube manometers						
90000090	VDI 6022 hygiene pack		⊙	⊙	⊙	⊙
Duct temperature sensor						
90000089	Duct temp. (0-24v output)		⊙	⊙	⊙	⊙
Room humidity sensor						
90000320	Room rh (0-10v output)		⊙	⊙	⊙	⊙
Duct humidity sensor						
90000313	Duct rh (0-10v output)		⊙	⊙	⊙	⊙
Room CO₂ sensor						
90000166	Room CO ₂ (0-10v output)		⊙	⊙	⊙	⊙
Duct CO₂ sensor						
90000165	Duct CO ₂ (0-10v output)		⊙	⊙	⊙	⊙
Room air quality sensor						
90000321	Room air quality (0-10v output)		⊙	⊙	⊙	⊙

Air Flow Solutions

LOOVENT

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



LOOVENT eco
"The Next Generation"



- 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

See Residential Ventilation section of our website

Visit: airflow.com

Air Flow Solutions



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.

visit: airflow.com

for the latest, products, data sheets, application advice and information

CI/SfB
(57)

Customer Services : 01494 560800

Technical Support : 01494 560950



 **AirflowDevelopments Ltd**

You Tube  **AirflowDevelopments1**

 **AirflowD**

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
Facsimile: +44 (0) 1494 461073
airflow.com

© Airflow Developments Limited. Airflow Developments Limited reserve the right, in the interests of continuous development, to alter specifications without prior notice. All orders are accepted subject to our conditions of sale which are available on request



For latest prices and delivery to your door visit MyTub Ltd - www.mytub.co.uk - info@mytub.co.uk



80000191 - Issue1 03/14