



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



Piping & Instrument Diagram

Document No. 17735-03

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**Airpack B.V. - Air Compressor –
Integrated Methanol and Ammonia Plant
17735-COM Piping & Instrument Diagram (K020)**

code-2
M. Vakili

04	15-12-2023	Issued for Approval	S.K.	J.J.	S.K.
03	06-12-2023	Issued for Approval	S.K.	J.J.	S.K.
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REV.	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED

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Piping & Instrument Diagram

Document No. 17735-03

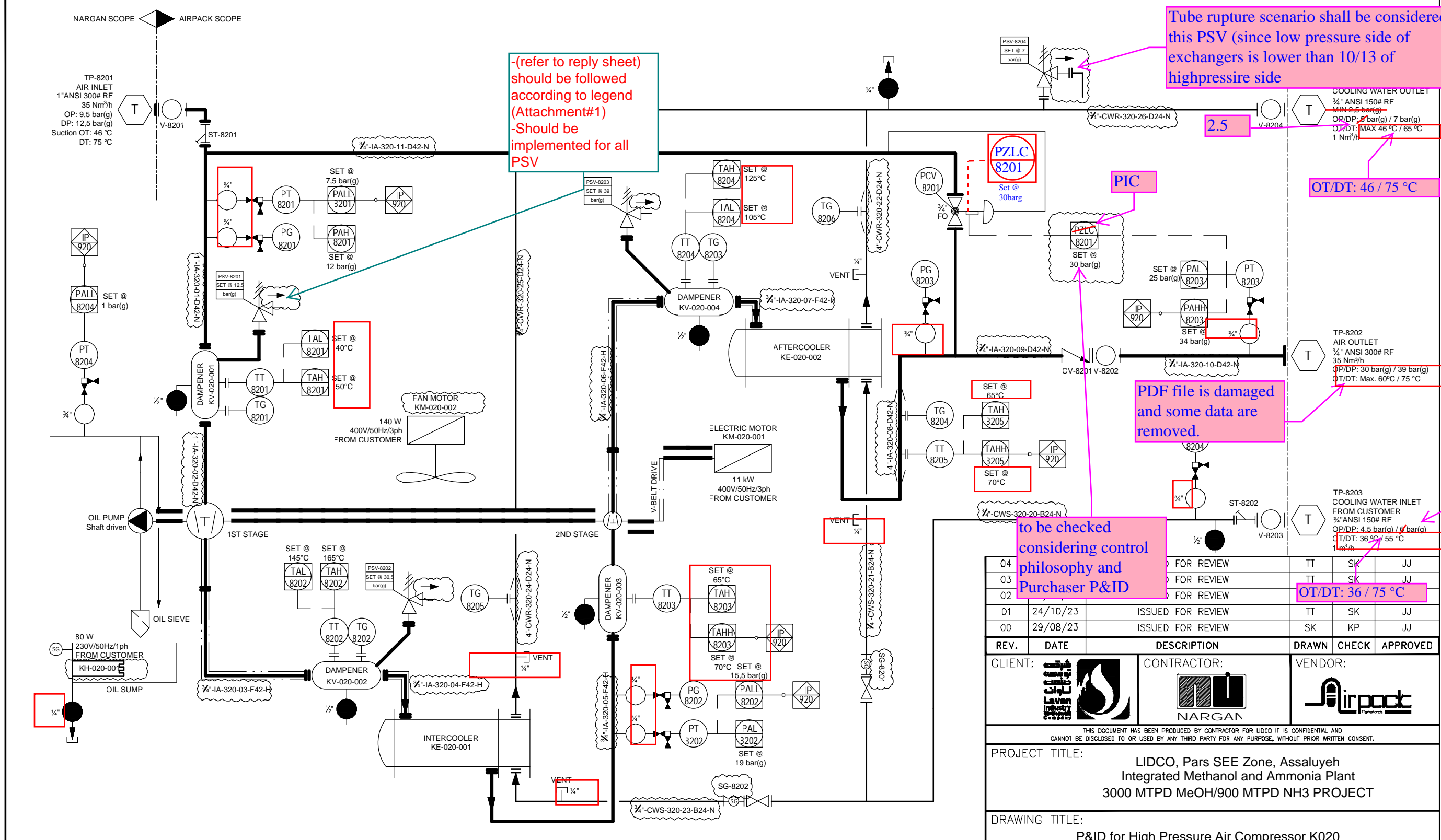
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2	X	X	X	X		27						52						77					
3	X	X	X	X		28						53						78					
4	X	X	X	X		29						54						79					
5		X	X	X		30						55						80					
6		X				31						56						81					
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All missing data to be specified.

COMPRESSOR	MAIN MOTOR	INTERCOOLER	AFTERCOOLER	PULSATION DAMPER INLET	PULSATION DAMPER 1ST STAGE DISCHARGE	PULSATION DAMPER 2ND STAGE SUCTION	PULSATION DAMPER 2ND STAGE DISCHARGE
Tagnumber: K-020 Type: 2-stage oilfree piston Modelnumber: RBV-130 Discharge capacity: 35 Nm ³ /h Operating pressure: 30 bar(g) Speed: 410 rpm	Tagnumber: KM-020 Rated power: 11 kW Speed: 1485 rpm Power supply: 400 V / 50 Hz / 3 ph Ingress protection: IP-55 Hazardous area class: Safe Area	Tagnumber: KE-020-001 Flow air side: 35 Nm ³ /hr Flow water side: 1 Nm ³ /hr OP / DP: 23,3 bar(g) / 30,5 bar(g) OT / DT: 157 °C / 175 °C Design: TEMA C, ASME VIII Div. 1 Material: SS316	Tagnumber: KE-020-002 Flow air side: 35 Nm ³ /hr Flow water side: 1 Nm ³ /hr OP / DP: 30 bar(g) / 39 bar(g) OT / DT: 116 °C / 135 °C Design: TEMA C, ASME VIII Div. 1 Material: SS316	Tagnumber: KV-020-001 Volume: 30 L OP / DP: 9,5 bar(g) / 12,5 bar(g) OT / DT: 46 °C / 75 °C Design: ASME VIII Div. 1 Material: CS	Tagnumber: KV-020-002 Volume: 30 L OP / DP: 23,3 bar(g) / 30,5 bar(g) OT / DT: 157 °C / 175 °C Design: ASME VIII Div. 1 Material: CS	Tagnumber: KV-020-003 Volume: 30 L OP / DP: 22,1 bar(g) / 29 bar(g) OT / DT: 60 °C / 157 °C Design: ASME VIII Div. 1 Material: CS	Tagnumber: KV-020-004 Volume: 30 L OP / DP: 30 bar(g) / 39 bar(g) OT / DT: 116 °C / 135 °C Design: ASME VIII Div. 1 Material: CS



- NOTES
- All instruments have prefix '320'
 - Instrument / control air tubing size: 12mm
 - TT and TG process connection is 3/4" NPT
 - TW process connection is 1 1/2" flange
 - PT and PG process connection is 1/2" NPT
 - Process connection of control valve is 300# flanged ANSI
 - Main process line piping material is SS316
 - Cooling water process line piping material is carbon steel
 - All signals is LIDCO scope and are connected to battery limit

REV.	DATE	DESCRIPTION	DRAWN	CHECK	APPROVED
04		FOR REVIEW	TT	SK	JJ
03		FOR REVIEW	TT	SK	JJ
02		FOR REVIEW	TT	SK	JJ
01	24/10/23	ISSUED FOR REVIEW	TT	SK	JJ
00	29/08/23	ISSUED FOR REVIEW	SK	KP	JJ

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

DRAWING TITLE: P&ID for High Pressure Air Compressor K020

DOCUMENT No:	17735-03 P&ID						SC.
PROJECT No.	VENDOR DOC.	P.O. No.	DEPARTMENT	DOC. TYPE	SERIAL No.	REV.	SHEET No.
N278	VD	6019	PR	PID	0002	04	4 OF 5

Spec of project shall be follow. (refer to previous comment rev01 to 03)

Tag name should be modified.
300LP-820
300JDAN-820
Re-comment

According to the project specifications and incompatibility with other site equipment all tags should be modified. This comment is mentioned from revision one to the last version

300JDAN-820

300LP-820

~~320-LPS-8201~~

Multi-pair cable by NARGAN

Multi-pair cable by NARGAN

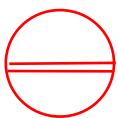
TO DCS

Individual Signal Cable by Airpack

FROM COMPRESSOR

By AIRPACK

if it is push button from LPS, as per spec of project shall be shown as per below figure

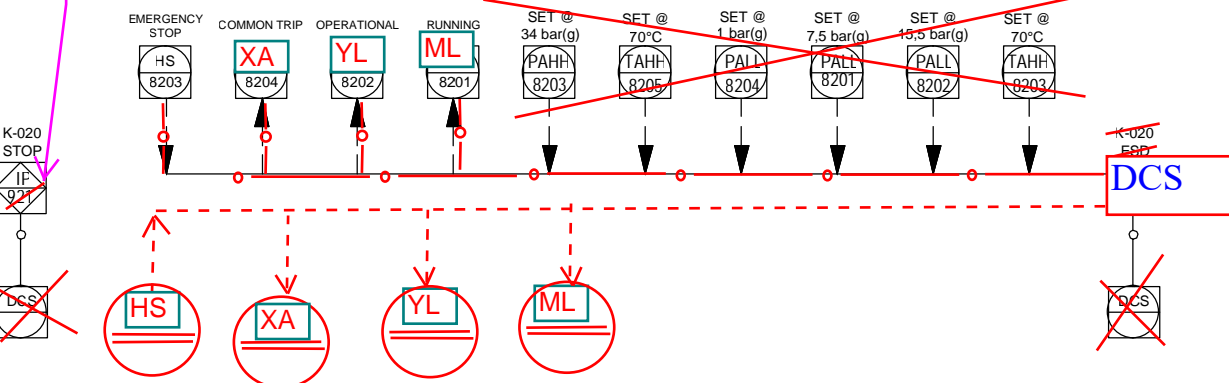


Remote

Remote

920

Should be deleted



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03	13/12/23	ISSUED FOR REVIEW	TT	SK	JJ
02	06/12/23	ISSUED FOR REVIEW	SK	KP	JJ
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DOCUMENT No: 17735-03 P&ID						SC.
						SIZE: A3
PROJECT No.	VENDOR DOC.	P.O. No.	DEPARTMENT	DOC. TYPE	SERIAL No.	REV.
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						SHEET No. 5 OF 5

- NOTES
- All instruments have prefix '320'
 - Package will be DCS controlled (by others)