



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 1)

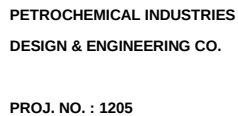
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Note: For relevant records of the document, reference can be made to Sabalan Methanol Project documentation.

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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	08.10.2016	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 1)**

Doc. No.: 1205-00-HV-DSH-001

Rev. : 01

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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 1) Doc. No.: 1205-00-HV-DSH-001 Rev. : 01		OWNER : SABALAN PETROCHEMICAL INDUSTRIES CO. PROJ. NO. : 89/S-G/102	
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NO.	GENERAL				
1	Tag No.	PAHU-0010 A/B			
2	Quantity (Working + Standby)	1+1			
3	Service Building	Control Room (Zone 1)			
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 1590
30	Total Cooling Capacity (Actual)	MBH	630.0	Control	Required
31	Total Sensible Cooling Cap. (Actual)	MBH	507.5	Bypass Factor	*
32	Air Flow Rate	cfm	23115	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	84.5 / 69.3	Number of Rows	*
37	Coil Leaving Air Temperature D / W	°F / °F	61.0 / 59.6	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	23115	Speed	rpm *
45	Static Pressure (Int. + Ext.)	in.w.g	* + 2.16	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	72.7			
70	Total Heating Capacity	Btu/hr	41937	Coil Leaving Air D.B.Temperature	°F	74.5			
71	Electrical Heater Qty. / Rating	Kw	* / *	No. of Rows	*				
72	Air Flow Rate / Fresh Air Quantity	cfm	23115 / 1590	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 23115			
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 20.6		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 23115			
93					Type / Thick.	in N.A.			
94					Max. Press. Drop	in.w.g -			
95					Efficiency	-			
96	ACCESSORIES								
97		REQUIRED	MAKE	ORIGIN	MODEL NO.	MORE DESCRIPTION			
98	Drift Eliminator	Yes	*	*	*	*			
99	Refrigerant Filters	Yes	*	*	*	*			
100	Safety / Control / Monitoring Devices Such as:								
101	Oil Differential Pressure Switches	Yes / IP 65	*	*	*	*			
102	High / Low Pressure Switches	Yes / IP 65	*	*	*	*			
103	Air Pressure Switch	Yes / IP 65	*	*	*	*			
104	High Pressure Indicator	Yes	*	*	*	*			
105	Oil Pressure Indicator	Yes	*	*	*	*			
106	Suction Pressure indicator	Yes	*	*	*	*			
107									
108	ACOUSTIC DATA								
109	Hz	63	125	250	500	1000	2000	4000	8000
110	Db	*	*	*	*	*	*	*	*
111									

- 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.