



LIDCO, Pars SEE Zone, Assaluyeh,  
Integrated Methanol and Ammonia  
Plant 3000 MTPD MeOH / 900 MTPD NH3 PROJECT



Noise data sheet

Document No. 17735-49

Project No.	Vendor Doc.	P.O. No.	Department	Document Type	Serial No	Revision	Page
N278	VD	6019	IN	DS	0042	02	Page 1 of 4

**Airpack B.V. - Air Compressor –  
Integrated Methanol and Ammonia Plant  
17735-COM Noise data sheet**

Code 2  
M.Dalakeh

REV.	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
02	17-09-2025	Issued for Information	S.K.	J.J.	S.K.
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N278	VD	6019	IN	DS	0042	02	Page 2 of 4

LIST OF REVISED PAGES

Rev. Page	01	02	03	04	05	Rev. Page	06	07	08	09	10	Rev. Page	01	02	03	04	05	Rev. Page	01	02	03	04	05
1	X					26						51						76					
2	X					27						52						77					
3	X					28						53						78					
4						29						54						79					
5						30						55						80					
6						31						56						81					
7						32						57						82					
8						33						58						83					
9						34						59						84					
10						35						60						85					
11						36						61						86					
12						37						62						87					
13						38						63						88					
14						39						64						89					
15						40						65						90					
16						41						66						91					
17						42						67						92					
18						43						68						ATTACHMENT					
19						44						69						1					
20						45						70						2					
21						46						71						3					
22						47						72						4					
23						48						73						5					
24						49						74						6					
25						50						75						7					

# Integrated Methanol and Ammonia Plant

Document n° : 17735-14 attachment 4

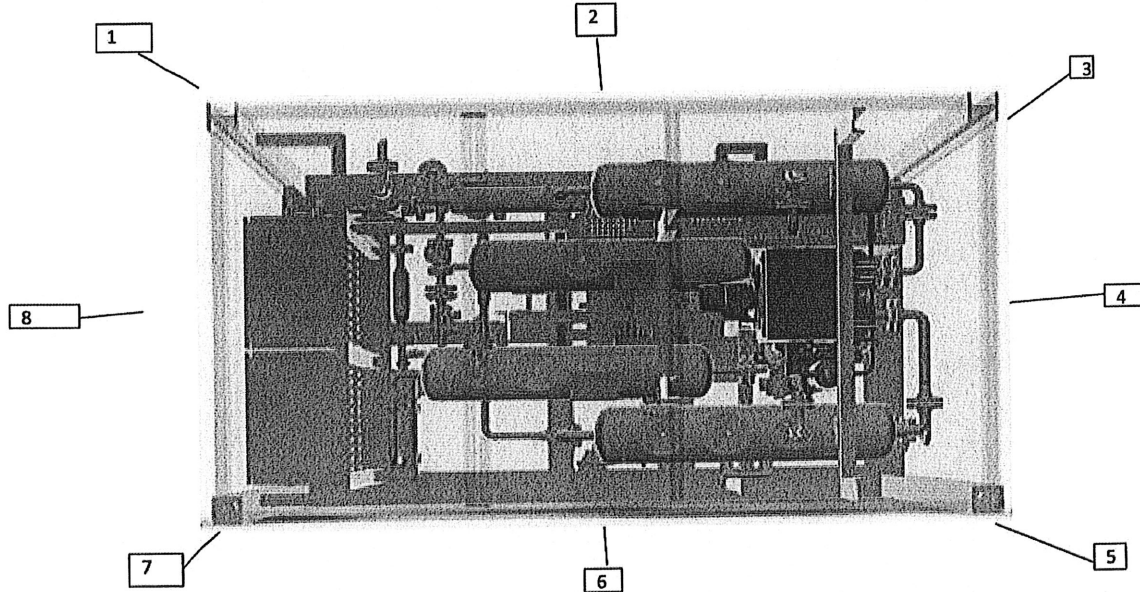
Revision : 06

## NOISE LEVEL

Unit : K-020  
 Service : Air booster compressor  
 Supplier : Airpack  
 Serial No. : T-2023-00799

Client: Lavan Industry Development Company (LIDCO)  
 Contractor: Nargan Company  
 Project: Integrated Methanol and Ammonia Plant

### Supplier to Complete Expected Noise Level Data



Noise test has been performed during performance test:

**Procedure:**

Measure point will be defined by a distance of 1 metre from the package and 1,5 metre above the ground level to measured round the package. Final measure points will be the same as start measure points. This is for checking correct functioning of the noise level meter. Noise shall not exceed 85 dB(A) for complete package. Noise meter calibration certificate is available during test

Points	Unit	Noise Estimated	Noise measured	Average of anti logs	Noise level (Logarithmic Avg)	Noise level (Arithmetic Avg)
P1	dB(A)	83	70	16402224	72.14903	71.875
P2	dB(A)	84	73			
P3	dB(A)	85	72			
P4	dB(A)	85	74			
P5	dB(A)	85	71			
P6	dB(A)	84	74			
P7	dB(A)	83	70			
P8	dB(A)	83	71			

**Test Result:**



Tested By : SK

Date: 28/02/2025

NOTE:

*Rang*

Surrounding Noise measured (dB(A)) : 85

Noise level (After correction (if required) as per 5.3 of ISO 2151):

**Correction Factor**

Level increase due to Value to be subtracted from measured

Test Condition : Noise level test as per ISO 2151

NOISE SOURCE DATA SHEET													
POS	ITEM : K-020										NOISE SOURCE DATA SHEET		
1	INSTALLED POWER (KW) : 11			ROTARY SPEED (RPM) : 1485				DIMENSIONS <sup>(1)</sup> 2500 x 1500 x 3000 mm					
2	SOUND POWER LEVEL TEST METHOD			STD. ISO 2151									
3	OCTAVE BAND FREQUENCY (Hz)			63	125	250	500	1k	2k	4k	8k	OVERALL	
												"A"	Lin
4	CUSTOMER SPECIFIED NOISE LEVELS			Lw <sup>(2)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	85 dB	
				Lp <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	85 dB	
5	VENDOR GUARANTEED NOISE LEVELS FOR STANDARD EQUIPMENT(1)			Lw <sup>(2)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	85 dB	
				Lp <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	85 dB	
6	VENDOR GUARANTEED NOISE LEVELS FOR INTRINSECALLY LOW NOISE EQUIPMENT <sup>(1)</sup>			Lw <sup>(2)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
				Lp <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
7	VENDOR GUARANTEED NOISE LEVELS WITH ACOUSTIC TREATMENT <sup>(1)</sup>			Lw <sup>(2)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
				Lp <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8	THE SOUND POWER LEVELS HAVE BEEN OBTAINED BY			DIRECT MEASURING									
				MEASURING ON ANALOGOUS SOURCE									
9	LOAD CONDITIONS			NORMAL OPERATION									
10	DRIVER			INCLUDED									
11	DESCRIPTION OF INTRINSECALLY LOW NOISE EQUIPMENT												
12	DESCRIPTION OF ACOUSTIC TREATMENT												
13	WE GUARANTEE OUR EQUIPMENT, WHEN INSTALLED AND OPERATING UNDER DESIGN CONDITION, WILL NOT PRODUCE SOUND POWER LEVELS IN EXCESS OF THE ABOVE MENTIONE												
	DATE _____			VENDOR STAMP AND SIGNATURE _____									
NOTES: THE Lw VALUES IN ANY CASE MUST BE REPORTED													
<p>(1) IF SOUND POWER LEVEL (Lw) IS NOT AVAILABLE, IT SHALL BE ESTIMATED FROM THE SOUND PRESSURE LEVEL (Lp) IN FREE-FIELD MEASURED AT 1 METER FROM EQUIPMENT, BY MEANS THE FOLLOWING FORMULA (SEE FIGURE BY SIDE):  <math>Lw = Lp + 10 \log_{10}(S)</math> WHERE: <math>S = 4(ab + bc + ca)m^2</math> WITH: <math>a = (L/2 + 1)m</math>, <math>b = (D/2 + 1)m</math>, <math>c = (H + 1)m</math></p> <p>(2) Lw = SOUND POWER LEVEL, dB ref. 1-pW</p> <p>(3) Lp = SOUND PRESSURE LEVEL AT 1 METER, dB ref. 20 µPa</p>													
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 60%;"> <p><b>Enveloping Surface S</b></p> <p>Noise Source</p> </div> <div style="width: 35%; text-align: right;"> <p>Enveloping Surface S</p> <p>H</p> <p>D</p> <p>L</p> <p>Noise Source</p> </div> </div>													
2													
1													
ISS.	DESCRIPTION				DRAWN UP	CHECKED	APPROVED	DATE					

**RESULTS / GUARANTEE:**

Measured Noise Level (Arithmetic Avg): 71.88 dB(A)

Measured Noise Level (Logarithmic Avg): 72.15 dB(A)

Result: PASS (all measured points ≤ 74 dB(A), below limit of 85 dB(A))