

Air Flow Solutions



Ventilation with Heat Recovery Commercial applications



Ventilation with Heat Recovery

SETTING THE STANDARD

Eliminating pollutants from the workplace



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

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 93%) 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 ROTARY / ROTARY-N

Duplexvent Rotary and Rotary-N Heat Recovery units use the rotary wheel principle to recover heat that would otherwise be extracted to atmosphere.

The narrow, rotating heat exchanger delivers up to 85% thermal efficiency and using low energy, controllable EC motors is economical to operate.

Modular or compact in design the equipment is easily installed in commercial, civic and retail applications.

DUPLEXVENT MULTI / MULTI-V / MULTI-N

Duplexvent Multi, Multi-V 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 93%. Multi-V version enables duct connection from the top of the unit.

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-V / Multi-N Line units can be delivered in a period of **4-6 week lead time or earlier** to meet tight project deadlines.

DUPLEXVENT MULTI eco / MULTI eco-V / MULTI eco-N

The Duplexvent Multi eco, Multi eco-V and Multi eco-N range of commercial heat recovery units provide outstanding ventilation and thermal efficiency with leading energy efficiency, making the range one of the most environmentally friendly systems available.

The Multi-eco range offers the same level of functionality that you expect from a Multi MVHR unit with; up to 93% heat recovery, internet and BMS connectivity and can be easily customised to your circumstances whilst only consuming as little as 300W.

Duplexvent Flexi

Heat Recovery Ventilation



KEY FEATURES

- Heat recovery ventilation
- 93% thermal efficiency
- Low energy EC fans
- Versatile unit positioning
- Automatic, 100% bypass
- 100% adjustable digital controller with internet and BMS connection
- Off the shelf delivery
- Passive House Institute certified
- 2 year warranty +



Duplexvent Flexi

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!

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

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.

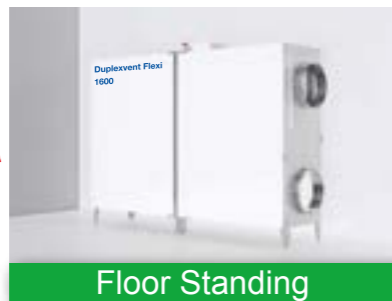
By continuously checking the operating status, diagnosing any faults and instructing the user what to do immediately,

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

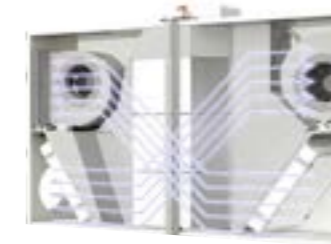
1 Base Unit
(FLEXI DV1100 / 1600 / 2600 / 3600)

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 hygiene standard VDI 6022



Duplexvent Flexi

Heat Recovery Ventilation

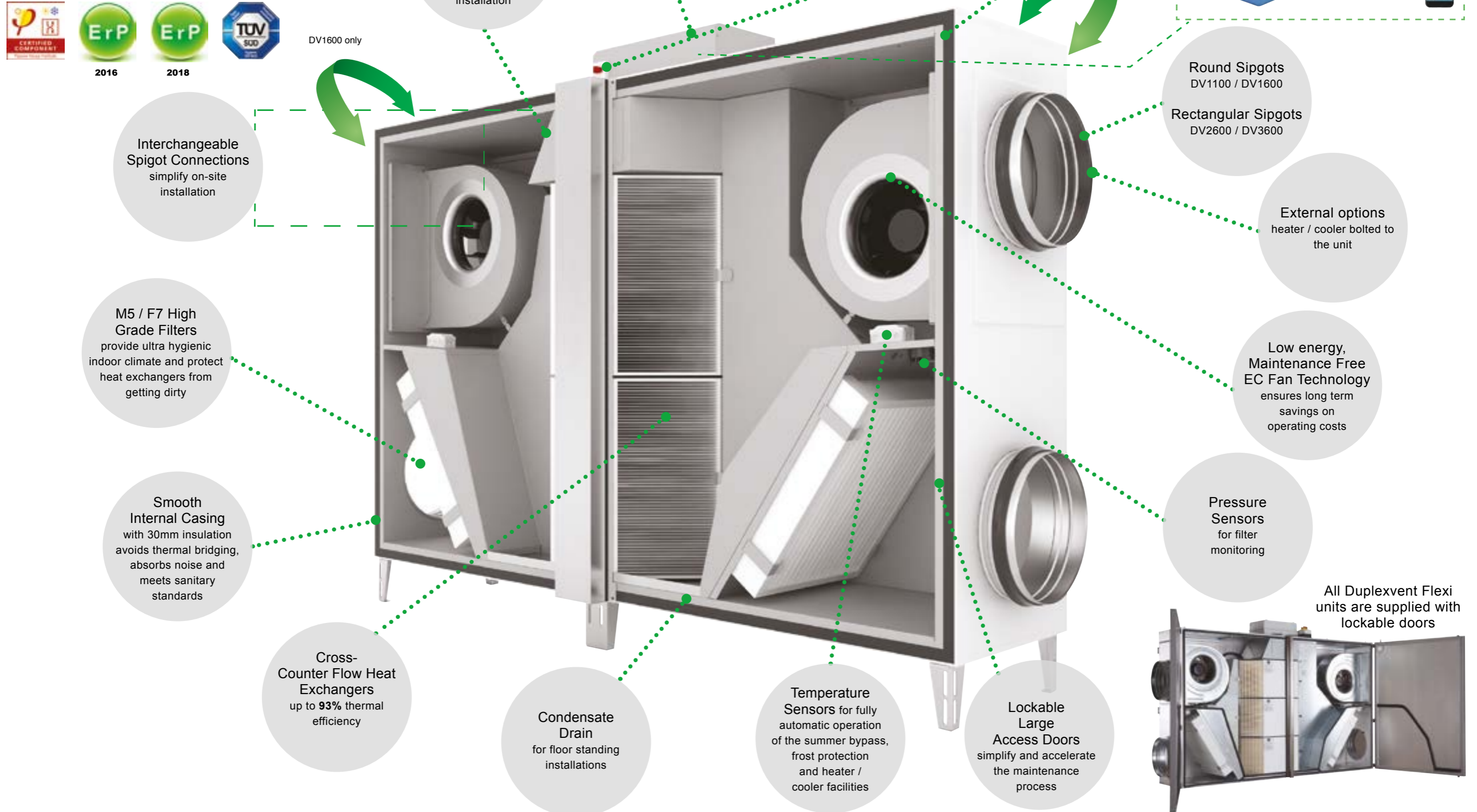
KEY COMPONENTS

Models available:

DV1100, DV1600, DV2600 and DV3600



DV1600 only



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

Digital Control Box with internet and BMS connections

Safety Switch to shut off the power in case of emergency

Condensate Drain for ceiling - suspended installations on inside of door

DV1600 only

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



Round Spigots DV1100 / DV1600

Rectangular Spigots DV2600 / DV3600

External options heater / cooler bolted to the unit

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

Pressure Sensors for filter monitoring

All Duplexvent Flexi units are supplied with lockable doors



Interchangeable Spigot Connections simplify on-site installation

M5 / 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 93% thermal efficiency

Condensate Drain for floor standing installations

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

Duplexvent FLEXI DV1100

Flexi Line Side Entry -
Up to 1250 m³/hr air volume



KEY FEATURES

- Air volume up to 1100 m³/hr @ 200 Pa
- Excellent heat recovery efficiency, up to 92%
- 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
- 100% adjustable digital controller with internet and BMS connection
- BREEAM, Passive House and ErP 2016 / 2018 compliant
- 2 year warranty +

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

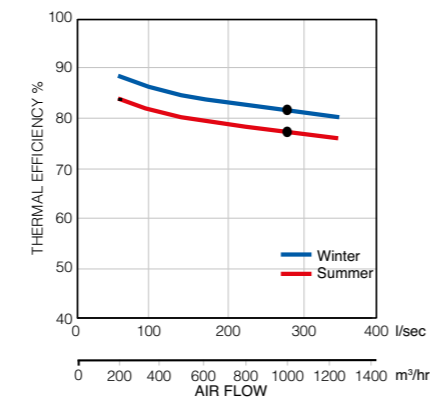
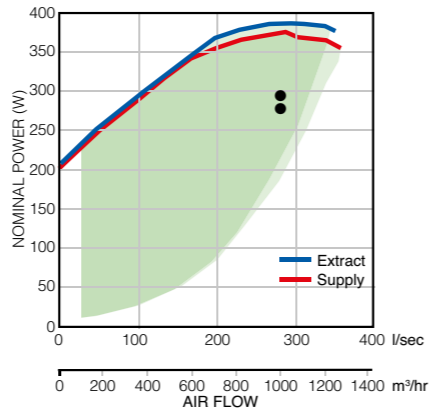
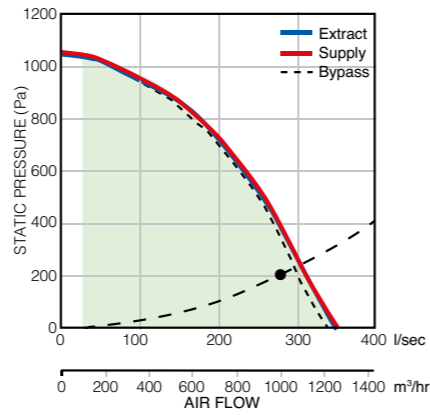
Sound pressure level is measured at 3m distance

Ventilation		Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec	1100 / 306	1100 / 306
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

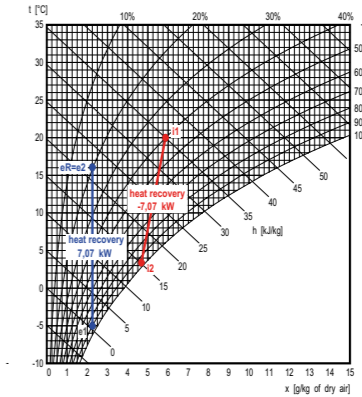
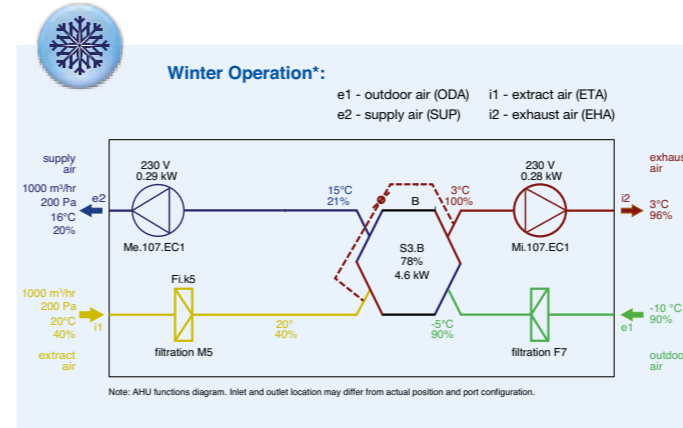
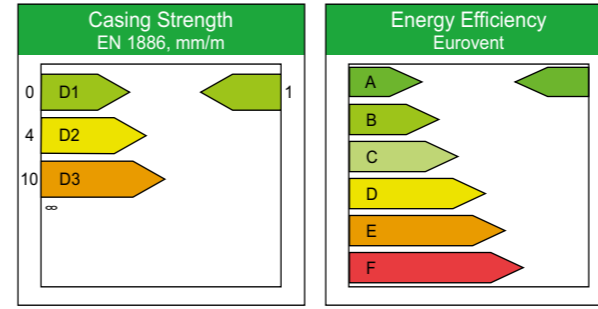
* Note: ● The figures above have been measured at 500 m³/hr and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

Heat Recovery		Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec	1100 / 306	1100 / 306
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	

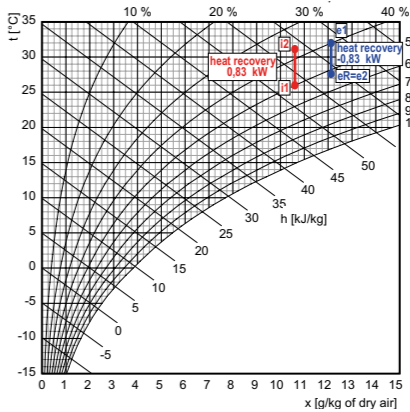
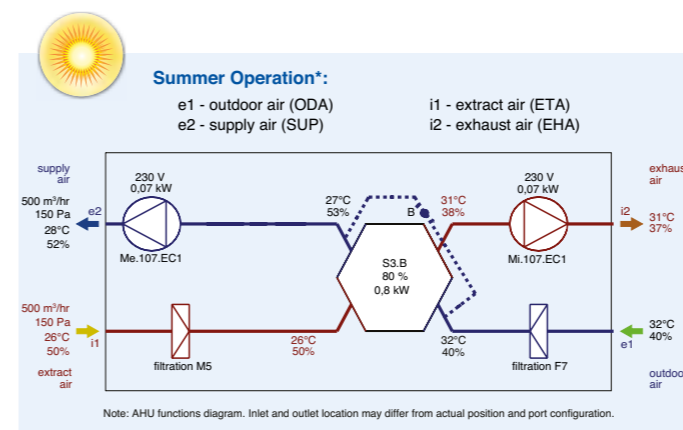
* Note: ● The figures above have been measured at 500 m³/hr and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



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

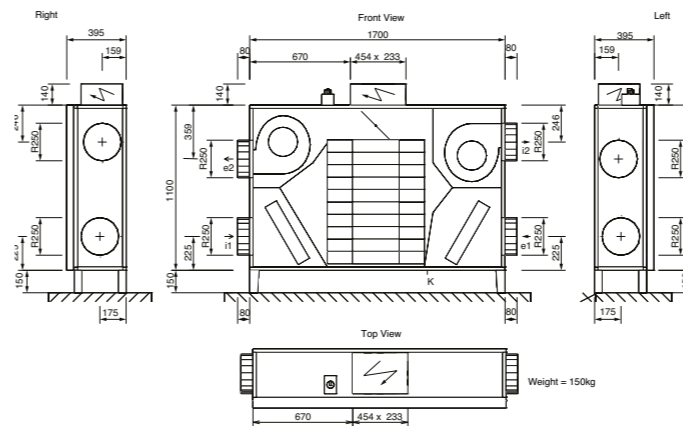


Supply			
Description	t [°C]	rh [%]	
e1 Outdoor Air	-10.0	90	
e2 Supply Air	17.0	12	
Exhaust			
Description	t [°C]	rh [%]	
i1 Extract Air	22.0	40	
i2 Exhaust Air	2.0	100	



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



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

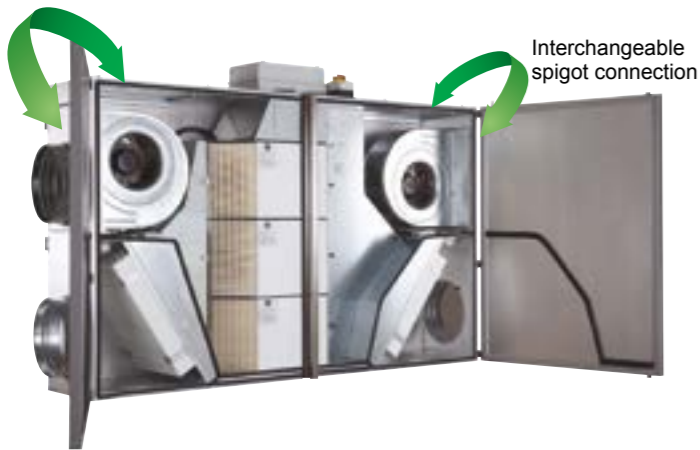
See Duplexvent accessories pages for more details.

* The above figures are example performance measurements. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



Duplexvent FLEXI DV1600

Flexi Line Side / Top Entry -
Up to 2150 m³/hr air volume



Interchangeable spigot connection

KEY FEATURES

- Air volume up to 1980 m³/hr @ 200 Pa
- Excellent heat recovery efficiency, up to 92%
- 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
- 100% adjustable digital controller with internet and BMS connection
- BREEAM, Passive House and ErP 2016 / 2018 compliant
- 2 year warranty +

PERFORMANCE

Sound Power Level Lw (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 Ld	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

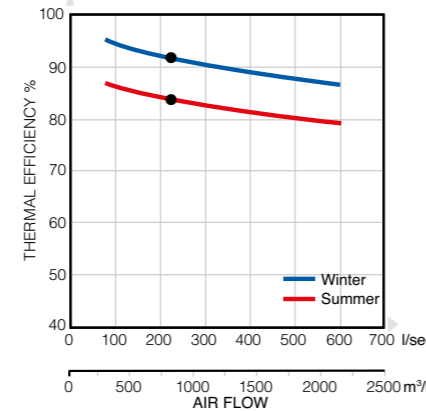
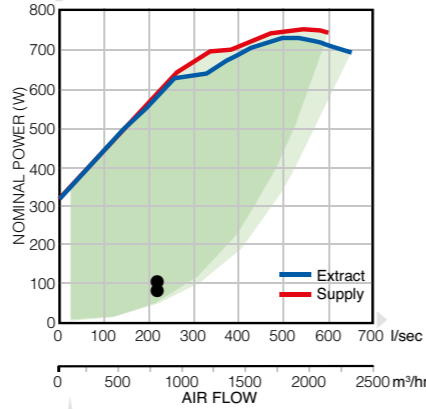
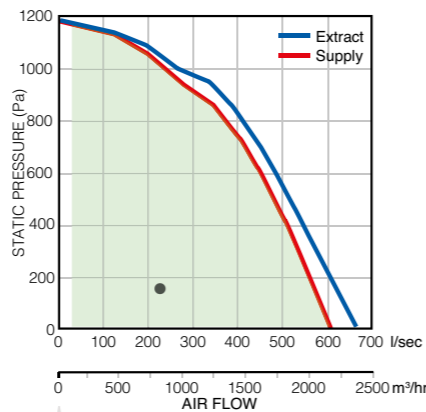
Sound pressure level is measured at 3m distance

Ventilation	Supply Air	Extract Air
Maximum Air Volume @ 200 Pa	m ³ /hr / l/sec 1980 / 550	2130 / 592
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

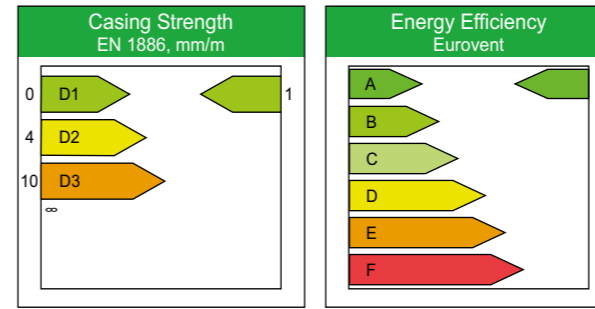
* Note: The figures above have been measured at 800 m³/hr and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

Heat Recovery	Supply Air	Extract Air
Maximum Air Volume @ 200 Pa	m ³ /hr / l/sec 1900 / 444	2130 / 592
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	

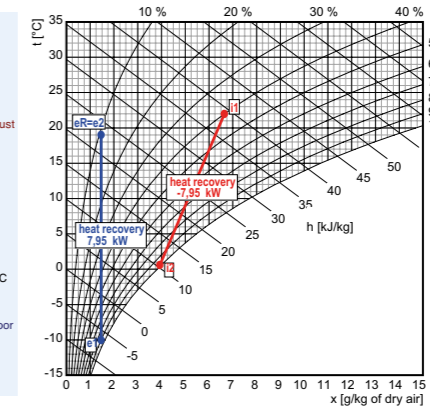
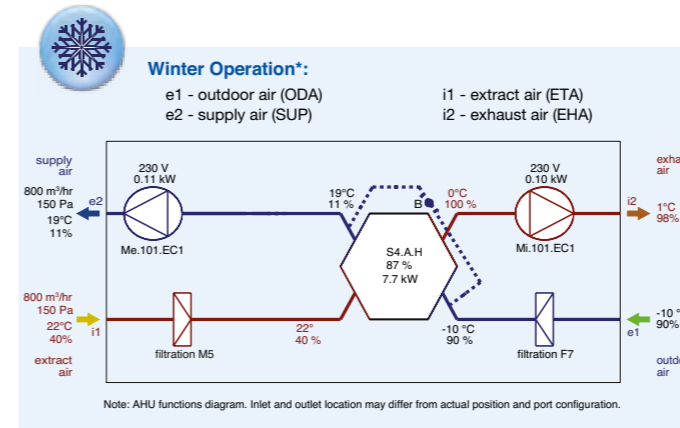
* Note: The figures above have been measured at 800 m³/hr and 150 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



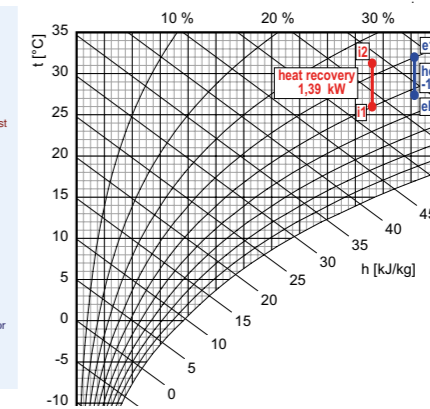
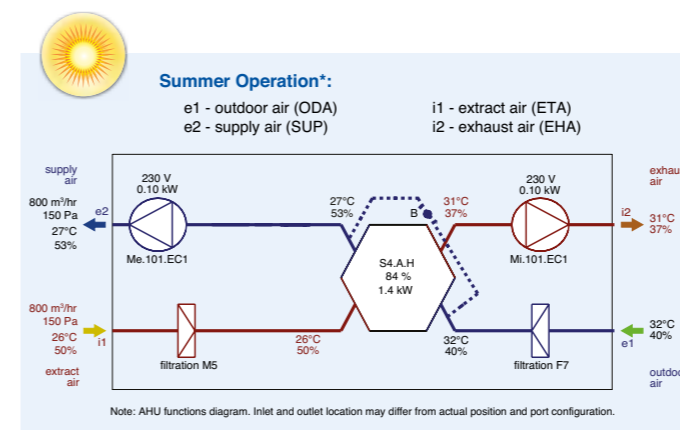
+excludes motors. Motor warranty one year from date of purchase.



2016 / 2018

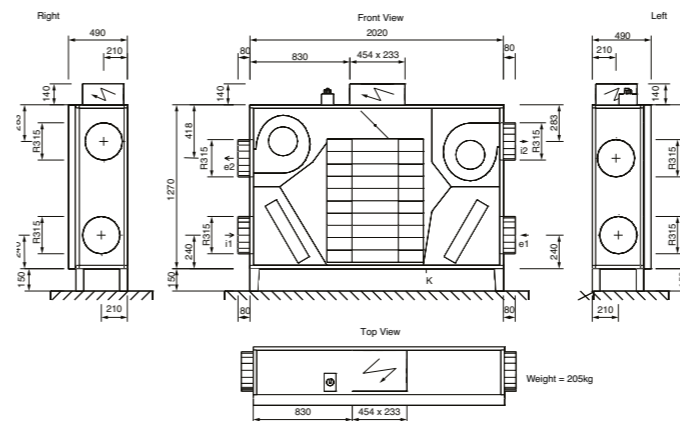


Supply			
Description	t [°C]	rh [%]	
e1	Outdoor Air	-10.0	90
e2	Supply Air	18.0	11
Exhaust			
Description	t [°C]	rh [%]	
i1	Extract Air	22.0	40
i2	Exhaust Air	1.0	100



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



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 for more details.

* The above figures are example performance measurements. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



Duplexvent FLEXI DV2600

Flexi Line Side Entry -
Up to 2910 m³/hr air volume



KEY FEATURES

- Air volume up to 2620 m³/hr @ 200 Pa
- Excellent heat recovery efficiency, up to 91%
- 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
- 100% adjustable digital controller with internet and BMS connection
- BREEAM, Passive House and ErP 2016 / 2018 compliant
- 2 year warranty +

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

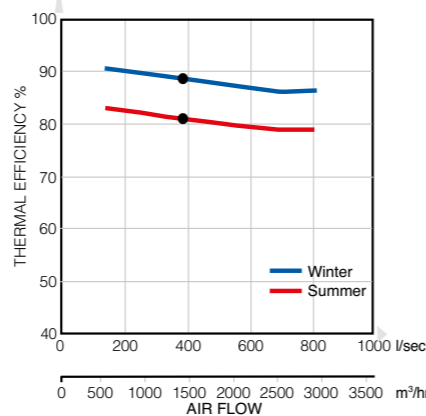
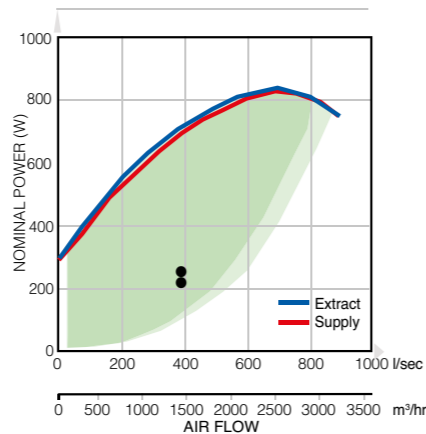
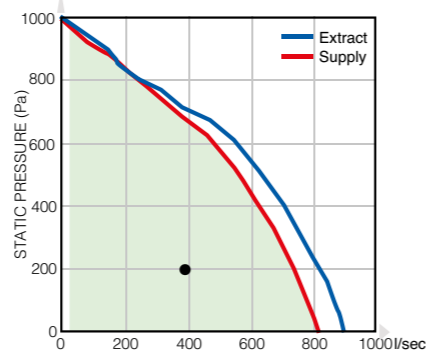
Sound pressure level is measured at 3m distance

Ventilation		Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec	2620 / 728	2910 / 808
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

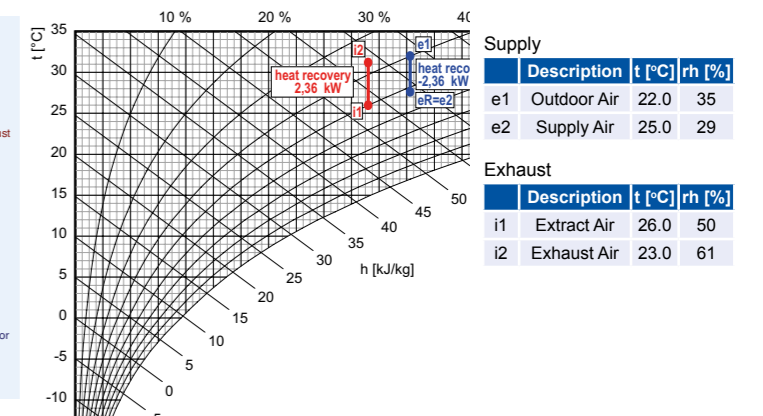
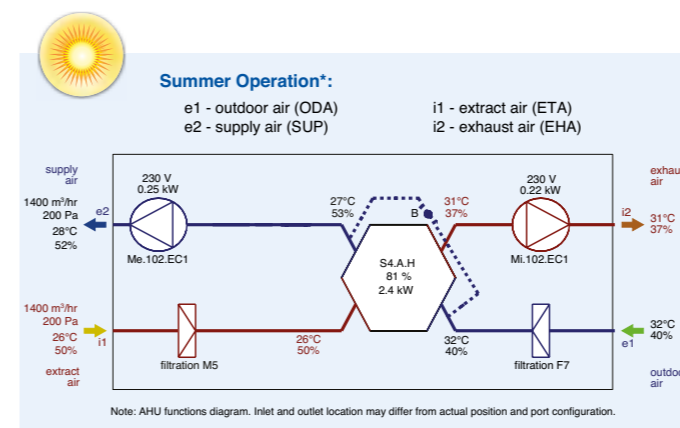
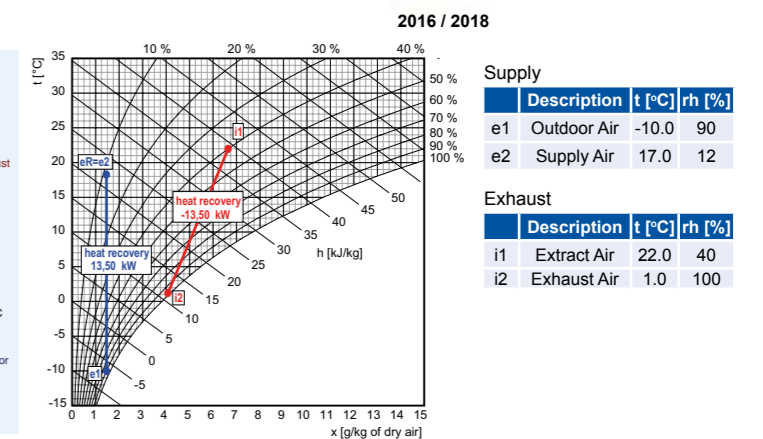
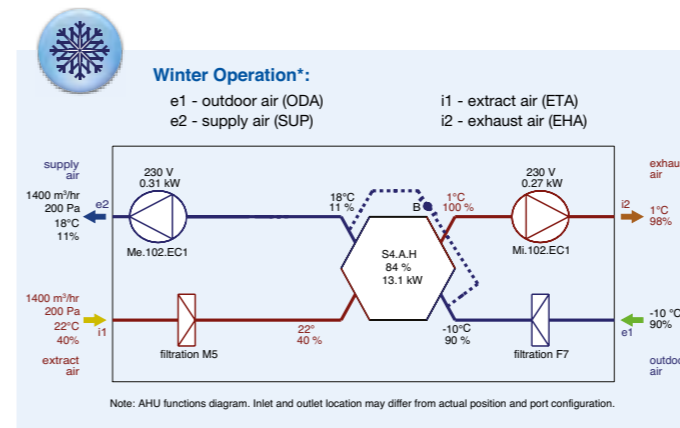
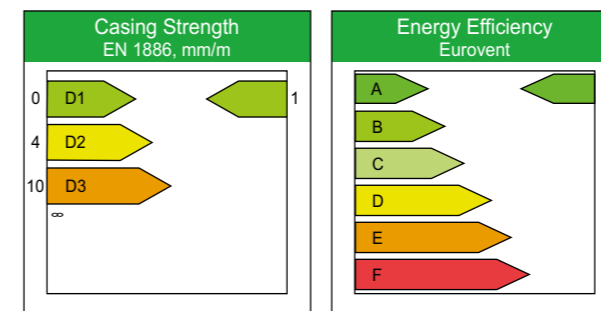
* Note: ● The figures above have been measured at 1400 m³/hr and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

Heat Recovery		Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec	2620 / 728	2910 / 808
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	

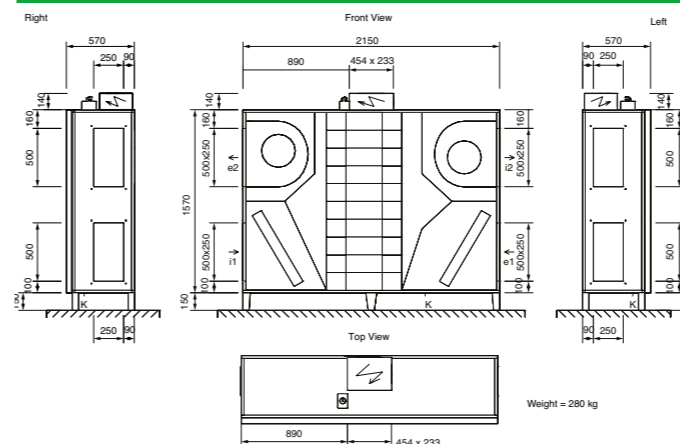
* Note: ● The figures above have been measured at 1400 m³/hr and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.



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



DIMENSIONS



* The above figures are example performance measurements. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

ACCESSORIES

See Duplexvent accessories pages for more details.

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



Duplexvent FLEXI DV3600

Flexi Line Side Entry -
Up to 5620 m³/hr air volume



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 5340 / 1483	5400 / 1500
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

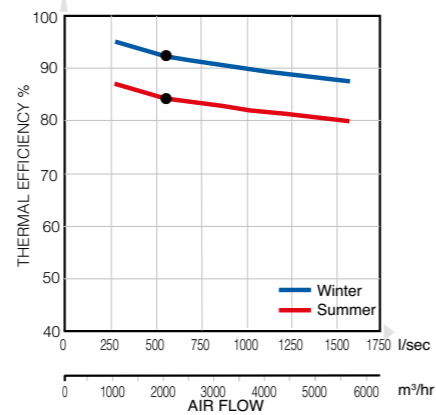
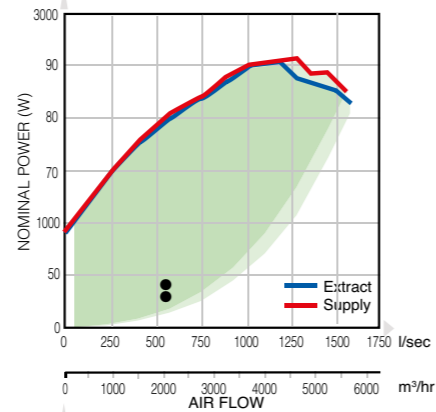
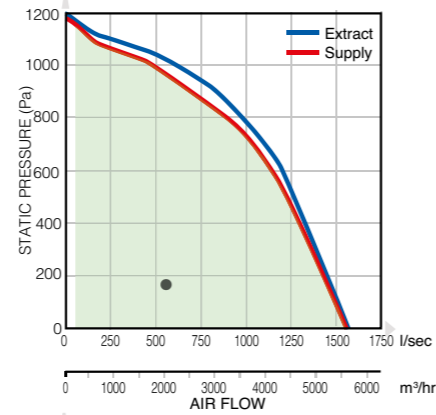
* Note: The figures above have been measured at 2000 m³/hr and 250 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

Heat Recovery	Supply Air	Extract Air
Maximum air volume @ 200 Pa	m ³ /hr / l/sec 5340 / 1483	5400 / 1500
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	

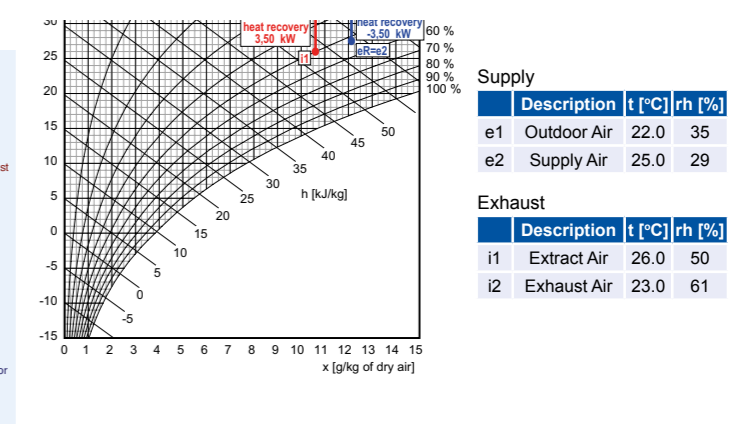
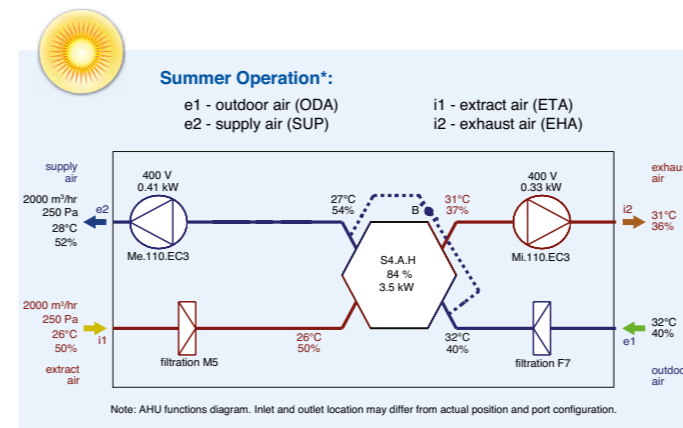
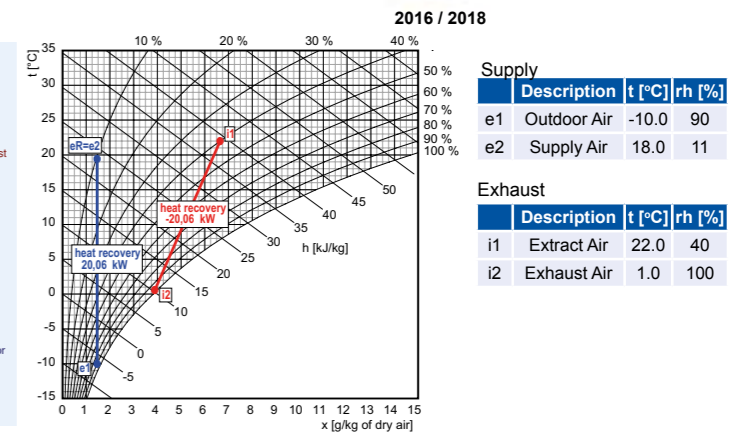
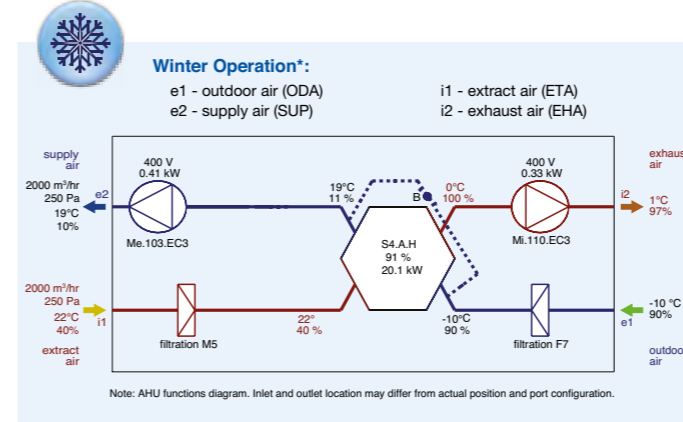
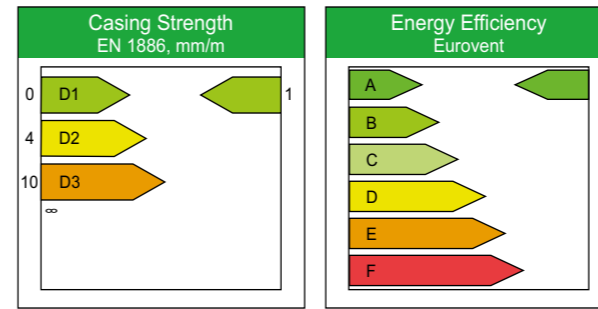
* Note: The figures above have been measured at 2000 m³/hr and 250 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

KEY FEATURES

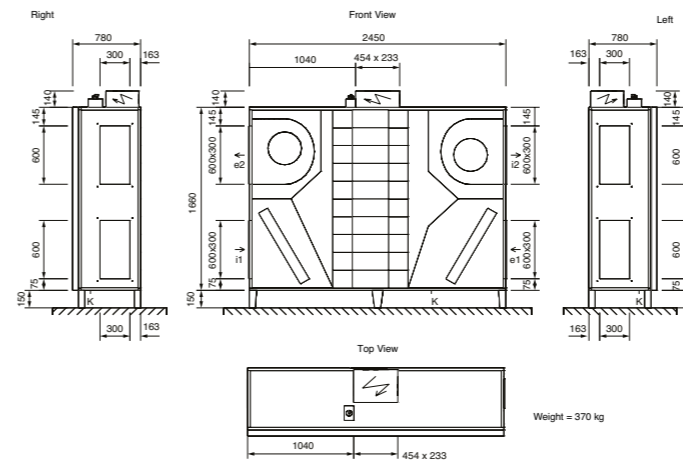
- Air volume up to 5340 m³/hr @ 200 Pa
- Excellent heat recovery efficiency, up to 93%
- Versatile unit positioning with floor and ceiling suspended mounting options
- Low SFP with energy saving EC fans
- Low noise, refer to NR35 and BB93 standards
- 100% adjustable digital controller with internet and BMS connection
- BREEAM, Passive House and ErP 2016 / 2018 compliant
- 2 year warranty +



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



DIMENSIONS



* The above figures are example performance measurements. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

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 for more details.



Duplexvent MULTI Range - typical features

Heat Recovery Ventilation

KEY COMPONENTS



Now its easier to control Duplexvent units via internet or local network using laptop, smartphone, tablet etc.

Lockable Large Access
Doors simplify and accelerate the maintenance process

Digital Control Box
with internet and BMS connections

Cross-Counter Flow Heat Exchanger
up to 93% 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

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

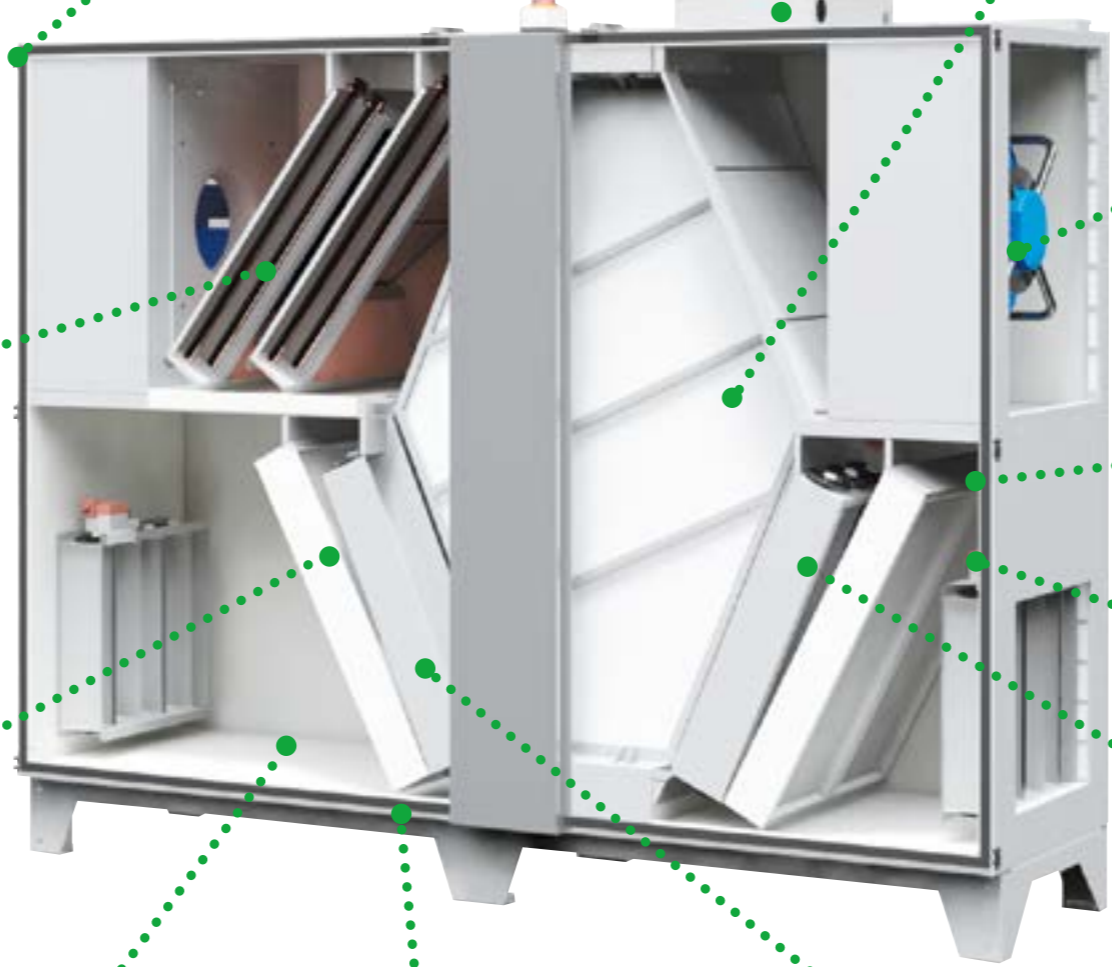
Circulation Damper
for indoor temperature / humidity control

Condensate Drain
for floor standing installations

Smooth Internal Casing
with 30mm insulation (class T2) avoids thermal bridging (class TB1 / TB2), absorbs noise and meets sanitary standards

G4 / M5 / F7 High Grade Filters
provide ultra hygienic indoor climate and protect heat exchangers from getting dirty

Built-in Heaters / Coolers
provide space saving solution



Duplexvent MULTI

Heat Recovery Ventilation



2016 / 2018

KEY FEATURES

- Heat recovery ventilation
- 100% customisation
- 93% thermal efficiency
- Low energy EC fans
- Automatic 100% bypass
- Built-in heating / cooling coils
- Integrated web server enables to control the unit via internet
- BMS connection (Modbus as a standard, optional BACnet or KNX)
- VAV control compatibility
- 2 year warranty +

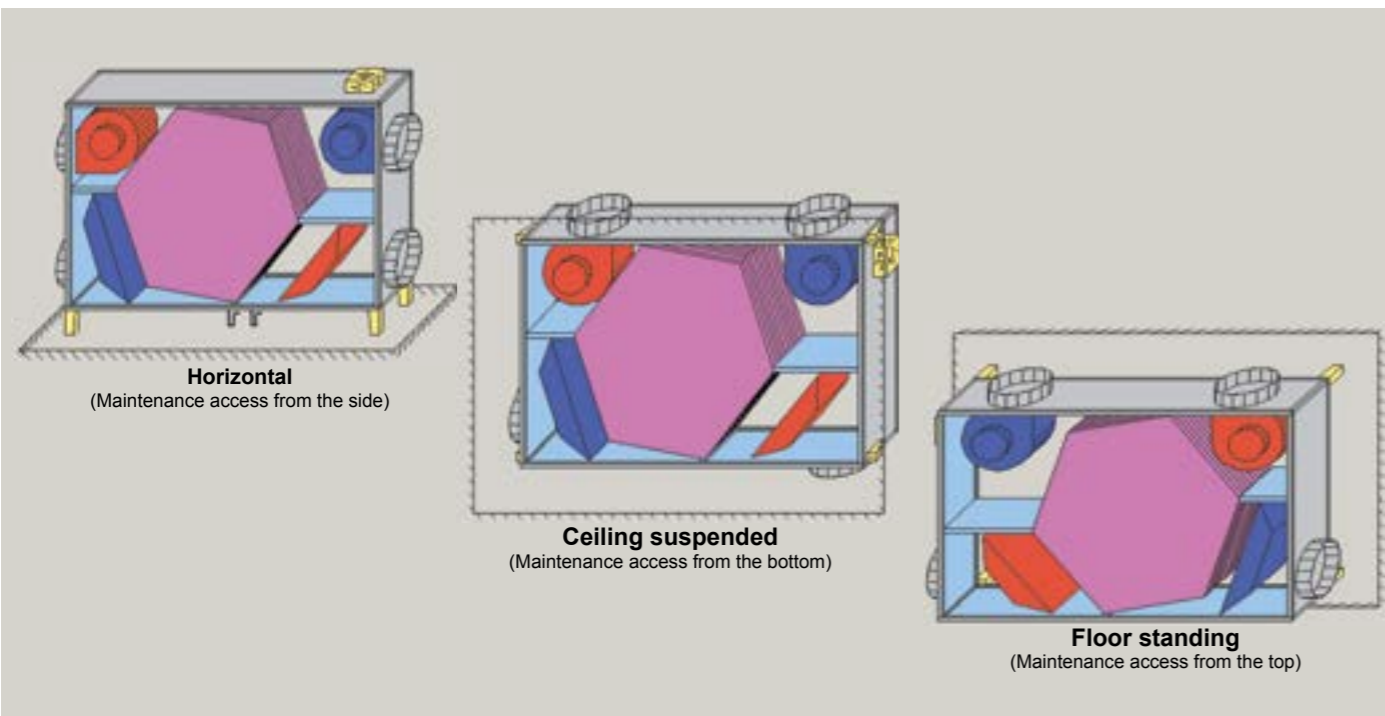
Duplexvent MULTI

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 16,000 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 and Rotary 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.

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

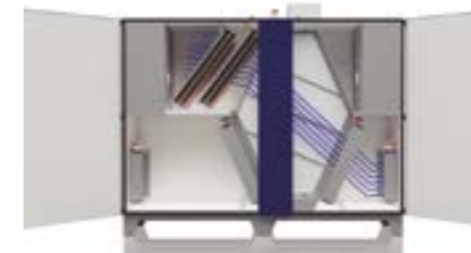
MULTI LINE UNIT CONFIGURATIONS



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.

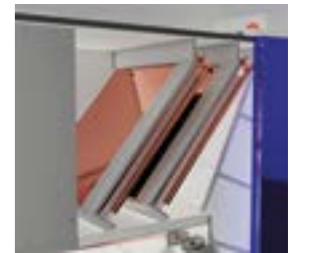
Despite the full customisation Multi Line units are delivered in a period of **4-6 weeks** to meet tight project deadlines.



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

<p>1600 mm 384 mm</p> <p>Multi DV500</p>	<p>1800 mm 384 mm</p> <p>Multi DV1000</p>	<p>2300 mm 455 mm</p> <p>Multi DV1500</p>	<p>2300 mm 580 mm</p> <p>Multi DV2500</p>	<p>2300 mm 665 mm</p> <p>Multi DV3500</p>
<p>2500 mm 885 mm</p> <p>Multi DV5000</p>	<p>2500 mm 1065 mm</p> <p>Multi DV6500</p>	<p>2500 mm 1 290 mm</p> <p>Multi DV8000</p>	<p>3370 mm 1620 mm</p> <p>Multi DV10000</p>	<p>3370 mm 2100 mm</p> <p>Multi DV11000</p>

Duplexvent MULTI

Multi Line Customised Indoor -
Up to 13050m³/hr air volume



2016 / 2018

KEY FEATURES

- Fully customised commercial units in 10 different sizes up to 12500 m³/hr at 200 Pa
- Digital touchscreen or simple manual controller
- Low noise, refer to NR35 and BB93 standards
- Excellent thermal insulation (class T2, TB1)
- G4, M5 or F7 filters available
- Optional circulation damper
- Optional constant flow and constant pressure mode
- BREEAM and ErP 2016 / 2018 compliant
- Meets Building Regulations Part L2A and L2B

PERFORMANCE

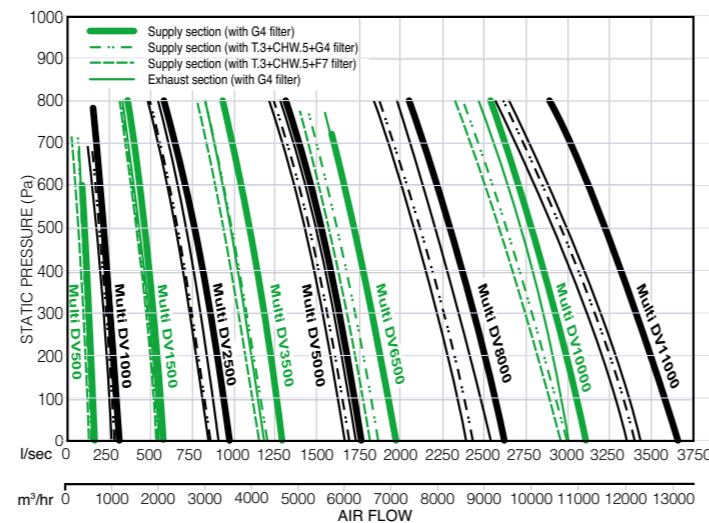
Duplexvent Multi		DV500	DV1000	DV1500	DV2500	DV3500	DV5000	DV6500	DV8000	DV10000	DV11000
Supply air - max. ¹	m ³ /hr / l/sec	660 / 183	1200 / 333	2200 / 611	3400 / 944	4600 / 1278	6400 / 1778	7100 / 1972	9600 / 2667	11100 / 3083	13050 / 3625
Extraction air - max. ¹	m ³ /hr / l/sec	670 / 186	1150 / 319	1800 / 500	3200 / 889	4200 / 1166	6350 / 1764	7050 / 1958	9100 / 2528	10700 / 2972	12300 / 3417
Heat recovery efficiency ²	%	up to 93%									
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	1170-1280	1230-1350
Max power input	kW	0.3	0.7	1.2	2.6	4.5	6.7	7.3	9.3	10.7	10.8
Voltage	V	230					400				
Frequency	Hz	50									
RPM - max.	min ⁻¹	4300	3350	2920	3000	2980	2700	2820	2570	2570	2130
Heating output T - max. ⁴	kW	5	14	22	30	42	51	71	88	95	100
Cooling output CHW - max. ⁴	kW	4	8	16	22	30	42	56	62	65	70
Cooling output CHF - max. ⁴	kW	3	6	10	13	25	37	41	50	60	65
Part No.		9041571	9041572	9041573	9041521	9041522	9041523	9041524	9041525	90000815	90000816

- Maximum flow rate at zero external pressure
- According to air volume
- Depending on equipment
- Depending on register type, liquid and flow rates

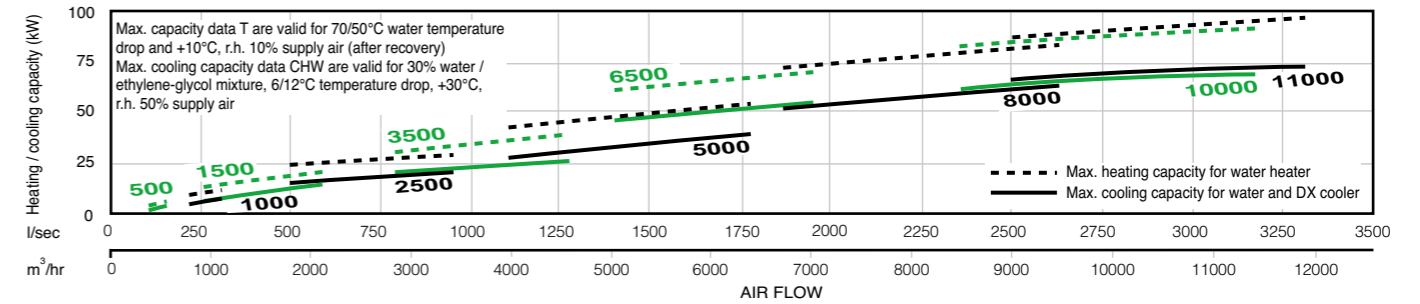
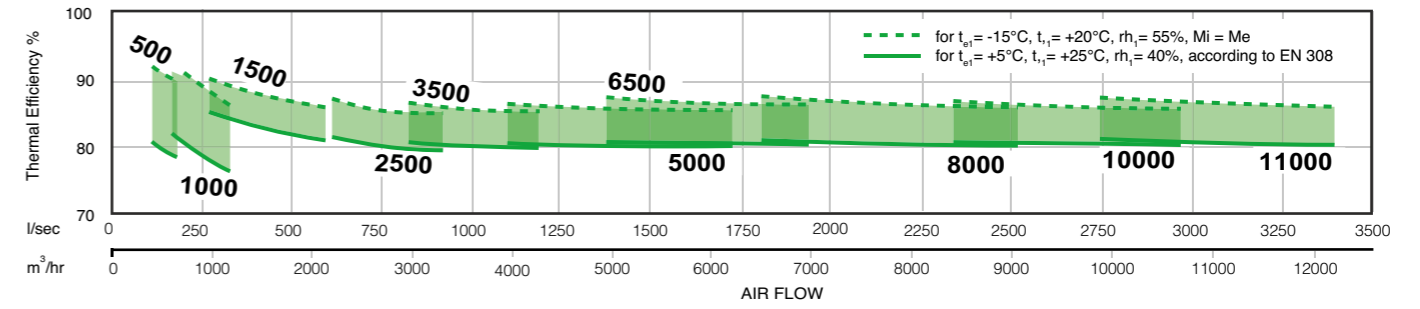
T - Water heating coil
CHW - Water cooling coil
CHF - DX (direct evaporator) coil

ACOUSTIC POWER L_w AND PRESSURE L_p

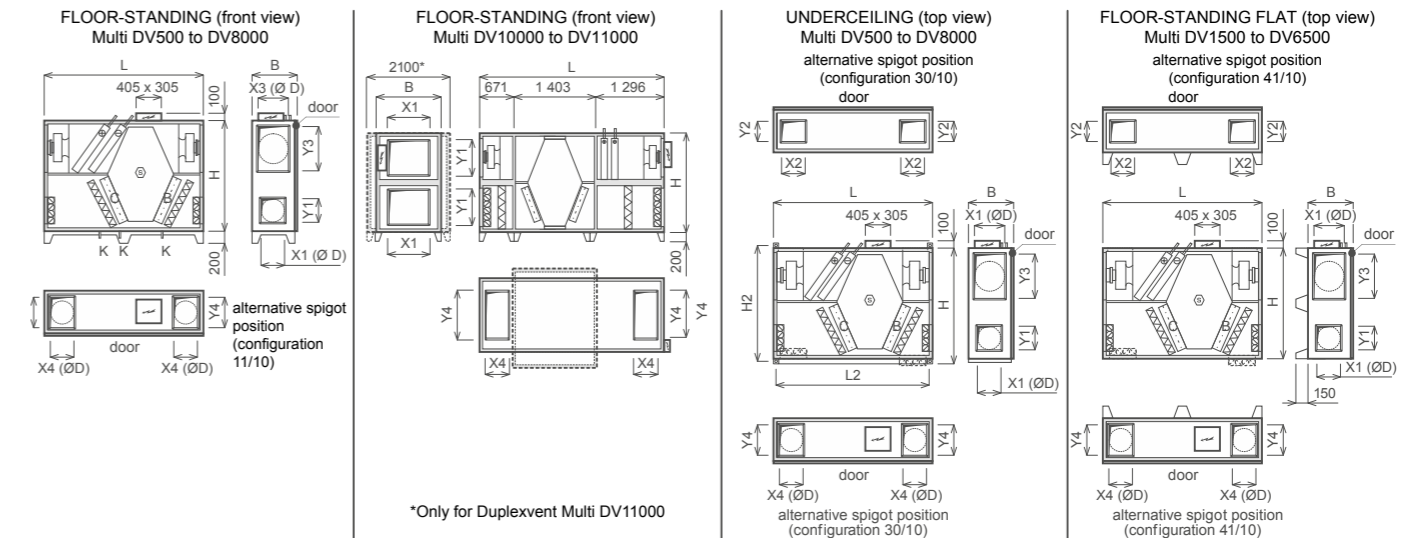
Type	Working point	Acoustic power L _w [dB(A)]					Acoustic pressure L _p [dB(A)] at 3 m
		inlet e ₁	inlet i ₁	inlet e ₂	inlet i ₂	unit	
Duplexvent Multi DV500	500m ³ /hr (200Pa)	53	66	80	82	59	38
Duplexvent Multi DV1000	1000m ³ /hr (200Pa)	66	65	85	86	62	42
Duplexvent Multi DV1500	1500m ³ /hr (200Pa)	61	61	86	86	64	43
Duplexvent Multi DV2500	2500m ³ /hr (200Pa)	59	55	79	79	70	49
Duplexvent Multi DV3500	3500m ³ /hr (200Pa)	60	59	91	88	70	49
Duplexvent Multi DV5000	5000m ³ /hr (200Pa)	68	67	91	93	78	48
Duplexvent Multi DV6500	6500m ³ /hr (200Pa)	70	71	95	95	76	55
Duplexvent Multi DV8000	8000m ³ /hr (200Pa)	75	74	99	96	69	49
Duplexvent Multi DV10000	9000m ³ /hr (200Pa)	66	67	98	97	74	53
Duplexvent Multi DV11000	10000m ³ /hr (200Pa)	63	64	88	88	73	52



PERFORMANCE



DIMENSIONS



Duplexvent Multi		DV500	DV1000	DV1500	DV2500	DV3500	DV5000	DV6500	DV8000	DV10000	DV11000
Dimension H	mm	765	970	1600	1600	1600	1600	1600	1600	1795	1795
Dimension H2	mm	715	920	1650	1650	1650	1650	1650	1650	-	-
Dimension B	mm	384	384	455	580	665	885	1065	1295 / 1390*	1620	1620
Length L	mm	1600	1800	2300	2300	2300	2500	2500	2500	3370	3370
Length L2	mm	1652	1852	2270	2270	2270	2470	2470	2368	-	-
Condensate drain	mm	Ø22					Ø32				
Connecting Ports											
Dimension X1 x Y1 (standard e ₁ , i ₁), D	mm	Ø200	Ø250	Ø315	300 x 400	400 x 400	500 x 500	500 x 500	700 x 500	900 x 710	900 x 710
Dimension X2 x Y2 (atypical e ₁ , i ₁), D	mm	Ø200	Ø250	400 x 200	300 x 400	400 x 400	500 x 500	500 x 500	500 x 700	-	-
Dimension X3 x Y3 (standard e ₂ , i ₂), D	mm	200 x 250	200 x 350	Ø315	450 x 710	500 x 710	710 x 710	900 x 710	900 x 710	-	-
Dimension X4 x Y4 (atypical e ₂ , i ₂), D	mm	-	-	-	250 x 355	250 x 400	355 x 630	355 x 800	355 x 900	400 x 1200	400 x 1200

*For Duplexvent Multi DV8000 in configuration 30/X



Duplexvent MULTI-V

Heat Recovery Ventilation



2016 / 2018

KEY FEATURES

- Heat recovery ventilation
- 100% customisation
- 93% thermal efficiency
- Vertical duct connections
- Low energy EC fans
- Automatic 100% bypass
- Built-in heating / cooling coils
- Integrated web server enables to control the unit via internet
- BMS connection (Modbus as a standard, optional BACnet or KNX)
- VAV control compatibility
- 2 year warranty +

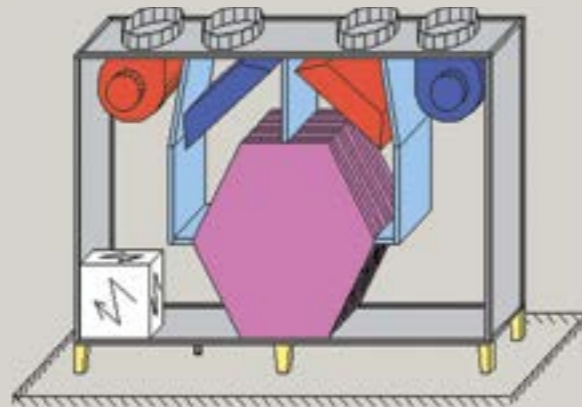
Duplexvent MULTI-V

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 16,000 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 and Rotary 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.

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

MULTI-V LINE UNIT CONFIGURATION



Upright
(Maintenance access from the side)

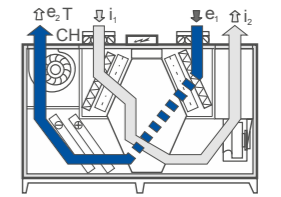
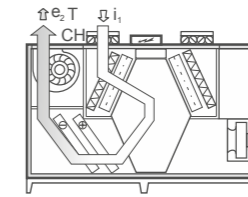
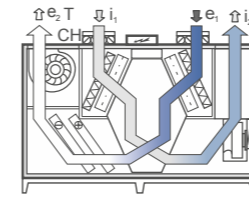


100% CUSTOMISATION AND SHORT DELIVERY TIME

Multi-V 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-V Line units are delivered in a period of **4-6 weeks** to meet tight project deadlines.



⇒ e₁ ... Fresh outdoor air suction
⇒ e₂ ... Fresh filtered air outlet

Ventilation with heat recovery

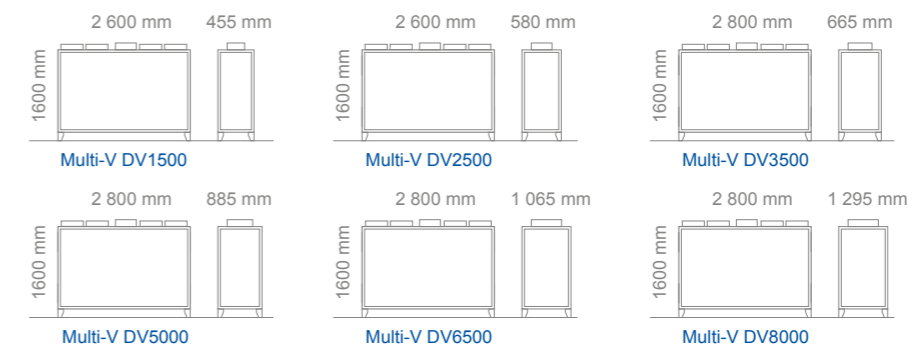
⇒ i₁ ... Exhaust air suction
⇒ i₂ ... Exhaust air outlet

Circulation damper helps regulate indoor temperature / humidity conditions

T ... Central heating connection
CH ... Cooling connection

100% Bypass facility delivers cool, fresh and filtered air

DUPLEXVENT MULTI-V SIZE RANGE



Duplexvent MULTI-V

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



2016 / 2018

KEY FEATURES

- Fully customised commercial units in 6 different sizes up to 9200 m³/hr at 200 Pa
- Digital Touchscreen or simple manual controller
- Low noise, refer to NR35 and BB93 standards
- Excellent thermal insulation (class T2, TB1)
- G4, M5 or F7 filters available
- Optional circulation damper
- Optional constant flow and constant pressure mode
- BREEAM and ErP 2016 / 2018 compliant
- Meets Building Regulations Part L2A and L2B

PERFORMANCE

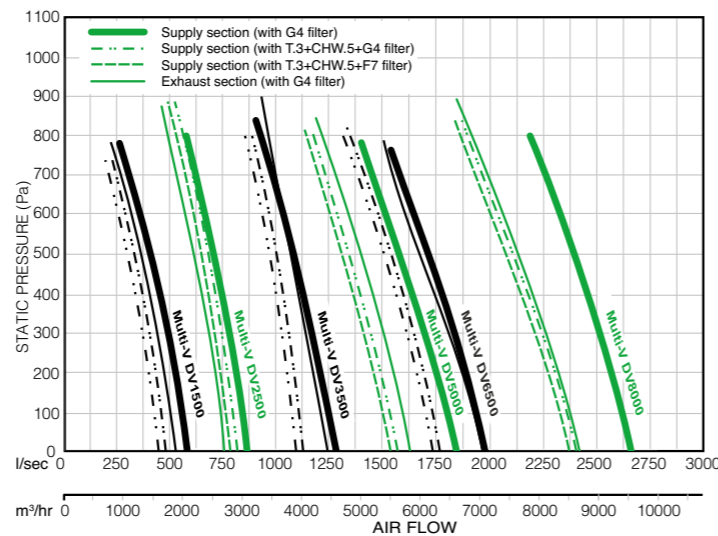
Duplexvent Multi-V		DV1500	DV2500	DV3500	DV5000	DV6500	DV8000
Supply air - max. ¹	m ³ /hr / l/sec	2050 / 569	3050 / 847	4500 / 1250	6600 / 1833	7100 / 1972	9600 / 2667
Extraction air - max. ¹	m ³ /hr / l/sec	1800 / 500	2700 / 750	4450 / 1236	5800 / 1611	7000 / 1944	8600 / 2389
Heat recovery efficiency ²	%	up to 93%					
Fan type		EC (backward curved impeller)					
Weight ³	kg	210-290	300-380	330-400	380-460	490-590	590-680
Max power input	kW	1.2	2.3	4.9	6.2	7.5	10.3
Voltage	V	230					
Frequency	Hz	50					
RPM - max.	min ⁻¹	2920	3000	2980	2700	2820	2560
Heating output T - max. ⁴	kW	22	30	42	51	71	88
Cooling output CHW - max. ⁴	kW	16	22	30	42	56	62
Cooling output CHF - max. ⁴	kW	10	13	25	37	41	50
Part No.		90000819	90000820	90000821	90000822	90000823	90000824

- Maximum flow rate at zero external pressure
- According to air volume
- Depending on equipment
- Depending on register type, liquid and flow rates

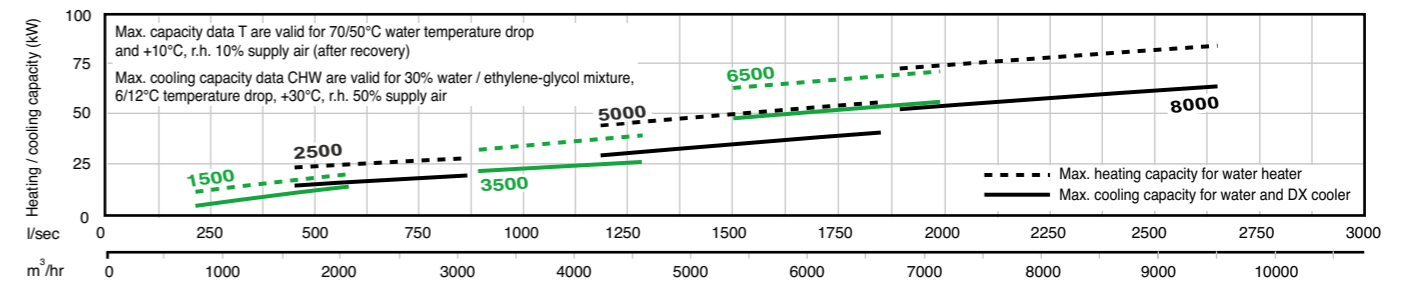
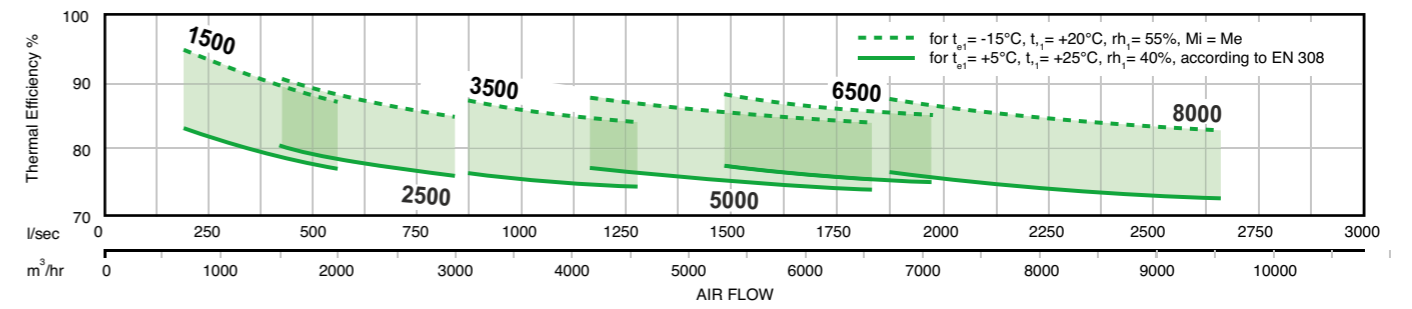
T - Water heating coil
CHW - Water cooling coil
CHF - DX (direct evaporator) coil

ACOUSTIC POWER L_w AND PRESSURE L_p

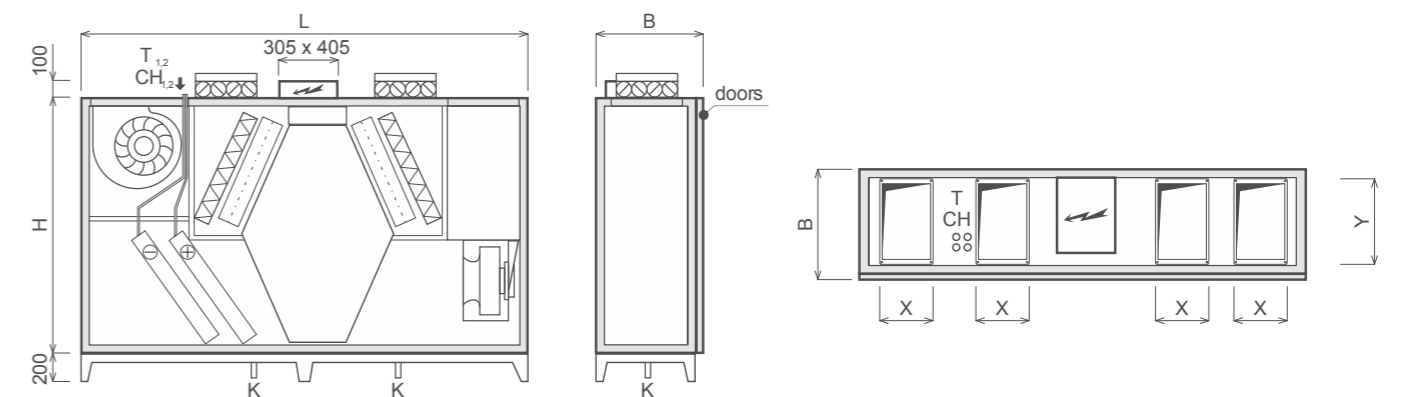
Type	Working point	Acoustic power L _w [dB(A)]					Acoustic pressure L _p [dB(A)] at 3 m
		inlet e ₁	inlet i ₁	inlet e ₂	inlet i ₂	unit	
Duplexvent Multi-V DV1500	1500m ³ /hr (200 Pa)	54	59	81	81	66	45
Duplexvent Multi-V DV2500	2500m ³ /hr (200 Pa)	66	70	82	91	76	55
Duplexvent Multi-V DV3500	3500m ³ /hr (200 Pa)	64	66	88	84	73	52
Duplexvent Multi-V DV5000	5000m ³ /hr (200 Pa)	71	74	90	91	79	58
Duplexvent Multi-V DV6500	6500m ³ /hr (200 Pa)	71	77	95	95	82	61
Duplexvent Multi-V DV8000	8000m ³ /hr (200 Pa)	74	80	95	98	80	59



PERFORMANCE



DIMENSIONS



Duplexvent Multi-V		DV1500	DV2500	DV3500	DV5000	DV6500	DV8000
Dimension H	mm	1600	1600	1600	1600	1600	1600
Dimension B	mm	455	580	665	885	1065	1295
Length L	mm	2600	2600	2800	2800	2800	2800
Condensate drain	mm	Ø32					
Connecting ports							
Dimension X x Y	mm	300 x 250	300 x 400	400 x 400	400 x 600	400 x 710	400 x 900



Duplexvent MULTI-N

Heat Recovery Ventilation

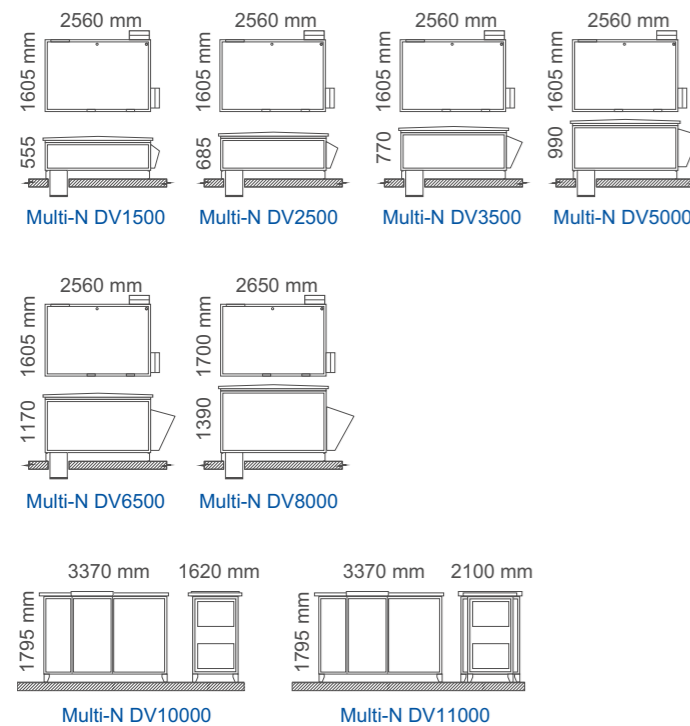
LIFT INTO PLACE

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

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.



OUTDOOR SIZE RANGE



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

EFFICIENT INSTALLATION

Duplexvent MULTI-N outdoor units give the option of being installed directly on to the roof, or on a bespoke low profile, insulated base frame.

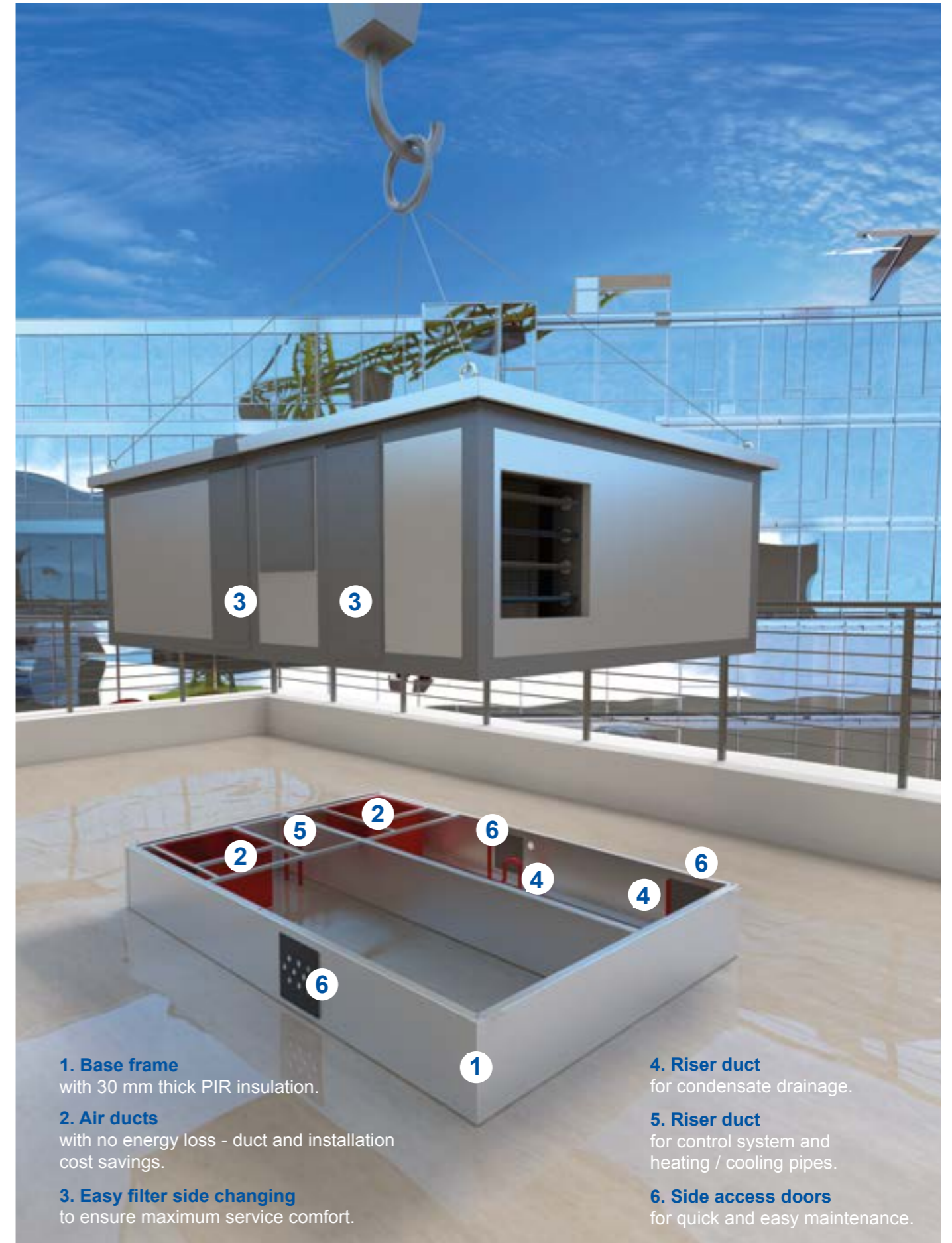
Using the stainless steel framed, highly insulated base, allows supply and extract air duct positions within the footprint of the unit. This modular, encapsulated set up reduces duct runs and does away with conventional duct insulation expense while giving a more energy efficient and easily installed unit.

Note: Bespoke insulated base frame is fitted with service access points.



COMPACT SIZE

One of the biggest Duplexvent Multi-N advantages is its compact size. Having an exceptionally low height, all units up to 6400 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.

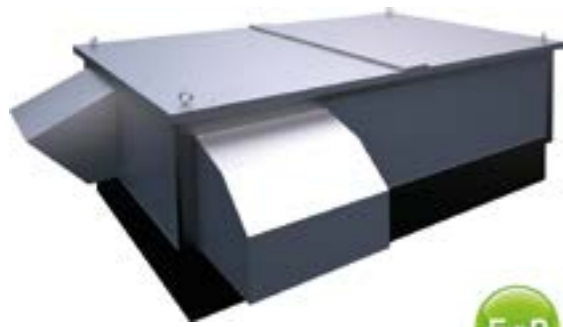
4. Riser duct for condensate drainage.

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

6. Side access doors for quick and easy maintenance.

Duplexvent MULTI-N

Multi Line Customised Outdoor -
Up to 13050m³/hr air volume



2016 / 2018

KEY FEATURES

- Fully customised commercial units in 8 different sizes up to 12500 m³/hr at 200 Pa
- Excellent heat recovery efficiency, up to 93%
- Unique duct connection from the bottom
- Optional insulated base frame reduces heat loss and duct runs
- Low SFP with energy saving fans
- Ready for crane transport
- Digital Touchscreen or simple manual controller
- G4, M5 or F7 filters available
- Optional circulation damper
- Optional constant flow and constant pressure mode
- BREEAM and ErP 2016 / 2018 compliant
- Meets Building Regulations Part L2A and L2B
- 2 year warranty +

PERFORMANCE

Duplexvent Multi-N		DV1500	DV2500	DV3500	DV5000	DV6500	DV8000	DV10000	DV11000
Supply air - max. ¹	m ³ /hr / l/sec	2500 / 694	3600 / 1000	4700 / 1306	6400 / 1778	7200 / 1200	8800 / 2444	11100 / 3083	13050 / 3625
Extraction air - max. ¹	m ³ /hr / l/sec	2300 / 639	3650 / 1014	4600 / 1278	6350 / 1704	7100 / 1372	8900 / 2472	10700 / 2972	12300 / 3417
Heat recovery efficiency ²	%	to 93%							
Fan type		EC (backward curve impeller)							
Weight ³	kg	290-350	350-420	450-480	460-560	520-630	630-750	1220-1330	1280-1400
Max power input	kW	1.5	2.5	4.4	6.4	6.7	8.9	10.7	10.8
Voltage	V	230							
Frequency	Hz	50							
RPM - max.	min ⁻¹	2920	3000	2980	2700	2820	2570	2570	2130
Heating output T - max. ⁴	kW	18	27	36	46	67	75	95	100
Cooling output CHW - max. ⁴	kW	9	12	22	30	39	46	65	70
Cooling output CHF - max. ⁴	kW	10	13	25	37	41	50	60	65
Part No.		9041533	9041534	9041535	9041536	9041520	9041532	90000817	90000818

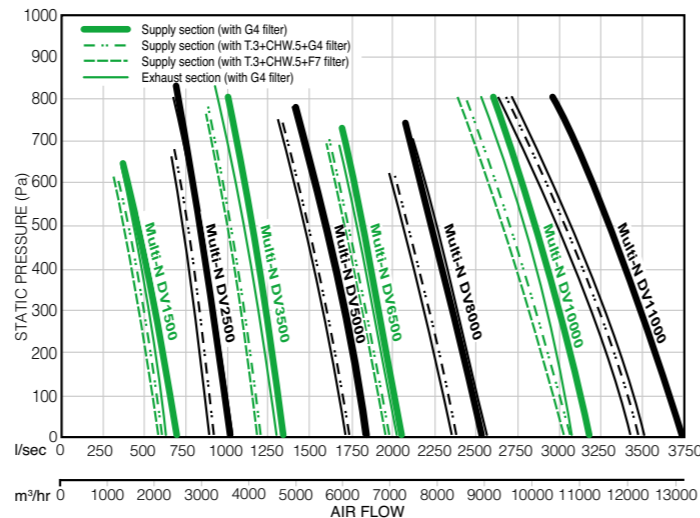
1. Maximum flow rate at zero external pressure
2. According to air volume
3. Depending on equipment
4. Depending on register type, liquid and flow rates

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

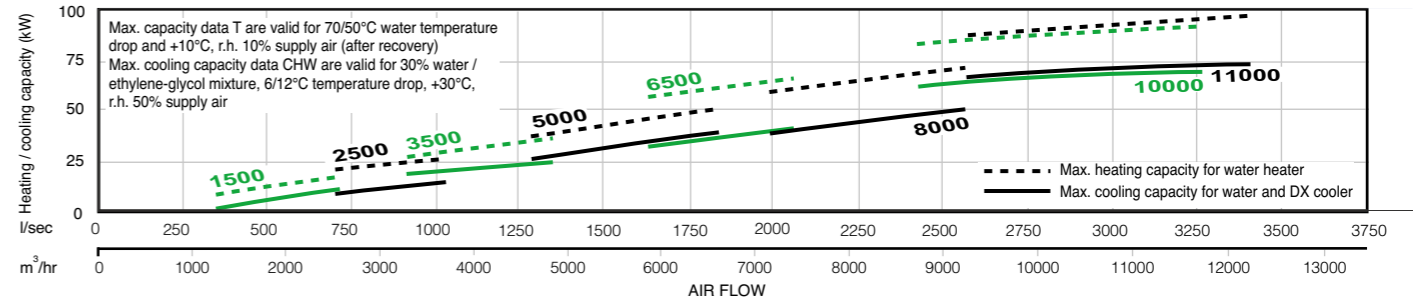
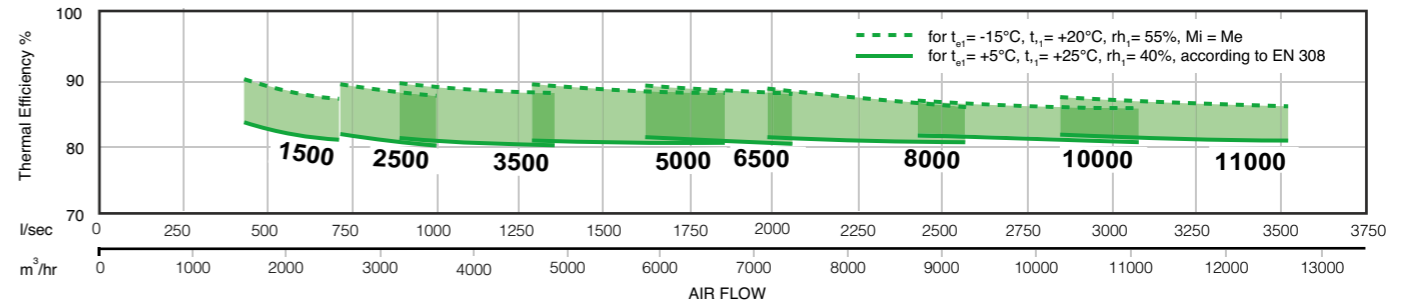
+ excludes motors. Motor warranty one year from date of purchase.

ACOUSTIC POWER L_w AND PRESSURE L_p

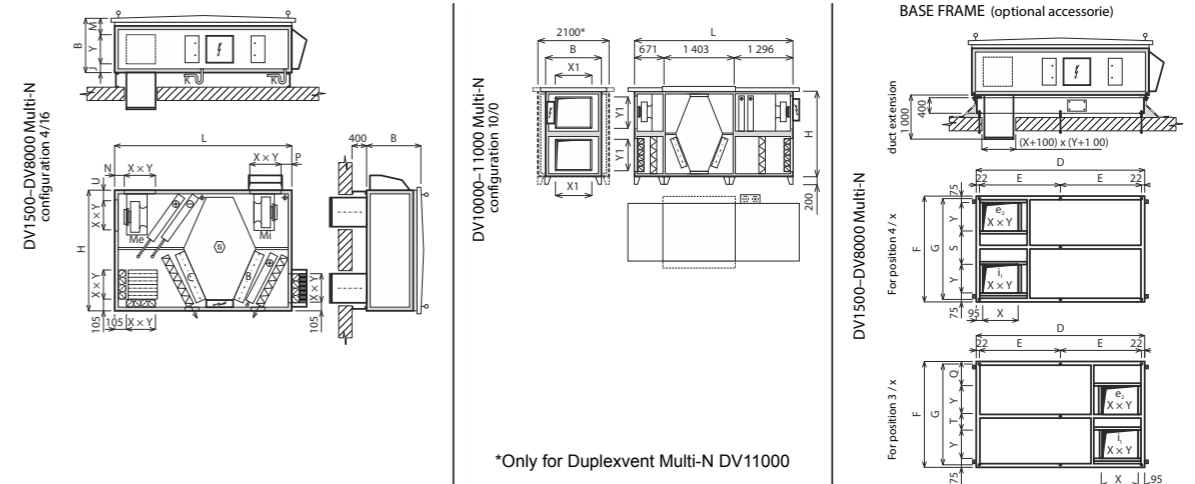
Type	Working point	Acoustic power L _w [dB(A)]				Acoustic pressure L _p [dB(A)] at 3 m
		Inlet e ₁	Inlet i ₁	Inlet e ₂	Inlet i ₂	
Duplexvent Multi-N DV1500	1500m ³ /hr (200Pa)	57	57	87	87	60
Duplexvent Multi-N DV2500	2500m ³ /hr (200Pa)	57	57	82	82	61
Duplexvent Multi-N DV3500	3500m ³ /hr (200Pa)	58	59	87	88	59
Duplexvent Multi-N DV5000	5000m ³ /hr (200Pa)	68	68	89	89	62
Duplexvent Multi-N DV6500	6500m ³ /hr (200Pa)	72	72	94	95	66
Duplexvent Multi-N DV8000	8000m ³ /hr (200Pa)	66	62	76	79	50
Duplexvent Multi-N DV10000	9000m ³ /hr (200 Pa)	66	67	98	97	53
Duplexvent Multi-N DV11000	10000m ³ /hr (200 Pa)	63	64	88	88	52



PERFORMANCE



DIMENSIONS



Duplexvent Multi-N		DV1500	DV2500	DV3500	DV5000	DV6500	DV8000	DV10000	DV11000
Dimension H	mm	1605	1605	1605	1605	1605	1700	1795	1795
Dimension B	mm	555	685	770	990	1170	1390	1620	1620
Length L	mm	2560	2560	2560	2560	2560	2650	3370	3370
Dimension N	mm	130	105	105	105	105	105	-	-
Dimension U	mm	270	105	105	105	105	105	-	-
Dimension P	mm	135	105	105	105	105	105	-	-
Dimension J	mm	100	100	165	225	315	340	-	-
Dimension M	mm	155	185	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	900 x 710	900 x 710
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 MULTI-Eco

Heat Recovery Ventilation



2016 / 2018

KEY FEATURES

- Heat recovery ventilation
- 100% customisation
- 93% thermal efficiency
- Optimised range with more efficient fans
- Automatic 100% bypass
- Built-in heating / cooling coils
- Integrated web server enables to control the unit via internet
- BMS connection (Modbus as a standard, optional BACnet or KNX)
- VAV control compatibility
- 2 year warranty +

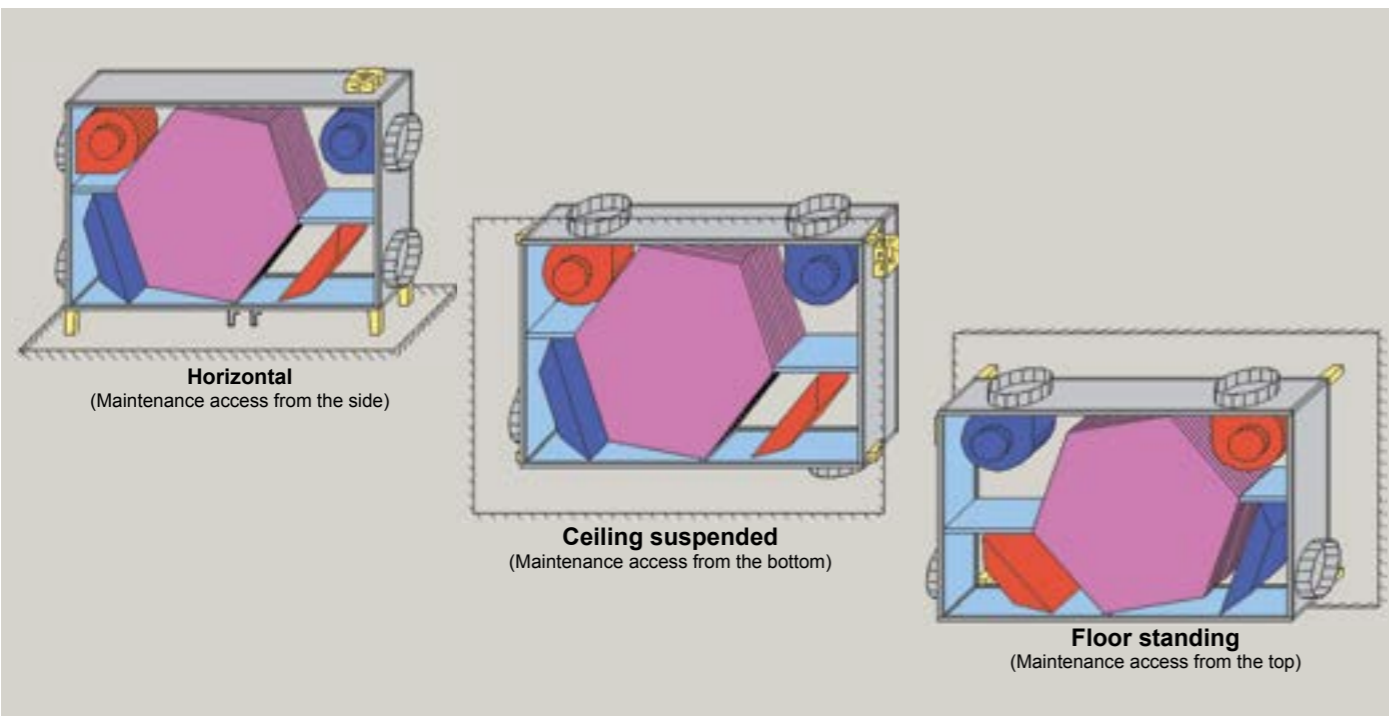
Duplexvent MULTI-Eco

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 16,000 m³/hr air volume with the availability of indoor and outdoor versions.

To offer you the greatest choice in meeting your commercial ventilation needs, we have expanded our Multi line to include the Multi-Eco line of energy efficient units, which still match your specification in terms of installation flexibility, performance and quality by meeting the high air volume requirements for commercial and large industrial spaces

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

MULTI-Eco LINE UNIT CONFIGURATIONS

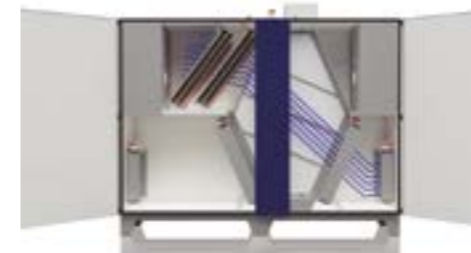


100% CUSTOMISATION AND SHORT DELIVERY TIME

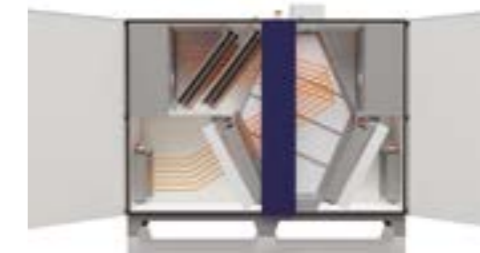
Multi-Eco Line MVHR units follow the business philosophy of multiple variability. Designers can easily modify unit positions, spigot connections, filters, integral heating/cooling coils, bypass and circulation dampers using the selection software which accelerates the specification

process and helps meet stringent project requirements.

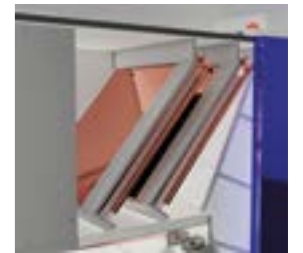
Despite the full customisation Multi-Eco Line units are delivered in a period of **4-6 weeks** to meet tight project deadlines.



100% Bypass facility delivers cool, fresh and filtered air

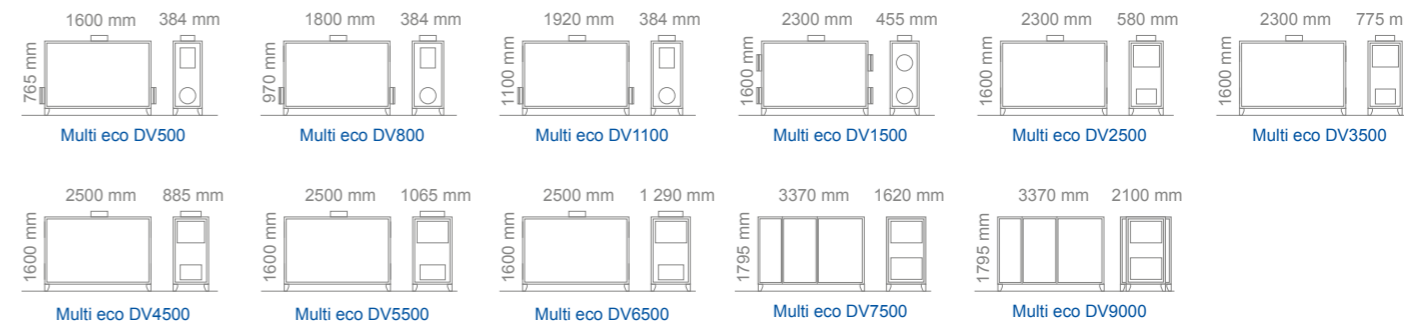


Circulation damper helps regulate indoor temperature / humidity conditions



Built-in water / DX coils extra heating / cooling

DUPLEXVENT MULTI-Eco SIZE RANGE



Duplexvent MULTI-Eco

New improved Multi-Eco Line Customised
Indoor - Up to 11500m³/hr air volume

KEY FEATURES

- Fully customised commercial units in 11 different sizes up to 11100 m³/hr at 200 Pa
- Digital Touchscreen or simple manual controller
- Low noise, refer to NR35 and BB93 standards
- Excellent thermal insulation (class T2, TB1)
- G4, M5 or F7 filters available
- Optional circulation damper
- Optional constant flow and constant pressure mode
- BREEAM and ErP 2016 / 2018 compliant
- Meets Building Regulations Part L2A and L2B



2016 / 2018

PERFORMANCE

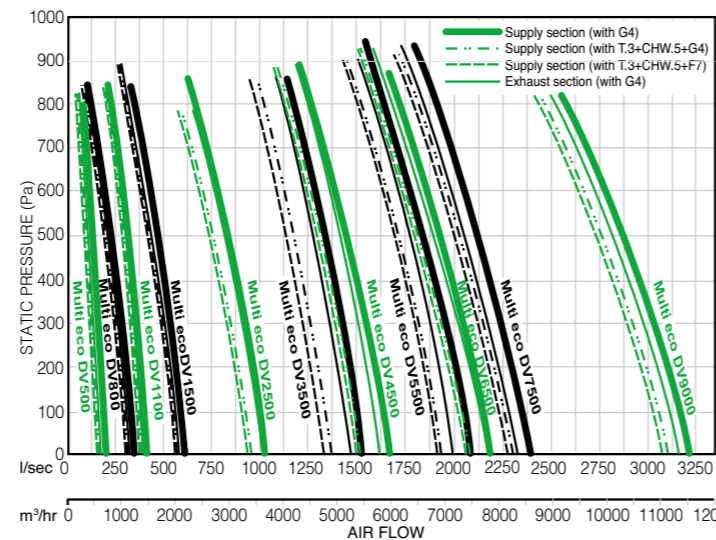
Duplexvent Multi-Eco		DV500	DV800	DV1100	DV1500	DV2500	DV3500	DV4500	DV5500	DV6500	DV7500	DV9000
Supply air - max. ¹	m ³ /hr / l/sec	660 / 183	1200 / 333	1300 / 361	2200 / 611	3600 / 1000	5500 / 1528	5800 / 1611	7500 / 2083	7800 / 2167	8600 / 2389	11500 / 3194
Extraction air - max. ¹	m ³ /hr / l/sec	670 / 186	1150 / 319	1250 / 347	1800 / 500	3550 / 986	5300 / 1472	5600 / 1556	7100 / 1972	7700 / 2139	8300 / 2306	11300 / 3139
Heat recovery efficiency ²	%	up to 93%										
Fan type		EC (backward curved impeller)										
Weight ³	kg	80-110	95-130	120-170	200-280	290-370	350-430	370-450	480-560	580-670	1120-1250	1210-1350
Max power input	kW	0.3	0.7	0.8	1.2	2.6	4.5	5.2	6.6	6.6	6.6	8.9
Voltage	V	230										
Frequency	Hz	50										
RPM - max.	min ⁻¹	4300	3350	3350	2920	3000	2980	2980	2700	2700	2700	2570
Heating output T - max. ⁴	kW	5	14	16	22	30	42	51	71	80	85	90
Cooling output CHW - max. ⁴	kW	4	8	10	16	22	30	42	56	62	67	72
Cooling output CHF - max. ⁴	kW	3	6	8	10	13	25	37	41	50	55	60
Part No.		90000790	90000791	90000792	90000793	90000794	90000795	90000796	90000797	90000798	90000799	90000800

- Maximum flow rate at zero external pressure
- According to air volume
- Depending on equipment
- Depending on register type, liquid and flow rates

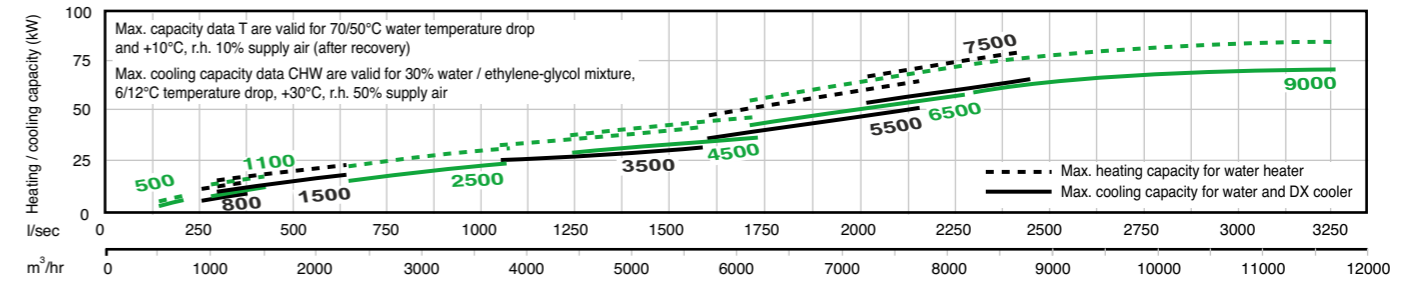
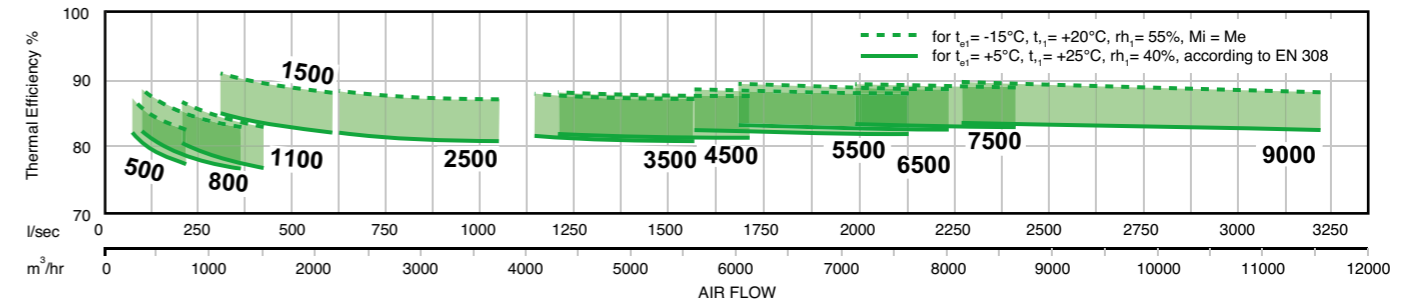
T - Water heating coil
CHW - Water cooling coil
CHF - DX (direct evaporator) coil

ACOUSTIC POWER L_w AND PRESSURE PL_{D3}

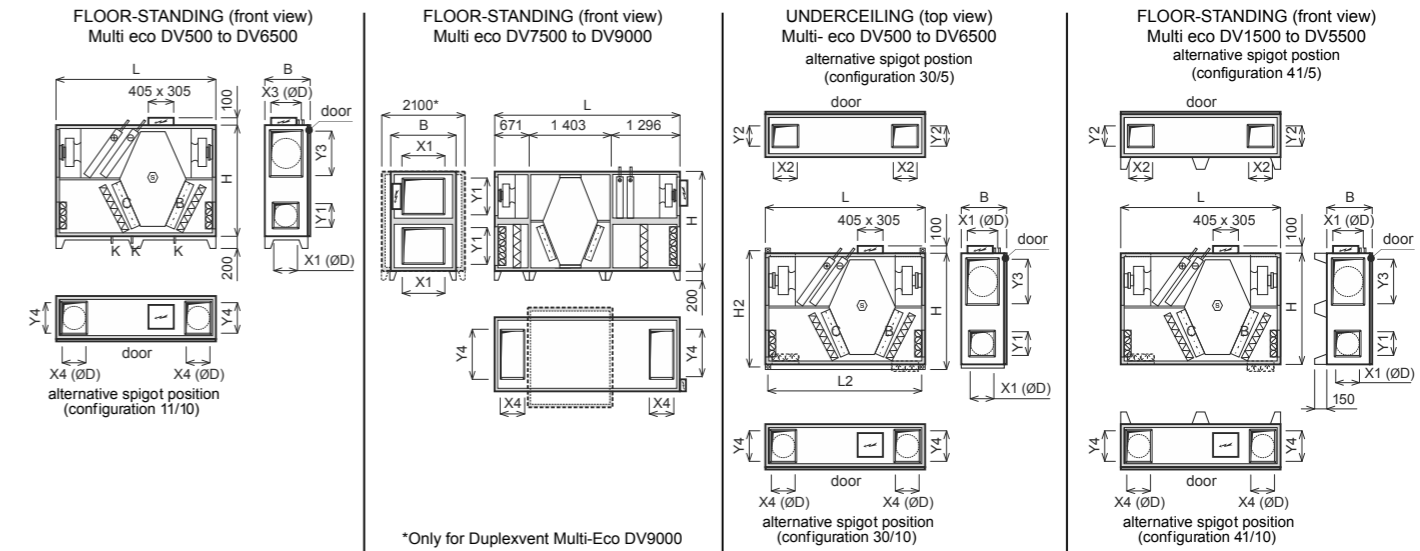
Type	Working point	Acoustic power L _w [dB(A)]					Acoustic pressure PL _{D3} [dB(A)] at 3 m
		Inlet e ₁	Inlet i ₁	Inlet e ₂	Inlet i ₂	unit	
Duplexvent Multi Eco DV500	500m ³ /hr (200 Pa)	53	66	80	82	59	38
Duplexvent Multi Eco DV800	800m ³ /hr (200 Pa)	64	65	81	79	58	38
Duplexvent Multi Eco DV1100	1000m ³ /hr (200 Pa)	56	58	80	80	65	44
Duplexvent Multi Eco DV1500	1500m ³ /hr (200 Pa)	61	61	86	86	64	43
Duplexvent Multi Eco DV2500	2500m ³ /hr (200 Pa)	59	55	79	79	70	49
Duplexvent Multi Eco DV3500	3500m ³ /hr (200 Pa)	64	62	90	90	70	50
Duplexvent Multi Eco DV4500	4500m ³ /hr (200 Pa)	67	67	92	91	76	55
Duplexvent Multi Eco DV5500	5500m ³ /hr (200 Pa)	69	68	97	95	66	45
Duplexvent Multi Eco DV6500	6000m ³ /hr (200 Pa)	72	72	96	88	75	55
Duplexvent Multi Eco DV7500	7500m ³ /hr (200 Pa)	65	69	91	92	72	51
Duplexvent Multi Eco DV9000	8500m ³ /hr (200 Pa)	67	66	97	97	76	46



PERFORMANCE



DIMENSIONS



Duplexvent Multi-Eco		DV500	DV800	DV1100	DV1500	DV2500	DV3500	DV4500	DV5500	DV6500	DV7500	DV9000
Dimension H	mm	765	970	1100	1600	1600	1600	1600	1600	1600	1795	1795
Dimension H2	mm	715	920	1050	1650	1650	1650	1650	1650	-	-	-
Dimension B	mm	384	384	384	455	580	775	885	1065	1295 / 1390	1620	1620
Length L	mm	1600	1800	1920	2300	2300	2300	2500	2500	2500	3370	3370
Length L2	mm	1652	1852	1972	2270	2270	2270	2470	2470	2368	-	-
Condensate drain	mm	Ø22										
Connecting Ports												
Dimension X1 x Y1 (standard e ₁ , i ₁), D	mm	Ø200	Ø250	Ø250	Ø315	300 x 400	400 x 400	500 x 500	500 x 500	700 x 500	900 x 710	900 x 710
Dimension X2 x Y2 (atypical e ₁ , i ₁), D	mm	Ø200	Ø250	Ø250	400 x 200	300 x 400	400 x 400	500 x 500	500 x 500	500 x 700	-	-
Dimension X3 x Y3 (standard e ₂ , i ₂), D	mm	200 x 250	200 x 350	200 x 350	Ø315	450 x 710	500 x 710	710 x 710	900 x 710	900 x 710	-	-
Dimension X4 x Y4 (atypical e ₂ , i ₂), D	mm	-	-	-	-	250 x 355	250 x 400	355 x 630	355 x 800	355 x 900	400 x 1200	400 x 1200

*For Duplexvent Multi-Eco DV6500 in configuration 30/X



Duplexvent MULTI Eco-V

Heat Recovery Ventilation



2016 / 2018

KEY FEATURES

- Heat recovery ventilation
- 100% customisation
- 93% thermal efficiency
- Vertical duct connections
- Low energy EC fans
- Automatic 100% bypass
- Built-in heating / cooling coils
- Integrated web server enables to control the unit via internet
- BMS connection (Modbus as a standard, optional BACnet or KNX)
- VAV control compatibility
- 2 year warranty +

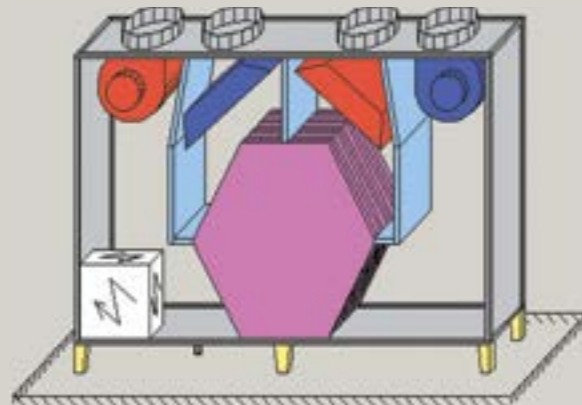
Duplexvent MULTI Eco-V

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 16,000 m³/hr air volume with the availability of indoor and outdoor versions.

To offer you the greatest choice in meeting your commercial ventilation needs, we have expanded our Multi line to include the Multi-Eco line of energy efficient units, which still match your specification in terms of installation flexibility, performance and quality by meeting the high air volume requirements for commercial and large industrial spaces.

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

MULTI Eco-V LINE UNIT CONFIGURATION



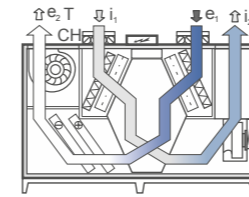
Upright
(Maintenance access from the side)



100% CUSTOMISATION AND SHORT DELIVERY TIME

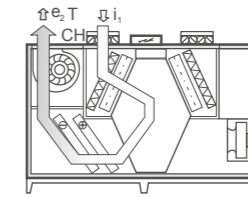
Multi Eco-V Line MVHR units follow the business philosophy of multiple variability. Designers can easily modify unit positions, spigot connections, filters, integral heating /cooling coils, bypass and circulation dampers using the selection software which accelerates the specification

process and helps meet stringent project requirements. Despite the full customisation Multi Eco-V Line units are delivered in a period of **4-6 weeks** to meet tight project deadlines.



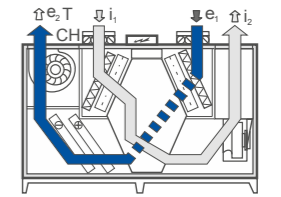
⇒ e₁ ... Fresh outdoor air suction
⇒ e₂ ... Fresh filtered air outlet

Ventilation with heat recovery



⇒ i₁ ... Exhaust air suction
⇒ i₂ ... Exhaust air outlet

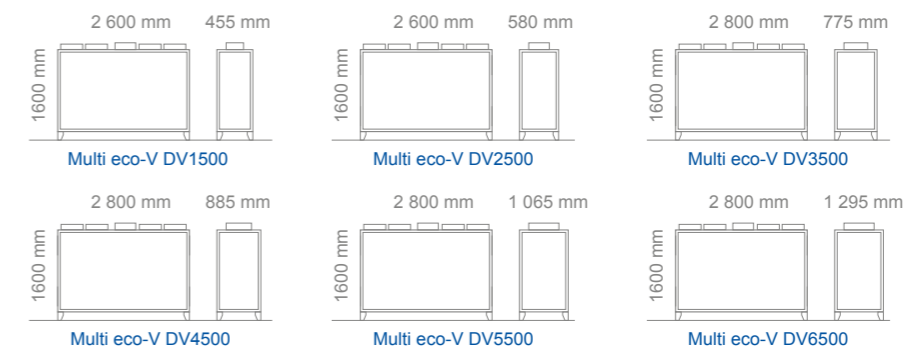
Circulation damper helps regulate indoor temperature / humidity conditions



T ... Central heating connection
CH ... Cooling connection

100% Bypass facility delivers cool, fresh and filtered air

DUPLEXVENT MULTI Eco-V SIZE RANGE



Duplexvent MULTI Eco-V

Multi Line Customised Indoor -
Up to 7800m³/hr air volume



2016 / 2018

KEY FEATURES

- Fully customised commercial units in 6 different sizes up to 7600 m³/hr at 200 Pa
- Digital Touchscreen or simple manual controller
- Low noise, refer to NR35 and BB93 standards
- Excellent thermal insulation (class T2, TB1)
- G4, M5 or F7 filters available
- Optional circulation damper
- Optional constant flow and constant pressure mode
- BREEAM and ErP 2016 / 2018 compliant
- Meets Building Regulations Part L2A and L2B

PERFORMANCE

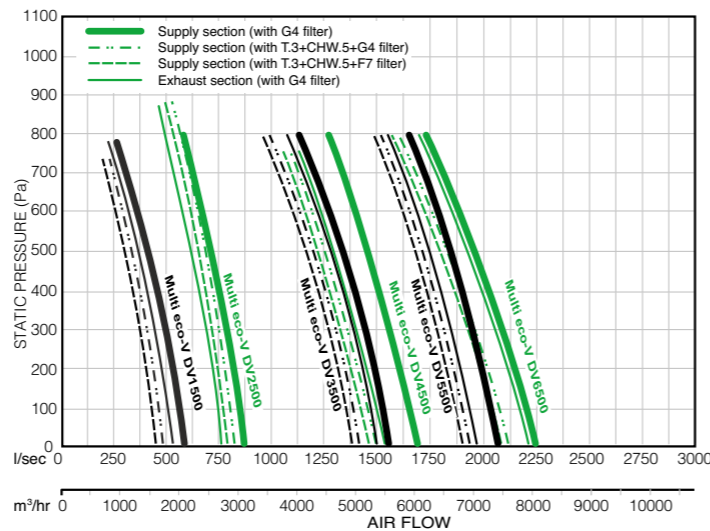
Duplexvent Multi Eco-V		DV1500	DV2500	DV3500	DV4500	DV5500-	DV6500
Supply air - max. ¹	m ³ /hr / l/sec	2050 / 569	3050 / 847	5400 / 1500	5900 / 1639	7400 / 2055	7800 / 2166
Extraction air - max. ¹	m ³ /hr / l/sec	1800 / 500	2700 / 750	5300 / 1472	5400 / 1500	7000 / 1944	7700 / 2139
Heat recovery efficiency ²	%	up to 93%					
Fan type		EC (backward curved impeller)					
Weight ³	kg	210-290	300-380	360-430	380-460	490-570	590-680
Max power input	kW	1.2	2.3	5	5	6.6	6.6
Voltage	V	230		400			
Frequency	Hz	50					
RPM - max.	min ⁻¹	2920	3000	2980	2980	2700	2700
Heating output T - max. ⁴	kW	22	30	42	51	71	88
Cooling output CHW - max. ⁴	kW	16	22	30	42	56	62
Cooling output CHF - max. ⁴	kW	10	13	25	37	41	50
Part No.		90000801	90000802	90000803	90000804	90000805	90000806

- Maximum flow rate at zero external pressure
- According to air volume
- Depending on equipment
- Depending on register type, liquid and flow rates

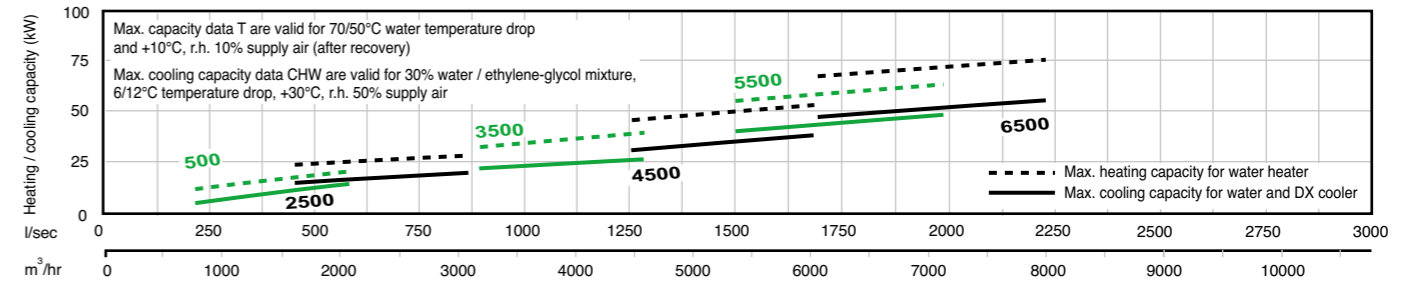
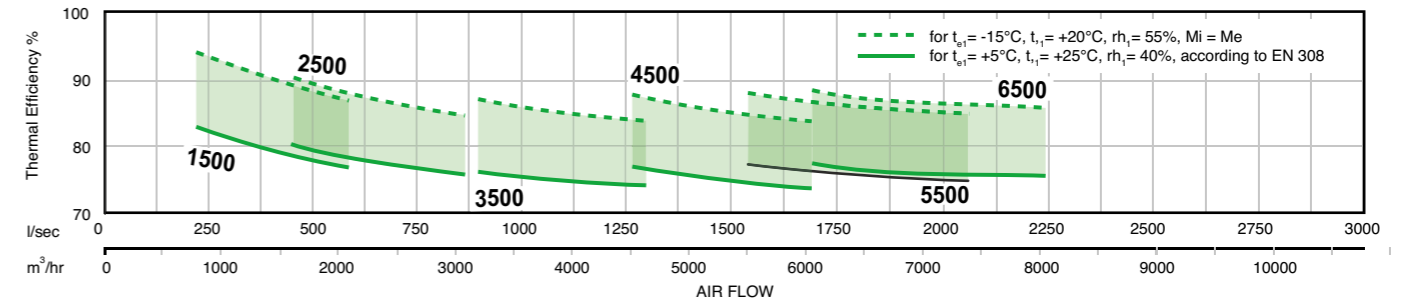
T - Water heating coil
CHW - Water cooling coil
CHF - DX (direct evaporator) coil

ACOUSTIC POWER L_w AND PRESSURE PL_p

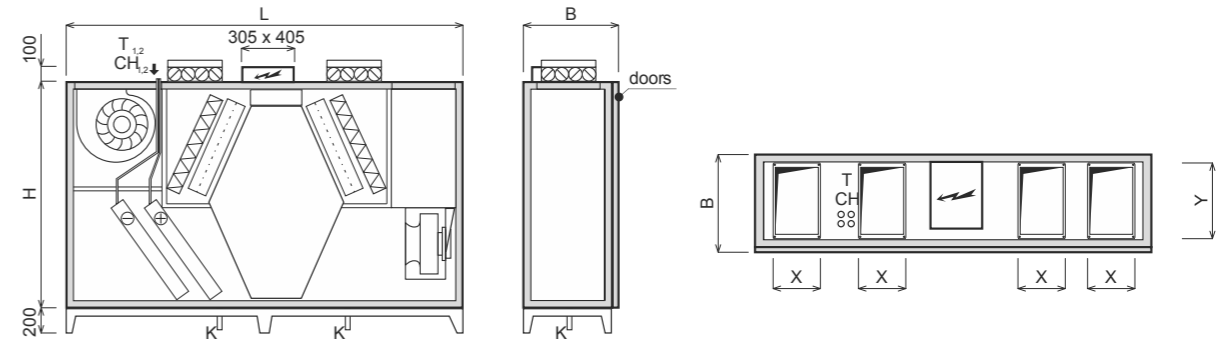
Type	Working point	Acoustic power L _w [dB(A)]					Acoustic pressure L _p [dB(A)] at 3 m
		inlet e ₁	inlet i ₁	inlet e ₂	inlet i ₂	unit	
Duplexvent Multi eco-V DV1500	1500m ³ /hr (200 Pa)	54	59	81	81	66	45
Duplexvent Multi eco-V DV2500	2500m ³ /hr (200 Pa)	66	70	82	91	76	55
Duplexvent Multi eco-V DV3500	3500m ³ /hr (200 Pa)	64	63	91	91	74	52
Duplexvent Multi eco-V DV4500	4500m ³ /hr (200 Pa)	67	67	92	88	66	58
Duplexvent Multi eco-V DV5500	5500m ³ /hr (200 Pa)	69	70	95	93	68	61
Duplexvent Multi eco-V DV6500	6000m ³ /hr (200 Pa)	72	75	96	88	78	59



PERFORMANCE



DIMENSIONS



Duplexvent Multi Eco-V		DV500	DV1000	DV1500	DV2500	DV3500	DV5000
Dimension H	mm	1600	1600	1600	1600	1600	1600
Dimension B	mm	455	580	775	885	1065	1290
Length L	mm	2600	2600	2800	2800	2800	2800
Condensate drain	mm	Ø32					
Connecting Ports							
Dimension X x Y	mm	300 x 250	300 x 400	400 x 400	400 x 600	400 x 710	400 x 900



Duplexvent MULTI Eco-N

Heat Recovery Ventilation

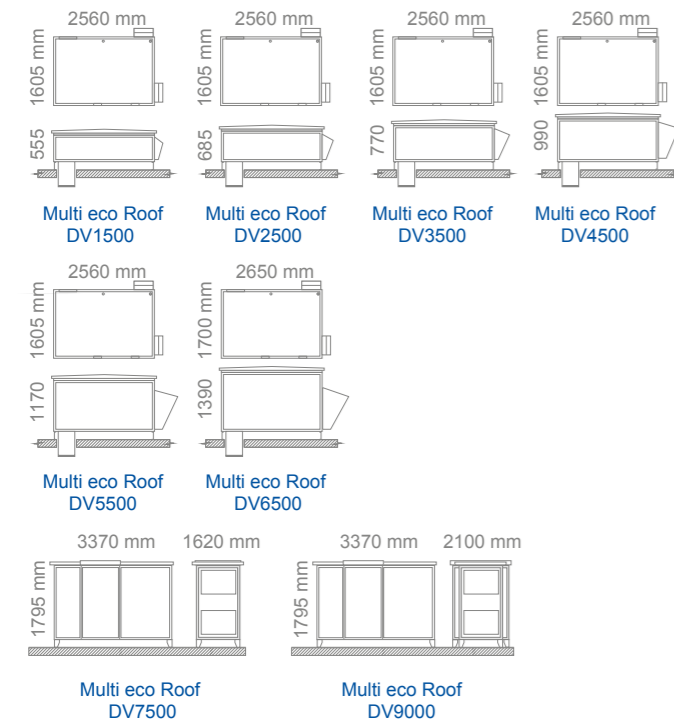
LIFT INTO PLACE

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

Multi Eco-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 units doors.



OUTDOOR SIZE RANGE



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

EFFICIENT INSTALLATION

Duplexvent MULTI Eco-N outdoor units give the option of being installed directly on to the roof, or on a bespoke low profile, insulated base frame.

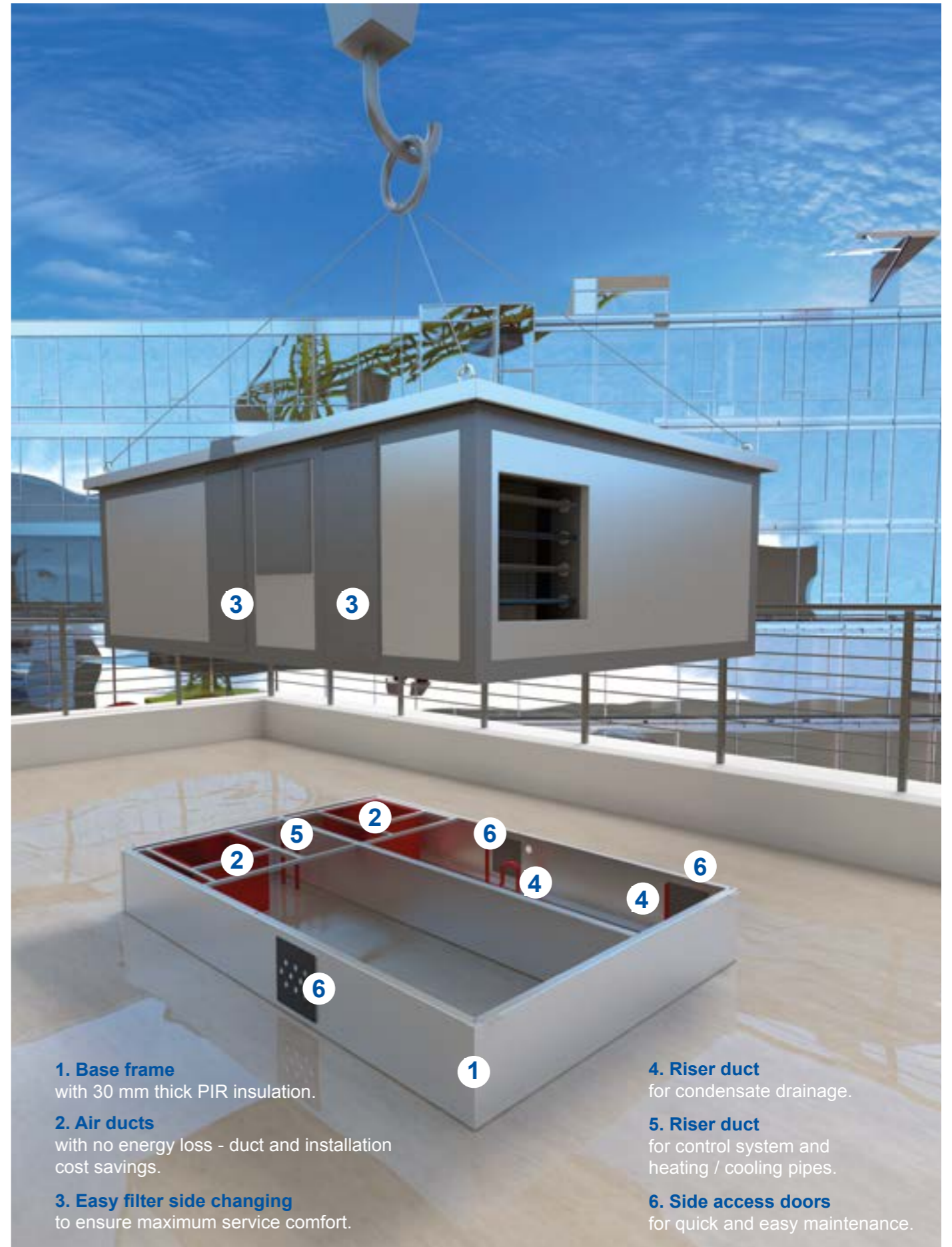
Using the stainless steel framed, highly insulated base, allows supply and extract air duct positions within the footprint of the unit. This modular, encapsulated set up reduces duct runs and does away with conventional duct insulation expense while giving a more energy efficient and easily installed unit.

Note: Bespoke insulated base frame is fitted with service access points.



COMPACT SIZE

One of the biggest Duplexvent Multi Eco-N advantages is its compact size. Having an exceptionally low height, all units up to 5900 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 Eco-N

New improved Multi Eco-N Line Customised Outdoor – Up to 11500m³/hr air volume



2016 / 2018

KEY FEATURES

- Fully customised commercial units in 8 different sizes up to 11100 m³/hr at 200 Pa
- Excellent heat recovery efficiency, up to 93%
- Unique duct connection from the bottom
- Optional insulated base frame reduces heat loss and duct runs
- Optimised range with more efficient fans
- Ready for crane transport
- Digital Touchscreen or simple manual controller
- G4, M5 or F7 filters available
- Optional circulation damper
- Optional constant flow and constant pressure mode
- BREEAM and ErP 2016 / 2018 compliant
- Meets Building Regulations Part L2A and L2B
- 2 year warranty +

PERFORMANCE

Duplexvent Multi Eco-N		DV1500	DV2500	DV3500	DV4500	DV5500	DV6500	DV7500	DV9000
Supply air - max. ¹	m ³ /hr / l/sec	2500 / 694	3600 / 1000	4700 / 1306	5900 / 1639	7600 / 2111	7800 / 2167	8600 / 2389	11500 / 3194
Extraction air - max. ¹	m ³ /hr / l/sec	2300 / 8280	3650 / 1014	4600 / 1278	5750 / 1597	7650 / 2125	7900 / 2194	8300 / 2306	11300 / 3139
Heat recovery efficiency ²	%	to 93%							
Fan type		EC (backward curve impeller)							
Weight ³	kg	290-350	350-420	405-480	460-560	520-630	630-750	1170-1310	1260-1400
Max power input	kW	1.5	2.5	4.4	4.4	6.5	6.5	6.6	8.9
Voltage	V	230							
Frequency	Hz	50							
RPM - max.	min ⁻¹	2920	3000	2980	2980	2700	2700	2700	2570
Heating output T - max. ⁴	kW	18	27	36	46	67	75	85	90
Cooling output CHW - max. ⁴	kW	9	12	22	36	39	46	67	72
Cooling output CHF - max. ⁴	kW	10	13	25	37	41	50	55	60
Part No.		90000807	90000808	90000809	90000810	90000811	90000812	90000813	90000814

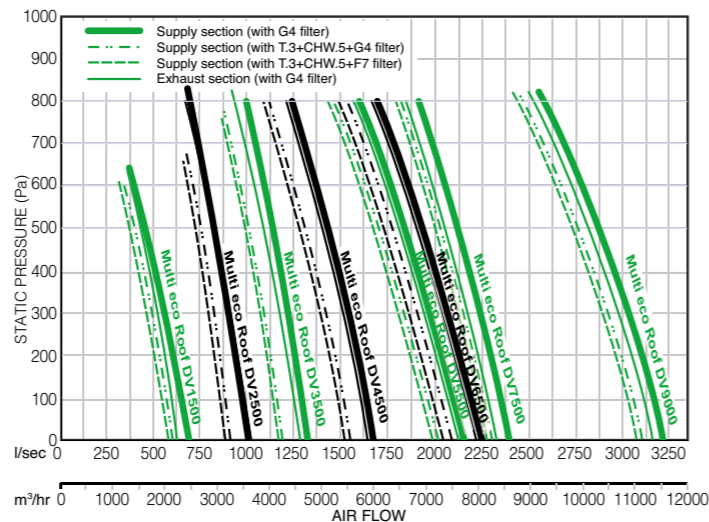
- Maximum flow rate at zero external pressure
- According to air volume
- Depending on equipment
- Depending on register type, liquid and flow rates

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

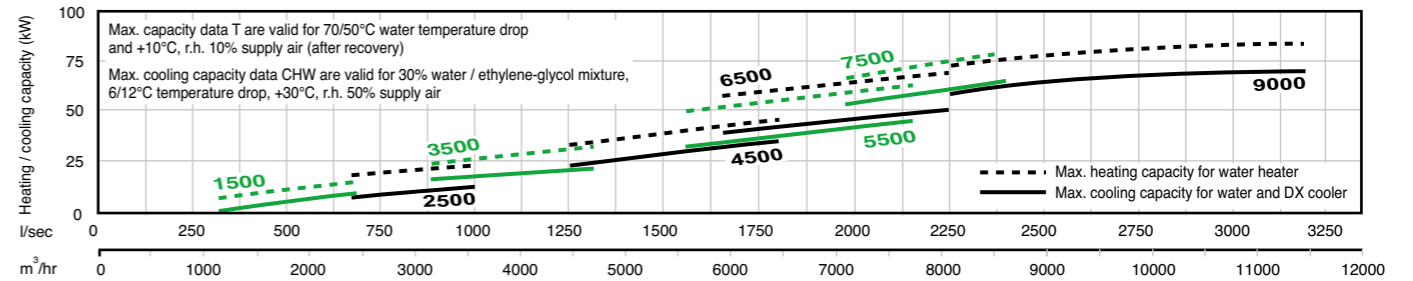
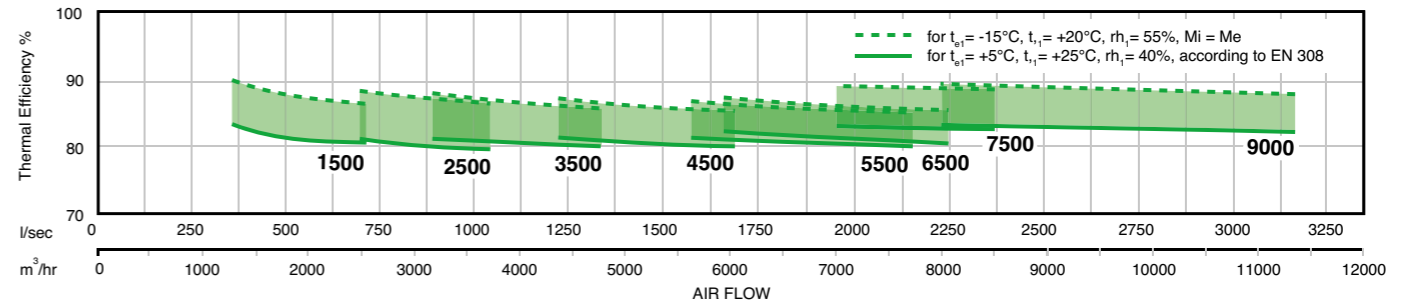
+ excludes motors. Motor warranty one year from date of purchase.

ACOUSTIC POWER L_w AND PRESSURE L_p

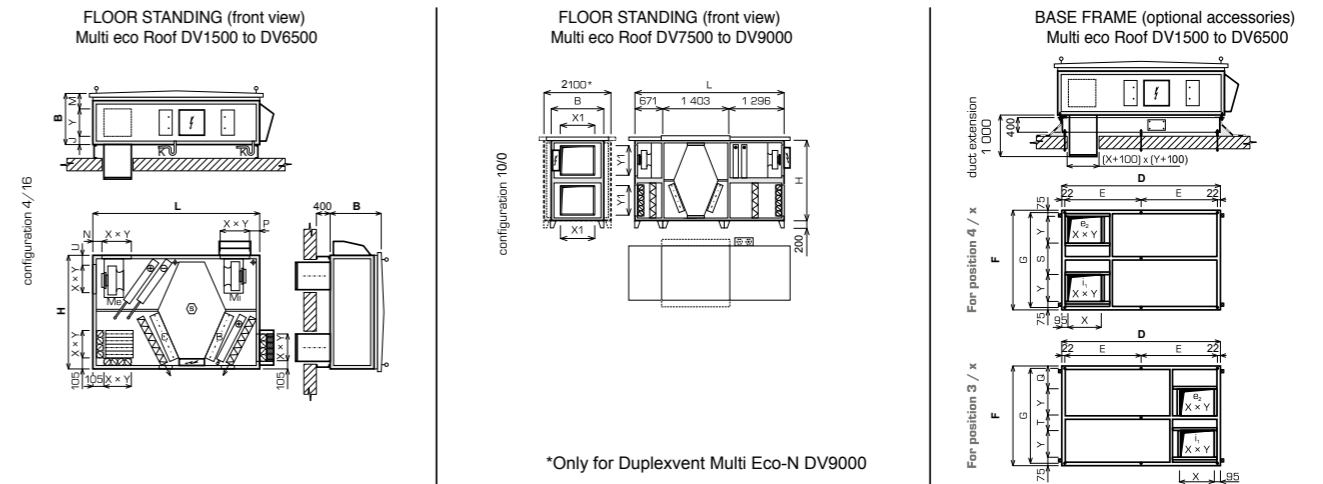
Type	Working point	Acoustic power L _w [dB(A)]				Acoustic pressure L _p [dB(A)] at 3 m
		Inlet e ₁	Inlet i ₁	Inlet e ₂	Inlet i ₂	
Duplexvent Multi Eco-N DV1500	1500m ³ /hr (200 Pa)	57	57	87	87	60
Duplexvent Multi Eco-N DV2500	2500m ³ /hr (200 Pa)	57	57	82	82	61
Duplexvent Multi Eco-N DV3500	3500m ³ /hr (200 Pa)	58	59	87	88	59
Duplexvent Multi Eco-N DV4500	4500m ³ /hr (200 Pa)	65	65	90	90	61
Duplexvent Multi Eco-N DV5500	5500m ³ /hr (200 Pa)	67	67	96	95	51
Duplexvent Multi Eco-N DV6500	6000m ³ /hr (200 Pa)	66	68	96	88	65
Duplexvent Multi Eco-N DV7500	7500m ³ /hr (200 Pa)	65	69	91	92	51
Duplexvent Multi Eco-N DV9000	8500m ³ /hr (200 Pa)	67	66	97	97	46



PERFORMANCE



DIMENSIONS



Duplexvent Multi Eco-N		DV1500	DV2500	DV3500	DV4500	DV5500	DV6500	DV7500	DV9000
Dimension H	mm	1605	1605	1605	1605	1605	1700	1795	1795
Dimension B	mm	555	685	770	990	1170	1390	1620	1620
Length L	mm	2560	2560	2560	2560	2560	2650	3370	3370
Dimension N	mm	130	105	105	105	105	105	-	-
Dimension U	mm	270	105	105	105	105	105	-	-
Dimension P	mm	135	105	105	105	105	105	-	-
Dimension J	mm	100	100	165	225	315	340	-	-
Dimension M	mm	155	185	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	900 x 710	900 x 710
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 ROTARY

Commercial MVHR Rotary Thermal Wheel –
Up to 16,700m³/hr air volume



2016 / 2018

KEY FEATURES

- Indoor installation
- Highly efficient, certified by Eurovent rotary heat exchanger, up to 85% thermal efficiency
- Versatile unit with various mounting options
- Low SFP and energy saving EC fans
- Digital touchscreen or simple manual controller
- BMS connection
- VAV control compatibility
- G4 filters standard. Optional M5 / F7 filters available
- Optional equipment: recirculation damper, heating or cooling coils, purge chamber
- Optional constant flow / pressure mode
- BREEAM and ErP 2016 / 2018 compliant
- 2 year warranty+

PERFORMANCE

Duplexvent Rotary		DV1500	DV2500	DV4000	DV5000	DV8000	DV12000	DV15000
Supply air - max. ¹	(m ³ /hr) / (l/sec)	1550 / 431	2750 / 764	4600 / 1278	6600 / 1833	11200 / 3111	14100 / 3917	16700 / 4639
Extract air - max. ¹	(m ³ /hr) / (l/sec)	1500 / 417	2700 / 750	4650 / 1292	6650 / 1847	11100 / 3084	14000 / 3889	16600 / 4611
Heat recovery efficiency ²	%	to 85%						
Heat exchanger		Thermal rotary wheel						
Max power consumption (W)	W	800	1700	2900	5100	9900	10200	11300
Voltage	V	230	230	400	400	400	400	400
Frequency	Hz	50						
Fan type		EC (backward curved impeller)						
RPM - max	min ⁻¹	3350	2960	3000	2980	2570	2130	1860
Heating output T - max. ³	kW	17	22	42	50	70	100	120
Cooling output CHW - max. ³	kW	10	18	35	39	50	61	80
Cooling output CHF - max. ³	kW	17	24	36	40	47	60	85
Mounting		Floor Standing						
Weight ⁴	kg	345 - 400	360 - 405	570 - 640	575 - 645	850 - 1060	1140 - 1360	1340 - 1610
Part Number		90000724	90000725	90000726	90000727	90000568	90000569	90000570

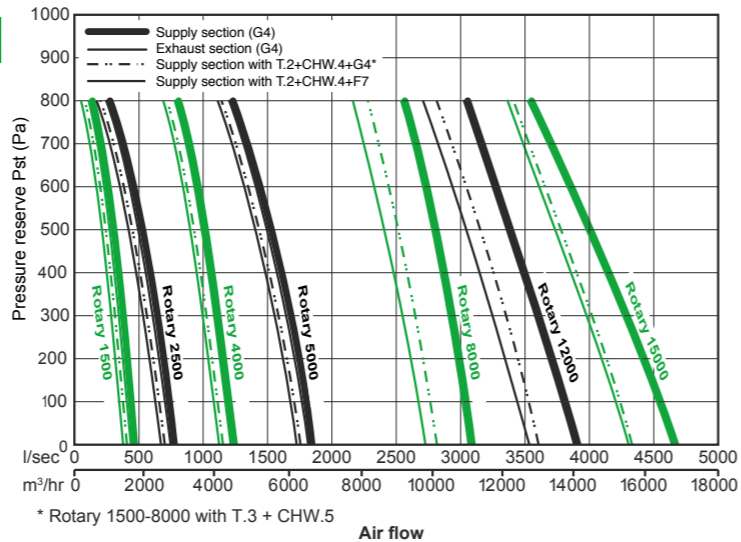
1. Maximum flow rate at zero external pressure
2. According to air volume
3. Depending on register type, liquid and flow rates
4. Depending on equipment

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

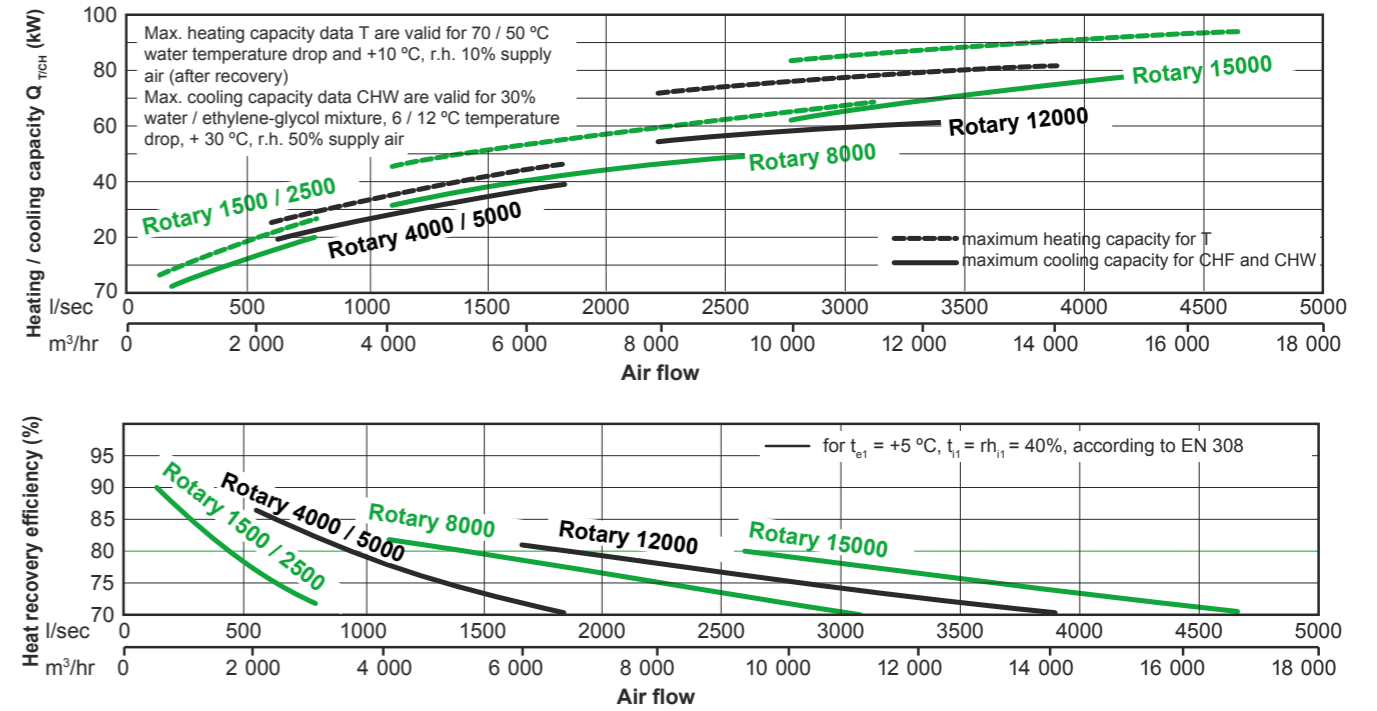
+ excludes motors. Motor warranty 1 year from date of the purchase.

ACOUSTIC POWER L_w AND PRESSURE L_p

Type	Working point	Acoustic power L _w [dB(A)]					Acoustic pressure L _p [dB(A)] at 3 m
		Inlet e ₁	Inlet i ₁	Inlet e ₂	Inlet i ₂	unit	
Duplexvent Rotary DV1500	1300m ³ /h at 200Pa	63	62	81	81	54	34
Duplexvent Rotary DV2500	2300m ³ /h at 200Pa	68	68	83	83	61	40
Duplexvent Rotary DV4000	3500m ³ /h at 200Pa	69	69	87	87	68	48
Duplexvent Rotary DV5000	5000m ³ /h at 200Pa	67	66	91	91	65	45
Duplexvent Rotary DV8000	8000m ³ /h at 200Pa	81	81	97	96	76	56
Duplexvent Rotary DV12000	10000m ³ /h at 200Pa	80	80	99	99	69	49
Duplexvent Rotary DV15000	15000m ³ /h at 200Pa	81	81	97	97	72	52

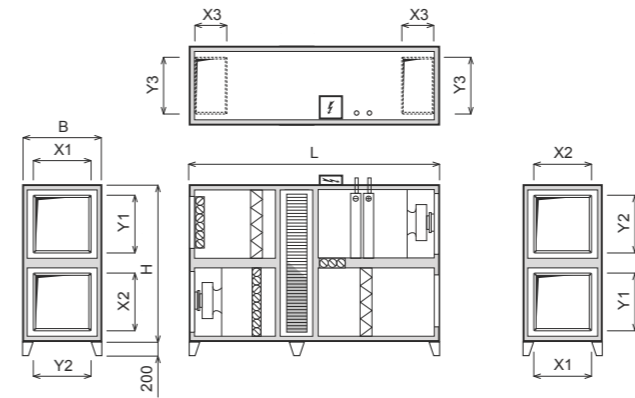


PERFORMANCE

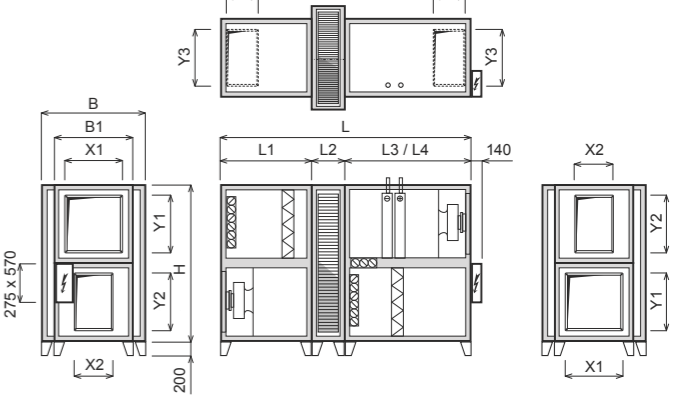


DIMENSIONS

FLOOR STANDING (front view)
1500 to 5000 Rotary



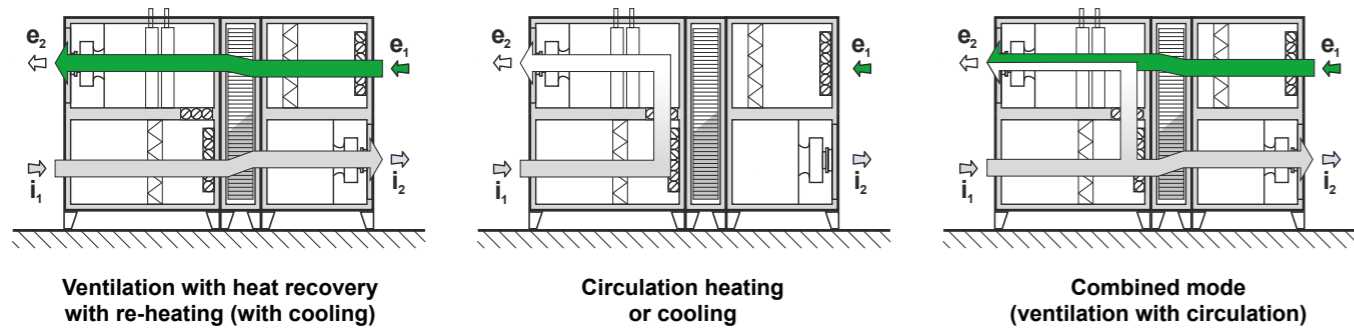
FLOOR STANDING (front view)
8000 to 15000 Rotary



Duplexvent Rotary		DV1500	DV2500	DV4000	DV5000	DV8000	DV12000	DV15000
Depth (B)	mm	880	880	1200	1200	1600	1780	1930
Depth (B1)	mm					1160	1430	1705
Height (H)	mm	1150	1150	1760	1760	1820	2100	2250
Length (L) (without/with mixing damper)	mm	2030 / 2030	2030 / 2030	2250 / 2250	2250 / 2250	2665 / 2965	2830 / 3130	2970 / 3270
Length (L1)	mm	-	-	-	-	1000	1055	1125
Length (L2)	mm	-	-	-	-	530	530	530
Length (L3) (without mixing damper)	mm	-	-	-	-	1135	1245	1315
Length (L4) (with mixing)	mm	-	-	-	-	1435	1545	1615
Condensate drain	mm	ø32 (only when equipped with cooling coils)						
Connecting ports								
X1 x Y1 (standard e ₂ , i ₂)	mm	400 x 400	400 x 400	710 x 710	710 x 710	900 x 710	1000 x 900	1200 x 900
X2 x Y2 (standard e ₁ , i ₁)	mm	400 x 400	400 x 400	710 x 710	710 x 710	500 x 700	710 x 900	900 x 900
X3 x Y3 (standard e ₁ , e ₂)	mm	400 x 400	400 x 400	355 x 710	355 x 710	300 x 900	400 x 1000	400 x 1200



OPERATING MODES



→ e₁ ...Fresh outdoor air suction
→ e₂ ...Fresh filtered air outlet

→ i₁ ...Exhaust air suction
→ i₂ ...Exhaust air outlet

T ...Central heating connection
CH ...Cooling connection



DUPLEXVENT ROTARY

The Duplexvent ROTARY is a range of all-purpose commercial MVHR units that are suitable for all commercial premises that require ventilation up to 16,700m³/hr. The highly efficient rotary wheel heat exchanger recovers up to 85% of otherwise wasted heat to pre-warm the incoming supply air; reducing ongoing energy costs for the building.

ROTARY units offer outstanding performance, with low SFP and high end thermal insulation to minimise heat loss. You can control your ROTARY unit with ease thanks to a wide range of control options, which enables adjustment of the unit's ventilation with or without a BMS via an internet connected device such as smartphone, computer or Duplexvent digital controller.



SYSTEM CONTROL

BMS control interface is standard with Modbus TCP, (KNX and BACnet optional) protocols.

Alternatively the Duplexvent Web control system with internet connectivity may be specified to control remote equipment from a PC, Tablet or Smart phone



A NEW GENERATION IN MECHANICAL VENTILATION WITH HEAT RECOVERY

Duplexvent Rotary units provide outstanding performance within a compact shape. The system comprises of separate supply and extract backward curved EC fans. Duplexvent Rotary units are easy to transport and install on site and provide excellent MVHR performance for a range of commercial and industrial applications.

The casing is twin skin construction with high insulation and transfer characteristic of 0.037 W/mK. It is rated to Thermal Insulation class T2 and thermal bridging class TB1 / TB2 (depending on the unit). Access doors are provided for ease of filter maintenance. Thanks to the highly efficient EC motors, Rotary units achieve extremely low SFP values from 0.45 W/m³/h.

Multiple choice duct connectivity is a feature of the Duplexvent Rotary range. Supply and extract ports can be rotated by 90 degrees to facilitate on-site duct connections in limited access spaces. This enables the connecting ducting to be configured in line with the space available and the structure of the building.



Duplexvent ROTARY-N

Side Entry Commercial MVHR –
Up to 16,700m³/hr air volume



2016 / 2018

KEY FEATURES

- Outdoor installation
- Weather protection hoods and a roof
- Highly efficient, certified by Eurovent rotary heat exchanger, up to 85% thermal efficiency
- Versatile unit with various mounting options
- Low SFP and energy saving EC fans
- Digital touchscreen or simple manual controller
- BMS connection
- VAV control compatibility
- G4 filters standard. Optional M5 / F7 filters available
- Optional equipment: recirculation damper, heating or cooling coils, purge chamber
- Optional constant flow / pressure mode
- BREEAM and ErP 2016 / 2018 compliant
- 2 year warranty+

PERFORMANCE

Duplexvent Rotary-N		DV1500-N	DV2500-N	DV4000-N	DV5000-N	DV8000-N	DV12000-N	DV15000-N
Supply air - max. ¹	(m ³ /hr) / (l/sec)	1550 / 431	2750 / 764	4600 / 1278	6600 / 1833	11200 / 3111	14100 / 3917	16700 / 4639
Extract air - max. ¹	(m ³ /hr) / (l/sec)	1500 / 417	2700 / 750	4650 / 1292	6650 / 1847	11100 / 3084	14000 / 3889	16600 / 4611
Heat recovery efficiency ²	%	to 85%						
Heat exchanger		Thermal rotary wheel						
Max power consumption (W)	W	800	1700	2900	5100	9900	10200	11300
Voltage	V	230	230	400	400	400	400	400
Frequency	Hz	50						
Fan type		EC (backward curved impeller)						
RPM - max	min ⁻¹	3,50	2960	3000	2980	2570	2130	1860
Heating output T - max. ³	kW	17	22	42	50	70	100	120
Cooling output CHW - max. ³	kW	10	18	35	39	50	61	80
Cooling output CHF - max. ³	kW	17	24	36	40	47	60	85
Mounting		Floor Standing						
Weight ⁴	kg	345 - 390	350 - 395	560 - 630	565 - 635	840 - 1050	1130 - 1350	1330 - 1660
Part Number		90000728	90000729	90000730	90000731	90000571	90000572	90000573

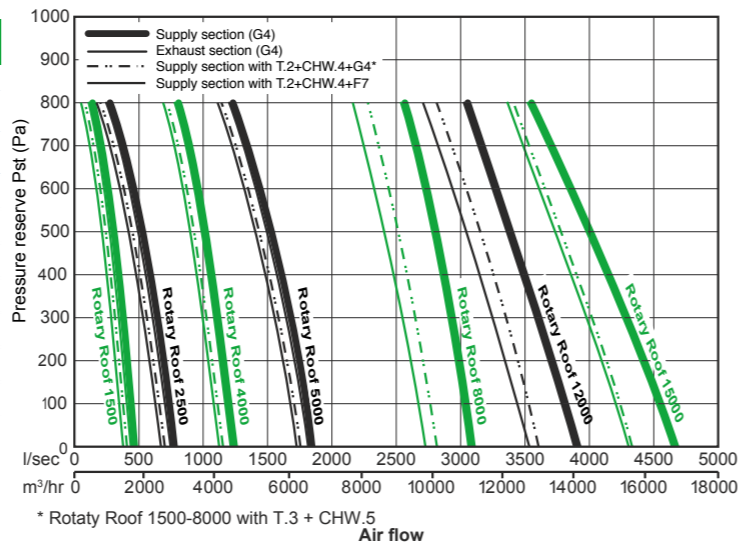
1. Maximum flow rate at zero external pressure
2. According to air volume
3. Depending on register type, liquid and flow rates
4. Depending on equipment

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

+ excludes motors. Motor warranty 1 year from date of the purchase.

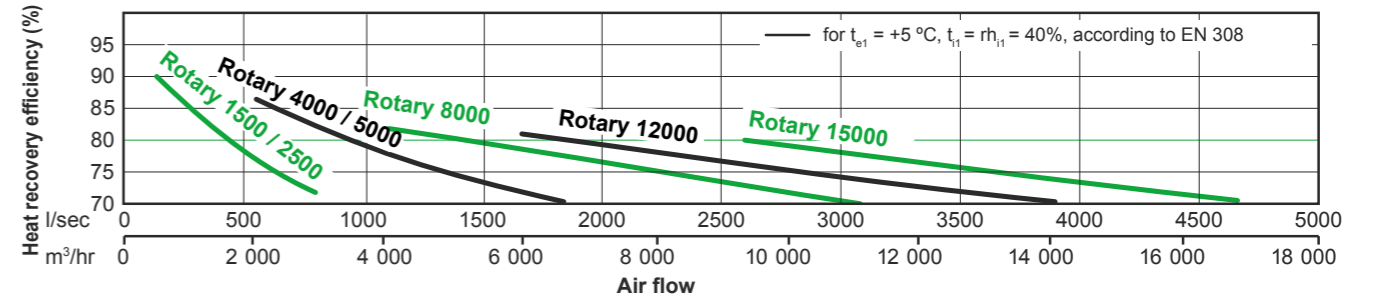
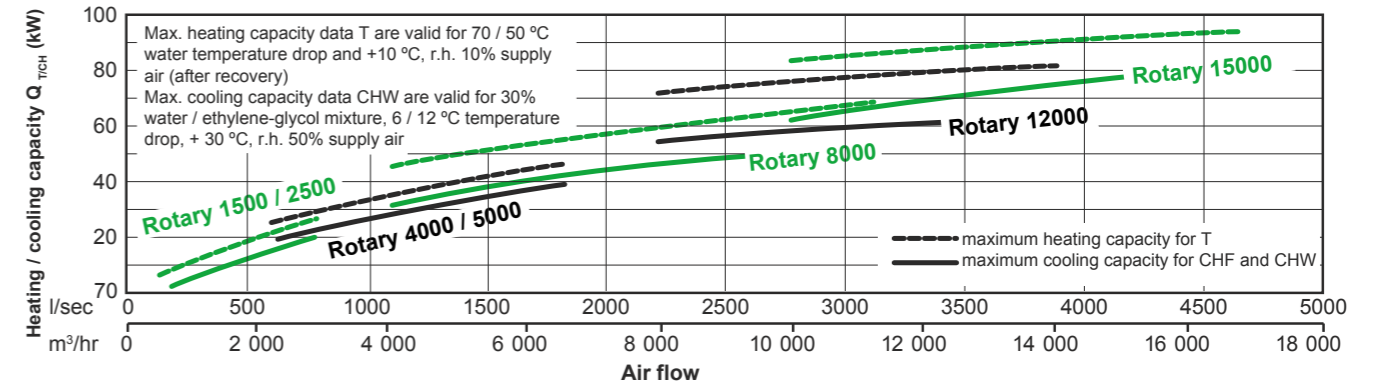
ACOUSTIC POWER L_w AND PRESSURE L_p

Type	Working point	Acoustic power L _w [dB(A)]					Acoustic pressure L _p [dB(A)] at 3 m
		Inlet e ₁	Inlet i ₁	Inlet e ₂	Inlet i ₂	unit	
Duplexvent Rotary-N DV1500-N	1300m ³ /h at 200Pa	63	62	81	81	54	34
Duplexvent Rotary-N DV2500-N	2300m ³ /h at 200Pa	68	68	83	83	61	40
Duplexvent Rotary-N DV4000-N	3500m ³ /h at 200Pa	69	69	87	87	68	48
Duplexvent Rotary-N DV5000-N	5000m ³ /h at 200Pa	67	66	91	91	65	45
Duplexvent Rotary-N DV8000-N	8000m ³ /h at 200Pa	81	81	97	96	76	56
Duplexvent Rotary-N DV12000-N	10000m ³ /h at 200Pa	80	80	99	99	69	49
Duplexvent Rotary-N DV15000-N	15000m ³ /h at 200Pa	81	81	97	97	72	52



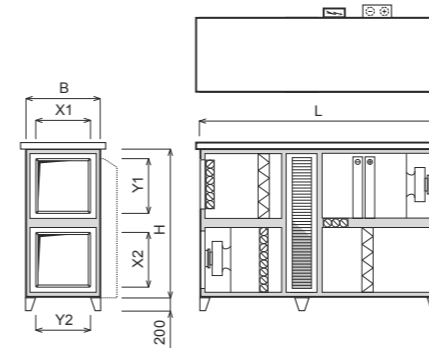
* Rotary Roof 1500-8000 with T.3 + CHW.5

PERFORMANCE

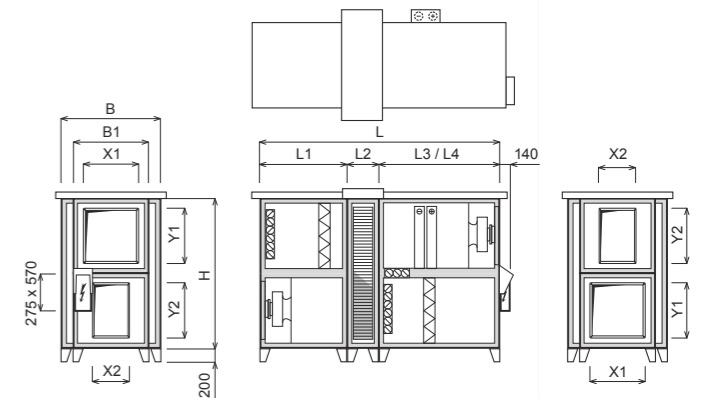


DIMENSIONS

ROOFTOP (front view)
1500 to 5000 Rotary



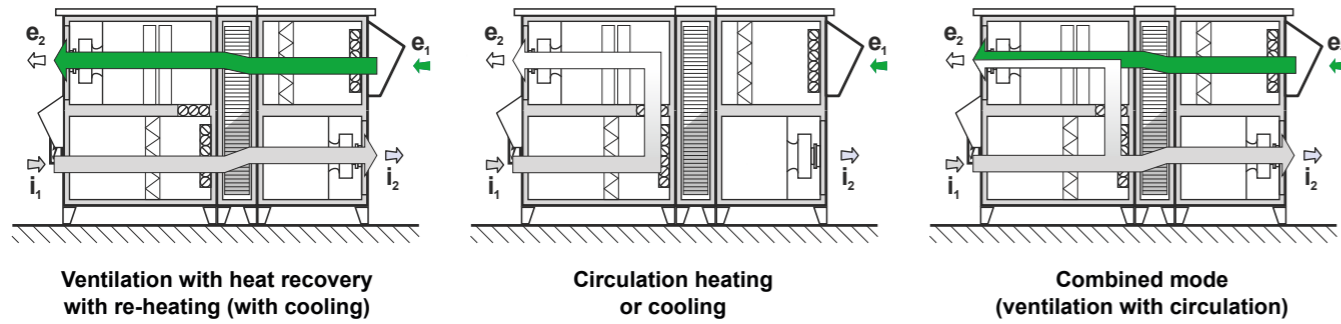
ROOFTOP (front view)
8000 to 15000 Rotary



Duplexvent Rotary-N		DV1500-N	DV2500-N	DV4000-N	DV5000-N	DV8000-N	DV12000-N	DV15000-N
Depth (B)	mm	880	880	1200	1200	1600	1780	1930
Depth (B1)	mm					1160	1430	1705
Height (H)	mm	1150	1150	1760	1760	1820	2100	2250
Length (L) (without/with mixing damper)	mm	2030 / 2030	2030 / 2030	2250 / 2250	2250 / 2250	2665 / 2965	2830 / 3130	2970 / 3270
Length (L1)	mm	-	-	-	-	1000	1055	1125
Length (L2)	mm	-	-	-	-	530	530	530
Length (L3) (without mixing damper)	mm	-	-	-	-	1135	1245	1315
Length (L4) (with mixing)	mm	-	-	-	-	1435	1545	1615
Condensate drain	mm	ø32 (only when equipped with cooling coils)						
Connecting ports								
X1 x Y1 (standard e ₂ , i ₂)	mm	400 x 400	400 x 400	710 x 710	710 x 710	900 x 710	1000 x 900	1200 x 900
X2 x Y2 (standard e ₁ , i ₁)	mm	400 x 400	400 x 400	710 x 710	710 x 710	500 x 700	710 x 900	900 x 900



OPERATING MODES



→ e₁ ...Fresh outdoor air suction
 ⇨ e₂ ...Fresh filtered air outlet

⇨ i₁ ...Exhaust air suction
 ⇨ i₂ ...Exhaust air outlet

T ...Central heating connection
 CH ...Cooling connection



DUPLEXVENT ROTARY-N

The Duplexvent ROTARY-N is a range of all-purpose commercial MVHR units that are suitable for all commercial premises that require ventilation up to 16,700m³/hr. The highly efficient rotary wheel heat exchanger recovers up to 85% of otherwise wasted heat to pre-warm the incoming supply air; reducing ongoing energy costs for the building.

Rotary units offer outstanding performance, with low SFP and high end thermal insulation to minimise heat loss. You can control your ROTARY-N unit with ease thanks to a wide range of control options, which enables adjustment of the unit's ventilation with or without a BMS via an internet connected device such as smartphone, computer or Duplexvent digital controller.



SYSTEM CONTROL

BMS control interface is standard with Modbus TCP, (KNX and BACnet optional) protocols.

Alternatively the Duplexvent Web control system with internet connectivity may be specified to control remote equipment from a PC, Tablet or Smart phone



A NEW GENERATION IN MECHANICAL VENTILATION WITH HEAT RECOVERY

Duplexvent Rotary-N units provide outstanding performance within a compact shape. The system comprises of separate supply and extract backward curved EC fans. Duplexvent Rotary-N units are easy to transport and install on site and provide excellent MVHR performance for a range of commercial and industrial applications.

The casing is twin skin construction with high insulation and transfer characteristic of 0.037 W/mK. It is rated to Thermal Insulation class T2 and thermal bridging class TB1 / TB2 (depending on the unit). Access doors are provided for ease of filter maintenance. Thanks to the highly efficient EC motors, Rotary-N units achieve extremely low SFP values from 0.45 W/m³/h.

Rotary-N units are designed to be installed outdoors. Thanks to the steel hood found on all units which cover the supply air inlet and the extract air inlet, the Duplexvent Rotary-N is protected against the weather. This protection helps to extend the life of the unit and maintain its long term optimal performance.



Duplexvent - Advanced Functionality and Control

WEB CONTROL SYSTEM

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

- Advanced control with digital display
- 100% adjustable EC fan control
- Automatic 100% bypass control for free cooling
- Daily / Weekly programme setting
- Filter monitoring via pressure sensors
- BMS connection (Modbus, KNX, 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



User Control / Service Monitoring



User Control



Demand Control via CO₂, rh%, Air Quality Sensors



Building Management System (BMS)

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



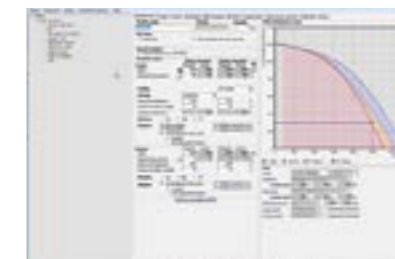
Our advanced and user friendly Duplexvent Selection Software makes it possible to select the most suitable product in just a few simple steps.

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 EAST 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



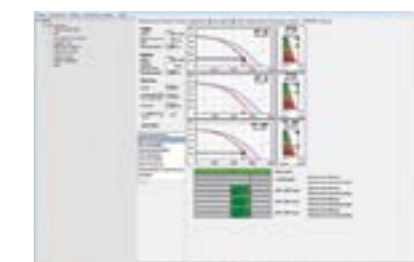
Software Outputs:

- 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



VAV System

Zonal Control for your MVHR system



KEY FEATURES

- Variable air volume (VAV) ventilation system with compatible controller and VAV dampers
- Independent monitoring and air flow regulation for individual area requirements
- Intelligent, internet controlled dampers for fine adjustment of air flow
- Real time data transfer and regulation of VAV dampers from a central monitoring station
- Allows users to control the system through smartphone and PC
- Optimises the performance of an MVHR unit and reduces the ongoing operating costs of your ventilation system
- Helps analyse ventilation and heating (optional) energy costs by zone
- Doesn't require a BMS system
- Up to 63 dampers can be connected to a central unit
- Suitable for all commercial Duplexvent MVHR units

VAV System

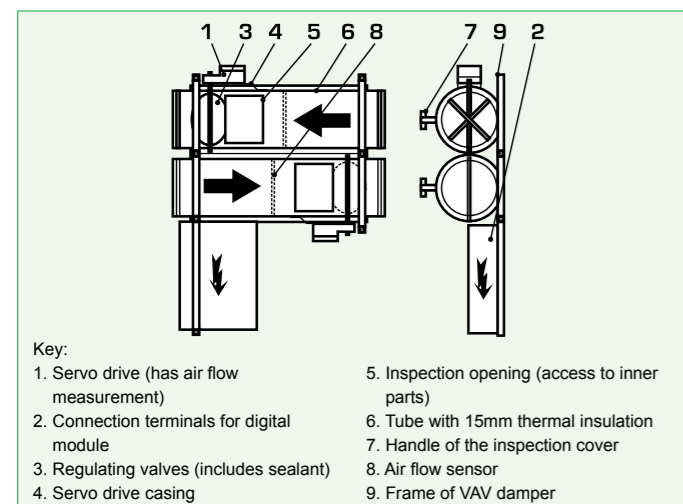
The VAV System grants building managers a ventilation system that can responsively adapt to changes in ventilation demand in each section of large rooms or the building without the need for a BMS System.

The Airflow VAV system can be integrated with any commercial Duplexvent MVHR unit via an Ethernet cable and, due to the improved efficiency it provides, keeps the ongoing operating costs of the ventilation system down.

When integrated, the entire system is permanently and immediately controlled so that the central unit gives exactly the required air without unnecessarily wasting energy.

Various designs of the dampers enable them to be installed in various locations of the ventilation system and thanks to a comprehensive range of sizes, give this VAV system a wide range of applications.

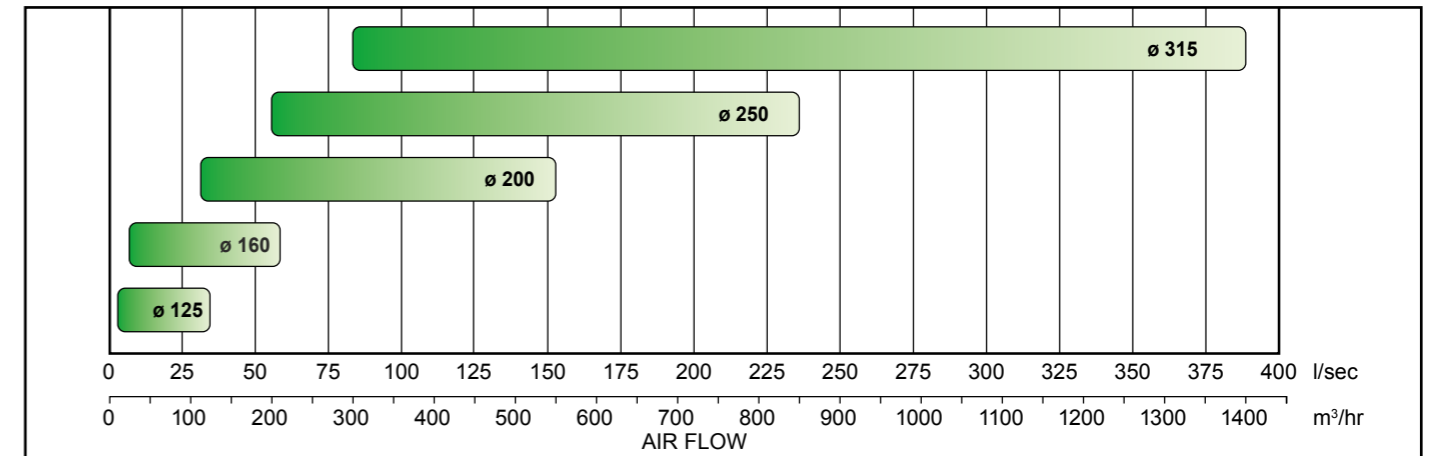
KEY COMPONENTS



VAV SYSTEM RANGE

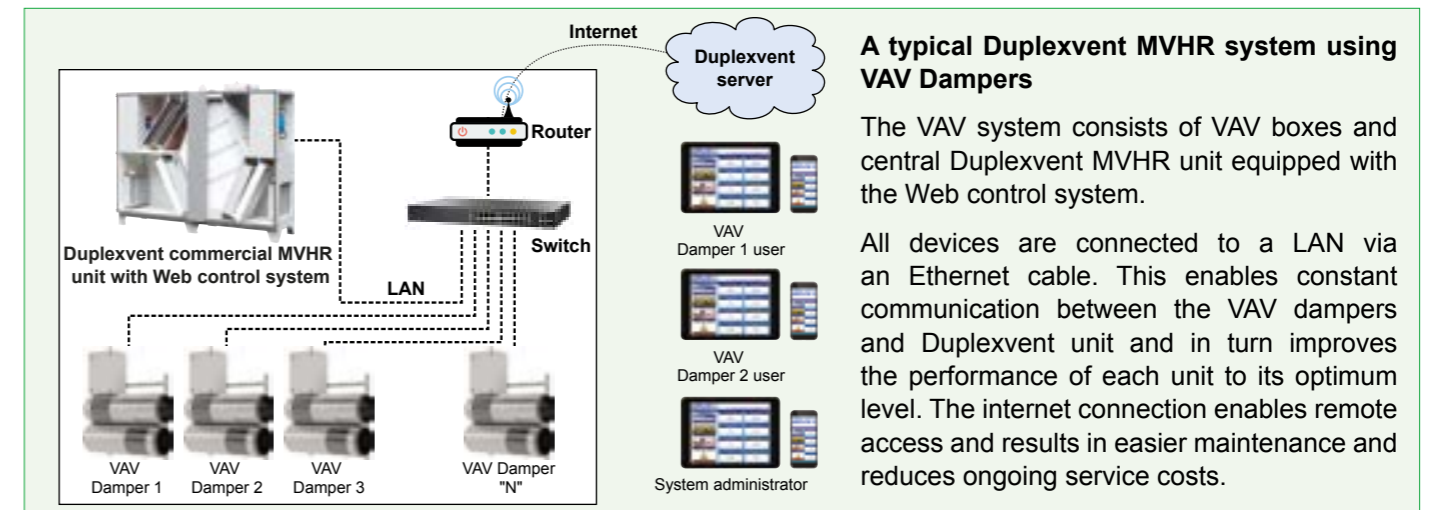


UNIT SELECTION



EXAMPLE SYSTEM

Duplexvent commercial MVHR unit with Web control

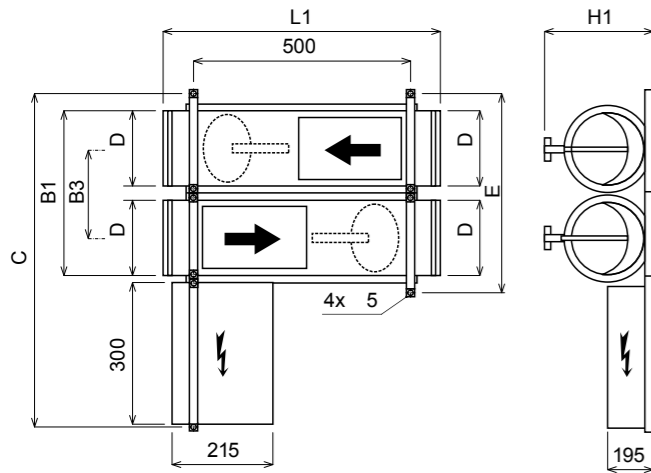


PERFORMANCE

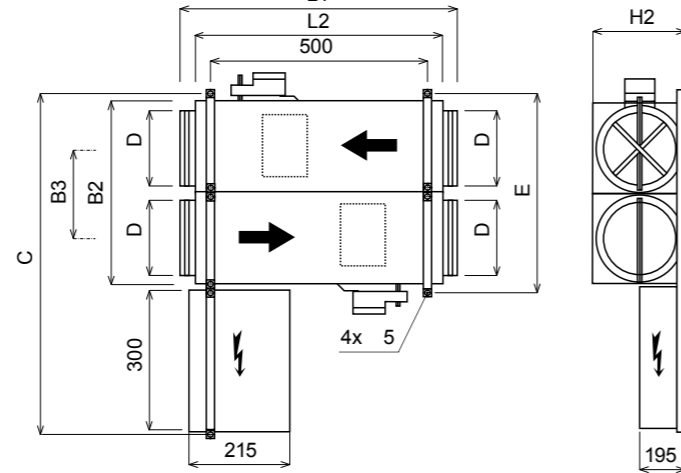
VAV Damper	Working Point		Acoustic Performance L_{wa} (dB)								L_{wa} (dB)
	Pressure Loss (Pa)	Air Flow Volume (m³/hr) / (l/sec)	63	125	250	500	1000	2000	4000	8000	
125	50	120 / 33	45.0	44.4	43.6	40.7	33.1	30.8	22.6	18.9	41.0
160		180 / 50	49.3	46.5	47.5	44.8	37.0	26.3	15.4	5.7	44.4
200		450 / 125	54.0	49.1	42.0	31.8	18.2	13.2	6.0	4.0	36.9
250		750 / 208	54.6	49.7	42.6	32.4	18.8	14.0	6.8	4.8	37.7
315		1300 / 361	55.7	50.8	43.7	33.5	19.9	14.8	7.6	5.6	38.5
125	50	120 / 33	49.0	49.9	54.1	52.8	47.0	43.5	41.3	41.7	53.5
160		180 / 50	42.6	54.0	52.0	53.5	47.5	43.4	36.6	31.5	53.6
200		450 / 125	52.1	49.9	47.9	47.5	42.1	34.2	32.7	23.7	47.6
250		750 / 208	52.7	50.5	48.5	48.1	42.7	35.0	33.5	24.5	48.4
315		1300 / 361	53.8	51.6	49.6	49.2	43.8	35.8	34.3	25.3	49.2
125	50	120 / 33	43.7	48.4	57.5	60.1	51.5	50.9	49.7	50.9	60.1
160		180 / 50	48.0	51.7	57.1	59.8	52.5	48.5	44.8	43.3	59.3
200		450 / 125	42.0	52.6	52.9	51.9	49.4	46.5	43.9	36.5	54.4
250		750 / 208	48.0	53.2	53.5	52.5	50.0	47.3	44.7	37.3	55.2
315		1300 / 361	59.0	54.3	54.6	53.6	51.1	48.1	45.5	38.1	56.0

DIMENSIONS

VAV Damper without cover



VAV Damper with cover



Values in brackets apply to VAV dampers (diameter symbol) 200-315 with servos inside

VAV Damper	B1 (mm)	B2 (mm)	B3 (mm)	C (mm)	D (mm)	E (mm)	L1 (mm)	L2 (mm)	H1 (mm)	H2 (mm)
125/125	387	397	198	800	125	429	590	540	155	185
160/160	457	467	235	870	160	499	590	540	190	220
200/200	537 (588)	547 (659)	304 (358)	1055	200	685	600	550	230	265
250/250	642 (698)	647 (781)	362 (418)	1175	250	804	700	650	280	315
315/315	765 (826)	777 (905)	419 (480)	1300	315	929	850	800	345	380

INSTALLATION

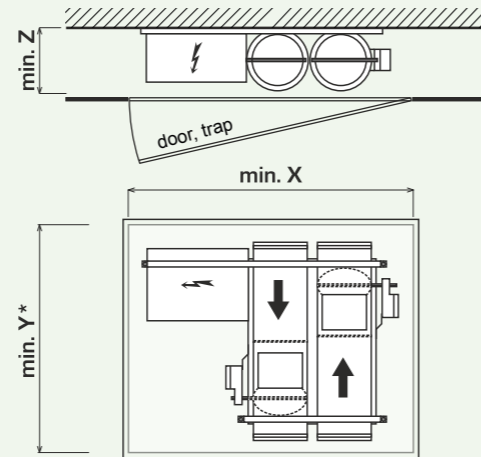
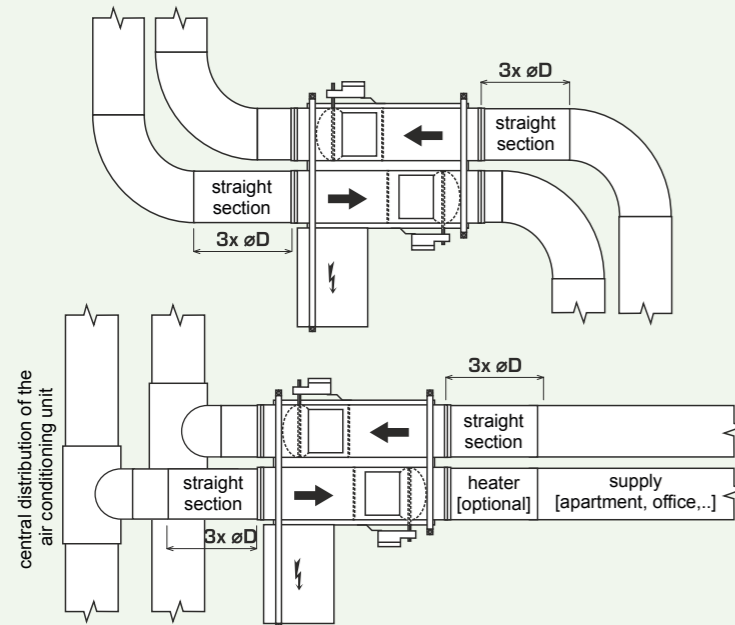
In order to achieve accurate flow control, it is necessary to keep a minimum calming distance of three times the diameter of the damper connection before the damper after an elbow or bend.

* Applies to VAV \varnothing 200-315 Dampers with servos inside

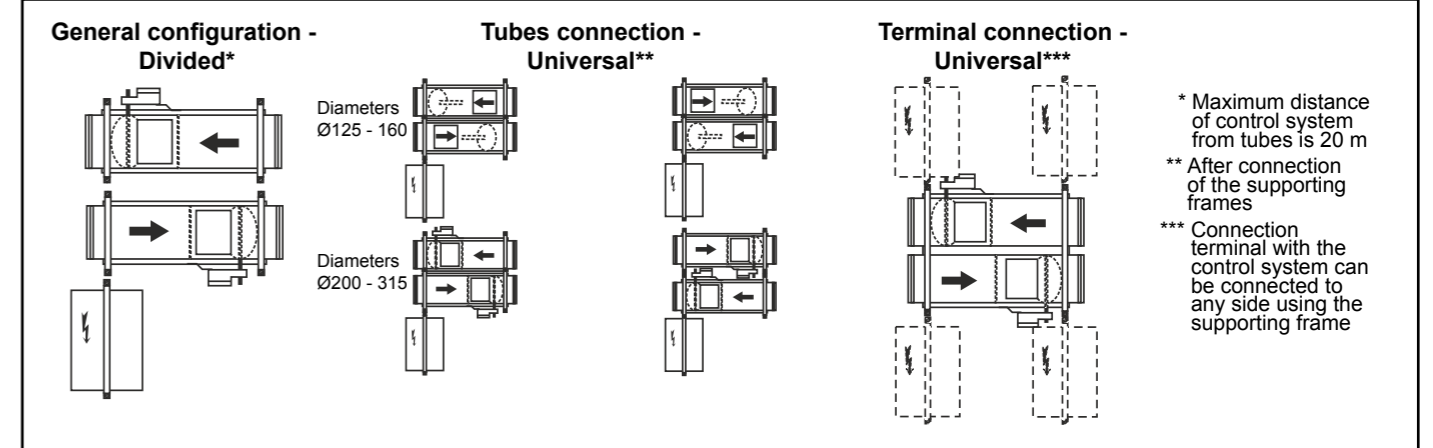
** When electric or water heaters are connected, this distance must be increased

The VAV damper box must remain accessible for commissioning the system and its ongoing maintenance

VAV Damper	X* (mm)	Y** (mm)	Z (mm)
125/125	750	500	225
160/160	850	500	225
200/200	1000	650	270
250/250	1100	750	320
315/315	1250	850	385



CONFIGURATION



CONTROLLERS

The following Airflow controllers can be used to control the VAV System:

WB1 Touch Controller

A digital, colour touch screen controller that enables the user to set all modes for the VAV system, including weekly scheduling and adjusting the entire system. This controller provides the user in-depth system information.



WB1 Touch controller

WB2 Rotary Controller

A variable speed controller with temperature adjustment (if equipped with the heater) and a switch off function.



WB2 Rotary controller



BC2 Rotary controller

BC2 Rotary Controller

A variable speed controller with a switch off function.

VAV PART NUMBERS

Description	Part Number
VAV Damper 125	90000736
VAV Damper 160	90000737
VAV Damper 200	90000738
VAV Damper 250	90000739
VAV Damper 315	90000740
Metal Cover for VAV Damper 125	90000741
Metal Cover for VAV Damper 160	90000742
Metal Cover for VAV Damper 200	90000743
Metal Cover for VAV Damper 250	90000744
Metal Cover for VAV Damper 315	90000745

Description	Part Number
VAV Control Box	90000746
WB1 Touch controller	90000710
WB2 Rotary controller	90000785
BC2 Rotary controller	90000408
Switch 8-Port	90000734
Switch 24-Port	90000735
Router	90000733

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TYPICAL APPLICATIONS

Nursery



Offices



Large Residential Properties



Restaurants



Schools and Colleges



Retail



Industrial Plants



Public Areas



Duplexvent - Versatile Solutions

TYPICAL APPLICATIONS

MULTI DV1500



FLEXI DV2600



MULTI-N DV1500



FLEXI DV3600



MULTI-N DV5000



MULTI-N DV3500



MULTI-N DV6500



MULTI DV8000

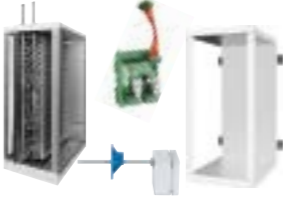




Duplexvent Commercial Accessories

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	250 mm connection		⊙	-	-	-
90000095	315 mm connection		-	⊙	-	-
90000096	500 x 250 mm connection		-	-	⊙	-
90000134	600 x 300 mm connection		-	-	-	⊙
Shut-off damper with spring return						
90000172	250 mm connection		⊙	-	-	-
90000098	315 mm connection		-	⊙	-	-
90000100	500 x 250 mm connection		-	-	⊙	-
90000137	600 x 300 mm connection		-	-	-	⊙
Shut-off damper without spring return						
90000181	250 mm connection		⊙	-	-	-
90000097	315mm connection		-	⊙	-	-
90000099	500 x 250 mm connection		-	-	⊙	-
90000182	600 x 300 mm connection		-	-	-	⊙
Electric duct heater						
90000173	3.0 kW, 250 mm connection		⊙	-	-	-
90000091	6.0 kW, 315 mm connection		-	⊙	-	-
90000092	10.5 kW, 500 x 250 mm connection		-	-	⊙	-
90000138	13.5 kW, 600 x 300 mm connection		-	-	-	⊙
Water heating coil + duct temp. sensor (floor standing position)						
90000200	5.4 kW at 60/40°C		⊙	-	-	-
90000202	7.8 kW at 60/40°C		-	⊙	-	-
90000204	12.0 kW at 60/40°C		-	-	⊙	-
90000206	16.0 kW 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	5.4 kW at 60/40°C		⊙	-	-	-
90000203	7.8 kW at 60/40°C		-	⊙	-	-
90000205	12.0 kW at 60/40°C		-	-	⊙	-
90000207	16.0 kW 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	3.4 kW at 6/12°C		⊙	-	-	-
90000194	4.8 kW at 6/12°C		-	⊙	-	-
90000196	7.5 kW at 6/12°C		-	-	⊙	-
90000198	11.0 kW at 6/12°C		-	-	-	⊙
Water cooling coil + duct temp. sensor + RD-IO circuit board + free chamber (ceiling suspended position)						
90000193	3.4 kW at 6/12°C		⊙	-	-	-
90000195	4.8 kW at 6/12°C		-	⊙	-	-
90000197	7.5 kW at 6/12°C		-	-	⊙	-
90000199	11.0 kW 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	5.4 kW at 60/40°C, 3.4 kW at 6/12°C		⊙	-	-	-
90000186	7.8 kW at 60/40°C, 4.8 kW at 6/12°C		-	⊙	-	-
90000188	12.0 kW at 60/40°C, 7.5 kW at 6/12°C		-	-	⊙	-
90000190	16.0 kW at 60/40°C, 11.0 kW at 6/12°C		-	-	-	⊙
Water heating/cooling coils + duct temp. sensor + RD-IO circuit board (ceiling suspended position)						
90000185	5.4 kW at 60/40°C, 3.4 kW at 6/12°C		⊙	-	-	-
90000187	7.8 kW at 60/40°C, 4.8 kW at 6/12°C		-	⊙	-	-
90000189	12.0 kW at 60/40°C, 7.5 kW at 6/12°C		-	-	⊙	-
90000191	16.0 kW at 60/40°C, 11.0 kW 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. (0-24 V output)		⊙	⊙	⊙	⊙
Room humidity sensor						
90000320	Room rh (0-10 V output)		⊙	⊙	⊙	⊙
Duct humidity sensor						
90000313	Duct rh (0-10 V output)		⊙	⊙	⊙	⊙
Room CO₂ sensor						
90000166	Room CO ₂ (0-10 V output)		⊙	⊙	⊙	⊙
Duct CO₂ sensor						
90000165	Duct CO ₂ (0-10 V output)		⊙	⊙	⊙	⊙
Room air quality sensor						
90000321	Room air quality (0-10 V output)		⊙	⊙	⊙	⊙

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