



AgipGas BV LIBYAN BRANCH		WESTERN LIBYA GAS PROJECT		AGBV Job No. 0177/NC/02		AGBV Doc. No. G-65-X-L-21KA 01	
 Snamprogetti ABB Lummus Malta  HYUNDAI ENGINEERING & CONSTRUCTION CO., LTD.		Plant MELLITAH PLANT		CTR Job No. 310300		CTR Doc. No. 51 210-MC-E-30100	
Location GSPLAJ		Sh. 1 of 24		Rev.		P1 P2 P3 P4	

RECIPROCATING COMPRESSOR DATA SHEET							Rev.
GENERAL DATA							
1							
2	ITEM	50-210-KB-001 A (17)	No. OF MAIN / STAND-BY UNITS	1 (1) / 1 (1)			
3	SERVICE	OFFGAS COMPRESSOR (2 STAGE MACHINE)	TYPE	(lubricated - not lubricated) not lubricated			
4	OPERATION (continuous - discontinuous - other)	continuous	INSTALLATION: (indoor - outdoor - other)	outdoor			
5	TYPE OF DRIVER	induction motor	FOR UNITS	DATA SHEET No.			
6	TYPE OF DRIVER	induction motor	FOR UNITS	DATA SHEET No.			
PROCESS OPERATING DATA							
8	OPERATING CASE		YEAR 2 WINTER	YEAR 11 WINTER	YEAR 2 SUMMER	YEAR 11 SUMMER	
9	STAGE		1	1	1	1	
10	SIDE STREAM						
11	GAS HANDLED (see gas analysis sheet)	OFFGAS	OFFGAS	OFFGAS	OFFGAS		
12	CORROSIVE COMPOUNDS (yes-no)	yes (12)	yes (12)	yes (12)	yes (12)		
13	TOXICITY OF GAS (yes-no)	yes (12)	yes (12)	yes (12)	yes (12)		
14	PRESENCE OF SOLIDS OR MIST						
15	MOLECULAR WEIGHT	34,59	34,14	35,17	34,74		
16	MASS FLOW RATE <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY	kg/h	9738 (3)	8564	5674	4872	
17	INLET CONDITIONS at Dampner inlet						
18	PRESSURE	NORMAL	bar (g)	4,4 (4)	4,4 (4)	4,4 (4)	4,4 (4)
19		MINIMUM	bar (g)				
20		MAXIMUM	bar (g)				
21	TEMPERATURE	NORMAL	°C	27,6	26,4 (2)	36,7 (2)	35,9
22		MINIMUM	°C				
23		MAXIMUM	°C				
24	SPECIFIC HEAT RATIO	Cp / Cv		1,22	1,22	1,22	1,22
25	COMPRESSIBILITY FACTOR	z		0,962	0,963	0,965	0,966
26	RELATIVE HUMIDITY	%					
27	DEW POINT	°C					
28	DISCHARGE CONDITIONS at Dampner outlet						
29	PRESSURE		bar (g)	15 (9) (18)	15 (9) (18)	15 (9) (18)	15 (9) (18)
30	ESTIMATED TEMPERATURE		°C	102	102	112	112
31	MAX ALLOW. TEMPERATURE FOR PROCESS REASONS		°C				
32	ESTIMATED SPECIFIC HEAT RATIO	Cp / Cv		1,21	1,21	1,21	1,21
33	ESTIMATED COMPRESSIBILITY FACTOR	z		0,947	0,949	0,95	0,953
34							
35	ESTIMATED ABSORBED SHAFT POWER		kW	318,5			
36	ADIABATIC EFFICIENCY (14)		%	72,87			
37	GUARANTEE POINT (normal / other)						
38	NOTES: (17) THIS DATA SHEET IS VALID ALSO FOR COMPRESSOR ITEM 50-210-KB-001 B						
39	(18) DISCHARGE PRESSURE REFERRED TO THE PULSATION SUPP. OUTLET.						
40							
41							
42							

P4	18/07/03	Updated by Dresser-Rand					
P3	27.06.03	Issued for order, COMPANY comments incorporated	C Garth	G. Thomson	P.L.Gotti	M Maddaloni	T.M Said
P2	28.02.03	Issued for design, COMPANY comments incorporated	C. Garth	P.L.Gotti	P.L.Gotti	M. Maddaloni	T.M. Said
P1	19-Dec-02	Issued for Approval	P.Zaninetti	P.L.Gotti	P.L.Gotti		
Rev.	Date	Description	Prep.	Check.	Appr.	PMS Review	AGBV Appr.

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