

PROJECT : MGM HOSPITAL VASHI	NO.REQD.: 1	DATA SHEET: AHU-CL
EQUIPMENT: AIR HANDLING UNIT	DESIGNATION: AHU-CATH LAB	
FUNCTION: CATHLAB AIRCONDITIONING	LOCATION:	
<p>1.0 DESIGN DATA</p> <p>1.1 Outside : 100 °F DB 82°F WB</p> <p>1.2 Room : 70 °F DB RH 55%</p> <p>1.3 Hours of operation : 24</p> <p>1.4 Load</p> <p>i) RSH (Btu/hr) : 92,382</p> <p>ii) RLH (Btu/hr) : 2,752</p> <p>iii) OASH (Btu/hr) : 9,200</p> <p>iv) OALH (Btu/hr) : 14,170</p> <p>iii) GTH (Btu/hr) : 1,36,280</p> <p>1.5 Air thru' (cfm) : 6,000</p> <p>1.6 Ventilation (cfm) : 350</p> <p>2.0 UNIT SELECTION</p> <p>2.1 No. of Units : 1</p> <p>Max dimension : By Vendor</p> <p>L(mm) x W(mm) x H(mm)</p> <p>2.2 Type of Unit : Horizontal Floor Mounted Unit</p> <p>2.3 Fan RPM : 1500 (Max)</p> <p>2.4 Noise level @3.0mtr : 45-50 dB (Max)</p> <p>2.5 Total Air (cfm) : 6,000</p> <p>2.6 Static Pressu (mmWG)</p> <p>i) Supply duct, damper etc. : 15</p> <p>ii) Prefilter : 8</p> <p>iii) Microvee : 15</p> <p>iv) HEPA : -</p> <p>v) Cooling Coil : 6</p> <p>vi) Heating Coil : 6</p> <p>vii) Return path : 10</p> <p>viii) Safety : -</p> <p>Total : <u>60</u></p> <p>2.7 Filters</p> <p>i) Prefilters (MERV 7) : 50 mm x 1.889 Sq.m</p> <p>ii) Microvee (sqm) : 1.889 1.385 Sq.m</p>	<p>2.8 Cooling Coil</p> <p>i) Air thru' coil (cfm) : 6,000</p> <p>ii) Coil capacity</p> <p>a) Sens. Heat (Btu/hr) : 43,746</p> <p>b) GTH (Btu/h): : 1,36,280</p> <p>iii) Apparatus dewpoint (C) : 12.5°C</p> <p>iv) Chilled water (C) : 9.0°C</p> <p>Temperature</p> <p>v) Coil size</p> <p>a) Fins/meter : 560</p> <p>b) Face area (sqm) : 1.13</p> <p>c) Depth (rows) : 6</p> <p>iv) Flow thru' coil (Lpm) : 103.0</p> <p>2.9 Disinfection : UV light with ballast</p> <p>2.10 MIXING BOX :- Required</p> <p>2.11 HEATING COIL (Reheat)</p> <p>i) Mode of heating : Thyristor controlled Electrical Strip Heater</p> <p>ii) Capacity (Kw) : 4# 2.5 KW</p> <p>2.12 ELECTRICAL</p> <p>i) Supply System(V) : 3PH, 415V AC 50 Hz</p> <p>ii) Drive motor</p> <p>a) Type : Sq cage induction</p> <p>b) Rating KW : 3.80</p> <p>c) Speed (rpm) : 1500 rpm (max)</p> <p>d) Enclosure : IP 44</p> <p>e) Duty : S1</p> <p>f) min fan efficiency : 75% (Amca Certified for noise and power)</p> <p>g) Motor eff. : IE3</p> <p>iii) Control Panel</p> <p>a) Starter : VFD</p> <p>b) Interface : BMS</p> <p>c) Cabling : Copper cable from Starter to Motor</p>	

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3.0 INSTALLATION		
3.1 Vibration mounts		
i) Type	2# 12 mm serrated neoprene for the unit	
ii) Static Deflection (mm)	6	
3.2 Drive		
i) Type	NA	
ii) No. of drives & motors	One	
iii) Mounting	Adjustable base, capable of 100 mm adjustment	
3.3 Shaft		
i) One side extrn.	As per 3.2	
ii) Two side extrn.		
3.4 Unit insulation		
	DOUBLE SKIN construction with foamed in polyurethane	
3.5 Pipe connections		
Drain pipe	50mm dia cpvc pipe upto nearest floor drain.	
3.6 Electrical connection		
	As indicated on drawings	
4.0 Abbreviations		
N.R	:	Not Required
N.A	:	Not Applicable
Notes:		
1 2 Sets of Potential free contacts to be provided along with starter.		
2 All starters to have AOM Selector and latch on contact for fault trip status.		