

Section 1

Technical Submission

Technical Submission Ref No: **32396-6000-TS-ZZ-M-0001**

Revision: BIW ref: 32396-6000-TS-ZZ-M-0001

Date Issued: 13/06/2016

Title: **Air Handling Units** *AHU 9.*

Issue & Approval dates:**Planned****Actual**

Trade contractor name to consultant

Status by Lead Reviewer

Review by Tenant Team

Drawing Commencement Date:

Trade Contractor Manager:

Revision No.	Date	Prepared By	Comments
01	24/03/2016	Andrew Tsang	
02	13/06/16	Andrew Tsang	Responses to Rev 01 Comments



Ventilation Equipment Ltd

PROJECT DETAILS			
Date	Quotation	Project Reference	Unit No
15 March 2016	Q 8461	Commonwealth House	Q 8461-06-19a
	Revision	Customer Reference	Flow (Supply/Exhaust)
	19a	AHU 2 – 9 th Floor	0.90 / 0.90 m3/s

OVERALL UNIT DIMENSIONS			
Length	Width	Height	Total Weight
3300 mm + Cowls (if required)	1420 mm	1900mm inc 100mm base & Roof	1648 kg

001 FRESH AIR INLET			
Flow	Damper	Additional Product	Actuator
0.90 m3/s	Yes	Weatherhood (if required)	Yes

002 FILTERS						
Stage #	Air Volume	Class	Spare Filters	Type	Media	Length mm
1 (Supply)	0.90 m3/s	F7	None	Bag	-	-

003 COMPRESSOR SECTION	
• R410a refrigerant	

004 THERMAL WHEEL							
m3/s Supply / Extract		Recovery Capacity kW		Eff.%		Heating	
						Fresh Air Inlet	
						C	%
✓ 0.90 / 0.90		18		70		-4.0	100
						20.0	50
							12.8

005 INDOOR COIL - COOLING	
COIL AIR ON °C	COIL AIR OFF °C
30 DB	20 DB

005 INDOOR COIL - HEATING	
COIL AIR ON °C	COIL AIR OFF °C
12.8	22.0

006 DIRECT DRIVEN EC FAN - SUPPLY			
Air Volume	External Static Pressure	Motor Rating	FLC
0.90 m3/s	250 Pa	2.40 kW	1.05 amps
• Speed Controller fitted			

007 DUCT MOUNTED PRE-START / TOP UP ELECTRIC COIL	
DUTY	TEMPERATURE RISE
12kW	10.0°C



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008 FILTERS						
Stage #	Air Volume	Class	Spare Filters	Type	Media	Length mm
1 (Extract)	0.90 m3/s	G4	None	Panel	-	-

009 CONTROLS

- Recessed Control panel
- BMS Controller

010 DIRECT DRIVEN EC FAN – EXTRACT

Air Volume	External Static Pressure	Motor Rating	FLC
0.90 m3/s	250 Pa	2.40 kW	1.01 amps
• Speed Controller fitted			

011 OUTDOOR COIL

- Heat rejection coil

012 EXHAUST AIR OUTLET

Flow	Damper	Additional Product	Actuator
0.90 m3/s	Yes	Weatherhood (if required)	Yes

FAN SOUND POWER LEVELS

Frequency	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Supply Fan Inlet	58	65	63	63	59	59	57	50
Supply Fan Outlet	61	69	67	68	70	65	62	55
Extract Fan Inlet	57	65	63	62	59	58	56	49
Extract Fan Outlet	60	69	67	67	69	65	62	54

ELECTRICAL RATING

Max Unit Amps	19.96 amps
Electric Coil Amps	17.43 amps

UNIT POWER SUPPLY

Supply	400v-3ph-50hz
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Specific Fan Power (based on CLEAN filter conditions)

1.20 w/l/s → LHO TO ADVISE

Electric Coil Notes

Electric coil is supplied loose for duct mounting by others.
The power and control for the coil is provided by the AHU.
Matching terminals are provided on the AHU and coil for interconnecting wiring by others.