



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

FRESH AIR FAN & FILTER UNIT FOR CONTROL BUILDING (ZONE 2)

DOCUMENT NO. : 1205-00-HV-DSH-007

TOTAL PAGES : 1 (Excluding Cover & Revision Index Sheets and attachments)

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
00	13.10.2016	ISSUED FOR ENGINEERING		M.Mashayekh	M.Momenaie	A.Moadeli
Rev.	Date	Description		Prepared by	Checked by	Approved by
						Project



Data Sheet for Fresh Air Fan & Filter Unit for Control Building (Zone 2)

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	PROJ. NO. : 1205	Data Sheet for Fresh Air Fan & Filter Unit for Control Building (Zone 2)				PROJ. NO. : 89/S-G/102
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NO.	GENERAL									
1	Tag No.		FTU-0021							
2	Manufacturer		*		Duty		Permanent			
3	Quantity (Working + Standby)		1		Operating Weight		Kg	*		
4	Service Building		Control Building		Installation		Outdoor			
5	Service Equipment		PAHU-0020		Overall Size		l x w x h	m x m x m	*	
6	SITE CONDITION									
7	Location / Latitude		Assaluyeh / 28.5° N		Altitude		m	34		
8	Ambient Air Temperature		Max / Min	°F	118.4 / 41		Wet Bulb Temp		°F	91.4
9	OPERATING CONDITIONS									
10	Gas Composition		Air		Air Flow Rate (Normal / Rated)		cfm	1040 / 1140		
11	Molecular Weight		29		Internal Pressure Drop		in.w.g	*		
12	Relative Humidity at Suction		Max	%	65		External Pressure Drop		in.w.g	0.2
13	Suc. Temp.		Max / Min	°F	118.4 / 41		Differential Pressure		in.w.g	* + 0.2 Note 4
14	FAN SECTION				FAN MOTOR DATA					
15	No. of Required Units		1		Each Unit Motor Qty.		*			
16	Each Unit Fan Qty.		*		Make/Origin		* / *			
17	Make/Origin		* / *		Model No.		*			
18	Model No.		*		Each Motor Input Power		Kw	*		
19	Fan Diameter		m	*	Speed		rpm	*		
20	Speed		rpm	*	Insulation Class / Temperature Rise		* / *			
21	Material		Casing	C.S.	Power Supply (each)		V/Ph/Hz	400 / 3 / 50		
22			Impeller	Hot Deep Galv. Steel	Degree Of Protection		IP 55 Motor, IPW 55 Term. Box			
23			Shaft	C.S.	System Full Load Cur. / Power Factor		A / %	* / *		
24	Fan Efficiency		%	*	Hazardous Classification		Unclassified			
25	CASING									
26	Frame		Material	*	Casing Finishing		As Project Panting Spec.			
27			Profile & Size	*	Access Door Required		Yes			
28	Panel		Material	*	Duct Connection Type		Flanged Rectangular			
29			Thickness	mm	*	Air In / Out Duct Connection Size		* / *		
30	Base		Material	*	Damper Required		Note 2			
31			Profile & Size	*	Vibration Isolator		Required			
32	SAND TRAP LOUVER									
33	Material		*		Face Velocity		fpm	*		
34	Efficiency		%	90 (Note 3)		Max Press. Drop		in.w.g	*	
35	Air In / Out Duct Connection Type		Flanged Rectangular		Air In Duct Connection Size		*			
36	PRE-FILTER				MAIN FILTER					
37	Type / Material		Aluminum Washable Filter		Type / Material / Thick.		mm	Pleated / * / *		
38	Thickness		mm	*	Thickness		mm	*		
39	Face Velocity		fpm	*	Face Velocity		fpm	*		
40	Max. Press. Drop / Location		in.w.g	*/ After Sand Trap Louver		Max. Press. Drop / Location		in.w.g	* / After Pre-filter	
41	Test Method		Gravimetric Method Of ASHRAE Std. 52.1		Test Method		Dust Spot Method of ASHRAE Std. 52.1			
42	Efficiency		%	60		Efficiency		%	65	
43	ACCESSORIES									
44	Air Flow Switch / Model No.		Required / *		Make / Origin		* / *			
45	LOCAL CONTROL STATION									
46	Required		No		Installation Location		-			
47	On / Off / Trip Indicating Lights		-		Degree Of Protection		-			
48	Start/Stop Push Buttons		-		Hazardous Classification		-			
49	Miscellaneous Requirements		-		Mounting		-			
50	ACOUSTIC DATA									
51	Hz	63	125	250	500	1000	2000	4000	8000	
52	Db	*	*	*	*	*	*	*	*	

REMARKS:

- * To be filled by vendor.
- Inlet : Motorized Block Damper & Outlet : Flange Volume Damper
- 90% efficiency for particles from 150 to 170 µm at 1 m/s of face air velocity.
- The fan DP is equal to sand trap louver, metal filter, and all other filters PD, that will be specified by vendor plus a.m. external PD.
- N.A. Not Applicable.
- IPW 55 protection for junction boxes, motor terminal boxes, control stations, panel boards, and auxiliary equipment should be considered.