

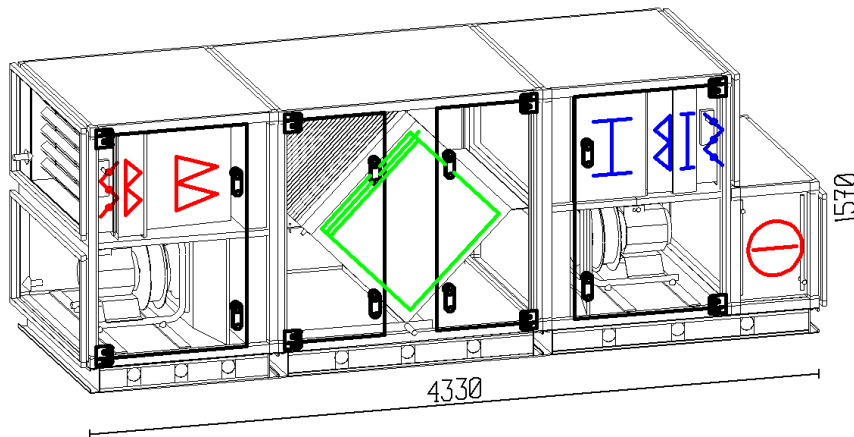
Project:

Unit: Danvent DV 25

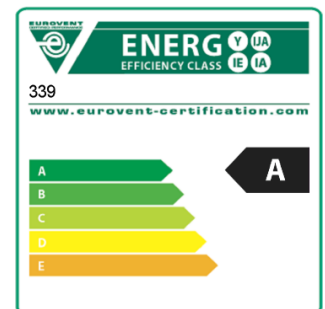
Plant no.: AHU-03/

## Summary for unit no. 1

Unit size	25
Unit width	1420 mm
Weight	1155 kg



	Supply		Extract	
Airflow (1,205 kg/m <sup>3</sup> )	1.30	m3/s	1.30	m3/s
Face velocity (unit)	1.55	m/s	1.55	m/s
External pressure	200	Pa	200	Pa
Filter	F7		G4	
Fan speed	1528	RPM	1358	RPM
Motor	1.50	kW	1.10	kW
Voltage	3x400	V	3x400	V
Rated current	3.30	A	2.40	A
Heat recovery	60.1 %			
SFP, clean filters including frequency converter	1.35	kW/(m <sup>3</sup> /s)		
SFP, clean filters excluding frequency converter	1.28	kW/(m <sup>3</sup> /s)		
Cooling	20.21 kW - Air 28.0/20.4°C - DX cooling coil, R410A 5°C			
Pipe connections	5/8" / 1 1/8"			



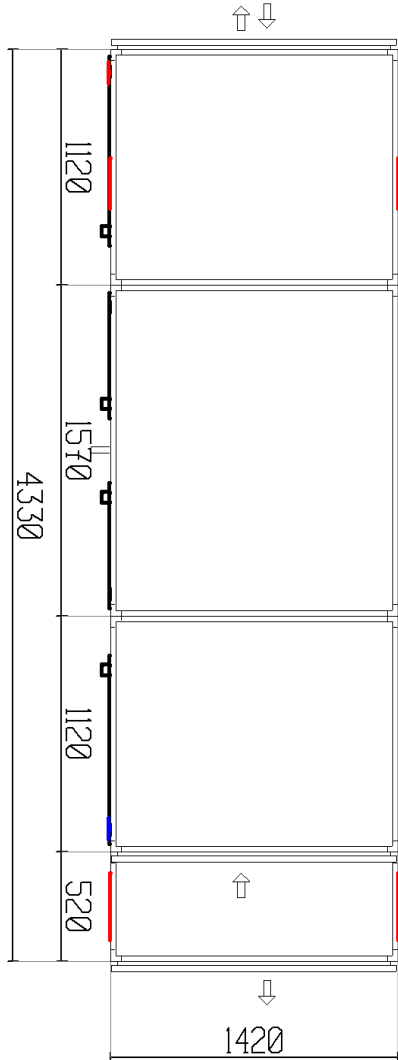
Sound power level	63	125	250	500	1k	2k	4k	8k	Hz	Total
	Supply air	65	73	72	72	76	63	59	50	dB
Outdoor air	56	63	64	59	56	46	39	30	dB	61 dB(A)
Exhaust air	63	73	70	73	75	65	62	55	dB	77 dB(A)
Extract air	56	65	64	61	59	51	47	40	dB	63 dB(A)
Sound break out	54	61	50	43	43	36	31	25	dB	49 dB(A)

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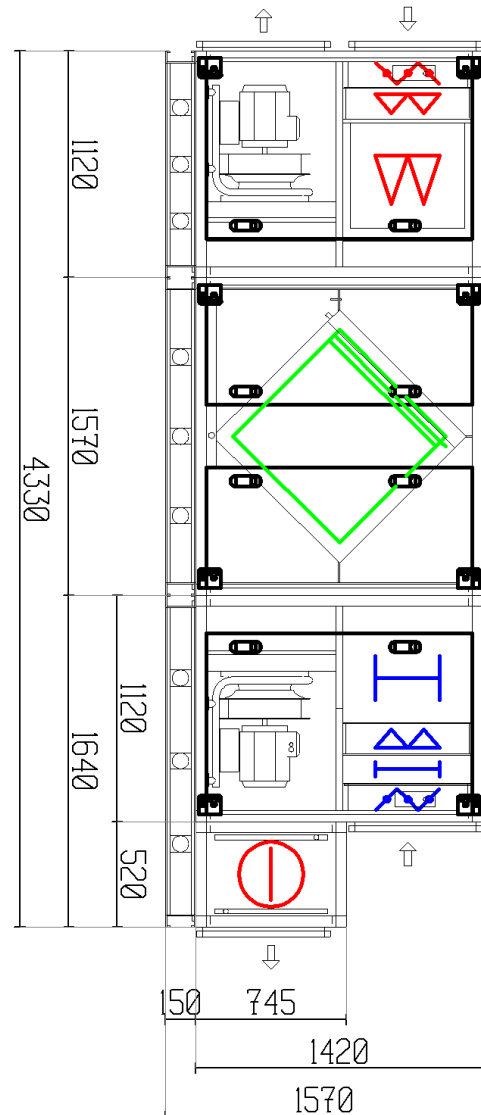
Unit: Danvent DV 25

Plant no.: AHU-03/

Plan view



Access side





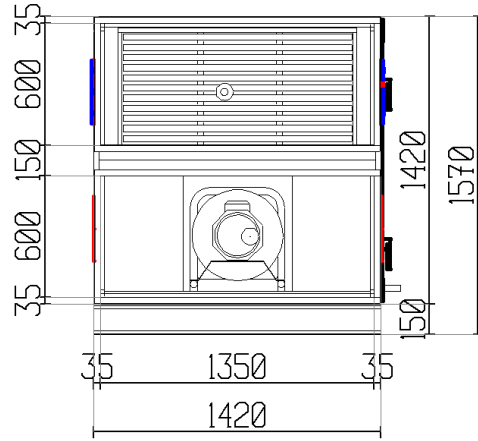
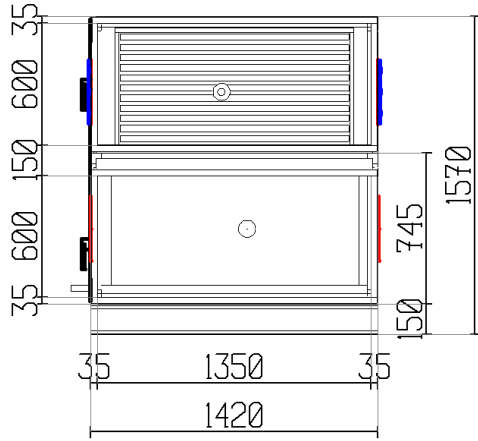
Project:

Unit: Danvent DV 25

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Right end

Left end





Project:

Unit: Danvent DV 25

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## Technical specification

### The supply unit consist of

#### Damper

Pressure drop	2	Pa
Damper blades	Standard	

#### Filter

Dimensioning pressure drop	70	Pa
Initial pressure drop/Final pressure drop	32/108	Pa
Velocity, face area	1.55	m/s
Velocity, filter area	0.60	m/s
Filter class	G4	
Filter size	2x[445x622x44] + 1x[391x622x44]	
Filter length	44	mm
U-tube manometer	1	pcs
The manometer is supplied wired from factory.		

#### Filter

Dimensioning pressure drop	123	Pa
Initial pressure drop/Final pressure drop	64/182	Pa
Velocity, face area	1.85	m/s
Velocity, filter area	0.10	m/s
Filter class	F7	
Filter size	2x[592x592]	
Filter length	535	mm
Inspection window	1	pcs
Bulkhead light with external switch	1	pcs
Inclined manometer	1	pcs
The manometer is supplied wired from factory.		

#### Empty section

Pressure drop	2	Pa
Length	150	mm

#### Plate heat exchanger

With face and by-pass damper

	Supply	Extract	
Air flow	1.30	1.30	m <sup>3</sup> /s
Pressure drop	86	86	Pa
WINTER Air temperature in winter before/after	-4.0/11.6	22.0/9.4	°C
Air relative humidity in winter before/after	100/33	50/97	%
Condensate		0.1	l/min
Capacity	24.75		kW
Temperature efficiency	60.1		%
Dry efficiency according to EN 308 at 1.30 m <sup>3</sup> /s	54.7		%
SUMMER Air temperature in summer before/after	30.0/27.3	25.0/27.7	°C



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Air relative humidity in summer before/after	60/70	50/43	%
Condensate	0.0		l/min
Capacity	4.38		kW
Temperature efficiency		54.7	%

Heat exchanger type	Aluminum heat exchanger		
Temperature efficiency	Standard efficiency		
Drip tray	Standard		
Inspection window	1		pcs
Bulkhead light with external switch	1		pcs

**Empty section**

Pressure drop		2	Pa
Length		150	mm

**Fan , Plug**

Air flow		1.30	m3/s
External pressure		200	Pa
Pressure drop		15	Pa
Static pressure		542	Pa
Total pressure		569	Pa
Absorbed power		0.93	kW
Fan speed		1528	RPM
Maximum fan speed		1690	RPM
Efficiency by static pressure		75.4	%
Efficiency by total pressure		79.2	%
K-factor (p=1,2 kg/m3)		197	
Fan type	L-ER45Cpro		
Operation frequency		53	Hz
Max. operating frequency		59	Hz
Direct drive			

**Motor**

Motor type	IE2		
Motor types-size	ABB-90 LD		
Motor protection	Thermistor		
Rated power	1.50		kW
Speed (nominal)	1435		RPM
Current, Amp.	3.30		A
Temperature efficiency	84.2		%
Voltage	3x400		V
Consumed power from mains power supply, excluding frequency converter	1.11		kW
Consumed power from mains power supply, including frequency converter	1.17		kW
Inspection window	1		pcs
Bulkhead light with external switch	1		pcs

**Cooling coil, DX**

Air flow		1.30	m3/s
Pressure drop air, wet coil with condensate droplets		41	Pa
Air temperature before/after		28.0/20.4	°C
Air relative humidity before/after		70/98	%
Total cooling capacity		20.21	kW
Sensible heat ratio		59	%
Face velocity		1.87	m/s



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Condensate	0.2	l/min
Refrigerant	R410A	
Refrigerant temperature	5.0	°C
Coil volume	6.4	l
Connection side	Service side	
Connection size inlet/outlet	5/8" / 1 1/8"	
Tube material	Cu	
Fin material	Al	
Fin spacing	2.1	mm
No. of rows	3	
Drip tray material	Standard	
Coil code	DVK-25-D-Z-3-4-600-1160-2.1-CU-AL-H-5/8	

## The extract unit consist of

### Damper

Pressure drop	2	Pa
Damper blades	Standard	

### Inspection section

Pressure drop	2	Pa
Length	150	mm

### Filter

Dimensioning pressure drop	70	Pa
Initial pressure drop/Final pressure drop	32/108	Pa
Velocity, face area	1.55	m/s
Velocity, filter area	0.60	m/s
Filter class	G4	
Filter size	2x[445x622x44] + 1x[391x622x44]	
Filter length	44	mm
U-tube manometer	1	pcs
The manometer is supplied wired from factory.		

### Inspection section

Pressure drop	2	Pa
Length	450	mm
Inspection window	1	pcs
Bulkhead light with external switch	1	pcs

### Empty section

Pressure drop	2	Pa
Length	150	mm

### Plate heat exchanger

Data are stated on supply.



Project:

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Plant no.: AHU-03/

**Empty section**

Pressure drop	2	Pa
Length	150	mm

**Fan , Plug**

Air flow	1.30	m3/s
External pressure	200	Pa
Pressure drop	15	Pa
Static pressure	380	Pa
Total pressure	408	Pa
Absorbed power	0.69	kW
Fan speed	1358	RPM
Maximum fan speed	1520	RPM
Efficiency by static pressure	72.0	%
Efficiency by total pressure	77.3	%
K-factor (p=1,2 kg/m3)	197	
Fan type	L-ER45Cpro	
Operation frequency	47	Hz
Max. operating frequency	53	Hz
Direct drive		

**Motor**

Motor type	IE2	
Motor types-size	ABB-90 L	
Motor protection	Thermistor	
Rated power	1.10	kW
Speed (nominal)	1435	RPM
Current, Amp.	2.40	A
Temperature efficiency	83.7	%
Voltage	3x400	V
Consumed power from mains power supply, excluding frequency converter	0.82	kW
Consumed power from mains power supply, including frequency converter	0.86	kW
Inspection window	1	pcs
Bulkhead light with external switch	1	pcs

**Other parts****Sections**

Product	Dimensions (width x height x length)	Weight
CS-25-0-1120-1-2	1420 x 1420 x 1120 mm	287 kg
CS-25-0-1570-1-2	1420 x 1420 x 1570 mm	362 kg
CS-25-0-1120-1-2	1420 x 1420 x 1120 mm	267 kg
CS-25-0-520-1-1	1420 x 745 x 520 mm	107 kg

**Baseframes**

Product	Dimensions (width x height x length)	Weight
DVZ-25-3-150-1220	1420 x 150 x 1120 mm	38 kg
DVZ-25-3-150-1670	1420 x 150 x 1570 mm	43 kg
DVZ-25-3-150-1670	1420 x 150 x 1640 mm	43 kg

The unit sections are delivered mounted on base frame.

**Rigid duct connection, 30 mm EP/LSM profile**



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Product	Dimensions (width x height)
Outdoor	1350x600 mm
Supply	1350x600 mm
Extract	1350x600 mm
Exhaust	1350x600 mm