

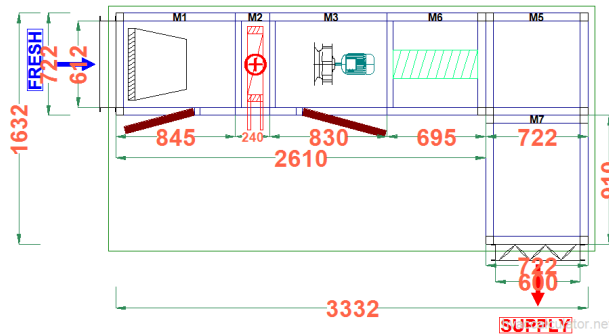
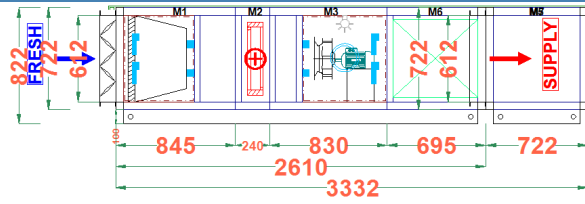


TECHNICAL DATA

Date	07.06.2023	Rev. Date	16.04.2024
Project ID	13438	Tracking Number	
Project Name	UCL GOSICH - S03		
AHU Name	AHU 03 - AA - (1 QTY)		
AHU Model	ATC Millennium Line 2 H x 2 W [142 HWC SL]		

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RIGHT VIEW



TOP VIEW

GENERAL SPECIFICATIONS

Air Flow			Frame	Dimensions (mm)(Size+Pedestal+Dampers+Pipes)	
1,418 m³/h			P 155/45 PS TB	W 872xH 822xL 4,357	
Air Velocity			Insulation Material	Total Weight	Altitude
1.05 m/s			50 mm Rockwool 150 kg/m³	548 kg	6 m
Coil Air Velocity	Air Density		Outside Sheet Material	Base Height	Roof (Outside)
2.05 m/s	1.3133 kg/m³		0.8 mm Powder Coated Galvanized	100 mm	Sheet
Design Outdoor Temp.(W-S)			Inside Sheet Material	Motor Power	
(-5°C/100%)-(-35°C/45%/WB:25.04°C%/DP:21.3°C)(LONDON CITY)			0.8 mm Galvanized	0.75 kW	
Total Heating Capacity				Total Absorbed Power	
7.41 kW				0.73 kW	
Specific Fan Power(SFP Total)	ErP Compliance	ErP Code	fs-Pref	External Static Pressure	Return External Static Pressure
1,501 W/(m³/s)	2018	NRVU - UVU	0.94 / 0.94	572 Pa	

SOUND POWER LEVEL (dB)

Frequency Hz	125	250	500	1000	2000	4000	8000	LwA-tot	
Airborne Sound Power Level	68.0	70.8	67.6	66.4	50.9	52.4	36.7	69.9	dB
Air Outlet Induct Sound Power Level	71.0	66.7	72.9	62.9	53.1	56.6	49.2	70.9	dB
Air Inlet Induct Sound Power Level	70.0	72.8	61.6	51.4	46.6	39.2	26.9	65.8	dB


MB MECHANICAL PROPERTY CLASSIFICATIONS

Model	CS Class	CAL Class -400 Pa (M) -400 Pa (R)	CAL Class +700 Pa (M) +400 Pa (R)	FBL Class	TT Class	TBF Class	CASING ACOUSTICAL INSULATION [dB]						
							125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Model Box RW TB 50	D1 (M)	L1 (M)/L1 (R)	L1 (M)/L1 (R)	F9	T2	TB2	20	24	24	26	30	38	48

ACCESSORIES

Pressure Measurement Tap Set (x4), Manometer Pressure Gauge_Dwyer Magnehelic 500 (x3), Observation Glass, Maintenance Switch, Lighting_LED



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FRESH AIR CONNECTION

Connection Type	Control Type	Pressure Drop
Gear Damper	Motor (On/Off) (Belimo - 230V (A-SR)-LM230ASR)	1 Pa
Air Flow	Dimensions	Air Velocity
1,418 m³/h	W 612 mm x H 612 mm	1.05 m/s

SUPPLY CONNECTION

Connection Type	Control Type	Pressure Drop
Gear Damper	Motor (On/Off) (Belimo - 230V (A-SR)-LM230ASR)	1 Pa
Air Flow	Dimensions	Air Velocity
1,418 m³/h	W 612 mm x H 600 mm	1.07 m/s

FILTER (M1)

Air Flow	Condensation Pan	Slide Type	Hygienic	Spare Filter	Section Weight
1,418 m³/h		Left Aligned	<input type="checkbox"/>	<input type="checkbox"/>	101.4 kg
Filter Type					
G4 - Coarse 55% Panel					
Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*
15 Pa / 45 Pa / 30 Pa	1.36 m/s	592x490x48/1/NA			
Filter Type					
F7 - ePM2.5 - 65% Bag					
Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*
28 Pa / 84 Pa / 56 Pa	1.36 m/s	592x490x360/1/A+			

* Filter Energy Performance; preferably energy classification

* G4 - Coarse 55% : Certified according to EN 16890:2016 / ISO 17065:2012

* F7 - ePM2.5 - 65% : Certified according to EN 16890:2016 / ISO 17065:2012


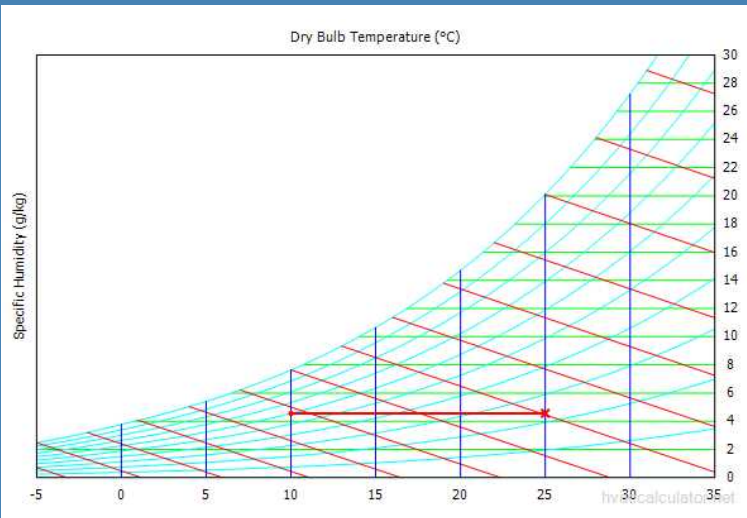
* Frame sealing applied.



ACCESSORIES (M1)

Pressure Measurement Tap Set (x2), Manometer Pressure Gauge_Dwyer Magnehelic 500 (x2)

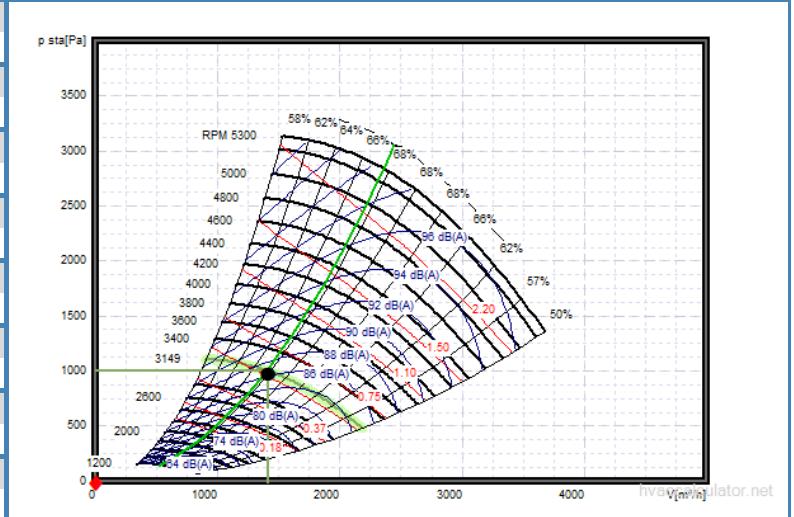


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COIL (Heating) (M2)						
Air Flow	Capacity	Required Capacity	Face Velocity	Pitch	Quantity	Section Weight
1,418 m³/h	7.41 kW		2.05 m/s	4	1	43.67 kg
Coil Code			Tube Material	Fin Material	Function	
32 x 28 12 C S 14T 2R 432A 4P 2NC			Copper	Aluminium	Heating	
Droplet Ellimin. / Press. Drop		Condensation Pan / Hmin U-Trap	Tube Thickness	Fin Thickness	Mixing Ratio	
			0.35 mm	0.12 mm	0 %	
Fluid Kind	Fluid In / Out	Size (W x H x L) mm	Conn. Material	Frame Material		
WATER	82/71 °C	432 x 445 x 55	Steel	Galvanized Steel		
Air Inlet Drybulb Temperature	Air Outlet Drybulb Temperature					
10 °C	25 °C					
Air Inlet Wetbulb Temperature	Air Outlet Wetbulb Temperature					
6.47 °C	13.12 °C					
Air Inlet Relative Humidity	Air Outlet Relative Humidity					
60 %	23.25 %					
Air Inlet - Outlet Enthalpy	Fluid Flow / Vol. Flow					
21.54 - 36.76 kJ/kg	578 kg/h / 596 dm³/h					
Air Press.Drop	Fluid Press.Drop / Fluid Velocity					
19 Pa	10.52 kPa / 0.76 m/s					
Coil Surface Area	Tube Inner Volume					
5.05 m²	1.79 L					
Manifold / Conn.QTY	Conn.Direction					
1 / 1	Right					
Connection Sizes			Air Condensation			
21.3 / 21.3 mm (1/2" DN15 / 1/2" DN15)			0.0000 l/h			
Bypass Damper			Hygienic		Blygold	
			<input type="checkbox"/>		<input type="checkbox"/>	

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SUPPLY FAN (M3)				
Air Flow	Motor Type	Fan Model	Quantity	Section Weight
1,418 m³/h	AC-Q4H80M2D40-KG	NPL250-	1	121.6 kg
Internal Static Pressure	Motor P./Pha./Volt./Freq.	Isolator	Isolator Count	
424 Pa	0.75 kW/3P/400V/50V-Hz	Rubber	4	
External Static Pressure	Motor Speed	Backup Fan	Backup Motor	Backup Inverter
572 Pa	3000 (2880)rpm	0	0	0

Total Static Pressure	Fan Bush Number
996 Pa	1210
Total Pressure	Motor Shaft Diameter
1,021 Pa	Ø19
Total / Static Efficiency	
67.61 / 65.93 %	
Motor / Inverter Efficiency	<input type="checkbox"/> Frequency Inverter Included
83.50 / 97.00 %	
Shaft Power / Absorbed Power	Absorbed Power With VFD
0.6 / 0.71 kW	0.73 kW
Fan Speed	Running Frequency
3149 rpm (Max. 3247 rpm)	54.67 Hz (Max. 56.37 Hz)
	Air Density
	1.3133 kg/m³
Specific Fan Power (SFPe int)	Electrical Current
51.13 W/(m³/s)	1.06 A (Max. 1.34 A)



Sound Power Level (dB)										
Hz	63	125	250	500	1000	2000	4000	8000	LwA-tot	
Outlet Side	72.7	75.7	81.7	85.7	83.7	74.7	73.7	65.7	86.7	dB(A)
Inlet Side	70.9	70.0	78.3	78.5	70.2	70.0	68.7	66.0	79.0	dB(A)

* The fan system effect is taken into account in the fan performance
 * The fan calculated for wet conditions
 * Frequency inverter is required

Energy Efficiency Class

A
A
C

ACCESSORIES (M3)

Observation Glass, Maintenance Switch, Pressure Measurement Tap Set, Lighting_LED




SILENCER (M6)					
Air Flow	Acoustical Insulation (250 Hz)	Air Velocity	Pressure Drop	Silencer Thickness	Section Weight
1,418 m³/h	15 dB	1.49 m/s	7 Pa	200 mm	84.35 kg
Silencer Code			Silencer Material		Hygienic
200d 120s 1n 600L 547H 597A			Taşyünü (70 kg/m3) 600x1200x50mm		<input type="checkbox"/>
Condensation Pan					

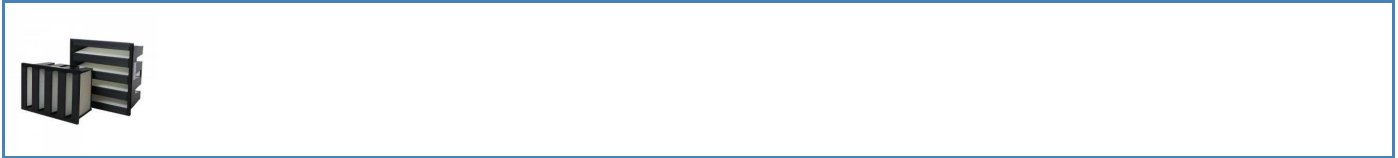
Acoustical Insulation (dB)							
63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
3.0	4.5	15.0	14.0	16.0	16.0	11.5	11.0

90° TURNING (M5)			
Air Flow	Turning Direction	Pressure Drop	Section Weight
1,418 m³/h	Right	50 Pa	76.34 kg



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FILTER (M7)					
Air Flow	Condensation Pan	Slide Type	Hygienic	Spare Filter	Section Weight
1,418 m³/h		None	<input type="checkbox"/>	<input type="checkbox"/>	120.3 kg
Filter Type HEPA H13 Compact Hepa					
Initial / Final / Design P.Drop	Air Velocity	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*	Size/Quantity/EC*
130 Pa / 390 Pa / 260 Pa	1.36 m/s	592x490x292/1/NA			
* Filter Energy Performance; preferably energy classification					
* Frame sealing applied.					

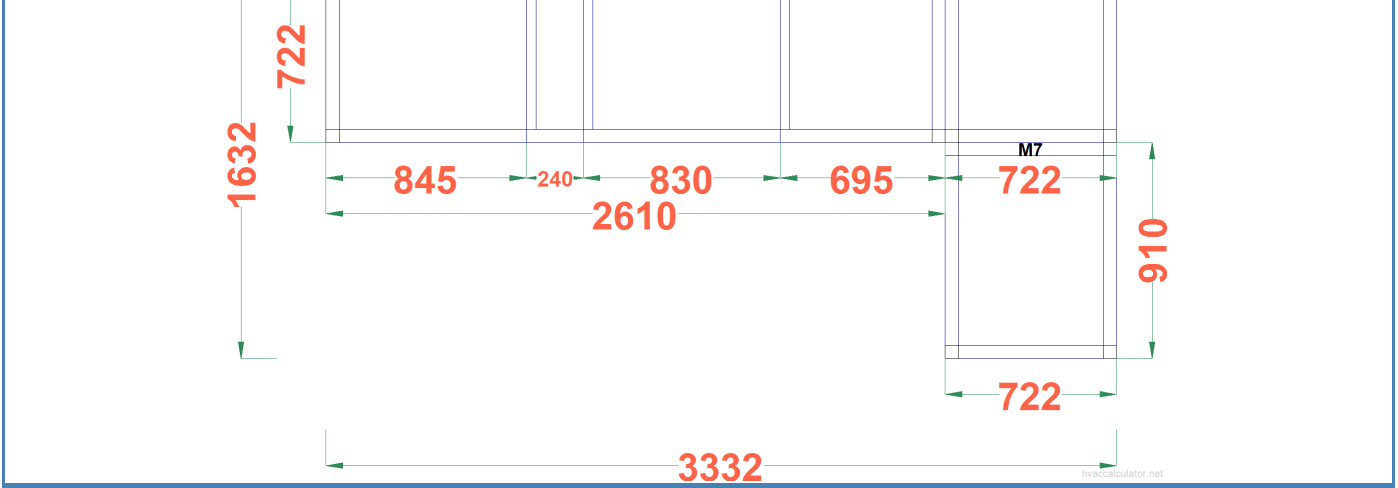


ACCESSORIES (M7)

Manometer Pressure Gauge_Dwyer Magnehelic 500, Pressure Measurement Tap Set




LOADING SIZES



LOADING SIZES

Section	Module	Type	Count	Width	Height	Length	Weight	Total Weight
S1	M1	Filter	1	782 mm	822 mm	960 mm	101.4 kg	101.4 kg
S1	M2	Heating Coil	1	872 mm	822 mm	240 mm	43.67 kg	43.67 kg
S1	M3	Fan	1	782 mm	822 mm	830 mm	121.6 kg	121.6 kg
S1	M6	Silencer	1	722 mm	822 mm	695 mm	84.35 kg	84.35 kg
	4 pcs.					2,725 mm	351 kg	351 kg
S2	M5	90° Turning	1	722 mm	822 mm	722 mm	76.34 kg	76.34 kg
	1 pcs.					722 mm	76.34 kg	76.34 kg
S3	M7	Filter	1	837 mm	822 mm	910 mm	120.3 kg	120.3 kg
	1 pcs.					910 mm	120.3 kg	120.3 kg
3 pcs.	6 pcs.						548 kg	548 kg



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		AHU Name	AHU 03 - AA - (1 QTY)		
		AHU Model	ATC Millennium Line 2 H x 2 W [142 HWC SL]		
Ecodesign Requirements Table					
		Value		2016	2018
	Product	ATC M Test			
	Erp	2018			
A	Manufacturer	CVS			
B	Model Identifier	ATC Millennium Line 2 H x 2 W [142 HWC SL]			
C	ErP Code	NRVU - UVU			
D	Type Of Drive	Variable Speed Drive (VSD)	---	Required	Required
E	Type Of HRS	---			
	HRS Damper	---		Required	Required
F	Thermal Efficiency of HRS	---		---	---
G	Nominal Flow Rate	0.39 m³/s	---		
H	Effective Electrical Power Input	0.73 kW	---		
I	SFPint	51.13 W/(m³/s)	---	<= 250	<= 230
J	Face Velocity	1.05 m/s	---		
K	Nominal External Drop Δps, Ext	572 Pa	---		
L	Internal Pressure Drop Δps, Int	424 Pa	---		
N	Static Fan Efficiency EC327/2011	65.93 %	---		
O	Declared Maximum Internal Leakage Rate	---			
P	Energy Performance Of Filters	NA	---		
Q	Description Of Visual Filter Warning	Manometer Pressure Gauge	---		Required
R	Casing Sound Power Level (Lwa)	69.9 dBA			
S	Internet Address Of Instructions	www.completeventsolutions.co.uk			