



PETROCHEMICAL INDUSTRIES
DESIGN & ENGINEERING CO.

PROJ. NO. : 1205



DENA METHANOL PLANT

COVER SHEET

OWNER :

SABALAN PETROCHEMICAL INDUSTRIES CO.

PROJ. NO. : 89/S-G/102

DATA SHEET

For

PACKAGE AIR HANDLING UNIT FOR CONTROL BUILDING (ZONE 2)

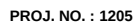
DOCUMENT NO. : 1205-00-HV-DSH-004

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Note: For relevant records of the document, reference can be made to Sabalan Methanol Project documentation.

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Eng. Phase		Purpose Of Distribution (POD)		Purpose Of Issue (POI)		Owner's Action	
01	16.05.2017	ISSUED FOR ENGINEERING (Partially Revised)		M.Mashayekh	M.Momenaie	A.Moadeli	N.Jafarpour
00	13.10.2016	ISSUED FOR ENGINEERING		M.Mashayekh	M.Momenaie	A.Moadeli	N.Jafarpour
Rev.	Date	Description		Prepared by	Checked by	Approved by	Project

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**Data Sheet for Package Air Handling Unit for
Control Building (Zone 2)**

Doc. No.: 1205-00-HV-DSH-004

Rev. : 01

OWNER :

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 PETROCHEMICAL INDUSTRIES DESIGN & ENGINEERING CO. PROJ. NO. : 1205		 DENA METHANOL PLANT Data Sheet for Package Air Handling Unit for Control Building (Zone 2)		OWNER :	
				SABALAN PETROCHEMICAL INDUSTRIES CO.	
		Doc. No.: 1205-00-HV-DSH-004		Rev. : 01	

NO.	GENERAL					
1	Tag No.		PAHU-0020			
2	Quantity (Working + Standby)		1			
3	Service Building		Control Room (Zone 2)			
4	Manufacturer / Model		* / *			
5	Overall Size	l x w x h	m x m x m	*		
6	Operating Weight		Kg	*		
7	Installation / Type		Indoor / Horizontal			
8						
9	DESIGN DATA			SITE CONDITION		
10	Winter Room Temperature	°F	73.4	Location / Latitude		Assaluyeh / 28.5° N
11	Relative Humidity	%	50±5	Altitude		m 34
12	Summer Room Temperature	°F	77	Summer Design Temp.		D / W °F 118.4 / 91.4
13	Relative Humidity	%	50±5	Winter Design Temp.		D / W °F 41 / 41
14						
15	COMPRESSOR SECTION			COMPRESSOR MOTOR DATA		
16	Type	* Semi Hermetic		Qty.		*
17	No. of Compressor	* 2		Mfg. / Model No.		* / *
18	Make / Origin	* / *		Input Power (each)		Kw *
19	Model No.	*		Speed		rpm *
20	No. of Stage(s)	*		Insulation Class / Temperature Rise		* / *
21	Compressor Speed	rpm	*	Power Supply		V/Ph/Hz 400 / 3 / 50
22	Minimum of Capacity Control Steps	3		Degree of Protection		IPW 54
23	Refrigerant Charge	lb	*	System Full Load Current		*
24	Octave Bands/Noise Data	dB	*	System Power Factor		*
25	Vibration Isolator	Required		Hazardous Classification		Unclassified
26				Motor Efficiency		% *
27	COOLING SECTION DATA					
28	Type			Evaporating Temperature		°F *
29	Coil / Fin / Frame Material	Copper / Al. / *		Fresh Air Quantity		cfm 1040
30	Total Cooling Capacity (Actual)	MBH	188.6	Control		Required
31	Total Sensible Cooling Cap. (Actual)	MBH	108.1	Bypass Factor		*
32	Air Flow Rate	cfm	3125	Fins / Tubes Coating Material		* Blygold or Heresite
33	Face Velocity	fpm	*	Refrigerant		R134a
34	Fins Per Inch	*		Pressure Drop		in.w.g *
35	Face Area	ft²	*	Number of Circuits		*
36	Coil Entering Air Temperature D / W	°F / °F	92.1 / 76.1	Number of Rows		*
37	Coil Leaving Air Temperature D / W	°F / °F	60.0 / 58.8	Tubes Diameter		*
38						
39	FAN SECTION			FAN MOTOR DATA		
40	Type	Centrifugal		Qty.		*
41	No. of Fan	*		Make / Origin		* / *
42	Make / Origin	* / *		Model		*
43	Model	*		Input Power		Kw *
44	Total Air Flow Rate	cfm	3125	Speed		rpm *
45	Static Pressure (Int. + Ext.)	in.w.g	* + 1.23	Insulation Class / Temperature Rise		* / *
46	Fan Speed / Tip Speed	rpm / fpm	* / *	Power Supply (each)		V/Ph/Hz 400 / 3 / 50
47	Fan Efficiency	%	*	Degree Of Protect		IP 55
48	Fan Shaft Power	Kw	*	System Full Load Current		*
49	Type of drive	Belt drive		System Power Factor		*
50	Belt guard	Required		Hazardous Classification		Unclassified
51	Vibration isolation	Required		Motor Efficiency		% *
52	Fan Discharge	Top		Terminal Box Degree Of Protection		IPW 55
53	Material	Casing	*			
54		Impeller	*			
55		Shaft	*			
56						
57						
58						

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NO.	CASING								
59	Frame	Mat.	*	Insulation Material / Thickness	mm	* / *			
60		Prof. & Size	mm	Supply Air Position / Dimension	mm	Top / *			
61	Panel	Double Skin	*	Return Air Position / Dimension	mm	Top / *			
62		Mat.	*	Fresh Air Position / Dimension	mm	End / *			
63		Prof. & Size	mm	Supply Air Damper Type		Motorized Block Damper			
64	Base	Mat.	*	Return Air Damper Type		Motorized Block Damper			
65		Prof. & Size	mm	Fresh Air Damper Type		Flanged Al. Volume Damper			
66	Finishing	As Project Painting Spec.							
67	HEATING SECTION DATA								
68	Type	Electrical		Fins Per Inch	*				
69	Coil / Fin / Frame Material	* / * / *		Coil Entering Air D.B.Temperature	°F	62.6			
70	Total Heating Capacity	Btu/hr	41136	Coil Leaving Air D.B.Temperature	°F	74.8			
71	Electrical Heater Qty. / Rating	Kw	* / *	No. of Rows	*				
72	Air Flow Rate / Fresh Air Quantity	cfm	3125 / 1040	Control / No. of Stage	Required / *				
73	Face Velocity	fpm	*	Make / Origin	* / *				
74	Face Area	ft²	*	Model	*				
75	Pressure Drop	in.w.g	*						
76									
77	THERMOSTAT			FILTER SECTION					
78	Location	On Return Duct		PREFILTER	Type / Thick.	in.w.g Washable (AL) / 50			
79	Quantity	2 (For Summer & Winter)			Max. Press. Drop	in.w.g *			
80	Other accessories	*			Efficiency	60% by grvm. Meth. Of ASHRAE Std. 52.1			
81	Make / Origin	* / *			Location	In Mixing Box			
82	Model	*			Face Velocity	fpm *			
83	Degree Of Protection	IP 65			Flow Rate	cfm 3125			
84									
85									
86	HUMIDIFIER								
87	Type	Elec. Self-Contained Steam		MAIN FILTER 1	Type / Material / Thick.	in Pleated / * / *			
88	Water Flow Rate	Max.	lb/hr 11.35		Max. Press. Drop	in.w.g *			
89	Connection Size	in	*		Efficiency	65% by dust spot method (EU 6)			
90	Control Humidistat	Required			Location	After Pre-filter			
91	Make / Origin	* / *		MAIN FILTER 2	Face Velocity	fpm *			
92	Model	*			Flow Rate	cfm 3125			
93					Type / Thick.	in N.A.			
94					Max. Press. Drop	in.w.g -			
95				Efficiency	-				
96				Location	-				
97				Face Velocity	fpm -				
98				Flow Rate	cfm -				
99	ACCESSORIES								
100		REQUIRED	MAKE	ORIGIN	MODEL NO.	MORE DESCRIPTION			
101	Drift Eliminator	Yes	*	*	*	*			
102	Refrigerant Filters	Yes	*	*	*	*			
103	Safety / Control / Monitoring Devices Such as:								
104	Oil Differential Pressure Switches	Yes / IP 65	*	*	*	*			
105	High / Low Pressure Switches	Yes / IP 65	*	*	*	*			
106	Air Pressure Switch	Yes / IP 65	*	*	*	*			
107	High Pressure Indicator	Yes	*	*	*	*			
108	Oil Pressure Indicator	Yes	*	*	*	*			
109	Suction Pressure indicator	Yes	*	*	*	*			
110									
111	ACOUSTIC DATA								
112	Hz	63	125	250	500	1000	2000	4000	8000
113	Db	*	*	*	*	*	*	*	*
114									

- REMARKS:
- * To be filled by vendor.
 - N.A. Not Applicable.
 - IPW 55 protection for junction boxes, motor terminal boxes, control stations, panel boards, and auxiliary equipment should be considered.