



PETROCHEMICAL INDUSTRIES
DESIGN & ENGINEERING CO.

PROJ. NO. : 1205



DENA METHANOL PLANT

شرکت صنایع پتروشیمی دنا
Dena Petrochemical Industries Co.

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 1)

DOCUMENT NO. : 1205-00-HV-DSH-003

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	08.10.2016	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 1)

Doc. No.: 1205-00-HV-DSH-003

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	PROJ. NO. : 1205	Data Sheet for Fresh Air Fan & Filter Unit for Control Building (Zone 1)				PROJ. NO. : 89/S-G/102
		Doc. No.: 1205-00-HV-DSH-003		Rev. : 00		

NO.	GENERAL								
1	Tag No.			FTU-0011 A/B					
2	Manufacturer			*		Duty		Permanent	
3	Quantity (Working + Standby)			1+1		Operating Weight		Kg	*
4	Service Building			Control Room (Zone 1)		Installation		Outdoor	
5	Service Equipment			PAHU-0010 A/B		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	1590 / 1750
11	Molecular Weight			29		Internal Pressure Drop		in.w.g	*
12	Relative Humidity at Suction			Max	%	65		External Pressure Drop	in.w.g 1.16
13	Suc. Temp.			Max / Min	°F	118.4 / 41		Differential Pressure	in.w.g * + 1.16 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.