



# ASPC Project



<b>END CUSTOMER</b>	: Arya Sasol Polymer Company
<b>CONTRACTOR</b>	: DYPNF Co., Ltd.
<b>VENDOR NAME</b>	: Airpack Netherlands BV
<b>EQUIPMENT DESCRIPTION</b>	: Screw Compressor & Roots Blower : Package
<b>PURCHASE ORDER NUMBER</b>	: PO-PC2312-08

Customer Document : 3944-VD-0171-DYP-RE-400-DSH-0077  
Number

Airpack Document Number : 23383-12A

Document Title : Instrument data sheet

Review Code and Status		Contractor Initials/Signature	Date signed
<input type="checkbox"/>	<b>Code 1</b> <b>REJECTED</b> - Vendor to revise and Resubmit. Work cannot proceed		
<input type="checkbox"/>	<b>Code 2</b> Comments As Noted - Work May proceed, subject to compliance with and incorporation of comments		
<input type="checkbox"/>	<b>Code 3</b> No Comments - Work may proceed.		
<input type="checkbox"/>	<b>Code 4</b> Information only - Review not required.		

00	Issued for Approval	23-04-2025	LK	SC	JJ
Rev. No.	Description	Date	Prepared by	Checked by	Approved by

	<b>INSTRUMENT DATA SHEET</b>	
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Project Name :  
**300 KT POLYETHYLENE PLANT  
ARYA SASOL POLYMER COMPANY (ASPC)**

Site Location :

Document Title :  
**INSTRUMENT DATA SHEET**

Document No :  
**23383-12A**

00	23-4-2025	For Approval	LK	SC	
Rev	Date	Description	Prepared	Reviewed	Approved

GENERAL	1	Tag Number		Refer to next page		
	2	Service		Refer to next page		
	3	P&ID No.		Refer to next page		
	4	Area Classification		Zone 2, Ex'ia, IIC, T3		
	5	Line No. or Vessel No.		Refer to next page		
	6	Pipe Class		Refer to next page		
	7	NACE Requirement		N/A		
PROCESS CONDITIONS	8	Fluid (State)		Refer to next page		
	9	Pressure Max (barg)	Oper.	Refer to next page	Refer to next page	
	10	Temperature Max. (°C)	Oper.	Refer to next page	Refer to next page	
	11	Oper. Spec. Gravity	Oper. Viscosity (cP)	Air: 1; N <sub>2</sub> : 1,038	Air: 0,025 cP; N <sub>2</sub> : 0,024 cP	
	12	Design Pressure (barg)	Design Temperature (°C)	4,2 barg	215 °C	
TRANSMITTER	13	Application		Pressure transmitter		
	14	Type		Diaphragm		
	15	Enclosure Class		IP65		
	16	Housing	Paint	Aluminium (epoxy coated)	Manufacturer standard	
	17	Power Supply	Load Resist	24VDC 2-wire loop powered	VTA	
	18	Process Connection	Electrical Connection	1/2" NPT-M	ISO M20x1,5	
	19	Accuracy	Response Time	± 0.1% of span	VTA	
	20	Output Signal		4-20 mA, HART		
	21	Element Material		SS316L		
	22	Wetted O - Ring Material		VTA		
	23	Fill Fluid		VTA		
	24	Instrument Range		VTA		
	25	Calibrated Range		Refer to next page		
	26	Elevation	Suppression	N/A	N/A	
	27	Allow.Oper. Pressure	Allow.Oper.Temp.	VTA	VTA	
28						
DIAPHRAGM SEAL	29	Process Connection & Rating (H / L)		N/A		
	30	Diaphragm Material		N/A		
	31	Capillary Type / Material / Length (M)		N/A		
	32	Fill Fluid		N/A		
	33	Housing Material / Flange Material		N/A		
	34	Allowable Over Temperature		N/A		
	35	Flushing Connection	Flushing Ring	N/A	N/A	
MANIFOLD	36	Type	Body Material	2-way block&bleed	SS316	
	37	Trim	Packing	VTA	PTFE	
	38	Max. Rating Pressure	Temperature	4,2 barg	215 °C	
	39	Held Terminal		N/A		
	40	Process Conn.	Size	Type	Rating	1/2"   NPT-F   800#
	41	Manufacturer		According to approved vendor list		
	42	Model		VTA		
OPTIONS	43	Integral Meter	Scale	Yes, LCD	bar(g)	
	44	Lightning Protection		N/A		
	45	Pressure Testing		N/A		
	46	Mounting Brackets		Yes, SS316		
	47	Burnout		N/A		
PURCHASE	48	Manufacturer		According to approved vendor list		
	49	Model		VTA		
	50	KOSHA/KGS Explosion Proof Certification No		N/A		

Note. :

- Calibration, 3.1 material test, ATEX and IP certification to be included with transmitters

				PRESSURE TRANSMITTER		
00	LK	23-4-2025	For Approval			SHEET 2 OF 11

No.	By	Date	Revision	Code:	Doc. No.	23383-12	Rev.: 00
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00	LK	23-4-2025	For Approval				SHEET 3 OF 11
No.	By	Date	Revision	Code:	Doc. No.: 23383-12		Rev.: 00

GENERAL	1	Tag Number		Refer to next page	
	2	Service		Refer to next page	
	3	P&ID No.		Refer to next page	
	4	Area Classification		Zone 2, Ex'ia, IIC, T3	
	5	Line No. or Vessel No.		Refer to next page	
	6	Pipe Class		Refer to next page	
	7	NACE Requirement		N/A	
PROCESS CONDITIONS	8	Fluid (State)		Refer to next page	
	9	Pressure Max (barg)	Oper.	Refer to next page	Refer to next page
	10	Temperature Max. (°C)	Oper.	Refer to next page	Refer to next page
	11	Oper. Spec. Gravity	Oper. Viscosity (cP)	Air: 1; N <sub>2</sub> : 1,038	Air: 0,025 cP; N <sub>2</sub> : 0,024 cP
12	Design Pressure (barg)	Design Temp. (°C)	4,2 barg	215 °C	
TRANSMITTER	13	Application		Pressure differential transmitter	
	14	Type		Diaphragm	
	15	Enclosure Class		IP65	
	16	Housing	Paint	Aluminium (epoxy coated)	Manufacturer standard
	17	Power Supply	Load Resist	24VDC 2-wire loop powered	VTA
	18	Process Connection	Electrical Connection	1/2" NPT-M	ISO M20x1,5
	19	Accuracy	Response Time	± 0.1% of span	VTA
	20	Output Signal		4-20 mA, HART	
	21	Element Material		SS316L	
	22	Wetted O - Ring Material		VTA	
	23	Fill Fluid		VTA	
	24	Instrument Range		VTA	
	25	Calibrated Range		Refer to next page	
	26	Elevation	Suppression	N/A	N/A
27	Allow.Oper. Pressure	Allow.Oper.Temp.	VTA	VTA	
28					
DIAPHRAGM SEAL	29	Process Connection & Rating (H / L)		N/A	
	30	Diaphragm Material		N/A	
	31	Capillary Type / Material / Length		N/A	
	32	Fill Fluid		N/A	
	33	Housing Material / Flange Material		N/A	
	34	Allowable Over Temperature		N/A	
	35	Flushing Connection	Flushing Ring	N/A	N/A
MANIFOLD	36	Type	Body Material	5-way manifold	SS316
	37	Trim	Packing	VTA	PTFE
	38	Max. Rating Pressure	Temperature	4,2 barg	215 °C
	39	Held Terminal		N/A	
	40	Process Conn. Size	Type	Rating	1/2"   NPT-F   800#
	41	Manufacturer		According to approved vendor list	
	42	Model		VTA	
OPTIONS	43	Integral Meter	Scale	Yes, LCD	bar(g)
	44	Lightning Protection		N/A	
	45	Pressure Testing		N/A	
	46	Mounting Brackets		Yes, SS316	
	47	Burnout		N/A	
PURCHASE	48	Manufacturer		According to approved vendor list	
	49	Model		VTA	
	50	KOSHA/KGS Explosion Proof Certification No		N/A	

Note. :

- Calibration, 3.1 material test, ATEX and IP certification to be included with transmitters

					D/P TYPE PRESSURE TRANSMITTER	

00	LK	23-4-2025	For Approval			SHEET 4 OF 11	
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GENERAL	1	Tag Number		Refer to next sheet	
	2	Service		Refer to next sheet	
	3	P&ID No.		Refer to next sheet	
	4	Area Classification		Zone 2, Ex'ia, IIC, T3	
	5	Line No. or Vessel No.		Refer to next sheet	
	6	Pipe Class		Refer to next sheet	
	7	NACE Requirement		N/A	
	8				
PROCESS CONDITIONS	9	Fluid (State)		Refer to next sheet	
	10	Pressure Max (MPaG)	Oper.	Refer to next sheet	Refer to next sheet
	11	Temperature Max. (°C)	Oper.	Refer to next sheet	Refer to next sheet
	12	Oper. Spec.Gravity	Oper. Viscosity (cP)	Air: 1; N2: 1,038	Air: 0,025 cP; N2: 0,024 cP
	13	Design Pressure (barg)		4,2 barg	
	14	Design Temperature (°C)		215 °C	
TRANSMITTER	15	Type		Field mounted transmitter	
	16	RTD Types Supported		N/A	
	17	Thermocouple Supported Types		Type 'K'	
	18	MV Supported Type		N/A	
	19	Cold Junction Compensation		Internal compensation	
	20	Enclosure Class		IP65	
	21	Housing	Paint	Aluminium (epoxy coated)	Manufacturer standard
	22	Power Supply	Load Resist	24VDC, 2-wire loop powered	VTA
	23	Process Connection	Electrical Connection	N/A	ISO M20x1,5
	24	Accuracy	Response Time	± 0.1% of span	
	25	Output Signal		4-20mA, HART	
	26	Range Limits		VTA	
	27	Calibrated Range		Refer to next sheet	
	28	Display		Digital, LCD	
29					
30					
COMMUNICATION AND SOFTWARE	31	Communication Type		Smart, HART	
	32	Baud - Rate		N/A	
	33	Communication with:		N/A	
	34	Configuration from:		N/A	
	35	Internal Diagnostics		Yes	
	36	Held Terminal		N/A	
	37				
OPTIONS	38	Integral Meter	Scale	Yes	°C
	39	Lightning Protection		N/A	
	40	Custom Configuration		N/A	
	41	Mounting Brackets		Yes	
	42	Burnout		Overrange	
PURCHASE	43	Manufacturer		According to approved vendor list	
	44	Model		VTA	
	45	KOSHA/KGS Explosion Proof Certification No		N/A	
	46				
	47				

Note. :

- Calibration, 3.1 material test, ATEX and IP certification to be included with transmitters

				TEMPERATURE TRANSMITTER		
00	LK	23-4-2025		For Approval		SHEET 6 OF 11
No.	By	Date		Revision	Code:	Doc. No.: 23383-12
						Rev.: 0

NO.	TAG NO.	Q'TY	OPERATING			CALIBRATION RANGE	FLUID (STATE)	SERVICE	LINE NO. /VESSEL NO.	PIPING CLASS.	P&ID NO.	NOTES	
			Oper. MAX	Oper. MAX									
			(°C)	barg									
1	44TT-4001056	1	TBD		3,5	TBD	Oil (Liquid)	Oil system temperature	44C-40001A	Mfr. std	23383-03		
2	44TT-4001057	1	189		1,903	0...300	Nitrogen (Gas)	Outlet temperature	44C-40001A	Mfr. std	23383-03		
3	44TT-4001001	1	48		Amb.	0...100	Air (Gas)	Enclosure temperature	44C-40001A	Mfr. std	23383-03		
4	44TT-4002056	1	TBD		3,5	TBD	Oil (Liquid)	Oil system temperature	44C-40001B	Mfr. std	23383-03		
5	44TT-4002057	1	189		2,903	0...300	Air (Gas)	Outlet temperature	44C-40001B	Mfr. std	23383-03		
6	44TT-4002001	1	TBD		Amb.	0...100	Air (Gas)	Enclosure temperature	44C-40001B	Mfr. std	23383-03		
7	44TT-8001041	1	TBD		4,2	TBD	Oil (Liquid)	Oil system temperature	44C-80001A	Mfr. std	23383-03		
8	44TT-8004001	1	167		1,473	0...250	Air (Gas)	Outlet temperature	44C-80001A	Mfr. std	23383-03		
9	44TT-8001042	1	TBD		4,2	TBD	Oil (Liquid)	Oil system temperature	44C-80001B	Mfr. std	23383-03		
10	44TT-8004003	1	167		1,473	0...250	Air (Gas)	Outlet temperature	44C-80001B	Mfr. std	23383-03		
11	44TT-8004005	1	154		0,983	1,067	0...250	Air (Gas)	Outlet temperature	44C-80002A	Mfr. std	23383-03	
12	44TT-8004007	1	154		0,983	1,067	0...250	Air (Gas)	Outlet temperature	44C-80002B	Mfr. std	23383-03	
13	44TT-8004043	1	TBD		3,5	TBD	Oil (Liquid)	Oil system temperature	44C-80004A	Mfr. std	23383-03		
14	44TT-8004009	1	205		2,213	3,5	0...300	Air (Gas)	Outlet temperature	44C-80004A	Mfr. std	23383-03	
15	44TT-8004044	1	TBD		3,5	TBD	Oil (Liquid)	Oil system temperature	44C-80004B	Mfr. std	23383-03		
16	44TT-8004011	1	205		2,213	3,5	0...300	Air (Gas)	Outlet temperature	44C-80004B	Mfr. std	23383-03	
17	44TT-8005041	1	TBD		3,5	TBD	Oil (Liquid)	Oil system temperature	44C-80005A	Mfr. std	23383-03		
18	44TT-8005001	1	164		1,423	4,2	0...250	Air (Gas)	Outlet temperature	44C-80005A	Mfr. std	23383-03	
19	44TT-8005042	1	TBD		4,2	TBD	Oil (Liquid)	Oil system temperature	44C-80005B	Mfr. std	23383-03		
20	44TT-8005003	1	164		1,423	4,2	0...250	Air (Gas)	Outlet temperature	44C-80005B	Mfr. std	23383-03	
21	44TT-8005043	1	TBD		4,2	TBD	Oil (Liquid)	Oil system temperature	44C-80005C	Mfr. std	23383-03		
22	44TT-8005004	1	164		1,423	4,2	0...250	Air (Gas)	Outlet temperature	44C-80005C	Mfr. std	23383-03	

Note. :

				TEMPERATURE TRANSMITTER							
00	LK	23-4-2025	For Approval			SHEET 7 OF 11					
No.	By	Date	Revision			Doc. No.: 23383-12				Rev.: 00	